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## REPORT

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# COMMISSIONER OF EDUCATION 

FOR

THE YEAR 1898-99.

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# CHAPTER XXVIII. 

EDUCATION AND CRIME.

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## THE POWER OF COMMON SCHOOLS TO REDEEM THE STATE FROM SOCIAL VICES AND CRIMES. ${ }^{1}$

By Horace Mann, Secretary Massachusetts State Board of Education.

The incontestable progress which the cause of popular education is making inMassachusetts and in some of the other States of our Union is a subject for hearty congratulation among ourselves and for devout gratitude to Heaven. It can not be denied that the cause has won to itself most able and earnest advocates, who are in: no way officially connected with it, but who cherish it from the purest motives of duty and philanthropy. But it happens to this, as to all other good causes, that, some of its professed friends have attached themselves to it from collateral and some from sinister motives. It is equally true that the cause has enemies, although in this community there are but few who dare to make open proclamation of theirhostility. But opponents are all the more formidable when their opposition is secret. Their measures of counteraction are not the less efficient because they are indirect and hide their origin under specious pretenses. There is a third class who have nofaith in the utility of education. They number it among what they are pleased to. call the Utopian schemes of reform with which the age is teeming, and they regards with an ill-concealed suspicion either the bonesty of purpose or the soundness of intellect of those who are laboring to uphold its banner and to bear it forward.. There are those also who suspect in education the existence of some unknown and. mystical power which, should it once obtain the ascendency, would bear the community onward, they know not whither; and having some ism or ology of their own by which, provided all civil institutions and Nature herself will succumb totheir dictation, they can forthwith extricate the world from all its troubles and carry it forward in the directest line and with the swiftest speed to a millennial goal, they discard an agency whose power they can neither control nor comprehend. And lastly, there are those who array themselves against education solely from mercenary-

[^0]motives-because of the one or two mills upon the dollar which its support subtracts from their property.

To meet the opposition and the indifference originating in these and similar prejudgments, the subject of education has been very much "agitated," particularly in the northern portion of our ceuntry, within the last dozen years. There can be no hazard in affirming that far more has been spoken and printed, heard and read, on this theme within the last twelve years than ever before, were it all put together, since the settlement of the colonies. The consequence certainly has been a very marked development of the merits of the subject and a corresponding opening or expansion of the public mind for their recognition. To many sensible men it has come like a revelation, inspiring hopes for the amelioration of mankind and for the perpetuity of our institutions which they had never dreamed of before. There are thousands of persons among us whose once darkened minds have been so quickened with life and illuminated with wisdom on this subject as to beget an intolerable impatience under old imperfections, a perception of which has made rest impossible and the pleasures of home uncomfortable until, within their respective spheres, they had effected a reform.

In order to make this subject more intelligible to the common mind, as well as to conform to broad distinctions which Nature herself has established, it has been considered under a threefold aspect-first, as embracing the proper care and training of the body, that its health and longevity may be secured; second, as cultivating the faculties by which we perceive, compare, analyze and combine, remember, reason, and perceive natural fitness and the beauty of things, so that we may know more of the world in which we are placed and of the glorious attributes of its Maker, and so that, by more faithfully harmonizing our conduct with its laws, we may the better enjoy its exquisite adaptations to our welfare; and third, as fashioning our moral nature into some resemblance to its divine original, subordinating our propensities to the law of duty, expanding our benevolence into a sentiment of universal brotherhood, and lifting our hearts to the grateful and devout contemplation of God.

In pursuance of these fundamental ideas, it has been shown by the authority of the highest medical men in the country that even in the present imperfect state of physiological science more than one-half of all the cases of bodily disability and disease, more than one-half of all the pains and expenditures of sickness, more than one-half of all the cases of premature death-that is, of death under the age of 70 years-are the consequence of sheer ignorance-not of any irrepealable decree or fatality necessitating their existence, independently of our consent and cooperation, but of our own brutish ignorance of the conditions of health and life to which our bodies have been subjected by their Maker. And I desire, also, to be here understood as not including in this moiety of umnecessary suffering and of untimely death a single one of that extensive class of cases which result from a slavish submission to some tyrannous appetite, such as intemperance for instance, where the knowledge, even if we possessed it, might be overborne in a conflict with the sensual desire; but I mean maladies, pains, and death which a bad man would be as quick to avoid as a good one, which every sane man would desire to escape from as he would from blindness or deafness, the gout or the toothache. Even were ignorance, then, to be classed among the greatest luxuries of life, it would be found too costly an indulgence to be borne by an economical people. ${ }^{1}$

The indispensableness of education to worldly prosperity has also been demonstrated. An ignorant people not only is but must be a poor people. They must be destitute of sagacity and providence, and, of course, of competence and comfort. The proof of this does not depend upon the lessons of history, but on the constitution of nature. No richness of climate, no spontaneous productiveness of soil, no facilities

[^1]for commerce, no stores of gold or of diamonds garnered in the treasure chambers of the earth, can confer even worldly prosperity upon an uneducated nation. Such a nation can not create wealth of itself; and whatever riches may be showered upon it will run to waste. The ignorant pearl divers do not wear the pearls they win. The diamond hunters are not ornamented by the gems they find. The miners for silver and gold are not enriched by the precious metals they dig. Those who toil on the most luxuriant soils are not filled with the harvests they gather. All the choicest productions of the earth, whether mineral or vegetable, wherever found or wherever gathered, will in a short time, as by some secret and resistless attraction, make their way into the hands of the more intelligent. Within the last four centuries the people of Spain have owned as much silver and gold as all the other nations of Europe put together, yet at the present time poor indeed is the people who have less than they. The nation which has produced more of the raw material and manufactured from it more fine linen than all contemporary nations is now the most ragged and squalid in Christendom. Let whoever will sow the seed or gather the fruit, Intelligence will consume the banquet.

It must be admitted, indeed, that when the people composing any particular state or country are compared with each other, the wisest are not always the wealthiest. This natural law, like others, is liable to fluctuations and disturbances from artificial and arbitrary institutions. Primogeniture, entail, monopoly, may derange its action. Yet even here, as if to add confirmation to the general principle, it is always found that the families of inferior minds who inherit wealth, and the imbecile sovereigns or rulers who inherit power, owe their elevation to the greatness of some ancestor, whose mental superiority not only won preeminence for himself, but for his descendants also. Where wealth or social position has not been earned or won by the possessors themselves, it is the representative of some ancestral talent whose force is not yet expended.

Who that visited the late Mechanics' Fair in the city of Boston was not bewildered by the number and diversity of the products of inventive genius and skill there exhibited? To the common observer it was profusion producing confusion. What would be the result and "sum total" of a mechanics' fair among a tribe in the interior of Africa or among the aborigines of our TVestern wilderness? Hardly more than a stone hatchet, a flint-headed arrow, a stick burned at the end and sharpened into a spear, and a few yards of tawdry wampum. Yet the variety and richness of the one compared with the porerty and rudeness of the other would be but feeble symbols of the relative power and weakness of the minds from which they sprung. And whence came the vast, the wonderful intellectual superiority? It came from the old slate and pencil; the bit of chalk and the bit of board, planed or unplaned; the spelling book, and the reading book, which have been found in every household through all our borders from the time of the first rude huts that went up, amid winter and storm, about Plymouth Rock, which have been the companions and playthings of every nursery and the business things of every schoolroom for more than two centuries, until the children, as if by force of hereditary instinct, seem to look round inquiringly after them almost as soon as they are borm. These are the acorns whence the majestic forest has sprung.
If the difference between persons dwelling in the same community and living side by side be less striking to the senses, it is not less instructive to the reason. In my fifth annual report I presented the testimony of some of the most eminent and successful business men amongst us, proving from business data and beyond controversy that labor becomes more profitable as the laborer is more intelligent, and that the true mint of wealth, the veritable coinage of the country, is not to be found in magnificent Government establishments, at Philadelphia or New Orleans, but in the humble schoolhouse.

On the occasion referred to one of our most sagacious manufacturers declared, not
only in accordance with the conclusions of his own reason, but as the result of an actual experiment, that the best cotton mill in New England, if worked by operatives so low in the scale of intelligence as to be unable to read and write, would never yield the proprietor a profit-that the machinery would soon be worn out, the owner impoverished, and the operatives themselves left penniless. Another witness, for a long time superintendent of many work people, made the following striking remark: "So confident am I that production is affected by the intellectual and moral condition of help that whenever a mill or a room should fail to give the proper amount of work my first inquiry, after that respecting the condition of the machinery, would be as to the character of the help, and if the deficiency remained any great length of time I am sure I should find many who had made their marks upon the pay roll, being unable to write their names; and I should be greatly disappointed if I did not, upon inquiry, find a portion of them of irregular habits and suspicious character." ${ }^{1}$

Is it not, in fact, most palpably demonstrable from a comparison of the nature of man with the powers and properties of the material universe in which he is placed that he was designed to reach a point of intellectual and moral elevation far higher than any which the most favored people on the earth have yet attained? A material world, active with such invisible energies and constantly displaying such fitful changes as belong to our planet, would be the most cruel prison house to beings capable of perceiving its aspects but incapable of understanding its laws. The superiority of our affective and sympathetic faculties over those possessed by the lower orders of creation would only render us so much the more miserable and defenseless if we had not the faculties of reason and judgment, also, by which we are able to bring ourselves into harmony with surrounding circumstances. Without knowledge our present lives would be far more wretched than those of the brutes which perish, for we should be vulnerable on all sides, capable of suffering the keenest pain while incapable of avoiding its causes. The revolution of the seasons would inflict want and debasement upon the whole race if we could not foresee their vicissitudes and provide for their varying necessities. Comets and eclipses are fitted in their very natures to shed consternation and dismay upon the hearts of men until the intellect comes in to explain the sublime order that produces them. ${ }^{2}$

To the savage, thunder and lightning are tokens of divine wrath; while to the Christian philosopher they are only emphatic and vivid proofs of the greatness and wisdom of God. To the enlightened mind a tempest or a whirlwind is only a tempest or a whirlwind; but a barbarian dreads them a thousand times more for the anger of the gods which they denote and for the evils they portend than for any actual injuries which they inflict. The auroras of the north, so beautiful to the eye of science, have shaken myriads of hearts with fear. That numerous and varied class of phenomena which we call optical illusions are sources of the direst terror to the ignorant, while they gratify a philosophic curiosity with the purest delight. In short,

[^2]we know that all the wonders and glories which nature displays in her majestic course are only sources of superstition to those who have not learned her sublime laws-darkening the already darkened mind, debasing the debased, and terrifying the affrighted. It seems impossible that a benevolent Being could have gifted the human race with its high faculties if He had not provided for and ordained their development and education. All the other orders of animated nature are adapted to their condition; but a human soul, quickened by irrepressible impulses of curiosity, subject to the illusions of hope and to the agonies of fear, but with no power to unriddle the mysteries by which it is encompassed-with no power to realize the hopes spontaneously springing up within it or to emancipate itself from the bondage of fear-such a soul would be forever the trembling slave of nature, while nature would be a tyrant over it, deaf and remorseless. Whatever name might be given to the place of its habitation, it would be a habitation of unquenchable fire.

Knowledge and a highly developed and highly trained reason are to the temporal necessities of man what instinct is to the brute. But instinct is complete, periect, self-active; while knowledge and reason can never reach any adequate height without vigorous self-effort and copious instruction from others. Far better, therefore, would it have been for mankind had they never been elevated in the scale of existence above the simian tribe-the ape, the monkey, or the baboon-than that they should have been endowed with the faculties of memory, of hope, of fear, and of imagination, without an adequate ability to derive wisdom from past experience and to make provision for future necessities. There is no earthly power but education which, by supplying these wants, can rescue the human race from sinking as much below the brute creation as they were designed to rise above it.

So, too, if the practice of equity, virtue, and benevolence were not possible for the race, its condition would be far more deplorable than that of any horde of wild beasts that ever prowled through a wilderness or hid themselves for ambush in the depths of a jungle. Even tigers and wolves, with all their ferocity, can inflict but a transitory pain upon each other or upon the weaker races around them. The most ingenious of all the animals have never invented machines to torture those of their own or of an inferior order. The iron boot, the thumbscrew, the rack, the fagot, are dreadful realities in natural history, but the infamy of their invention and their use belongs not to the brute creation. Brutes can not build ships and cross oceans to despoil or enslave a defenseless and kindred race in another hemisphere, nor can they forge any fetters, whether of iron or of law, which shall bind in remorseless bondage not only the victim himself, but generations of his descendants. Brutes can not bereave each other of their natural instincts, make the mother forget her young, the mated pair assail each other's lives, or the offspring lay parricidal hands upon its parent, by transforming the choicest fruits of the earth into poison, and selling this poison for ignominious gain. The most selfish and ignoble races that ever flew through the air or swam in the sea never availed themselves of the accidental possession of power to establish orders of patrician and plebeian, or of lord and commoner, and thus to doom one portion of their number to perform all the toil and bear all the burdens of the tribe while they themselves monopolized all its leisure and its luxuries. What a spectacle would be presented if a few individuals of some family of insects, gathering themselves into conclave upon some spire of grass in the middle of a vast plain, or upon some leaf in a boundless forest, should there presume, not only to adjudicate upon all the purposes of creation and all the mysteries of eternity, but should denounce imprisoument and torture, the fagot and the scaffold, upon all who would not bow to their authority and vow assent to their conclusions. There are tribes of the brute creation, it is true, which prey upon other tribes, but it is only for the satisfaction of a physical want, and when their hunger is appeased their fierceness subsides; but not in the north, where their rage is whetted by arctic cold, nor in the south, where their blood is fevered by tropical heats, do they ever inflict upon a victim
the life-long solitude of a dungeon or gratuitously burn his body and heap contempt upon his ashes for not believing as they believe, or for not acknowledging as the Great Spirit of the universe the idol which they may have set up. If, then, I say, it had not been a part of the divine determination in the creation of our race that its terrible propensities should be controlled and its higher susceptibilities advanced into supremacy, zoology has yet to discover the species of animals so vile, so wretched, so mutually predaceous, that mankind has not reason to enry them. If posterity is to be what history shows us that nineteen-twentieths of all the preceding world have been, what not less than four-fifths of it now are, then is man not the noblest but the ignoblest work of creation, the accursed and not the favored of heaven. Not believing in such a destiny, I believe there is a way to avoid it.

Having proved, then, in former reports, by the testimony of wise and skilled men, that disease may be supplanted by health, bodily pain by enjoyment, and premature death by length of life, merely by the knowledge and practice of a few great physiological principles, such as every person can easily master before the age of sixteen years; and having also shown, by testimony equally authentic and satisfactory, that intelligence, cooperating with the bounties of nature, is sufficient to secure comfort and competence to all mankind, I propose to myself in the residue of this report the still more delightful task of showing, by proofs equally unexceptionable and convincing, that the great body of vices and crimes which now sadden and torment the community may be dislodged and driven out from amongst us by such improvements in our present common-school system as we are abundantly able immediately to make.

During the last summer, in order to a clear and full presentation of the subject to those persons whose testimony I wished to obtain, I prepared a circular setting forth, with as much precision and completeness as possible, certain specific emendations of our present school system-only such emendations, however, as we can readily make-and appealing to the experience and judgment of the persons addressed, to know what would be the results were the system to be so amended. This circular was sent to teachers highly competent to give evidence on so important a subjectcompetent, from their science and from their personal experience, from the sobriety of their judgment and from their freedom from any motive to overstate facts, or to deduce inferences too broad for the premises on which they were founded. In fine, the circular was sent to persons whose elevated character and whose extended personal acquaintance with the subject-matter on which they testify place them abore denial, cavil, or suspicion.

The circular and the answer to it follow:

## Circtlar.

## To

I desire to obtain the opinion of teachers who are both scientific and practical on a subject of great importance to the cause of popular education. Your long experience in school keeping, the great number of children whom you have had under your care, and your well-earned reputation as an instructor and trainer of youth prompt me to apply to you for answers to the subjoined inquiries.

My general object is to obtain such an opinion as your experience will authorize you to give respecting the efficiency in the formation of social and moral character of a good common-school education, conducted on the cardinal principles of the New England systems. In other words, how much of improvement in the upright conduct and good morals of the community might we reasonably hope and expect if all our common schools were what they should be, what some of them now are, and what all of them, by means which the public is perfectly able to command, may soon be made to become?

As we look around us we see that society is infested by vices both small and great. The value of life is diminished, and even life itself is sometimes made burdensome and odious by the existence amongst us of pests and nuisances in human form, whom the law forbids us to destroy, and whom, with all our efforts, we are unable wholly
to reform. Wre we permitted to hunt out and exterminate from society a wicked or mischierous man as we would a prowling wolf from the sheepfold, or could we apply the sovereign antidote of extinction to a pestilent brood of children whom profligate parents are about to send forth into the world, we might then secure ourselves in a summary manner from present fears and from future annoyance. So, too, if we could arrest the momentum of long habit or win back to the paths of virtue those Who by their frequent tread have worn the highways of vice both smooth and broad, we should then have access to a milder though a more laborious remedy. But the common sentiments of mankind would revolt at any proposal to prevent all violations of the moral code by extinguishing the life of the violators; and all history and experience afiord concurrent proof that the inbred habits of grown men and women, their accustomed trains of thought and of action, are mainly beyond the control of secondary causes. Hence it is that a great part of the legislation of every State and nation, a yast majority of the decisions of all legal tribunals, and a still larger proportion of all the labors and expenditures of philanthropic and Christian men have been devoted to the punishment of positive wrong or to the vain attempt to repair its nameless and numberless mischiefs. Could these wrongs and mischiefs be prevented our descendants would inherit a new earth.
The classes of common offenses by which society is vexed and tormented are numerous, but the individual acts of commission under the respective classes are absolutely incomprehensible sare by the Omniscient.
There is the detestable practice of profane swearing, which is motiveless and gratuitous wickedness. This is a vice which neither gives any property to the poor man nor any luxury to the rich one. It degrades even the clown to a lower state of vulgarity, and it would render the presence even of the most polished gentleman offensive and disgusting, if it were ever possible for a gentleman to be guilty of it.
Though greatly restricted at the present day in its destructive agency and gradually withdrawing itself from the more respectable and intelligent classes to the two extremes of society, to the luxuriously rich and the seli-made poor, yet the vice of intemperance still exists amongst us. Wherever it invades it eats out the substance of families, not only consumes the means of educating children, but eradicates also the very disposition to educate them; involves the innocent in the sufferings of the guilty, even torturing them with superadded pangs of shame which the guilty do not feel, and, according to the divinely ordained laws of our physical being, it risits the iniquities of the fathers upon the children unto the third and fourth generation by sowing in their constitution the seeds of inordinate desires.

Below that degree of slander or defamation which the law denounces as punishable there exists such an amount of censoriousness and detraction as often estranges acquaintances, dissolyes friendships, introduces discord into neighborhoods and communities, and sometimes entails hereditary animosities upon families and circles which might otherwise be blessed by harmony and peace.
Nor can the gross and cowardly offense of lying be omitted from this odious catalogue. This vice includes in its very nature so much of the assassin and the dastard that it lurks to inflict secret blows or only ventures abroad when large numbers, bound together by strong ties of passion or of interest, impart mutual confidence and boldness in the prosecution of a common object. Hence a private individual who is known as a liar is detested, scorned, and shumned, while profligate political defamers and sectarian zealots, inspired by a common sentiment of ambition or of intelerance and keeping themselves in countenance by their numbers and their partisanship, welcome this vice as an ally and rejoice in the successes obtained by its aid. No patriotism is proof against the rancor of party spirit, no piety or good works against the rage and blindness of religious bigotry.

In pecuniary transactions, the temptations to overreaching, to exorbitance, and to actual dishonesty are yielded to with a most lamentable frequency. The buyer takes advantage of the necessities of the seller, and obtains a transfer of his property for a small part of its value; or sometimes, by adroit management and preliminary scheming, he creates the necessity which places the victim within the jaws of his ararice. The seller knowingly overstates the quantity, the quality, or the value of the commodities he sells; and perhaps takes advantage of the ignorance or credulity of the purchaser to obtain a price which he knows to be exorbitant and inequitable. The employer often avails himself of the necessities of the employed to obtain his services for less than they are worth; he summons in hunger, and cold, and the sufferings of a dependent family, as advisers in helping to make an unrighteous bargain, and as sureties for its performance. Men without any pecuniary resources which they can call their own embark in hazardous speculations, where, if the rash adrenture should chance to prove successful, they will pocket all the gain; but should it turn out to be disastrous, their creditors must suffer all the loss.

In some of the commercial countries of Europe, a merchant's insolvency affects his moral character hardly less than his pecuniary credit. If a bankrupt can not show that his deficiency of means was occasioned by some disaster which he could not control, or by some loss which he could not reasonably be expected to foresee, he forfeits his mercantile standing amongst honorable dealers, and can retrieve his character only by actual proof of returning or of newly created honesty. A second failure, unexplained and unatoned for, brands with disgrace, and expels not more from the traffic than from the companionship of honorable men.

The above classes of wrongdoing, together with many others of a kindred nature, are regarded by the law as minor offences. Some of them it does not undertake to punish; yet, from their widespread prevalence and great frequency, they perhaps inflict as large an aggregate of evil upon society as those of a more heinous and formidable character, but of less frequent occurrence.

In regard to offences of a graver nature-such as come under the head of crimes or felonies-the condition of our country compares favorably with that of any other part of Christendom. Especially will this remark appear true, if we consider the slight amount of preventive force made use of in any part of our Union to deter from actual transgression; and as a general rule the lightness of the penal sanctions held up as a terror to evildoers. Yet that there does exist amongst us an appalling amount of criminality of this deeper dye; that flagrant offences against the rights of property, of person, of reputation, and of life are perpetrated, is proved by the records of our criminal courts, and by the mournful procession of convicts and felons, whom we see on their way to our penitentiaries and other receptacles prepared for the guilty.

Including all classes of offenders, both the less and the more flagitious, it is undeniable that there exists amongst us a multitude of men of whom it may be truly said, that it would be better for the community had they never been born; or had they died in childhood before their propensities for evil had been developed, or before they had gone abroad to disturb the peace of society, and to destroy that sense of security which every honest man is entitled to feel. To thin the ranks of this host of enemies to the welfare of the race, or to cripple the evil energies of those who could not be wholly reclaimed, has been the object of philanthropists and sages from the beginning of time. Their efforts, however, have been expended a million fold more upon the old than upon the young; and a million fold more, also, in the way of punishment than of prevention.

Among the republics of ancient times, a few wise and sagacious men did clearly perceive the bearing of education upon character; and, of course, upon innocence and guilt, both personal and public; but among the masses of the people there never existed any settled and operative conviction of this truth; and not a single year can be pointed out in all their long annals, where a majority of those who held the reins of government, and framed the laws of the State, rose to any practical or even theoretical conception of the grand idea, that the vital intelligence or the stupidity, the integrity or the dishonesty of the people at large, will be measured and bounded by the kind and degree of the education imparted to its children, just as the zones upon the earth's surface are measured and bounded by the amount of sunlight which is shed upon them. ${ }^{1}$

In modern times this relation of early education to adult character has been more clearly and generally recognized as being what it truly to a very great extent is, a relation between cause and effect. As one means of establishing this truth, many earnest well-wishers of their race have made extensive collections of what are called the "Statistics of Education and Crime." The inmates of large penal establishments have been subjected to a personal examination, in order to ascertain whether a greater portion of them, than of the community at large from which they were taken, were wholly ignorant of letters. In this investigation the comparison has been made between those who were able both to read and write, and those who could perform neither or but one of these operations.

I will not dwell here upon the amazing absurdity of any definition of the word "education," whose spirit or whose terms are satisfied by the mere ability to read and write. Reading and writing may be, and among this class of persons they usually are, mere mechanical processes; and how such attainments should ever have been dignified by the name of education, or confounded with that noble culture of the soul which pours the noonday illumination of knowledge upon the midnight darkness of ignorance, which seeks to enthrone the moral faculties over all animal desires and propensities, and to make the entire course of instruction subservient to the great duties of love to God and love to man-how an absurdity so extravagant

[^3]and now so obvious could ever have been committed car be explained only by reference to the low and unworthy ideas of education which once prevailed.

The naked capacity to read and write is no more education than a tool is a workman, or a telescope is a Laplace or a Le Verrier. To possess the means of education is not the same as to possess the lofty powers and immunities of education, any more than to possess the pen of a poet is to possess a poet's skill and "faculty divine;" or than the possession of the Gospel is the possession of that liberty wherewith Christ maketh his disciples free; and, that reading and writing are only instruments or means to be used in education, is a truism now so intuitively obvious as to disdain argument. And hence it is, that, of two persons one of whom can barely write his name or spell out a paragraph in a newspaper, while, to the mind of the other, the contents of all manuscripts and of all libraries have no more existence than nonentity has to his senses, it would be hazardous to affirm that the chances of the former for a virtuous life are much superior to those of the latter. Nor do the best authorities dispel all the clouds of doubt which hang over this question. Some writers maintain that crime actually increases in proportion to the diffusion of the rudiments of knowledge, provided the knowledge which is diffused stops with mere rudiments. I think, however, it must be conceded that the preponderance of names and of statistical results does, on the whole, clearly favor the opinion that crime recedes ass knowledge advances; and that, as the full-risen sun enables a traveller to see his path and to avoid the dangers that beset it, so the first and faintest gleaming of the morning twilight helps him to discover his way and to shun its perils. It must also be remembered, that when great numbers are taken as the basis of comparison, all of whom possess the rudiments of knowledge, it will always happen that some of them will possess more than the rudiments. Hence, taking whole communities together, I believe the legitimate and inevitable conclusion to be that every advance in knowledge amongst a people is pro tanto an invasion of the domain of crime.

For years past, however, although I have carefully scrutinized these so-called "Statistics of Education and Crime," and am convinced that they do establish a distinction between the two classes-one of which can read and write, while the other can do neither of these things or but one of them-in regard to their relative exemption from crime, or exposure to it, yet I have never been able to bring myself to present these schedules to our people, as an argument in favor of that elevated and ennobling education to which it is their duty to aspire. I have felt that, by so doing, the argument would be shorn of half its power by the feebleness of the proofs brought to sustain it. It would be like exhibiting a taper to prove the existence of light, while surrounded by the sun's effulgence. Our present state of society, the form of government under which we live, the improvable faculties with which we have been endowed by our Maker, and the solemn destiny that awaits us, all demand vastly more than "a knowledge of the nature and power of letters, and the just method of spelling words," and the mechanical ability to imitate, with a pen, their written of printed signs.
Yet this degrading idea of education, which was first conceived in reference to the ignorant classes of Europe, has been, to some extent, adopted and acted upon in our own country. The last census of the United States, taken by authority of a law of Congress, and in compliance with a provision of the Federal constitution, proceeded upon this European fallacy. It virtually adopted the old line of distinction between education and ignorance, for it required an enumeration of all persons over twenty years of age who were unable to read and write. The results have been published and they are now embodied with the permanent statistics of the country. Towns, counties, and States are classed, their condition is mentioned with honor or with opprobrium, according to their relative position above or below this absurd standard of knowledge and culture. It is inevitable that this legislative sanction of such a standard-this naturalization of it, so to speak-should have a most baneful effect in debasing public opinion upon the subject. Facts of an interesting nature are presented, it is true, but their tendency is to rob education of all its noblest attributes.
But though the public mind always tends strongly to conform its modes of thinking to legal definitions, and to subscribe to opinions sanctioned by high authority, yet the common sense of the community, especially in the more educated States of the Union, has outgrown these contracted notions, and has claimed for the word education a far ampler and loftier significance. All intelligent thinkers upon this subject now utterly discard and repudiate the idea that reading and writing, with a knowledge of accounts, constitute education. The lowest claim which any intelligent man now prefers in its behalf is, that its domain extends over the threefold nature of man-over his body, training it by the systematic and intelligent observance of those benign laws which secure health, impart strength, and prolong life; over his intellect, invigorating the mind, replenishing it with knowledge, and culti-
vating all those tastes which are allied to virtue; and over his moral and religious susceptibilities also, dethroning selfishness, enthroning conscience, leading the affections outward in good will toward men, and upward in gratitude and reverence to God. In thousands of reports, prepared by school committees; in frequent addresses and lectures, delivered on public occasions; in all educational documents emanating from high official sources; and in every work pretending to scientific accuracy, or to any comprehensive outline of the subject, these sacred and majestic attributes have been set forth; and it has been demonstrated, hundreds of times over, that the effect of a sound education of the people must, not accidentally but necessarily, not occasionally but always, be, to repress the commission of crime and to promote the diffusion of human happiness; and that to act in conscious defiance or disregard of these truths is treachery to the best interests of our fellow men, and impiety towards the Author of the moral universe.

But, notwithstanding all that has been said, and so well said, as to the moral power of education in reforming the world, there have still been a vagueness and an indefiniteness in regard to the extent of that power which have shorn argument and eloquence of much of their strength. Nowhere have its adrocates set forth distinctly and specifically how much they believe can be accomplished by it. When an alleged improvement is presented to a judicious man, he wishes to know whether and to what extent its benefit will exceed its cost. A capitalist will not aid a new enterprise with his money until he is satisfied of the profitableness of the investment, nor will a manufacturer purchase new machinery unless he is convinced that it will do better work in the same time or equal work in less.

It seems to me that the time is now arrived when the friends of this cause should plant themselves on a more conspicuous position, when, surveying the infinite of wretchedness and crime around them, before which the stoutest heart is appalled and humanity stands aghast, they should proclaim the power and the prerogatives of education to rescue mankind from their calamities. Founding themselyes upon evidence that can not be disputed, and fortifying their conclusions by the results of personal experience, they should proclaim how far the miseries of men can be alleviated and how far the dominion of crime can be orerthrown by such a system of education as it is perfectly practicable for every civilized community forthwith to establish, and thus they shoukl awaken the conscience of the public to a sense of its responsibility.

The idea will be more distinctly presented under an inquiry like the following:
Under the soundest and most vigorous system of education which we can now command, what proportion or percentage of all the children who are born can be made useful and exemplary men-honest dealers, conscientious jurors, true witnesses, incorruptible voters or magistrates, good parents, good neighbors, good members of society? In other words, with our present knowledge of the art and science of education, and with such new fruit of experience as time may be expected to bear, what proportion or percentage of all children must be pronounced irreclaimable and irredeemable, notwithstanding the most vigorous educational efforts which in the present state of society can be put forth in their behalf; what proportion or percentage must become drunkards, profane swearers, detractors, vagabonds, rioters, cheats, thieves, aggressors upon the rights of property, of persons, of reputations, or of life; or, in a single phrase, must be guilty of such omissions of right and commissions of wrong that it would have been better for the community had they never been born? This is a problem which the course of events has evolved, and which society and the Government must meet. If, with such educational means and resources as we can now command, $80,90,95$, or 99 per cent of all children can be made temperate, industrious, frugal, conscientious in all their dealings, prompt to pity and instruct ignorance instead of ridiculing it and taking advantage of it, public spirited, philanthropic, and observers of all things sacred; if, I say, any given proportion of our children, by human efforts and by such a divine blessing as the common course of God's providence authorizes us to expect, can be made to possess these qualities and to act from them, then just so far as our posterity shall fall below this practicable exemption from vice and crimes, and just so far as they shall fail to possess these attainable virtues, just so far will those who frame and execute our laws, shape public opinion and lead public action be criminally responsible for the difference. I can conceive of no moral proposition clearer than this. Society, in its collective capacity, is the possessor of all the knowledge and the owner of all the property in existence. Govermments have been organized and are invested with power to use any needful amount of this property for purposes of education, and by holding out adequate inducements and remuneration they can command the services of the highest talent. Here, then, duty and the means to perform it come together. The only remaining question is how much can be done? For in a cause and for a pur-
pose like this nothing which can actually be done can be guiltlessly omitted. If it is proved with a reasonable degree of certainty that $99,95,90,80$, or any other given percentage of all children, can be rescued from vice and crime and can be so educated and trained as to become valuable citizens but the State refuses or declines to do this work, then the State itself becomes a culprit, and before the great Moral Judge who is seated on the throne of the universe it must stand a spectacle of shame and guilt, like one of its own inferior culprits before its own judicial tribunals.

With these preliminary observations, which seemed to be necessary in order to a full exposition of the object I have in view, I proceed to submit the following specific inquiries, and to request your answer to them:

1. How many years have you been engaged in school keeping, and whether in the country or in populous towns or cities?
2. About how many children have you had under your care, of which sex, and between what ages?
3. Should all our schools be kept by teackers of high intellectual and moral qualifications, and should all the children in the community be brought within these schools for ten months in a year, from the age of 4 to that of 16 years; then, what proportion, what percentage, of such children as you have had under your care could, in your opinion, be so educated and trained that their existence on going out into the world would be a benefit and not a detriment, an honor and not a shame, to society? Or, to state the question in a general form, if all children were brought within the salutary and auspicious influences I have here supposed, what percentage of them should you pronounce to be irrecłaimable and hopeless? Of course, I do not speak of imbeciles or idiots, but only of rational and accountable beings.

You will perceive that in certain respects I am supposing no change in the present condition of society. I am taking families as they are now, and am allowing all the unfavorable as well as the favorable infiuences of the old upon the young to continue to operate, at least for a time, as heretofore. Nor do I suppose any sudden or transforming change in cooperative or auxiliary institutions-such as the Sabbath school, the pulpit, and so forth-although it is certain that such a state of things as is here outlined would gradually impart new vigor to all that advances the progress of society, while it would impair the force of all that retards it.

On the other hand, however, I am supposing two great changes. I am supposing all our children to be placed under the care of such a class of men and women as we now honor by the appellation of first-class or first-rate teachers, of such teachers as are able in the schoolroom, both to teach and to govern, and who, out of the schoolroom, will be animated by a missionary spirit in furthering the objects of their sacred vocation. I have also supposed that all the children in the community shall be brought under the forming hands of such teachers, from the age of 4 to that of 16 , ten months in each year.

While, therefore, the above supposition leaves children exposed in many cases to the pernicious family and social influences, under which they are now suffering, it assumes that all the children, when out of school, shall meet only such children as are enjoying the same high training, the same daily instillation of moral principles as themselves. My supposition allows a continuance of the same family and adult influences, at least until these shall be supplanted by the better influences of the rising generation, action and reaction hastening results, because these influences are facts which no earthly power can cause to be immediately changed. But I have supposed this noble company of teachers, this length of schools, and this universality of attendance, because these are reforms on the present condition of things which can be effected without any great delay, at the furthest a yery few years being an ample allowance for the completion of such a change.

To reduce my third question, then, within its narrowest limits and to make it as definite and precise as possible, suppose yourself to be stationed as a school teacher in a place similar to any of those in which you have before labored; suppose yourself, too, to be surrounded by teachers fully as capable and as zealous in all respects as yourself; and suppose, further, that all the children are brought under your care or theirs, as above specified-that is, for a period of twelve years, or from 4 to 16, and ten months in each year, and will you then please to declare what proportion or percentage of those under your own care you believe could be turned out, the blessing and not the bane, the honor and not the scandal, of society; and on what proportion or percentage- the complement of the other-would your experience compel you to pronounce the doom of hopelessness and irreclaimability?

Very truly and sincerely, yours, etc.,
Horace Mayt,
Secretory of the Board of Education.

I extract from the replies to this circular only the specific answers to the circular.

> Letter from John Griscom, esq.

My Esteened Friend: * * *
My belief is that, under the conditions mentioned in the question, not more than 2 per cent would be irreclaimable nuisances to society, and that 95 per cent would be supporters of the moral welfare of the community in which they resided.

With teachers properly trained in normal schools, and with such a popular disposition toward schools as wise legislation might effect, nineteen-twentieths of the immoralities which afflict society might, I verily believe, be kept under hatches, or eradicated from the soil of our social institutions.

Every step in such a progress renders the next more easy. This is proved not only on the grand scale of comparing country with country, and state with state, but district with its adjacent district, and neighborhood with neighborhood.

Finally, in the predicament last stated in the circular, and supposing the teachers to be imbued with the Gospel spirit, I believe there would not be more than onehalf of one per cent of the children educated, on whom a wise judge would be "compelled to pronounce the doom of hopelessness and irreclaimability."
In nothing which I have advanced has it been my intention to advocate any sectarian instruction in our schools; or anything adverse to the statutory limits of the Massachusetts school system. I therefore expressly disavow any intention to recommend truths or doctrines as part of the moral instruction to be given in public schools, which any believer in the Bible would reasonably deem to be sectarian.

I am, with true ereem, thy friend,
Jno. Griscom.
Letter from D. P. Page, esq.
State Normal School,
Albany, N. Y., November 20, 18 价.
Hon. Horace Mann,
Dear Sir: * * *
Could I be connected with a school furnished with all the appliances you name, where all the children should be constant attendants upon my instruction for a succession of years; where all my fellow-teachers should be such as you suppose, and where all the favorable influences described in your circular should surround me and cheer me, even with my moderate abilities as a teacher, I should scarcely expect, after the first generation of children submitted to the experiment, to fail, in a single case, to secure the results you have named. ****

But I should not forgive myself, nor think myself longer fit to be a teacher, if, with all the aids and influences you have supposed, I should fail, in one case in a hundred, to rear up children who, when they should become men, would be "honest dealers, conscientious jurors, true witnesses, incorruptible voters or magistrates, good parents, good neighbors, good members of society," or, as you express it in another place, who would be "temperate, industrious, frugal, conscientious in all their dealings, prompt to pity and instruct ignorance, instead of ridiculing it and taking advantage of it, public-spirited, philanthropic, and observers of all things sacred;" and, negatively, who would not be "drunkards, profane swearers, detractors, vagabonds, rioters, cheats, thieves, aggressors upon the rights of property, of person, of reputation or of life, or guilty of such omissions of right and commissions of wrong that it would be better for the community had they never been born." * * *

With sincere regard, your friend,
D. P. Page.

> Letter from Solomon Adams, esq.

Boston, November 24, 1847.
Hon. Horace Mann.
My Dear Sir: * * *

1. I have been engaged in this profession twenty-four years. The first five years in the country, the remainder of the time in a city.
2. My whole number of pupils is a little below two thousand. The last nineteen years my pupils have been females. Previously, both sexes. * * *

If a well-conducted education produces benevolence, justice, truth, patriotism, love to God, and love to man, in one case, the same education, in the same circum-
stances, will produce the same results in all cases. The results for which we look and labor sometimes fail, not because the great law of uniformity is at fault, but by reason of counteracting causes which may escape our most careful scrutiny. Does the failure impair our confidence in the uniformity of moral causes and effects? The moment the law fails, every cord that binds society together is sundered; society is disintegrated. Every social enactment by which society attempts to regulate its members, every motive by which one man hopes to influence another, assumes this uniformity. It is the hinge on which all social influences turn. Without it we could not shape moral means to moral ends. To destroy it-to doubt it-would be the moral unhingement of society.
In this great law are the teacher's hopes and encouragements. The great outline of the means he is to employ is well defined. It is his province to bring all those moral appliances to bear upon the soul, which are suited to lead it into harmony with truth and with God-to train it to the perception and love of truth and goodness. In doing this the faithful teacher is a coworker with God, and may confidently look to the Author of all good to give the crowning blessing to his strenuous endeavors. There are those (and I confess myself of the number) who believe and feel that all human endeavors, unaided by an influence from on high, will prove fruitless so far as the highest wants of the immortal spirit are concerned. Yet those who feel so can tell us of no way in which they are authorized to expect such an infiuence, and of no way in which it is exerted even by almighty power, except through the instrumentality of truth presented to the mind. There might as well be a conflagration without fire, or a flood without.fluid.
I confess I do not see how our different theological views can essentially alter our modes of instruction. We are all to train the young in the way in which they should go, "giving line upon line, precept upon precept, here a little and there a little," waiting for and expecting precious fruit. The fruit may ripen slowly. From day to day you may not be able to see any progress. This holds true both in moral and intellectual training. But by comparing distant intervals progress is perceptible. At length a result comes which repays all the teacher's labor and inspires new courage for new efforts. You ask for my own experience. This is my apology for alluding with freedom to myself. Permit me to say that in very many cases, after laboring long with individuals almost against hope and sometimes in a manner, too, which I can now see was not always wise, I have never had a case which has not resulted in some goud degree according to my wishes. The many kind and voluntary testimonials given years afterwards by persons who remembered that they were once my wayward pupils are among the pleasantest and most cheering incidents of my life. So uniform have been the results that I have unhesitatingly adopted the motto, "Never despair:" Parents and teachers are apt to look for too speedy results from the labors of the latter. The moral nature, like the intellectual and physical, is long and slow in reaching the full maturity of its strength. I was told a few years since, by a gentleman who knew the history of nearly all my pupils for the first five years of my labor, that not one of them had ever brought reproach upon himself or mortification upon friends by a bad life. I can not now look over the whole list of my pupils and find one who had been with me long enough to receive a decided impression whose life is not honorabie and useful. I find them in all the learned professions and in the various mechanical arts. I find my female pupils scattered as teachers through half the States of the Union, and as the wives and assistants of Christian missionaries in every quarter of the globe.
So far, therefore, as my own experience goes, so far as my knowledge of the experience of others extends, so far as the statistics of crime throw any light on the subject, I should confidently expect that ninety-nine in a hundred, and I think even more, with such means of education as you have supposed and with such divine favor as we are authorized to expect, would become good members of society, the supporters of order and law and truth and justice and all righteousness.
That I may not be misunderstood, allow me to add a few explanatory remarks.
I have no confidence in the reformatory power of education into which moral and religious influences do not enter. I assume-as anyone having the slightest acquaintance with your writings and teachings on this subject knows that you do-that the three great classes of powers-the physical, intellectual, and moral-shall each receive its proper training; and then I feel authorized to look confidently for that providential blessing which will secure the high results already alluded to. Without such a training I have no right to expect the blessing of Heaven or a good result; I do not fulfill the conditions on which such results are promised. * * *

It is to be feared, yea, to be for a lamentation, that comparatively few of teachers and still fewer of the community have looked upon a school education as anything more than a very limited intellectual training, leaving physical and moral culture to
take care of themselres. The school laws of Massachusetts have always contemplated other attaimments and vastly higher ends. Yet it so happens that that part of the law has been best remembered and acted upon which speaks of reading, writing, and the elements of arithmetic. These have been insisted on chiefly with reference to their direct application to the business and traffic of life, as if it were the chief end of man to count coppers, pocket them, and keep them. While the law contemplates these elementary attainments as merely the beginnings and inlets to all the treasures of wisdom, how many have looked upon them as the education of the boy and the man! * * *

Very truly, your friend and obedient servant,
S. Adims.

Letter from Rer. Jacob Abbott.

Neir York City, June 25, $184 \%$.

Hon. Horace Mane,
Dear Sir: * * *

1. I have been engaged in the practical duties of teaching for about ten years, chiefly in private schools in Boston and New York.
2. I have had under my care, for a longer or shorter time, probably nearly eight hundred pupils. They have been of both sexes, and of all ages from four to twentyfive.
3. If all our schools were under the charge of teachers possessing what I regard as the right intellectual and moral qualifications, and if all the children of the community were brought under the influence of these schools for ten months in the year, I think that the work of training up the whole community to intelligence and virtue would soon be accomplished, as completely as any human end can be obtained by human means.

I do not think, however, that, so far as the formation of the habits of virtue in the young is concerned, the accomplishment of the result depends either upon the intellectual powers or attainments of the teacher, or upon the amount of formal moral instructions which he gives his pupils. Knowledge alone has but little tendency to affect the feelings and principles of the heart; and formal moral instructions, except as auxiliaries to other influences, have very little power, according to my experience, over the consciences and characters of the young.

The true power of the teacher in giving to his pupils good characters in future life, seems to me to lie in his forming them to the practice of virtue, while under his charge, by the influence of his own personal character and actions. To do this, however, he must have the right character himself. He must be governed, in all that he does, by high and honorable principles of action. He must be really benevolent and kind. He must take an honest interest in his pupils-not merely in their studies and general characters, but in all their childish thoughts and feelings, in the difficulties they encounter, in their temptations and trials, in their sports, in their contentions, in their troubles-in everything, in fact, that affects them. He must, in a word, feel a strong interest and sympathy for them, in the thousand difficulties and discouragements they must encounter, in slowly finding their way, with all their ignorance and inexperience, to their place in the complicated and bewildering maze of human life.

A teacher who takes this sort of interest in his pupils will understand them and sympathize with them, in a way which will at once command their kind regard, and give him a powerful, and, in the view of others, a yery mysterious ascendancy over their minds. They feel as if he was upon their side, taking their part, as it were, against the difficulties, and dangers, and troubles, which surround them. Thus he becomes one of them-a sharer in their enjoyments-a partaker of their feelings. They come to him with confidence. He plans their amusements; he joins them in conversation; he settles their disputes. They see on what principles he acts, and they catch, themselves, the same mode of action, from him, by a kind of sympathy. They imbibe his sentiments insensibly and spontaneously, not because he enunciates them, or proves them in lectures, but because he exhibits them in living reality in his conversation and conduct. This sort of sympathetic action between heart and heart has far greater influence, among all mankind, than formal teachings and exhortations. It is the life and spirit of virtue, in contradistinction from the letter and the form. * * *

If all the children of this land were under the charge of such teachers, for six hours in the day, and ten months in the year, and were to continue under these influences for the usual period of instruction in schools, I do not see why the result would not be that, in two generations, substantially the whole population would be
trained up to virtue, to habits of integrity, fidelity in duty, justice, temperance, and mutual good will. It seems to me that this effect would take place in all cases, except where extremely unfavorable influences out of school should counteract it, which I think would hardiy be the case, except in some districts in the more populous cities.

I am, very respectfully, yours,
Jacob Abbott.
Letter from F. A. Adams, esq.
Hon. Horace Mann,
Dear Sir: * * *
I do not hesitate to express the conviction that there is no agency which society can exert, through the Government, capable of exerting so great a moral influence for the rising generation as the steady training of the young in the best schools. * * *

In reply to the specific inquiry in your circular, What proportion of our youth would probably, under the advantages of schooling presupposed in the circular, fail of fulfilling honorably their social and moral obligations in society? I would say that in the course of my experience for ten years in teaching between three hundred and four hundred children, mostly boys, I have been acquainted with not more than two pupils in regard to whom I should not feel a cheeriul and strong confidence in the success of the proposed experiment. In regard to these two cases I should not despair, but should have a strong preponderance of fear that under the best influences, such as you have supposed, they would still remain wedded to low and mischievous habits. From their peculiar temperament there was much reason to suppose that a life of steady and hard labor would do for them much, in a moral point of view, which the influences of school could not accomplish.

The class of youth I have had under my care would in some respects afford a better than average chance for the success of the experiment, as they in all cases have been exempt from the evils of poverty. In other respects, however, this exemption was counterbalanced by habits of self-indulgence, which could not have existed had the pecuniary means been wanting.

I remain, dear sir, with sincere respect and esteem, yours,

F. A. Adams.

Orange, N. J., December 11, 18 行.
Letter from E. A. Andrerus, esq.
New Britany, Conn., December 8, $184 \%$
Hon. Horace Manr,
Dearsir: * * *
In reply-to your first and second questions, permit me simply to remark that I have been connected with the department of education, either as pupil or as teacher, for more than fifty years. I have instructed both in the country and in cities; in the former I have, for the most part, had the charge of only a few select pupils; in the latter, for about twenty years, I was connected with large institutions of instruction. I have no means of determining with any tolerable approach to accuracy the whole number of my pupils, nor the proportion of each sex. * * *

I do not hesitate to express my conviction that such an education as your question supposes, continued for so long a period as twelve years, and including all the children of the community, would remove a very large portion of the evils with which society is now burdened. I need not say that I would be far from attributing so important results to any system of merely intellectual training, or even to the most perfect combination of intellectual, physical, and moral discipline, to the exclusion of that which is strictly religious. Such a qualification of my meaning might have been necessary, on account of the limited sense in which the word education is often used, had not the necessity been removed by the express terms of the conditions annexed to the questions in your circular.

It may indeed be feared that society is not yet fully prepared to put forth the effort necessary to accomplish so desirable a result; but I can not believe that the time is very remote when its attainment will be considered an object of paramount importance. It can not be that the millions of intelligent men found in this and in other Christian countries can much longer permit their feelings to be enlisted, and the resources of the communities to which they belong to be employed, in promoting objects of far inferior value; while the advantages of a good system of general education are, in so great a degree, overlooked. If, as I fully believe, it is in the power of the people of any State, by means so simple as your question supposes,
and so completely in their own power as these obviously are, so to change the whole face of society in a single generation that scarcely 1 or 2 per cent of really incorrigible members shall be found in it, it can not be that so great a good will continue to be neglected, and the means for its attainment unemployed.

In forming our estimate of the probability of so important a result as I have supposed, it must not be forgotten, that, simple as are the means now proposed for its attainment, they have never been employed, so far as I know, in any extended community whose experience is on record. In Scotland, and of late in Prussia, a considerable approximation has been made toward reaching the supposed conditions, and with benefits, it is believed, fully corresponding with the degree of perfection of their respective systems. The common schools of New England, which have done so much to elevate her character, have still fallen immeasurably short of the conditions supposed. With all their acknowledged defects, however, the instances, I believe, are few in which those who have been trained in them, from childhood to the close of the period usually allotted to education in these schools, have afterwards, on mingling with the world, proven to be incorrigibly vicious, a burden rather than a benefit to society. The records of our criminal courts and the doors of our penitentiaries, have seldom been opened to those who, in childhood, had been in regular daily attendance, for ten or twelve years, upon the exercises of our common schools, however imperfect these schools may have been in their organization, and notwithstanding all the evil influences of uneducated associates to which the pupils have been exposed when out of school. The cell of the convict has, on the contrary, been almost uniformly occupied by those who have enjoyed few of the benefits of our common schools; and even the tenants of our poorhouses, it is believer, have, in most instances, belonged to the same unfortunate class. * * * Very truly, yours, etc.,

E. A. Andrews.

Letter from Roger S. Houard, esq.
Thetford, Vt., September 1, 1847.
Hon. Horace Mann,
Dear Sir: * * *
Judging from what I have seen and do know, if the conditions you have mentioned were strictly complied with, if the attendance of the scholars could be as universal, constant, and long-continued as you have stated, if the teachers were men of those high intellectual and moral qualities, apt to teach, and devoted to their work, and favored with that blessing which the word and providence of God teach us always to expect on our honest, earnest, and well-directed efforts in so good a cause, on these conditions, and under these circumstances, I do not hesitate to express the opinion that the failures need not be, would not be, one per cent. Else, what is the meaning of that explicit declaration of the Bible, "Train up a child in the way he should go, and when he is old he will not depart from it?"

I am aware that the opinion I have expressed above may by some be considered extravagant. But I have not formed or expressed it without deliberation. During all my experience as a teacher, I have never known the scholar whom, if brought within the reach of these salutary and auspicious influences for the length of time named, I should now be willing to believe, or dare to pronounce, utterly hopeless and irreclaimable. I do not mean to say that I never failed. But I do say that, in some of the most difficult and desperate cases I have ever met with, as a teacher, the result of direct, special, and perserving effort was such as to create the conviction that, with more zeal, patience and perseverance, and especially with the favoring influences above alluded to, success would have been certain and complete. And this conviction became more settled and strong the longer I continued to teach.

The power of a truly enlightened and Christian system of common-school education is but little understood and appreciated. When parents shall begin to feel, as they ought, its importance, when the community generally shall be willing to make the necessary efforts and sacrifices, and when teachers of the requisite literary qualifications and of high moral aims shall enter upon the work with a martyr's zeal, conscious that every day they are making deathless impressions upon immortal minds, then we shall see, as I believe, results which will greatly surpass the highest expectations of the most ardent and enthusiastic advocates of popular education.

But I am occupying more space than I intended, and will only add that I am, dear sir,

Very respectfully and truly, yours,
Roger S. Howard.

Hon. Horace Manv.
Dear Sir: In reference to the questions you propose, I would reply that I have been engaged directly and personally as a teacher about fifteen years in Hartford, Conn., and Cincinnati, Ohio. I have had a few classes of quite young children under my care, for the purpose of making some practical educational experiments; but most of my pupils in age have ranged from twelve to twenty. I have had pupils from every State in the Union, and, though I have no precise records, I think the number can not be less than a thousand.

I have ever considered intellectuai culture as subordinate to the main end of education, which is the formation of that character which Jesus Christ teaches to be indispensable to the eternal well-being of our race. Excepting the few classes of young children before named, my efforts have been directed to measures for reforming bad and supplying good habits and principles in minds already more or less developed by education; and this I consider a much more difficult work than the right training of minds as yet uninjured by pernicious influences.

In reference to the work of reforming miseducated minds, I have found that the noblest constructed minds when greatly mismanaged are most liable to become the worst, while at the same time they most readily yield to the reformatory measure, so that, as a general rule, with exceptions, of course, I should expect to do the most good. to the worst class of pupils, and in some cases to make finer characters from this class than from those who, possessing less excitable temperaments, have not fallen so far.

I would also remark that in the results I should anticipate, in the case to be supposed hereafter, my chief hope of success would rest on the proper application of those truths and motives which distinguish the teachings of Jesus Christ from what is called "natural religion," and by modes of presentation more simple and practical than I have ever seen fully adopted, or than I ever adopted myself when a practical teacher.

With these preliminaries, which I hope will be carefully pondered and borne in mind as indispensable, I will now suppose that it could be so arranged that in a given place, containing from ten to fifteen thousand inhabitants, in any part of our country where I ever resided, all the children at the age of four should be placed six hours a day for twelve years under the care of teachers having the same views that I have, and having received that course of training for their office that any State in this Union can secure to the teachers of its children. Let it be so arranged that all these children shall remain till sixteen under these teachers, and also that they shall spend their lives in this city, and I have no hesitation in saying I do not believe that one, no, not a single one, would fail of proving a respectable and prosperous member of society; nay, more, I believe every one would at the close of life find admission into the world of endless peace and love. I say this solemnly, deliberately, and with the full belief that I am upheld by such imperfect experimental trials as I have made or seen made by others; but more than this, that I am sustained by the authority of Heaven, which sets forth this grand palladium of education, "Train up a child in the way he should go, and when he is old he will not depart from it.'"

This sacred maxim surely represents the divine imprimatur to the doctrine that all children can be trained up in the way they should go, and that when so trained they will not depart from it. Nor does it imply that education alone will secure eternal life without supernatural assistance, but it points to the true method of securing this indispensable aid.

In this view of the case I can command no language strong enough to express my infinite longings that my countrymen who as legislators have the control of the institutions, the laws, and the wealth of our physically prosperous nation should be brought to see that they now have in their hands the power of securing to every child in the coming generation a life of virtue and usefulness here and an eternity of perfected bliss hereafter. How then can I express or imagine the awful responsibility which rests upon them, and which hereafter they must bear before the great Judge of nations, if they suffer the present state of things to go on, bearing as it does thousands and hundreds of thousands of helpless children in our country to hopeless and irretrievable ruin.

Respectfully, yours,
C. E. Beecher.
P. S.--All I anticipate, as stated in my communication, may come to pass without any departure from your statutory regulations in regard to religious instruction, as I understand these statutes, and as I suppose them to be understood by the great body of those who formed them, and of those who are bound by them.
C. E. B.

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The above answers are not choice specimens selected from among many; they are all I have received; and every person to whom the circular was sent was pleased to answer it. From conversations, held at different times, with many other teachers I believe the amount of testimony might have been very much increased, though no confirmation can be needed of its authority. The witnesses here introduced certainly possess' all the requisites to entitle them to implicit credence. Their character for honor and reracity repels the idea of distrust. Years of experience in different places and the training of children in great numbers qualify them in point of knowledge to speak with authority, and they are exempt from any imaginable bias to warp or to color the truth.

From time immemorial it has been customary for Parliaments and other legislative bodies to commit important practical subjects to committees, and througly their instrumentaity to obtain the testimony of learned and skilled men on the matter of inquiry. Sometimes witnesses are heard at the bar of the House-that is, before the legislative body by whom the inquiry was instituted. Now I have desired, in the present case, to introduce testimony of such credibility and cogency that no legislative committee could report against it, and no legislative body could act against it, without incurring an historic odium, either for want of intelligence or want of integrity.

So, too, by the rules of "common law," all questions of fact are decided by the intervention of a jury. In ancient times, when the character of juries was very different from what it now is, they sometimes gave a corrupt verdict; that is, a verdict so contradictory to evidence as to be of itself proof that they had discarded the testimony adduced and been governed by some dishonest motive in their own breasts. A jury convicted of this offense was said to be "attainted." Its members were punished by a fine and rendered infamous ever after. It was my intention, in the present case, to introduce evidence of such authority and directness as if submitted to a jury and rejected by them would, under the ancient law referred to, subject them to the penalties of an "attaint."

Where is one quality or characteristic common to all the witnesses whose testimony is above introduced which, as it seems to me, I am not only justified in stating, but which it would be inexcusable to withhold. All of them, without exception, are well-known believers in a theological creed one of whose fundamental articles is the depravity of the natural leart. They hold, in a literal sense and with regard to all mankind, that the innate affections or dispositions of the soul are "not subject to the law of God, neither indeed can be," until another infinence, emanating from the Godhead, and equal in itself to an act of creation, shall hare renewed them. With this private belief of the witnesses, of course, neither the board of education nor any man or body of men have aught to do, unless, indeed, it be to affirm their right to hold it, in common with every other man's right either to agree with them or to dissent from them. But as bearing upon the point under consideration the fact is most important; it adds great cogency to their testimony, and invests it, as it were, with a compulsory power. For, if those who believe that the human heart is by nature alienated from God, that its innate relation to the Holy One is that of natural repulsion and not of natural attraction, nor even of neutrality; if they, from their own experience in the education of youth, beliere that our common-school system, under certain practicable modifications, can rear up a generation of men who will practice toward their fellow-men whatsoever things are true, honest, just, pure, lovely, and of good report; then, surely, a rational community can need no additional evidence or motive to impel it to the work of reform. And all those, if such there are, who believe that moral evil comes from the abuse or misuse of powers in themselves good, and not from any inborn and original predilection for wrong, may well take courage, and may tender their heartiest cooperation in furthering an enterprise which, even under fundamental postulates the mostadverse, promises results
so glorious. If they who believe that there is a principle of evil in the human soul, lying back of consciousness incorporated as an original element into its constitution, beginning to be when the spirit itself began to be, and growing with it through all the primordial stages of its growth, which, indeed, belongs to the antenatal period of every descendant of Adam, as much as spottedness belongs to an unborn leopard before it has a skin, or venom to an whatched cockatrice before it has a sting; if those who believe this do nevertheless believe that our common-school system, with certain practicable modifications, can send out redeeming and transiorming influences which shall expel ninety-nine hundredths of all the vices and crimes under which society now mourns and agonizes, then those who dissent from the belief that the natural heart is thus organically intractable and perverse, will be all the more ready to proclaim the ameliorating power of education, and will all the more earnestly labor for its diffusion. And the crowning beauty of the whole is that Christian men of every faith may cordially unite in carrying forward the work of reform, however various may be their opinions as to the cause which has made that work necessary; just as all good citizens may unite in extinguishing a conflagration, though there may be a hundred conflicting opinions as to the means or the men that kindled it. In short, it may be difficuit to determine which class will act under the more consciencemoving motives-those who hold to a total depravity or corruption of the human heart, but still believe it can be emancipated from worldly vices and crimes by such instrumentalities as we can readily command; or those who hold that heart to he naturally capable of good as well as evil, and who therefore believe, not only that a still larger proportion of the race can be rescued from the dominion of wrong doing, but that a consummation so glorious can be reached at a still earlier period and with a less expenditure of effort.

But this divine result of staying the desolating torrent of practical iniquity by drying up its fountain liead in the bosoms of the young, is promised only on the antecedence or performance of certain prescribed conditions. These conditions are the three following:

1. That the public schools shall be conducted on the cardinal principles of the present New England system;
2. That they shall all be taught, for a period of ten months in each year, by persons of high intellectual and moral qualifications-or, in other words, that all the teachers shall be equal in capacity and in character to those whom we now call firstclass or first-rate teachers; and
3. That all the children in the Commonwealth shall attend school regularly-that is, for the ten months each year during which they are kept-from the age of 4 to that of 16 years.

As it is on the performance of these conditions that the renovation of society is predicated, it is, of course, necessary to show that they are practicable conditions. I therefore proceed to consider and, as I trust, to establish their practicability.
I. The first condition-namely, that the schools shall be conducted on the cardinal principles of the New England system-is already satisfied. The Nassachusetts school system represents favorably the systems of all the New England States. Not one of them has an element of prosperity or of permanence, of security against decay within, or the invasion of its rights from without, which ours does not possess. Our law requires that a school shall be sustained in every town in the State-even the smallest and the poorest not being excepted-and that this school shall be as open and free to all the children as the light of day or the air of heaven. No child is met on. the threshold of the schoolhouse door to be asked for money, or whether his parents are native or foreign, whether or not they pay a tax, or what is their faith. The schoolhouse is common property. All about it are inclosures and hedges, indicating private ownership and forbidding intrusion; but here is a spot which even rapacity dares not lay its finger upon. The most avaricious would as soon think of monopo-
lizing the summer cloud, as it comes floating up from the west to shed its treasures upon the thirsty earth, as of monopolizing these fountains of knowledge. Public opinion-that sovereign in representative governments-is in harmony with the law. Not infrequently there is some private opposition, and occasionally it avows itself and assumes an attitude of hostility; but perseverance on the part of the friends of progress always subdues it, and the success of their measures eventually shames it out of existence.
The law requires all public schools to be kept by a teacher whose literary and moral qualifications have been examined and approved by a committee chosen for the purpose by the people themselves. Not less than the six following branches of knowledge are to be taught in every town; namely, orthography, reading, writing, English grammar, geography, and arithmetic. The teaching of "good behavior," which includes all the courtesies of life, and all the minor morals, is also expressly enjoined. These peremptory requisitions are the minimum, but not the maximum. Any town may enlarge the course of studies to be pursued in its schools as much as it may choose, even to the preparation of young men for the university, or for any branch of educated labor. It may also bestow an equivalent education upon the other sex. The law also contains a further provision (subject, however, to be set aside by the express vote of a district or town), that in every school of more than fiity scholars in regular attendance an assistant teacher shall be employed. Although there is no statutory provision to this effect in any other of the New England States, yet the good sense of the community everywhere advocates this rule.

Nor are the needs of the intellect alone provided for. In prescribing the education to be given to the moral nature the law grows more earnest and impressive. Its beautiful and deep-toned language is, "It shall be the duty of the president, professors, and tutors of the university at Cambridge, and of the several colleges, and of all preceptors and teachers of academies, and all other instructors of youth to exert their best endeavors to impress on the minds of children and youth committed to their care and instruction the principles of picty, justice, and a sacred regard to truth, love to their country, humanity and universal benevolence, sobriety, industry and frugality, chastity, moderation and temperance, and those other virtues which are the ornament of human society and the basis upon which a republican constitution is founded, and it shall be the duty of such instructors to endeavor to lead their pupils, as their ages and capacities will permit, into a clear understanding of the tendency of the alove-mentioned virtues to preserve and perfect a republican constitution and secure the blessings of liberty, as well as to promote their future happiness, and also to point out to them the evil tendency of the opposite vices." But lest any individual or body of individuals, forgetful of the divine precept to do unto others as they would be done unto, should seize upon this statutory injunction, or upon some part of it, as a pretext for turning the schools into proselytizing institutions, the law rears a barrier against all sectarian encroachments. That which is "calculated to favor the tenets of any particular sect of Christians" is excluded from the schools. The use of the Bible in schools is not expressly enjoined by the law, but both its letter and its spirit are in consonance with that use, and, as a matter of fact, I suppose there is not, at the present time, a single town in the Commonwealth in whose schools it is not read. Whoever, therefore, believes in the Sacred Scriptures has his belief, in form and in spirit, in the schools, and his children read and hear the words themselves which contain it. The administration of this law is intrusted to the local authorities in the respective towns. By introducing the Bible they introduce what all its believers hold to be the rule of faith and practice, and although, by excluding theological systems of human origin, they may exclude a peculiarity which one denomination believes to be true, they do but exclude what other denominations believe to be erroneous. Such is the present policy of our law for including what all

Christions hold to be right, and for excluding what all, excepting some one party, hold to be wrong.
If it be the tendency of all parties and sects to fasten the mind upon what is peculiar to each and to withdraw it from what is common to all, these provisions of the law counterwork that tendency. They turn the mind toward that which produces harmony, while they withdraw it from sources of discord, and thus through the medium of our schools that song which ushered in the Christian era, "Peace on earth and good will to men," may be taken up and continued through the ages.

The first condition, then, not only may be, but actually is, complied with, in the the school system of Massachusetts as now established and administered.
II. The second condition requires that all our schools shall be kept, for ten months in each year, by persons of high intellectual and moral qualifications-by persons equal in capacity and in character to those whom we now call first-class or first-rate teachers.
This condition supposes two things which, as yet, we are very far from having attained. The question is, are they attainable?

In regard to teachers, it supposes such an improvement as shall adyance all those who are now behind what we call the front rank until they shall come upon a line with it. Of course if this be done, some will be found in advance of this line, for it never can happen, with regard to all the members of any profession, that they will stand precisely abreast. It supposes, also, that all our schools shall be kept for ten months each year.
The questions, then, for consideration under this head, are two, namely:

1. Is there, in the community at large, sufficient natural endowment or capacity from which, by appropriate training and cultivation, the requisite number of teachers possessing the supposed qualifications can be prepared? And
2. Can the towns and the State, separately or as copartners, bear the expense of maintaining the required class of teachers for the required length of time?
Is not the first question answered in the affirmative by observation and experience? For the last two generations, with exceptions comparatively few, all the eminent men of our State, whether men of letters, physicians, lawyers, clergymen, legislators, or judges, have taught school, more or less, during the early part of their lives. Now, it is no disparagement to say, respecting those who constitute at present our best class of teachers, that they are not superior in endowments or natural capacity, in industry or in versatility of genius to a vast number of their predecessors who, having labored for a limited period in this field, at length abandoned it in quest of some other occupation truly known to be more lucrative and falsely supposed to be more honorable. It is no unauthorized assumption, then, to say that great numbers of those who left the employment of school keeping for something deemed to be more eligible would, had they continued in it, have won the honor of standing in the foremost rank of this noble profession.
In the second place, to prove that there is no lack of natural talent in existence from which to form the supposed class of teachers, I may refer to the general history and experience of mankind in all other departments of human effort. No new calling has ever reached such an elevation as to insure honor and emolument to its professors which has not, without delay, attracted to itself an adequate number of followers. Witness the intrinsically odious profession of arms-a profession so odious that those have been held worthy of especial reward who resisted the natural love of ease and instincts of self-preservation to encounter its hardships and perils. So, also, has it been in regard to commerce and the useful arts; and in those truly dignified and honorable professions-the legal and clerical-where mind is the object to be acted upon, as well as the agent to act, the supply has generally exceeded the demand. Now, could the business of education take its stand in public estimation
by the side of the most honorable and lucrative callings in life, we are authorized by all the experience of mankind to conclude that it would soon cluster around itself an amount of talent, erudition, and genius at least equal to what has ever adorned any other arocation among civilized men.

But, independently of perzonal knowledge and of historic experience, may not a conclusire argument in support of the general position be drawn from the energy and rersatility with which, as we all know, Nature has gifted the minds of her children? In the rariety and strength of the capacities belonging to the race there must be the means or instruments by which Providence can accomplish every good work. Somewhere, in each generation, the powers exist by which the generation that is to succeed it may be adranced another stage along the radiant pathway of improvement. But in the whole of the past history of the world no generation has yet existed whose faculties have not, to a very'great extent, lain dormant, to say nothing of the perversion of those which have been developed. But our free institutions cherich growth. The future with us is not to be measured by the past. The mind of the masses, which for so many ages had been crippled, and fettered after it was crippled, is here unbound. Under the stimulus applied to native rigor, talent and genius start up as naturally as regetation in the spring. The desire of bettering one's condition springs from a miversal instinct in the human mind. With us every man sees that the gratification of this desire is within his reach. Including the lifetime of a single generation-that is, within the last forty or fifty years-there is not a school district in Massachusetts, however obscure, which has shown any interest in the character of its schools, that has not sent out one or more men who have become conspicuous in some of the honorable positions of society. They are found throughout the Union-wherever enterprise or talent is rewarded. Those districts and, still more, those towns, where common schools have been an object of special regard, have sent forth many such men. While visiting different parts of the State, for the last ten years, facts in sufficient numbers to make a most interesting and instructive book have come to my knowledge, showing that those districts and towns, where special pains have been exerted and special liberality bestowed in behalf of common schools, have supplied a proportion of all the distinguished men of the ricinity corresponding with the superior excellence of the early education afforded them. So, on the other hand, neglectful towns and districts have been comparatively barren of eminent men. The great ears of corn will not grow on sand hills. Great men will not spring up in an atmosphere void of intellectual inutrition. Nature observes a law in this respect in regard to her spiritual as well as her physical productions. Now, although something has been done in Massachusetts for the culture and expansion of the common mind, yet indefinitely more may be done. Even were it admitted, therefore, that the State had not been able in the past times to supply the requisite number of teachers of the highest grade, it would by no means follow that she could not do so in the future.

The intrinsically noble profession of teaching has, most unfortunately, been surrounded by an atmosphere of repulsion rather than of attraction. Young men of talent are generally determined by two things in selecting an employment for life. The first of these is the natural tendency of the mind-its predisposition toward one pursuit rather than toward another. In this way nature often predetermines what a man shall do, and, to make her purpose inevitable, she kneads it, as it were, into the stamina of his existence. She does not content herself with standing before his will, soliciting or tempting him to a particular course, but she stands behind the will, guding and propelling it, so that, from birth, he seems to be projected toward his object, like a well-aimed arrow to its mark. Those in whom the love of beartiful forms, colors, and proportions predominate are naturally won to the cultivation of the fine arts or to some branch of the useful arts most congenial to the fine. Those who have a great fondness for botany and chemistry, and to whom physiological
inquiries are especially grateful, become physicians. Persons enamored of forensic contests, roused by their excitements and panting for the eclat which their rictories confer, betake themselves to the study of the law and become adyocates. The clerical profession is composed of men whose minds are deeply imbued and penetrated with the religious sentiment, and who ponder profoundly and devoutly upon the solemn concerns of an hereafter. ${ }^{1}$ This constitutional or moral affinity for one sphere of employment rather than for another predetermines many minds in choosing the object of their pursuit for life. It is like the elective attractions of the chemist, existing beforehand, and only awaiting the contiguity of the related substances to make their secret affinities manifest.

But this natural tendency is often subjected to a disturbing or modifying force; and it yields to this force the more readily as it is itself less intense and dominant. All minds have a desire, more or less energetic, for pleasure, for wealth, for honor, or for some of that assemblage of rewards which obtains such willing allegiance from mankind. Hence the internal, inborn impulse is often diverted from the specific object to which it naturally points, and is lured away to another object, which, from some collateral or adventitious reason, promises a readier gratification.

There is also a class of minds of vigorous and varied capacities which stands nearly balanced between different pursuits, and which, therefore, may be turned, by slight circumstances, in any one of many directions. They are like fountains of water rising on a table-land, whose channels may be so cut as to cover either of its slopes with fertility.

Now, the qualities which predispose their possessor to become the companion, guide, and teacher of children are good sense, lively religious sensibilities, practical, unaffected benevolence, a genuine sympathy with the young, and that sumny, genial temperament which always sees its own cheerfulness reflected from the ever-open mirror of a child's face. The slightest exercise of good sense makes it apparent that any one year of childhood will exert a more decisive control over future destiny than any ten years afterwards. The religious and benevolent elements seize instinctively upon the promise made to those who train up children in the way they should go. The love of children casts a pleasing illusion over the mind, in regard to everything they doif, indeed, it be an illusion, and not a truth above the reach of the intellect--elevating their puerile sports into dignity, hailing each step in their progress as though it were some grand discovery in science, and grieving over their youthful wanderings or backslidings with as deep a sorrow as is feit for the turpitude of a full-grown man, or for the hearen-defying sins of a nation. So that genial, joyous, ever-smiling temperarient, which sees only rainbows where others see clouds, and which is delighted by the reflection of itself when coming from one child's face, will never tire of its labors when the same charming image perpetually comes back from the multiplying glasses of group after group of happy children-ever varying, but always beautiful.

Now, I think we have abrudant reason to believe that a sufficient number of persons, bearing from the hand of nature this distinctive image and superscription of a school-teacher, are born into the world with every generation. But the misfortune is that when they arrive at years of discretion, and begin to survey the various fields of labor that lie open before them, they find that the noblest of them all, and the one, too, for which they have the greatest natural predilection, is neither honored by distinction nor rewarded by emolument. They see that if they enter it many of their colleagues and associates will be persons with whom they have no congeniality of feeling, and who occupy a far less elevated position in the social scale than that to which their own aspirations point. If they go through the whole country and question every man, they can not find a single public-school teacher who has acquired

[^4]wealth by the longest and the most devoted life of labor. They can not find one who has been promoted to the presidency of a college, or to a professorship in it; nor one who has been elected or appointed to fill any distinguished civil station. Hence, in most cases, the adventitious circumstances which surround the object of their preference repel them from it. Or, if they enter the profession, it is only for a brief period, and for some collateral purpose; and when their temporary end is gained they sink it still lower by their avowed or well-understood reasons for abandoning it. Such is the literal history of hundreds and of thousands who have shone or are now shining in other walks of life, but who would have shone with beams far more creative of human happiness had they not been struck from the sphere for which nature preadapted them.

Look at the average rate of wages paid to teachers in some of the pattern states of the Union. In Maine it is $\$ 15.40$ per month to males and $\$ 4.80$ to females. In New Hampshire it is $\$ 13.50$ per month to males and $\$ 5.65$ to females. In Vermont it is $\$ 12$ per month to males and $\$ 4.75$ to females. In Connecticut it is $\$ 16$ per month to males and $\$ 6.50$ to females. In New York it is $\$ 14.96$ per month to males and $\$ 6.69$ to females. In Pennsylvania it is $\$ 17.02$ per month to males and $\$ 10.09$ to females. In Ohio it is $\$ 15.42$ per month to males and $\$ 8.73$ to females. In Indiana it is $\$ 12$ per month to males and $\$ 6$ to females. In Michigan it is $\$ 12.71$ per month to males and $\$ 5.36$ to females. Even in Massachusetts it is only $\$ 24.51$ per month to males and $\$ 8.07$ to females. All this is exclusive of board; but let it be compared with what is paid to cashiers of banks, to secretaries of insurance companies, to engineers upon railroads, to superintendents in factories, to custom-house officers, navy agents, etc., and it will then be seen what pecuniary temptations there are on every side, drawing enterprising and talented young men from the ranks of the teachers' profession.
Nor does the social estimation accorded to teachers much surpass the pecuniary value set upon their services. The nature of their calling debars them almost uni-' versally from political honors, which throughout our whole country have a factitious value so much above their real worth. Without entire faithlessness to their trust they can not engage in trade or commercial speculations. Modes of education have heretofore been so imperfect that I do not know a single instance where a teacher has been transferred from his school to any of those departments of educated labor in which such liberal salaries are now given. And thus it is that the profession at large, while they enjoy but a measured degree of public respect, seem shut out from all the paths that lead to fortune or to fame. No worldly prize is held up before them; and, in the present condition of mankind, how few there are who will work exclusively for the immortal reward. It supposes the possession only of very low faculties to derive pleasure from singing the praises of a martyr; but, to be the martyr oneself requires very high ones.
Hence it is, as was before said, that when the aspiring and highly endowed youth of our country arrive at years of discretion, and begin to survey the varied employments which lie spread out before them, they find that the noblest of them all presents the fewest external attractions. Those whose natural or acquired ambition seeks for wealth go into trade. The mechanical genius applies himself to the useful arts. The politically ambitious connect themselves with some one of those classes from which public officers are usually selected. Medicine attracts those who have the peculiar combination of tastes congenial to it. Those who ponder most upon the ways of God to men minister in sacred things. Who, then, are left to fill the most important position known to social life? A few remain whose natural tendencies in this direction are too vehement to be resisted or diverted; a somewhat larger number, who have no strong predilection for one sphere of exertion rather than for another, and to whom, under the circumstances peculiar to each, school keeping is as eligible as any other employment. But many, very many, the great majority,
engage in it not for its own sake, but only to make it subservient to some ulterior object, or (with humiliation be is said) perhaps only to escape from manual labor.

The profession of school keeping, then, as a profession, has never had an equal chance with its competitors. On the one hand, it has been resorted to by great numbers whose only object was to make a little money out of it and then abandon it; and, on the other, its true disciples, those who might have been and should have been its leaders and priesthood, have been lured and seduced away from it by all the more splendid prizes of life.

Even though, therefore, the profession of school keeping has not been crowded by learned and able men, devoting their energies and their lives to its beneficent labors, this fact wholly fails to prove that nature does not produce, with each generation, a sufficient number of fit persons, who, under an equitable distribution or apportionment of honors and rewards for meritorious services, would be found preadapted for school keeping in the same way that Newton was for mathematics, or Pope for poetry, or Franklin for the infallibility of his common sense. Indeed, the proportion of good teachers whom we now have, notwithstanding all their discouragements against entering and their seducements for leaving the profession, seem demonstrative of the contrary.
Thus far the argument has proceeded upon the basis that the required number of teachers, possessing the high grade of qualifications supposed, must equal the present number, such as these are. But it is almost too obvious to need mentioning that if the qualifications of teachers were to be so greatly enhanced and the term of the schools so materially lengthened, as is proposed, teaching would then really become a profession, and the same teachers would keep school through the year. Instead, therefore, of changing from male teachers in the winter to females in the summer, back again to males in the winter, and so on, alternately-the children of each school suffering under a new stepfather or a new stepmother each half yearthey would enjoy the vastly improved system of continuous training under the same hands. This would diminish by almost one-half the required number of teachers for our schools; the poorer half would be discarded, the better half retained. Surely, under these circumstances, if a sufficient number of the very highest class of teacher ${ }^{\mathbb{S}}$ could not be found, it would not be owing to any parsimony of nature in withholding the endowments, but to our unpardonable niggardliness in not cultivating and employing them.

Feeling now authorized to assume that the first proposition has been satisfactorily established, it only remains to be considered, under this head, whether the community at large-the towns separately, or the towns and the State by joint contribu-tions-can afford to make such compensation as shall attract to this field of labor the high order of teachers supposed, and shall requite them generously for their services.

To induce persons of the highest order of talent to become teachers, and to deter good teachers from abandoning the profession, its emoluments must bear some close analogy to those which the same persons could command in other employments. The case, too, as presented in the circular, and upon which the evidence has been obtained, supposes the schools to continue for ten months in each year. Although in many large towns the schools are now kept more than this portion of the year, yet their average length for the whole State is but eight months. The increased expense, then, both of the longer term and of the more liberal compensation, must be provided for. Can the community sustain this expense?

Let us suppose for a moment that 99 per cent of our whole community should be temperate, honest, industrious, frugal people-conscientious in feeling and exemplary in conduct-is it not certain that two grand pecuniary consequences would immediately follow, namely, a vast gain in productive power and a vast saving in the criminal destruction and loss of property? Either of these sources of gain would more
than defray the increased expenses of the system, which, according to the evidence I have obtained, would insure both. The current expenses last year for the education of all the children in the State between the ages of 4 and 16 was $\$ 3.14$ on an average for each one. Look into the police courts of our cities in the morning-and especially on Monday morning-when the ghastly array of drunkards is marched in for trial. A case may not occupy ten minutes, and yet the fine, costs, and expenses would educate two children for a year in our public schools at the present rate, or one child at double the present rate. The expenses incurred in punishing the smallest theft that is committed exceed the present cost of educating a child in our schools for a year. A knave who proposes to obtain goods by false pretenses will hardly aim at making less than $\$ 1,000$ by his speculation. There are more than 150 towns in Mas-sachusetts-that is, about hali the whole number in the State-in each of which the annual appropriation for all its schools is less than $\$ 1,000$. A burgiar or highway robber will seldom peril his hife without the prospect of a prize which would educate 500 or 1,000 children for a year. An incendiary exhibits fireworks at an expense which would educate all the children of many a school district in the State from the age of 4 to that of 16 , while the only reward he expects is that of stealing a few garments or trinkets during the confiagration. In a single city in the State, consisting of 16,000 or 17,000 inhabitants, it was estimated by a most respectable and intelligent committee, that the cost of alcoholic drinks during the last year far exceeded the combined cost of all the schools and all the churches in it, although, for both religion and education, it is a highly liberal city. The police expenses alone of the city of New York are about half a million a year. But all these are but a part of the sluiceways through which the hard-earned wealth of the people is wasted. What shall be said of those stock swindlings and bank faitures whose capitals of hundreds of thousands of dollars are embezzled in "fair business transactions;" whose vaults, sworn to be full of specie or bullion, remind one, on inspection, not merely of a pecuniary, but of a philosophical vacuum; what of those epidemic speculations in land-often fairyland, though void of both beauty and poetry--where fortunes change hands as rapidly as if dependent upon the throw of a gambler's dice; and what of those enormous peculations by government defaulters, where more money is engulfed by one stupendous fraud than Massachusetts expends for the education of all her children in a year? All this devastation and loss the public bears with marvelous, with most criminal composure. The people at large stand by the wreckcovered shore, where so many millions are dashed in pieces and sunk, and seem not to recognize the destruction; and-what is infinitely worse-there are those who rejoice in the howl of the tempest and the shrieks of the sufferers, because they can grow rich by plundering only here and there a fragment of property from the dead or the defenseless. By charity, by direct taxes, by paying 20 or 30 per cent more for every article or necessary of life than it is equitably worth, by bad debts, by the occasional and involuntary contributions of a pocketbook, a watch, a horse, a carriage, a ship, or a cargo, to which the robber and the barrator help themselves, by paying premiums for insurance, and in a hundred other ways, the honest and industrious part of the people not only support themselves, but supply the mighty current of wealth that goes to destruction through these flood-gates of iniquity. The people do not yet seem to see that all the costs of legislating against criminals, of judges and prosecuting officers, of jurors and witnesses to convict them; of building houses of correction, and jails and penitentiaries for restraining and punishing them, is not a hundredth part of the grand total of expenditure incurred by private and social immoralities and crimes. The people do not yet seem to see that the intelligence and the morality which education can impart is that beneficent kind of insurance which, by preventing losses, obviates the necessity of indermifying for them-thus saving both premium and risk. What is engulfed in the vortex of crime, in each generation, would build a palace of more than Oriental splendor in every school dis-
trict in the land; would endow it with a library beyond the ability of a lifetime to read; would supply it with apparatus and laboratories for the illustration of every study and the exemplification of every art, and munificently requite the services of a teacher worthy to preside in such a sanctuary of intelligence and virtue.
But the prevention of all that havoc of worldly goods which is caused by vice transfers only one item from the loss to the profit side of the account. Were all idle, intemperate, predatory men to become industrious, sober, and honest, they would add vast sums to the inventory of the nation's wealth, instead of subtracting from it. Let any person take a single town, village, or neighborhood and look at its inhabitants individually, with the question in his mind-how many of them are producers and how many are nouproducers; that is, how many, either by the labor of the body or the labor of the mind, add value and dignity to life, and how many barely support themselves, and I think he will often be surprised at the smallness of the number by whose talent and industry the storehouses of the earth are mainly filled and all the complicated business of society is principally managed. Could we convert into coworkers for the benefit of mankind all those physical and spiritual powers of usefuiness which are now antagonists or neutrals the gain would be incalculable.
Add the two above items together-namely, the saving of what the vicious now squander or destroy, and the wealth which, as virtuous men, they would amassand the only difficulty presented would be to find in what manner so vast an amount could be beneficially disposed of.
But it is not to be disguised, whatever reforms may be instituted, that the cost of crime can not at once be prevented. For a season, therefore, and until the expense of education shall arrest and supersede the expenses of guilt, both must be bome. I wish to state the difficulty without extenuation. The question, then, is, Can both be temporarily borne?
The appropriations for which the towns voluntarily taxed themselves last year for the current expenses of the schools-that is, for the wages and board of teachers and for fuel-were $\$ 662,870.57$. Adding the income of the surplus revenue, when appropriated for the support of schools, it was $\$ 670,628.13$. The valuation of the State I suppose to be not less than $\$ 500,000,000$. Last year's tax, therefore, for the current expenses of the schools was less than one mill and a half on the dollar-less than one mill and a half on a thousand mills. Taking the average of the State, then, no man was obliged to pay more than one six hundred and sixty-sixth part of his property for this purpose; or, rather, such would have been the case had there been no poll tax-had the whole tax been levied upon property alone. At this rate it would take six hundred and sixty-six years for all the property of the State to be once devoted to this purpose. And does not the portion of our worldly interests which is dependent upon public schools bear a greater ratio to the whole of those interests than 1 to 666? I need not argue this point, for who, out of an insane asy-lum-or even of the curable classes in it-will question the fact? Who will say that the importance of this interest as compared with all the earthly interests of mankind is not indefinitely greater than this? Who will say that to secure so precious an end as the diffusion of almost universal intelligence and virtue, and the suppression, with an equal degree of universality, of ignorance and vice it would not be expedient to do as the Bishop of Landaff once proposed that the British nation should do in an eventful crisis of its affairs-vote away, by acclamation, one-half of all the wealth of the kingdom? But there is no need of carrying our feelings or our reason to this pitch of exaltation. There is no need of any signal or unwonted sacrifice. There is no need of a devotion of life as is done in battle. There is no need of periling fortunes as is done every day in trade. There is no need that any man in the community should lose one day from his life, or an hour from his sleep, or a comfort from his wardrobe or his table. Three times more than is now expended-that is, $4 \frac{1}{2}$ mills
on every 1,000 mills of the property of the State, or only 1 part in 222 , instead of 1 in 666 -would. defray every expense and insure the result. Regarded merely as a commercial transaction-a pecuniary enterprise whose elements are dollars and cents alone-there is not an intelligent capitalist in the State who would not, on the evidence here adduced, assume the whole of it, and pay a bonus for the privilege. When the State was convinced of the lucrativeness or general expediency of a railroad from Worcester to its western border, it bound itself at a word to the amount of $\$ 5,000,000$; and I suppose it to be now the opinion of every intelligent man in the Commonwealth that when the day of payment shall arrive the road itself, in addition to all the collateral advantages which it will have conferred, will have paid for itself, and will then forever remain, not merely a monument of wisdom, but a reward for sagacity. Yet, what is a railroad, though it does cut down the mountains and lift up the valleys, compared with an all-embraring agency of social and moral reform which shall abase the pride of power and elevate the lowliness of misfortune? And those facilities for travel which supersede the tediousness of former journeyings and the labor of transportation, what are they when compared with the prevention of that "lamentation, mourning, and woe" which come from the perpetration of crime. When the city of Boston was convinced of the necessity of having a supply of pure water from abroad for the use of its inhabitants it voted $\$ 3,000,000$ to obtain it; and he would be a bold man who would now propose a repeal of the ordinance, though all past expenditures could be refunded. Yet all the schoolhouses in Boston, which it has erected during the present century, are not worth a fourth part of this sum. For the supply of water the city of New York lately incurred an expenditure of $\$ 13,000,000$. Admitting, as I most cheeriully do, that the use of water pertains to the moral as well as to the ceremonial law, yet our cities have pollutions which water can never wash awaydeflements which the baptism of a moral and Christian education alone can remove. There is not an appetite that allies man to the brutes, nor a passion for vain display which makes him more contemptible than any part of the irrational creation, which does not cost the country more every year than such a system of schools as would, according to the evidence I have exhibited, redeem it almost entirely from its follies and its guilt. Consider a single factitious habit of our people, which no one will pretend adds any degree to the health, or length to the life, or decency to the manners of the nation-I mean the smoking of tobacco. It is said, on good authority, that the annual expenditure in the country for the support of this habit is $\$ 10,000,000$; and if we reflect that this sum, averaged upon all the people, would be only half a dollar apiece, the estimate seems by no means extravagant. Yet this is far more than is paid to the teachers of all the public schools in the whole United States.

Were nations to embark in the cause of education for the redemption of mankind, as they have in that of war for their destruction, the darkest chapters in the history of earthly calamities would soon be brought to a close. But where units have been grudged for education, millions have been lavished for war. While for the one purpose mankind have refused to part with superfluities, for the other they have not only impoverished themselves, but levied burdensome taxes upon posterity. The vast national debts of Europe originated in war; and but for that scourge of mankind they never would have existed. The amount of money now owed by the different European nations is said, on good authority, to be $\$ 6,387,000,000$. Of this inconceivable sum the share of Great Britain is about $\$ 4,000,000,000$ (in round numbers, $£ 800,000,000$; of France, $\$ 780,000,000$ ); of Russia and Austria, $\$ 300,000,00 c$ each; of Prussia, $\$ 100,000,000$; and the debts of the minor powers increase this sum to $\$ 6,387,000,000$. The national debt of Great Britain now amounts to more than $\$ 140$ for every man, woman, and child in the three kingdoms. Allowing six persons to each family, it will average more than $\$ 850$ to every household-a sum which would be deemed by thousands and tens of thousands of families in that country to be a
handsome competence-nay, wealth itself-if it were owing to instead of from them.

It is estimated that during the twenty-two years preceding the general peace of 1815 the unimaginable sum of $£ 6,250,000,000$ sterling, or $\$ 30,000,000,000$, had been expended in war by nations calling themselves Christians-an amount of wealth many fold greater than has ever been expended for the same purpose by all the nations on the globe whom we call savage since the commencement of the Christian era. The earth itself could not be pawned for so vast a sum as this, were there any pawnbroker's office which would accept such a pledge Were it to be set up at anction, in the presence of fierce competitors for the purchase, it would not sell for enough to pay its war bills for a single century. The war estimates of the British Government, even for the current year of peace, are $\$ 85,000,000$; and the annual interest on the national debt incurred by war is at least $\$ 120,000,000$ more, or more than $\$ 200,000,000$ for a common and, on the whole, a very favorable year. Well might Christ, in the Beatitudes, pronounce His emphatic benediction upon the "peacemakers."

We have emulated in this country the same gigantic scale of expenditure for the same purpose. Since the organization of the Federal Government, in 1789, the expense of our military and naval establishments and equipments, in round numbers, is $\$ 700,000,000$. Two of our ships of the line have cost more than $\$ 2,000,000$. The value of the arms accumulated at one time at the arsenal in Springfield, in this State, was $\$ 2,000,000$. The Military Academy at West Point has cost more than $\$ 4,000,000$. In our town meetings and in our school-district meetings wealthy and substantial men oppose the grant of $\$ 15$ for a school library, and of $\$ 30$ for both library and apparatus; while at West Point they spend $\$ 50$ in a single lesson at target firing, and the Government keeps 100 horses, and grooms and blacksmiths to take care of them, as an indispensable part of the apparatus of the Academy. The pupils at our normal schools, who are preparing to become teachers, must maintain themselves; the cadets at the Academy receive $\$ 28$ a month during their entire term as a compensation for being educated at the public expense. Adding bounties and pensions to wages and rations, I suppose the cost of a common foot soldier in the Army can not be less than $\$ 250$ a year. The average cost of female teachers in the public schools of Massachusetts last year was only $\$ 13.60$ a month, inclusive of board, or at a rate which would give $\$ 153.20$ for the year; but the average length of the schools was but 8 montlis, so that the cost of two common soldiers is nearly that of five female teachers. The annual salary of a colonel of dragoons in the United States Army is $\$ 2,206$; of a brigadier-general, $\$ 2,958$; of a major-general, $\$ 4,512$; that of a captain of a ship of the line, when in service, $\$ 4,500$; and even when off duty it is $\$ 2,500$. There are but seven towns in Massachusetts where any teacher of a public school receives so high a salary as $\$ 1,000$, and in four of these towns one teacher only receives this sum.

Had my purpose been simply to show the pecuniary ability of the people at large to give the most generous compensation to such a company of accomplished, highminded, noble teachers as would lift the race at once out of the pit of vice and ignorance and superstition, as safely and as tenderly as a mother bears her infant in her arms; had my purpose been merely to show this pecuniary ability, then I have already said too much. But my design was not merely to carry conviction to the minds of those who would contest this fact, but to make the denial of it ridiculous.
III. But the consummation of this reformatory work is not promised except upon the performance of a third condition,-namely, that all the children in the State between the ages of 4 and 16 years shall be brought into school for ten months in each year. In other words, while the schools are kept the attendance of all the children upon them, with one or two exceptions to be hereafter noticed, must be regular.

Since the keeping of registers in our schools has made known the enormous amount of absences from them there is but one subject which has excited greater alarm or given rise to louder complaints. Teachers complain of this absence, because, while it increases their labors, it diminishes their success; indeed, it makes entire success an impossibility. Parents who do send their children regularly to school complain of it, because the tardy and the occasional comers are a dead weight upon the progress of those who are uniformly present and prompt. Committees complain of it in bchalf of the towns which they represent, because it lowers the general standard of intelligence among the people, and because, taken on an average for the whole State, it incurs a total loss of from one-third to one-half of all the money which is annually levied by taxation for the support of schools. Men of wealth who have no children to send to school, or who for any reason send none, complain of it, because, though they may be willing to be taxed for the education of all, yet they are not willing to be taxed to have their money taken and thrown away. They think it, and with good reason, too, to be an intolerable hardship to be first confronted with the argument that they are bound to secure the general intelligence and morality of the people through the instrumentality of schools, and when they have acknowledged the validity of this argument and cheerfully paid their money to have the rery men who so argued and so clamed turn upon them and say, We are still at liberty to throw your money away by keeping our children at home; and though you must keep the school regularly for us we have a right to use it irregularly, or not at all, as we please. Thus the delinquents, where they owe apology and repentance, retort with indignity and perserere in injustice.

I can not believe that our people will always, or even long, submit to this enormous abuse, now made known to them by well-authenticated documents. For an economical people, who form political parties on the subject of expenditures by the Government and make "retrenchment" a watch-word; for a people whose legislatuse sometimes debates for days together whether the salary of an officer shall be a few hundred dollars more or less, to continue to throw away, as was done last year, more than $\$ 200,000$ on account of voluntary, gratuitous, and, in most cases, wanton absences from school is not credible. For a people who are sufficiently prond, to say the least, of their general intelligence and who are sincerely anxious to perpetuate and improve their moral character, to be willing to forfeit one-third part of all the blessings of their free school system, without any necessity or any plausible pretext, is not to be believed. This great evil must be dealt with according to its magnitude. Violent diseases demand energetic remedies. It would be as unwise in a State as in an individual to allow its precautions to diminish while its dangers increase; to sleep more quietly as peril becomes more imminent. When we know that a malady is dangerous and that a remedy is at hand wisdom dictates its speedy application.

I propose, then, to consider the objections that may possibly be urged to the regular attendance of all our children upon school for ten months in each year, from the age of 4 to that of 16 years. I believe them to be by no means insurmountable; nay, that their formidableness will wholly disappear if subjected to a candid examination.

1. It may be said that there is a class of parents amongst us who depend partially upon the labor of their children for the support of their families, and who are too poor to forego the earnings of these children for ten months in the year and for twelve years of their minority.

With regard to a portion of the class of parents referred to this suggestion would have a foundation in fact; with regard to another portion of them it would have no such foundation. It is well known that a class of parents exists amongst us who work their children that they may themselves be idle; who coin the health, the capacities, and the future wellare of their own offspring into money, which money when gained is not expended for the necessaries or the comforts of life, but is wasted
upon appetites that brutify or demonize their possessor. The objections of this class against permitting their children to be educated at the public expense are not legitimate. It would be infinitely better for them, for their families, and for the public if they were cut off from these means of sinful indulgence. It would improve their condition still further if they were obliged to be industrious, even though coerced to labor by the goads of hunger and cold. The best of all conditions for them would be that they should themselves labor for the support of their children at school, where those intellectual and virtuous habits would be formed and that filial piety inculcated which would lead the children in after years to return to their parents, with a generous requital, the favors they had received.
There is, doubtless, another portion of this general class with whom the alleged necessity for their children's earnings as a part of the means for family support is no pretence. The number or age of the family, sickness, misfortune, or other cause may render this or some other resource indispensable to the procurement of the necessaries and decencies of life. I would notunderrate the number of the necessities of this class of persons; they have claims upon our warmest sympathies; but I have reason to believe that the class itself is not a very large one. Where the heads of the family enjoy good health; where they may have the assistance of their children who are of an age able to render it, for several hours each day, for one or two entire haif days each week and for two months uninterruptedly each year the circumstances must be peculiar where industry and frugality, with such favors as the honest and praiseworthy poor may al ways count upon from their better-conditioned neighbors, will not supply the means of a comfortable subsistence.

Still cases of necessity do and will exist; and where the need is not supplied by individual charity there is no other alternative but to do it at the public expense. This mould introduce no new principle into our legislation. It would be only a moderate but highly beneficial extension of an existing one. Our laws now provide for physical destitution, whatever may be its cause; and they enjoin upon school committees the duty of furnishing all neediul school books at the expense of their respective towns, to all children whose parents are unable to procure them.

The question then arises, What degree of destitution-and there is no propriety in restricting this to physical destitution-makes it expedient for a wise govermment to interfere and afford relief? "Poor laws," as we understand the term, are of modern origin. They were not only unknown to all barbarous nations, but to most Christian and civilized ones, until a recent period. In England they date from the reign of Elizabeth. In Scotland, although in a small class of extreme cases legal relief may have been rendered, yet "poor laws" can hardly be said ever to have had an effective existence in that country. In Ireland they were unknown until recently. In this country they are almost coeval with our colonial settlements.

But there neither is, nor ever has been, any legal standard of poverty. The degree of destitution which shall entitle the sufferer to relief is not a fixed quantity, like the statutory length of a yard, or the Winchester bushel. The general notions of men as to what constitutes poverty range between wide extremes, according to their prevalent style of living, their enlightenment, and their benevolence. It is said that when the present King of France heard that the income of the Jewish banker in London amounted only to some hundreds of dollars each hour, he expressed his deep grief at learning that he was so poor. With us he who can command a comfortable shelter, decent clothes, and a sufficient supply of wholesome food for himseif and family excites no special commiseration for his poverty; while there are places upon the earth where a potato a day is considered an independent fortune. Now, between these extremes, what shall the true definition of poyerty be?

So the line which divides poverty from competence is not a stationary, but a movable one. The laws themselves change; and the same law, on a question like this, will be made to speak a very different language under different administrators. In
favor of the militia, or of the country's defense, our law exempts from attachment, exccution, and distress, whether for debt or for taxes, the uniform, arms, ammunition, and accouterments which officers, noncommissioned officers, and privates are required to possess. In favor of the common sentiments of humanity, our law exempts also from attachment and execution not only wearing apparel, but a great variety of articles of household furniture-bedsteads, beds, bedding, an iron stove, fuel, and other commodities, to the value of $\$ 50$; also a cow, six sheep, one swine, and two tons of hay; also the tools and implements used by a debtor in his trade, not exceeding $\$ 50$ in value; and also rights of burial, and tombs used as repositories for the dead. Our legislation on this subject has been humanely progressive, as may be seen by reference to statutes 1805 , chapter $100 ; 1813$, chapter $172 ; 1822$, chapter 93 , section $8 ; 1832$, chapter $58 ; 1838$, chapter 145 , etc. In a neighboring State, by a late law, a portion of the debtor's homestead is also brought within the same rule. In favor of learning and religion, all schoolbooks and Bibles used in the family are also exempted from attachment and execution for debt; and, as was before said, all schoolchildren destitute of schoolbooks are first supplied with them at the public expense, and where the parents are unable to reimburse the cost the supply is gratuitous. Massachusetts has from time to time founded and endowed hospitals for the insane, and she makes annual and liberal appropriations for the education of the blind and the deaf and dumb. She is now engaged in erecting a noble institution for the reformation of juvenile delinquents; and a commission, instituted by her, is inquiring at the present time into the condition of idiots, which unfortunate, repulsive, and hitherto outcast portion of the community, it is not to be doubted, she will soon gather together and, in imitation of the noble examples set by France, Switzerland, and Prussia, will educate to cleanliness, to decency, and to no inconsiderable degree of positive enjoyment and usefulness. Each one, too, of all these great movements, when carried out into execution, has proved economical, as well as philanthropic and Christian. What striking results, in proof of this, are exhibited by the statistics of the State Lunatic Hospital at Worcester. According to the last report of that institution which Dr. Woodward made, the average expense of $2 t$ old cases, taking the first 24 on the list, and not selecting them or taking them at random, was $\$ 1,945.83$ each, and their aggregate expense $\$ 46,700$; while the average expense of the same number of recent cases, taking the last on the list who were discharged cured, was $\$ 41.53$ each, and their aggregate expense $\$ 996.75$; so that the whole expense of twenty-four recent cases was but about one-half as much as of one old one. That hospital already has far more than paid for itself by the saving it has effected, because without it all the new cases would have been old ones. I present these economical aspects of the subject by no means because I deem them to be the most important, but because all over the world there is a large class of persons with whom the pecuniary argument is the most persuasive and eloquent, and who will be induced to lend their services in aid of great social ameliorations only when they find that humanity is economy and that "godliness" is "great gain" in a worldly sense. They will then enlist for the sake of the "great gain," though quite indifferent as to the other quality. When I have been asked by persons from the fertile and exuberant regions of our own country or from transatlantic nations how it is that with our ungenerous soil and ungenial clime we are pecuniarily able to support these various and costly establishments, my answer has been that we are able because we do support them.

But the question recurs, What is poverty? What is that straitness of circumstances which for educational purposes would require a wise and profound statesman, and, of course, the State itself, to interpose and to supply those means for the education of the child which the parent is unable to render? It being proved if all our children were to be brought under the benignant influences of such teachers as the State can supply from the age of 4 years to that of 16 , and for ten months in each year,
that ninety-nine in every hundred of them can be rescued from uncharitableness, from falsehood, from intemperance, from cupidity, licentiousness, violence, and fraud, and reared to the performance of all the duties and to the practice of all the kindnesses and courtesies of domestic and social life-made promoters of the common weal instead of subtractors from it-this being proved, I respectfully and with deference submit to the board, and through them to the legislature and to my fellow citizens at large, that every man is poor in an educational sense who can not both spare and equip his children for school for the entire period above specified; and that while he remains thus poor it is not only the dictate of generosity and Christianity, but it is the wisest policy and profoundest statesmanship, too, to supply from the public treasury-municipal or State, or both-whatever means may be wanted to make certain so glorions an end. These principles and this practice the divine doctrines of Christianity have always pointed at, and a progressive civilization has now brought us into proximity to them. How is it that we can call a man poor because his body is cold, and not because his highest sympathies and affections have been frozen up within him in one polar and perpetual winter from his birth? Hunger does not stint the growth of the body half so much as ignorance dwarfs the capacities of the mind. No wound upon the limbs or gangrene of vital organs is a thousandth part so terrible as those maladies of the soul that jeopard its highest happiness and defeat the end for which it was created. And infinitely aggravated is the case where children are the sufferers; where moral distempers are inflicted upon them by parents or are inherited by them from ancestors; where they are born into an atmosphere saturated with the infection of crime; where vice obtrides itself upon every sense and presses inward through every pore to be imbibed and copied just as the common air forces itself into the nostrils to be breathed, and where in their early imitative transgressions they are no more consciously guilty than in the heaving of their lungs in an act of respiration.

Were a ship in midocean to be overtaken by a storm, to be dismantled, dismasted, and reduced to an unmanageble hulk, and while its crew were famishing and ins momentary danger of foundering, were another ship to pass within hail, but to refuse all succor and deliverance, should we not justly regard the deed as an enormous atrocity? But what moral difference does it make whether we pass by our perishing "neighbor" on the sea or on the dry land? The pitfalls of perdition on shore are deeper and far more terrible, and are inhabited by direr monsters, than any ocean caves. Now, it is the children of the man who through sickness or other misfortune has not the means fully and thoroughly to educate them for the duties of life who represent this perishing and foundering crew, and the man who has superfluities, or even an independency of means, but refuses to aid in giving these children an education sufficient for all the common responsibilities of life, he is the hardened mariner who sails recklessly by and sees the helpless sufferers engulfed ins the wake of his own proud vessel.

On this point, then, are we not authorized to conclude, in the first place, that the cases are comparatively few where parents can not afford to forego the earnings of their children and to send them to school for the length of time and with the regularity proposed; and, in the second place, were the cases of destitution far more numerous thain they are, that there is still an abundance of means as well as an obvious duty on the part of the public to supply all deficiencies? Assuming the value of all the property in the State to be $\$ 450,000,000$, the simple interest upon it alone at 6 per cent, and without any addition from earnings, is $\$ 27,000,000$ annually. The industrial statistics of the State show that its income from all its occupations and trades is more than $\$ 100,000,000$ annually, and even this does not include improvements upon its wharves, bridges, roads, or lands. Must such a state pare and clip and scrimp, and dole out its means with a niggardly hand when unfolding the mortal and the immortal capacities of its children?

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2. But though the means for supporting the schools are abundant, and though the earnings of children as a part of the family's daily livelihood may be foreborne in one class of cases and made up in the other, a further question still remains, Can the State itself afford to forego these juvenile services? Can the machinery be operated, the shoes bound, the types set, the errands and "chores" done, and the doorbells tended if all children under 16 years of age are withdrawn from the performance of these kinds of service for ten months each year? Minors under 16 are let out to corporations to be employed in manufacturing establishments; they are taken into the families of the wealthy and forehanded as underservants; a few are employed as errand boys in the offices and shops of cities, and in several of the lighter handicrafts they are put to regular labor. There are no exact data by which to determine the number of children so employed in the State. Compared with the whole number of children in it between the ages of 4 and 16, I suppose it to be inconsiderable, so inconsiderable, indeed, that if their services in these employments were henceforth to be wholly discontinued it would subtract hardly an appreciable fraction from the aggregate products of our labor and machinery. A highly intelligent gentleman, who has been engaged in manufacturing business for many years, informs me that the company with which he is associated now employs. 3,119 persons, namely, 2,571 in five cotton mills, 450 in two machine shops, and 98 in one woolen mill. In the cotton mills 346 persons are employed who are under 16 years of age, equal to 13 per cent. In the machine shops there are none. In the woolen mill there are 6 , or 6 per cent. The average for the whole is about 11 per cent. He adds: "I an of the opinion that this statement may be taken as a fair representation, in regard to age, of the persons in these several employments. Tery few are under 15. * * * This class of labor is not profitable to the employer, and, except in particular cases, is only employed from motives of charity. From my recollection of the labor required in print works [he was formerly extensively engaged in printing calicoes], I am inclined to think the proportion of persons under 16 is not greater than the average in the mills and shops before mentioned."

Here, then, is a statement worthy of implicit reliance respecting the largest branch of labor in which those children are employed who, on the proposed reformatory plan, would be sent to school. Can a substitute be found for this juvenile labor?

In the first place, if that class of parents who now coin into money their children's highest capacities for usefulness and enjoyment that they themselres may live in idleness and intemperance were peremptorily deprived of this source of gain they could perform a portion of the labor now exacted of the children; or, if not capable of performing this particular kind of labor, they could at least do some other work, and thus set free a class of persons who could perform it.

In the second place, manufacturers could employ, at a slightly enhanced price, a few more adults, or more persons over the age of 16 . I trust that no liberal-minded manufacturer would object to employing older help at the present time on the plea of nonremunerating returns.

But, thirdly-a consideration of more significance than all the rest-the children who had enjoyed such a school development and training as we are now supposing would go into the mills, after the completion of their educational course, with physical and intellectual ability to help and with a moral inability to harm, which of itself would far more than compensate for all the loss of their previous absence. Take any manufacturer whose mind has ever wandered, even by chance, to a contemplation of the only true sources and securities of wealth, and what would he not give to have all his operatives transformed at once into men and women of high intelligence and unswerving morality; to have them become so faithful and holiest that they would always turn out the greatest quantity and the best quality of work, without the trouble and expense of watching, and weighing, and counting, and superintending; that they would be as careful of his machinery as though it were
their own; that they would never ask or accept more in payment than their just due; that they would always consult their employer's interest, and never sacrifice it from motives of personal ease, or gain, or ill-will.
I have been told by one of our most careful and successful manufacturers that, on substituting, in one of his cotton mills, a better for a poorer educated class of operatives, he was enabled to add 12 or 15 per cent to the speed of his machinery, without any increase of damage or danger from the acceleration. Here there was a direct gain of 12 or 15 per cent-a larger percentage than that of the supposed whole number of children under 16 years of age in all our factories. And this gain was effected, too, without any additional investment of capital or any increased expense for board. The gain from improved morals would far exceed that from increased intelligence. On the whole, then, if all children under 16 years of age were withdrawn from the factories for ten months of each year, in order to be sent to school, there is reason to believe that the aggregate amount of the fabrics produced by the mills would not be diminished even a yard.
The above considerations have special reference to children employed in factories. I have selected this department of labor because I suppose that at least as many children under 16 are let out to service in factories as in all other branches of business taken together. The same views, with inconsiderable modifications, will apply to all others. It will be seen at a glance, therefore, that the contemplated diversion of children from manual labor to mental and moral pursuits will not be such as to impair the industrial resources of the State or to diminish the marketable value of its products.
But there is one remark which applies alike to all these classes of employers. They use the services of children not their own. Now, it must be conceded that there exists a well-grounded reluctance, on the part of free governments, to any such interference with parental relations as is not made necessary by the nature of the government itself or by the criminal conduct or culpable neglect of the parents. But those who employ other men's children for their own profit can not intrench themselves behind the sacredness of parental rights. Their object is their own personal gain, a lawiul and laudable object, it is true, when pursued by justifiable means, but one which can not sanction for a moment the infliction of a positive injury upon any child, or the deprivation of any privilege essential either to his wellbeing or to the permanence and prosperity of the Republic. The Republic, indeed, if true to itself, can never allow any of its members to do what will redound to its own injury; and, where no parental title can be alleged, the assertion of any right over the labor of children has as little foundation in natural justice or equity as the tyrant's claim to the toil of his vassals. How can any man, having any claim to the character, I will not say of a Christian or a philanthropist, but to the vastly lower one of a patriot, use the services of a child in his household, his shop, his office, or his mill when he knows that he does it at the sacrifice, to say the least, of that child's highest earthly interests? How can any man seek to enlarge his own gains, or to pamper his own luxurious habits, by taking the bread of intellectual and moral life from the children around him?

I can anticipate but one objection more having the aspect of plansibility. It may be said that although the schools should be kept for the proposed length of time by teachers ennobled with all the intellectual and moral attributes contemplated, yet there are persons capable, like brutes, of bringing children into the world, but impervious to those moral considerations which should impel them to train up those children in the way they should go, and that in regard to this class of parents some coercive measures will be necessary to secure the attendance of their children at school. I admit this. -But is coercion a new idea in a community where there are houses of correction, and jails, and State prisons, and the gallows? Surely boits and bars, granite walls, and strangulating hemp are strange emblems of the voluntary
principle. Massachusetts has at the present moment about two thousand persons under lock and key, nineteen-twentieths of whom, had they been blessed with a good common-school education, would, according to the testimony I have adduced, be now useful and exemplary citizens, building up instead of tearing down the fabric of public welfare. With a population of between 800,000 and 900,000 she has at ledst 5,000 police officers and magistrates, armed with power to seize and restrain and bring to trial and punishment any transgressors of those laws which she has paid many other thousands for enacting. Does it not argue, then, a perversion of intellect or an obliquity of the moral sense to contend that a child, for the purpose of being blessed by the influences of a good school, can not be taken from a parent who is preparing him to become at least a private, if not an officer, in the great army of malefactors, while it is conceded that by and by, when this same child becomes a parent, he may then be taken from his children, imprisoned, put to hard labor, or put to death? So far as force is concerned, so far as any supposed invasion of private rights is concerned, does not the greater contain the less a thousand times over? If the State can send a sheriff's posse to take a man from his own bed at midnight and carry him to jail, to trial, and to execution, does it require a greater extension or a bolder use of its prerogatives for the same State to send a kind, moral guardian to take a child from the temptations of the street or from the haunts of wickedness and bring him within the benign influences of a good school?

Should it be said that in the case of the adult offender there has been a forfeiture of civil rights by some overt act of violation, while in the case of the child the violation is prospective only, I reply that nothing is more common than to arrest and imprison men on probable suspicion merely; nothing is more common than to hold men to bail in sums proportioned to the suspected offense, and when a man gives proof that he intends to do a wrong and is only awaiting a favorable opportunity to execute his intention nothing is more common than to put him under bonds for his good behavior. Every child who is not receiving a good education comes at least within these latter categories. He is an object of violent suspicion. The presumption is strong that he will not make a good citizen; that in some form or other he will get his living out of the earnings of his fellow-men or offend against their welfare. If the Commonwealth, then, has a right to imprison an adult, or hold him to bail on suspicion, or to bind him over to keep the peace and be of good behavior, has it not an equal, nay, a superior, right to demand guaranties for the child's appearance upon the stage of manhood, there to answer to the great duties that shall be required of him as a citizen? And a good education is surely better security than any bail bond that ever was executed. Has not the State a right to bind each child to his good behavior by imparting to him the instruction and by instilling into his mind the principles of virtue and religion, by which he shall be twice bound or doubly fastened (for such is the etymological meaning of the word religion) to perform with intelligence and uprightness his social and political duties when he becomes a man?

Nor is our legislation without numerous precedents in favor of securing education even at the expense of coercive measures. These precedents are scattered along our annals from the earliest periods of our colonial existence. The colonial law of 1642, after premising that "forasmuch as the good education of children is of singular behoof and benefit to any Commonwealth," ordered "that the selectmen of every town * * * shall have a vigilant eye over their brethren and neighbors, to see, first, that none of them shall suffer so much barbarism in any of their families as not to endeavor to teach, by themselves or others, their children and apprentices so much learning as may enable them perfectly to read the English tongue, and knowledge of the capital laws;" and it imposed upon parents what, in those times, was a heavy penalty for neglect.

By the law of 1671 the selectmen were again required to see that all children and youth "be taught to read perfiectly the English tongue, have knowledge in the capital laws," etc.

So the laws of the Plymouth Colony, after setting forth that "whereas many Parents \& Masters either through an over respect to their own occasions and business, or not duely considering the good of their Children \& Servants, have too much neglected their duty in their Education, whilest they are young \& capable of Learning;" proceeded to make substantially the same requirements as were made by the above-cited provisions in the laws of the Massachusetts Bay Colony; and then declared that if any parents or masters, after warning and admonition, should still remain negligent in their duty, "whereby Children \& Servants may be in danger to grow Barberous, Rude or Stubborn, \& so prove Pests instead of Blessings to the Country," then "a fine of ten shillings shall be levied upon the goods of such negligent Parent or Master." If, after three months subsequent to the levying of this fine, "no due care shall be taken \& continued, for the education of such children \& apprentices," then a fine of twenty shillings was to be levied. "And Lastly, if in three months after that, there be no Reformation of the said neglect, then the Selectmen, with the help of two Magistrates, shall take such children \& servants from them [the parents,] \& place them with some Masters for years, (boyes till they come to twenty-one, and girls eighteen years of age,) which will more strictly educate and govern them, according to the rules of this Order."

Nor were the above enactments a dead letter. The earlier judicial and municipal records show that when the natural parent broke from the ties of consanguinity and duty by neglecting the education of his children the law interfered and provided a civil parent for them.

Modern legislation, it is true, has greatly relaxed the stringency of these provisions. No adequate substitute is to be found for them in our present educational code; and already neglected childhood is avenging itself upon society by its manhood of crime, not unfrequently by its precocity in crime, long before the years of manhood have been reached.

Compulsory enactments, however, still attest that all the spirit of our ancestors is not yet gone. Our laws provide in various cases that minor children may be bound out to service-males to the age of 21 years and females to the age of 18 years-but in all cases it is to be stipulated in the contract that they shall be taught to "read, write, and cipher." "Stubborn children" may be committed to the house of correction. Children in the city of Boston under the age of 16 years, whose "parents are dead or, if liying, do, from vice or any other cause, neglect to provide suitable employment for or to exercise salutary control over" them, may be sent by the court to the house of reformation. By the late act establishing the State reform school male convicts under 16 years of age may be sent to this school from any part of the Commonwealth, to be there "instructed in piety and morality, and in such branches of useful knowledge as shall be adapted to their age and capacity." The inmates may be bound out; but, in executing this part of their duty, the trustees "shall have scrupulous regard to the religious and moral character of those to whom they are to be bound, to the end that they may secure to the boys the benefit of a good example and wholesome instruction, and the sure means of improvement in virtue and knowledge, and thus the opportunity of becoming intelligent, moral, useful, and happy citizens of the Commonwealth." Manufacturers and overseers in manufacturing establishments are prohibited under a penalty from employing any child in their factories under 15 years of age who has not attended some day school for a specified portion of the year within which he may be so employed; and they are also prohibited from employing any child under 12 years of age more than ten hours a day under any circumstances. In the case of fires, of explosive commodities,
of contagious diseases, of immigrant passengers from infected countries, etc., the law rests its officers with plenary and summary powers "to save the Republic from detriment."

Paley has said that "to send an uneducated child into the world is injurious to the rest of mankind; it is little better than to turn out a mad dog or a wild beast into the streets." It is difficult to conceive why he thought it to be any "better," since one uneducated, vicious man may do infinitely more harm to the world than all the rabid dogs or wild beasts that ever existed. Much as we may need energetic remedies against contagious diseases, we need them against contagious vices more; and quarantine laws in fayor of moral health are the most necessary of all sanitary regulations.

But I forbear to press further considerations of this character upon the attention of the board. I hope that the great majority of our people will rather wonder why such an argument should be deemed necessary than be disposed to question its conclusions.
Having now surveyed somewhat at length the various points pertaining to this subject, a brief recapitulation may not be amiss.
The basis on which it is suggested that our public-school system shall be put is carefully defined in the circular.

In some important particulars no change is necessary, as our practice has already reached the point of theoretic excellence. Such are the unconditional rights of all children to enter the school-or their entire exemption from rate bills or any capitation tax, either as a condition precedent or subsequent of their attending schoolthe range of studies which may be taught; the provision for moral and religious instruction, with guaranties against its abuse, and so forth.

But, in other respects, important improvements are contemplated-no cardinal or organic change in the system itself, but only progression in courses already begun. Such are more befitting qualifications in teachers for the great work they undertake; the maintenance of the schools for a period of ten months in each year, instead of the present arerage of eight months; and, as a necessary consequence, the appropriation of moneys sufficient to sustain the prolonged school, and to pay the better qualified, teachers; and, finally, the gathering into the schools, during their entire term, of all the children in the community between the ages of 4 and 16 years.
From the comprehensiveness of this last condition it is obvious that all cases of sickness, casualty, or other reasonable cause of absence, must be excepted. And equally clear is it that when any parent or guardian prefers to educate his children at home or in a private school, he should be allowed to do so-the means of education to be left wholly optional with everyone, provided assurance is given to the State that the end is attained.

So far as the proposed changes involve the appropriation of more money, it has been shown that the State possesses not only a sufficiency, but a redundancy of wealth for the purpose. Besides, when once in operation, the system will be found, not merely a self-supporting one, but one yielding large revenues, both saving and producing many times more than it will cost, requiting a single expenditure by a manifold remuneration.

So far as higher mental and moral attributes in teachers will be required, reasons have been offered to show that Nature, or the common course of Providence, supplies an abundance of intellectual power and of moral capability; but that through our present misuse or maladministration of these noble qualities they are either lost by neglect of culture or diverted to less worthy pursuits. There is no more iron in the world now than there ever was. We have only discovered how to use it more advantageously, for steamboats, for railroads, for machinery, and a thousand mechanical purposes; and thus in point of mere pecuniary value we have given it the first rank among the precious metals. There is no more water flowing down our streams now
than there was centuries ago. But we have just found out how to make it saw timber, grind wheat, and make cloth; and already it does a thousand times more work than all our $20,000,000$ people could do, by their own unassisted strength, should every man vie with his neighbor in the severity of his toil and in the amount of his productions. There are no more individual particles of electricity in the air or in the earth to-day than there always have been. Forever since the creation there has been an inconceivable host of these particles-a multitude deriding all human power of computationwhich have careered round the earth by laws of their own, each one being as distinct from all the rest and having as separate and independent an existence as one wild horse upon the prairies has from another, Long ago science learned how to catch and confine these natural racers, but it was not until our day that she discovered how to take them-one, ten, a hundred, or a thousand--and dispatch them as messengers to distant cities-to make them the common carriers of intelligence, whom no pursuers can overtake, no bribe can cormupt, nor robbers despoil. Thus it is with the capacities of the human mind. By the bounty of Providence they may be employed and made sufficient for the greatest work of reform. It is through our blindness and perversity that they are not yet used to achieve their sublime purposes. Like the iron, like the gravity of falling water, like the electric coursers, they, too, have the power of conferring unimaginable blessings upon the pace; but as yet they have only been very partially enlisted in the highest services of humanity.

On the third point-that which contemplates the regular attendance of all the children upon the school (with certain specined exceptions), and even their compulsory attendance in a class of extreme cases-I rely upon legal precedents and analo-gies-upon the necessity which is imposed upon a republican government if it means to keep itself republican, and upon the broad principle that a parent who neglects to educate his child up to the point proposed proves that he has taken the parental relation upon himself without any corresponding idea of its solemnity, and thus, by the nonperformance of his parental duties, forieits his parental rights. * * *

Such, then, is a condensed view or summary of the testimony given by credible and trustworthy witnesses on a subject so unspeakably important. The judicial mind can not fail to observe that the section of country whence these results of experience have been gathered is large, embracing all the States north and east of Pennsylvania. The schools have been both public and private, in town and country, have consisted of both sexes and of all ages, and have contained children from all the States in the Union. They have embraced thousands and thousands of the youth of the land; and commencing at a point of time now more than fifty years gone by they reach in unbroken continuity to the present day. We have, therefore, no isolated or solitary case, illogically generalized, and made to yield an inference too broad for its premises.

The coincidence of the results, too, to which the witnesses have come is on its face a very remarkable circumstance; but it is rendered still more remarkable by the fact that they made their statements without any concert or comparison of vievs, and in entire independence of each other. The proof, therefore, is not cumulative merely; but its cogency is raised to a mathematical power equal to the number of the witnesses.

Nor is it to be forgotten that each of the witnesses, in theological character, is a sincere believer in such an innate natural condition of the human heart as opposes the most formidable obstacles to success in moral training. Sovereign, indeed, must be the influences which can educe exemplary lives and a well-ordered society from a race each one of whom could say, literally, "I was shapen in iniquity, and in sin did my mother conceive me," in a race whose alienation from the righteous law of God is supposed to antedate volition and even consciousness, and to be mingled and inbred with the primary corpuscles of being. It was no disrespect toward the many able and eminent teachers of a different religious faith which deterred me from pro-
pounding the same questions to them and soliciting the results of their experience. But it was because I wished to know what was deemed to be practicable by those who saw the greatest difficulties to be overcome before success could be achieved. While, therefore, their statements were solicited, respecting the moral efficacy or "potentiality" of schools "conducted on the cardinal principles of the New England systems," yet it was my wish that each one should make his own theological views manifest on the face of his communication; so that governors, and legislators, and all leaders of public opinion, might see how much was believed to be attainable, even while contending against the most formidable obstacles. I reasoned thus, that if those who believe the battle ground to be most nearly inaccessible, and the enemy's intrenchments to be most nearly impregnable, and his power to be most nearly invincible, do still believe that victory can be won-then all would gay, there should be no sleep in the camp until the war cry is rung and the hand-to-hand struggle is begun.

But I must not disguise the fact, nor in any way divert attention from it, that universality of education either public or private, is a substantive part of the plan here proposed and indispensable to its successful working. Indeed, I should have thought it nugatory and trifling to ask the opinion of any teacher about attainable results had this condition been omitted from the scheme. Had it been stipulated or supposed as a preliminary of the plan that 1 per cent only of the children might be left out of the schools, doubtless the witnesses would have made a deduction of at least 5 per cent in their estimate of results. They would have felt bound to make an allowance, not only for the abandoned class themselves, but for the poisonous influence of that class upon all the rest. Doubtless every advance in the qualification of teachers and in gathering more and more of the children within the renovating infuences of the schools will yield a great reward of mental and moral benefits, but universality in the end to be accomplished demands universality in the means to be employed. If a contagious or infectious distemper were to break out in any quarter of the city and all its victims but one were to be removed, though this removal would abate something from the malignant type of the disease, and contract the circle of its ravages, yet who would feel secure while even one should remain to impart its virus by contact or radiate its noxious effuvia? In moral no less than in physical maladies the security of each is conditioned on the security of all. The confidence of every rational man must be impaired respecting the prospective virtue of his own children while the children of his neighbor are vicious, and for the comprehensive meaning of the word "neighbor" Christ is our authority. I thank God that there can be no safety for any until there is safety for all. Were the sky to be opened and a voice to address us audibly from the heavens it could not proclaim more articulately than is done by the common course of Divine Providence that God has made of one blood all nations of men to dwell on all the face of the earth, and that therefore, being by the law of consanguinity one brotherhood and one body, no one member of this body can suffer but all the members must suffer with it, and no one member can be truly honored but all the members must rejoice with it. Where men are religious, therefore, this principle appeals to their religion and enforces all its dictates; where men are not religious, but have only an enlightened selfishness, it invokes that selfishness to do good to others for the reflected benefits upon itself, and thus it leaves only those to pursue a different course who are morally selfish and intellectually blind. Hence any system of education which does violence to this great principle of universal benevolence, which circumscribes itself within the limits of a family, a caste, a party, or a sect, is but human weakness wrestling against divine power, and, under whatever specious disguises it may mask itself, it is only mortal selfishness seeking by feigned and counterfeited compliances to cajole Heaven out of blessings promised only to those who do unto others as they would that
others should do unto them. What right has any man or body of men to make the second table of the law of less account than the first, or to delude themselves with the belief that they love the Lord their God with all the heart while they do not love their neighbor as themselves? If God is our Father, all men must be our brethren.

I believe it would not be only practicable but easy for the legislature, at its ensuing session, now so soon to be commenced, to initiate a series of measures which in a very brief period would carry us through the earlier stages of the contemplated reform, measures which would command the ready assent of a vast majority of the citizens of Massachusetts and would thus leave but few of those unnatural cases-of those parents who are not parents-to be dealt with compulsively.

In concluding this report I shall not attempt to heighten the effect of the evidence and the argument which have been submitted by any effort to describe the blessedness of that state of society which the universal application of this reformatory agency would usher in. Such an endeavor would be vain. He who would do this must first behold the scenes and be thrilled by the joys he would delineate; he must borrow the language of the Paradise he would describe, and more than this he must be able to depict the depth and fierceness of the pains which have been inflicted by the crimes of mankind, not only upon the guilty perpetrators themselves, but upon the imnocent circles of their families and friends; the terrors of the con-science-stricken malefactor; the sorrow and shame of children bemoaning a parent's guilt; the madness of the mother at the ruin of her child; the agony which brings down a father's gray hairs with sorrow to the grave; the pangs of fraternal and sisterly affection, to which a stain upon a brother's or a sister's name is a dark spot upon the sun of life, which spreads and deepens until it eclipses all the light of existence; all the varied cries of this mingled wail of distress, which have been heard in all lands and at all times from the death of Abel to the present hour; all these he must have power to describe who would describe the blessedness of a deliverance from them.
There is one consideration, however, which I can not forbear to introduce, because it appeals alike to all those various and oftentimes conflicting classes of men who are endeavoring in so many different ways to ameliorate the condition of mankind. Will not a moment's reflection convince them all that, so far as human instrumentality is concerned, education encompasses, pervades, and overrules all their efforts, grants them whatever triumphs they may achieve, and sets bounds to their successes which they can not overpass? Why does the advocate of temperance, every time he returns upon his circuit of beneficence, find his way again blocked up with the prostrate victims of inebriation? Why so long, in both hemispheres, have the divinest appeals of the advocate of peace been drowned by the din of mustering squadrons and the clarion of war? Why does the opponent of slavery, before he can strike the fetters even from one victim, see other fetters riveted upon the limbs of many more? Why do our moral-reform societies and our home-mission societies call annually for more money and more laborers wherewith to enter the ever-enlarging fields, as they open before them, of licentiousness and of irreligion? Why do those rich and powerful associations, formed for evangelizing the heathen world, see the very ships which carry out the gospel and its heralds, freighted also with idols made in Christian lands for those heathen to buy and to worship as true gods; and laden with a liquid poison, too, which sinks its victims to such a depth of debasement as to make common heathenism enviable? Why is it that the political parties into which our country is divided persist, year after year, in solemnly and unceasingly charging each other with heinous and premeditated offenses against the fundamental principles of our Government and the highest welfare of our people-charges which, if true, must brand the accused with infamy; if untrue, the accusers? So far as the members of
any one of these rarious parties are lovers of truth, of righteousness, and of peace, let them be asked what is the reason why they accomplish so little, and why so much ever remains to be done, and they will answer, and answer truly, that they do not fail through lack of reason or of authority, but because of blindness of mind or perversity of heart in those whom they address. The admonitions of history, the precepts of the gospel, the attributes of the Deity, are all on their side; but they are not heard, because they speak to adders' ears; they are not felt, because their words of fire fall upon stony hearts. It is not, therefore, better or more arguments that they need, but men capable of appreciating argument. Their eloquence is sufficiently electric and powerful were it not for the fintiness of the hearts that glance ofi its lightnings. They want men whose intellects are not blind to the most radiant truths; whose consciences are not as the nether millstone; whose prejudices have not become fossilized. The merits of the divinest cause may be all canceled by the demerits of the hearers, as the innocence of Christ was no better than guilt at the unholy tribunal of Pilate.

But in universal education every "follower of God and friend of human kind" will And the only sure means of carrying forward that particular reform to which he is devoted. In whatever department of philanthropy he may be engaged he will find that department to be only a segment of the great circle of beneficence of which universal education is center and circumference, and that it is only when these segments are fitly joined together that the wheel of progress can more harmoniously and resistlessly onward. Whether, therefore, he is struggling, on the one hand, to emancipate society from the thraldom of some particular enormity, which to him seems more flagitious than all the rest, or whether, on the other hand, he is striving to endue his age with some special virtue, in no way can he pursue his own peculiar aim so directly and so speedily as by preparing a generation of men, ninety-nine in every hundred of whom-even of the first subjects submitted to the experimentshall be trained "to do justly, to love merey, and to walk humbly with God." And hoverer a portion of my fellow-mortals or I myself may feel in regard to the highest religious concernments of the soul, I trust there are none who believe that such an education as is here contemplated would be an obstacle, and not an aid, to the reception of divine truth. I trust there are none who would not readily adopt the language of Mr. Page, in his letter above cited, where he says: "I am fully of the opinion that the right of expectation of a religious character would be increased very much in proportion to the excellence of the training given, since God never ordains means which He does not intend to bless."

## THE RELATION BETWEEN CRIME AND EDUCATION. ${ }^{1}$

By EDward I. Mansfield, LL. D.

*     *         * The general fact is apparent that education is a force restraining vice and crime. Where it is purely intellectual it restrains by teaching the truth expressed in the homely proverb that "honesty is the best policy;" where it rises to the dignity of a Christian education it teaches not only the restraint.of the intellect, but the higher restraint of the conscience. In either case it is a restraining force, a moral power, over the appetites and passions of men.

Such being the general fact, 'we shall endeavor to demonstrate it by the statistics both of Europe and America, the latter being derived directly from the prisons, jails, and reformatories of the several States.

[^5]
## THE RELATION OF CRIME TO EDUCATION IN EUROPE.

For the power to exhibit this subject as regards Europe we are indebted to Dr. E. C. Wines, who, as commissioner of the United States Government to organize the International Prison Congress, propounded a series of questions while traveling in Europe during 1871. Many of the reports were made under the direct supervision of the Government, and the figures may be taken as thoroughly reliable. We shall use here only the totals, disregarding minor details. In this way we shall present the relation of crime to education in Europe in the most striking view.

## FRINCE.

Of this country, Malte Brun, the scientific geographer, begins his account thus: "The influence of France may be compared to that which ancient Greece possessed over the civilized world. The French language has become the language of courts and embassadors; the literature of the same people has been admired by the enlightened of every nation. The inference of the reader from this declaration must be that the French are really an educated people, and producing the highest results of education in the fruits of humanity and civilization. But if this were said of what is really the nation, that is, of a great mass of the people, it would be entirely untrue, and furnish a signal proof of the superficial manner in which history is written."

In another part of his work Malte Brun (quoting the tables of Balbi) shows the number of scholars (pupils in school) to be 1 in 23 of the population. The number of children and youth in the public schools of Ohio is rather more than 1 in 4 of the whole population. The number in the schools of France was at that time (1832) only one-sixth the number in proportion to the State of Ohio, or, in other words, of the number that ought to be in school in order to educate the whole people. This is corroborated by another statement, that in 1833 out of 33,000 French communities 14,000 were without any schoois! In the meantime great efforts were made to increase popular education; but in 1870 there were still 800 communities totally without schools.

It is said there are now $5,000,000$ children attending school, but as the population of France is now $37,000,000$, even all that are now claimed to be in school is only 1 in 7.4 -that is to say, only about one-half of what would be if the whole people were educated.

In 1855 there were only 63,000 primary schools, which at the usual proportion of pupils would give about $4,500,000$ pupils, which corresponds with what has been stated, allowing for the increase of $1,200,000$ since 1856 , as stated by the French Government.

Looking then to the facts abore given, that in 1832 only one-sixth of the French people were educated at all; that in 1856 less than one-half were educated, and that in 1870 only a half, we shall be within bounds when we say that in 1870 more than half the French nation were not educated at all. Now let us look at the number and proportion of crimes committed in such a population. Let us take such general facts as we have, without reference to details.

Malte Brun gives the average number of births annually at about 900,000 , of which 74,000 were illegitimate. This is over 8 per cent of the whole. If we were to go into any neighborhood we should find each thirteenth child illegitimate. This shows how far ignorance has depravel the morals of the lower classes of the people. But as late as the past year (1871) it is stated in the papers that there had been 4,500 suicides in the city of Paris, which is two hundred fold the proportion which is found in the State of Ohio. If we suppose this to be exaggerated, or as a consequence of the recent war, there will be enough of this tremendous fact remaining to show how the want of the restraining force of education (especially of moral education) affects the very life of society.

Let us now proceed to trace the effect of this great ignorance in France on the number and character of crimes. The record is the most startling and convincing of anything we have seen in the annals of statistics. Dr. E. C. Wines gives this statement, derived from the best authorities:
Whole number of persons under arrest from 1867 to 1869 ...................... 444, 133
Number unable to read ....................................................................... 442, 194
Or................................................................................................. 95.63
Average number of convicts from 1866 to 1868.......................................... 18, 643
Number unable to read ............................................................................... 16,015
Or............................................................................................. 87.28
Average number of juvenile prisoners from 1866 to $1868 . \ldots . . . .$. .............. 8, 139
Number unable to read ............................................................................... 6,607
Or .............................................................................................. 81.14
We have shown above that at least half of the French people is in a state of total ignorance. Let us assume it as just half. At that time France had, in round numbers, $36,000,000$ of people. Then we find these proportions, viz:

In $18,000,000$ of people "unable to read and write" there were 442,194 arrests; that is, 1 in 41.

In $18,000,000$ of people who were commonly educated there were 1,939 arrests; that is, 1 in $9,291$.

Thus proving the proportion of criminals in the uneducated classes to be two hundred and twenty-six times as great as that of the educated classes:
The reader may say, "This is an exaggerated case, and, while the facts are apparently true, this proportion will not hold good in other countries."

We shall show in the sequence that the same general principle is true, and that when the people of the different countries are more and more educated, then this proportion diminishes, until, if we could imagine such a thing, society would present itself on the one hand thoroughly educated, and on the other hand without crime and without reproach.

## ENGLAND.

Our mother country is, in every just sense of the word, England. We therefore look with curious interest to the condition of her education, and its influence upon the production or the cure of crime. Let us look at the facts.
Dr. Wines gives the following figures:
Committed to county or borough prisons........................................ 157, 223
Could neither read nor write ................................................................. 53, 265
Proportion of totally ignorant .............................................................. 34
IRELAND.
Wholly illiterate, or very imperfectly educated criminals:
Males ..-........................................................................................ 21.74
Females............................................................................................. 63. 24
BELGIUM.
Criminals unable to read .................................................................. cent.. 49

## SWITZERLAND.

Average of criminals unable to read through all prisons .............per cent. . 83
The prisons of Lenzbourg, St. Gall, and Neuchatel give these special figures:

Inferior education ............................................................................ 36.9
Passable education ................................................................................ 30.4
Good education .......................................................................... 4.3

ITALY.
Illiterate in ordinary prisons .................................................... cent.. 40
Illiterate in bagnios (prisons of high grade) ........................................ 30
NETHERLANDS.
Criminals unable to read ................................................................ cer cent.. 35 to 38
From the above we find that the proportion of criminals totally ignorant varies in different countries of Europe from 35 to 95 per cent; but this does not show the whole truth, for in the reports from prisons in the United States it is almost universally said that but few of the whole number have anything more than the lowest kind of education, and doubtless this is true of Europe. These statistics prove that in Europe ignorance among criminals is the rule and education the exception.

Let us now examine this question more minutely in regard to our own country.

TIIE RELATION OF CRIME TO EDC'CATION IN THE UNITED STATES.
Mr. F. B. Sanborne, of Massachusetts, in a report prepared for the International Prison Congress, has made some general remarks upon the statistics of American prisoners which are very correct. He says:

The general condition of American prisoners, in point of education, is low, yet they are not so extremely illiterate as criminals are in many countries, if we except the colored criminals of the South.

In Massachusetts, for a period of eight years past, the statistics show very nearly one-third of all prisoners to be wholly illiterate; yet, in the highest prison, at Charlestown, the proportion of illiterate convicts since the beginning of 1864 has been scarcely more than 1 in 10 .

What Mr. Sanborne has remarked of Massachusetts is in the main true of the whole United States, as will be seen from the numerous tables hereto annexed.
In the great aggregate of criminals the number of the totally illiterate is very large, but is by no means so large as in Europe, for the reason that no part of our country is so densely ignorant as many parts of Europe. So, also, on the other hand, there are some prisons where the number of the illiterate is small, because they are special prisons of cities, where the better educated criminals are apt to be confined. But we need not remark upon these facts till we exhibit the great mass of prison statistics we have gathered from the Middle and Western States.
The statements following give partial returns from seventeen States, all of them but three from the Middle and Western States. The aggregates, in regard to education, sum up as follows, viz:
Aggregate of prisoners ..... 110, 538
Aggregate of whites ..... 91, 427
Aggregate of blacks ..... 6,396
Aggregate of foreign born ..... 57, 824
Aggregate of native born ..... 41, 942
Aggregate of those who can read and write ..... 82, 812
Aggregate of those who can read only ..... 5, 931
Aggregate of those who have no education ..... 21, 650

The discrepancies between the general aggregates and those for color and nativity are caused by the fact that in some prisons no record was kept of sex, color, or nativity. * * *

In regard to the above aggregate facts it may be observed-

1. That the whole number of those who can "read only" is described in the reports as in fact "very ignorant." To have learned to spell out words and read a little gives no real knowledge.
2. That the prison reports almost uniformly speak of the great number of those who "can read and write" as very deficient in education.
The general conclusion is that the great mass of prisoners is very ignorant; but in order to see this more clearly and understand it more thoroughly we shall analyze in the sequel the special reports of the prisons. In the mean while the general con= clusions of the aggregates above, including the observations of the prison keepers, are as follows:

Per cent.
The totally ignorant, as shown by those having no education, are.................. 22
The totally ignorant and very ignorant ......................................................... 25
The very deficient, including these and a large share of those who can read and write

These proportions are, in regard to the ignorant, much below those of Europe; and they ought to be, for it is beyond all doubt that, except the negroes of the South, the mass of the people of the United States is much better educated than in Europe. This is espesially the case in New England, New York, and the central States of the Northwest. But in either case the general fact is shown, beyond doubt or controrersy, that ignorance is one great cause of crime, and that in elevating the education of society, both religions and intellectual, we advance the interests of society by diminishing crime.
Just so far, therefore, as society neglects to educate the people, just so far does it prepare the crime which the criminal commits.
Let us now examine our statistics in detail, with regard to color, natixity, and religious education.
In regard to sections of the country, taking the State prisons and jails of New York and Pennsylvania (deducting the metropolitan police reports) as representatives of the Middle States, we have these results, viz:

Aggregate number.............................................................................. 12, 772
Aggregate number of whites................................................................ 11, 268
Aggregate number of colored .............................................................................. 465
Aggregate number of foreign-born ..................................................................... 4,658
Aggregate number of native-born............................................................. 8, 003
Aggregate number of those who can read and write ................................. 8, 501
Aggregate number of those who can read only....................................... 1, 774
Aggregate number of those who have no education.................................. 2,360
The proportions are:
The totally ignorant
The totally ignorant and very ignorant .......................................................... 33
The very deficient, at least....................................................................... 60
Let us take now the prisons and jails of the central Northwest, which includes the States of Ohio, Indiana, Illinois, Michigan, and Wisconsin.

Here we have the statistics of thirty penitentiaries, work houses, and jails, a sufficient number and variety to give a complete view of the subject in those States. The results are as follows, viz:
Aggregate number........................................................................................ 18,931
Aggregate number of whites........................................................................ 14, 362

Aggregate number of foreign-born ............................................................ 4,078
Aggregate number of native-born .............................................................. 4, 851
Aggregate number of those who can read and write ................................. 8, 722
Aggregate number of those who can read only .-......................................... 935
Aggregate number of those who have no education ................................ 6, 665

The proportions are:

## Percent.

Totally ignorant ............................................................................................................................................ 40
Totally and very ignorant .............
Totally and very ignorant . .................................................................................................................... 46
The rery deficient, at least ............................................................... 75
Let us now take the States west of the Mississippi to the Pacific. Of these we have the reports of four State prisons in the States of Minnesota, Iowa, Kansas, and California. The results are:

General aggregate of whites ................................................................... 1, 187

General aggregate of foreign-born .......................................................... . . . . 503
General aggregate of native-born .-........................................................ 696
General aggregate of those who can read and write .-. ............................. 1,333
General aggregate of those who can read only ...................................... 221
General aggregate of those who have no education................................. . . . 403
The proportions are:
Per cent.
Totally ignorant ......................................................................................... 21
Totally and very ignorant .-......-.-................................................................... 31
The very deficient, at least .-.................................................................-. 50
Now, let us take the only States that we have of those formerly slave States where the negro population prevails, viz, Maryland, Kentucky, Temessee, Georgia, South Carolina. In these States the results are:
Aggregate number of prisoners ............................................................ 4, 087


Aggregate number of foreign-born ........................................................... 267
Aggregate number of native-bsrn .................................................................. 3, 485

Aggregate number of those who can not read and write ......................... 1, 435
The States of Georgia and Tennessee, having 1,124 prisoners, made no return of the state of education, and were otherwise defective. In the 2,400 returned, the following are the proportions of educated and uneducated, viz:

Per cent.
Totally ignorant ........................................................................................... 60
Very deficient, fully .............................................................................. 85
Thus we see that in the midst of the South, where the colored population is almost totally ignorant, we lave the first approach in the United States to the educational condition of France in 1832, and of much of Europe now.

Comparing the several sections of the country as presented in the above tables, and including those who can read only (and that is usually very little) among the totally ignorant, we have these proportions. Those called "very deficient" are a low estimate, made from universal testimony of prisonkeepers:


The returns from the "West and Pacific" are deficient, and therefore not a fair test. This, and the fact that the great body of miners are really intelligent men, make the reasons why that section seems to have less ignorance among criminals.

THE PROPORTION OF ILLITERATE CRIMINALS AND OE ILLITERATE POPULATION COMPARED.
Here we come to test facts in regard to the influence of ignorance in producing crime. If the proportion of ignorant criminals to the whole number should prove greatly above that of the illiterate to the whole population, it will be a fact conclusive that ignorance is one great cause of crime. Fortunately the returns of education and illiteracy embodied in the census of 1870 will enable us to examine this question and obtain reliable results.
Taking the returns of the census of 1870 in connection with the tables we have above given, we have the proportions below, premising, however, that, as all prisoners are above 10 years of age, so we have taken from the "illiterate" in the census only those above 10 years of age.


It appears, therefore, that in the Middle States the proportion of illiterate criminals is eightfold the proportion of illiterate people; in the Central West it is thirteenfold; and in the West and Pacific States it is tenfold. In the South it is only threefold; but this is caused by the great mass of colored people, who make up a large portion of the whole people, and, being nine-tenths of them wholly ignorant, furnish the great mass of criminals. When the still larger white population is counted in it makes the disproportion of the illiterate criminals less. As to colored people only it is very great. But we see in the above proportions the great fact that ignorance is one of the great causes of crime. * * *

Having thus established certain general principles by the incontrovertible testimony of statistics, it will not be inconsequential or uninteresting to give the testimony of some of those who are engaged in the actual management of prisons.

The following statement, made by the superintendent of the Detroit House of Correction, gives the general facts and causes of crime nearly as correctly as can be obtained from the general averages of the most extended table of statistics:

Of the 8,744 prisoners, 44 per cent were under 30 years of age; 65 per cent acknowledged themselves habitually intemperate; 65 per cent were living out of the family reiation; only 57 per cent claimed to be able to read and write; 43 per cent acknowledging themselves without any education at all. The whole 8,744 , almost without exception, were poor and generally penniless on their admission to the institution. This fact, so generally true of criminals, must bear relation to their criminality. The improvidence that makes the spendthrift and pauper produces also the sensuality and selfishness that seek the means of indulgence without self-denial or regard for consequences.

Professor Tarbell, who has the school in the Detroit House of Correction, says:
Of the 150 men who have been examined individually on entering the school during the past six months, 23 were entirely ignorant of reading; 30 could read a little, but not well enough to use text books; while 97 could read with tolerable readiness, and some of them with intelligence and expression. From this it appears that 35 per cent of those admitted were practically illiterate. In 1869 there were 29 per cent of this class, and in 1870, 33 per cent. Whether this apparently increasing illiteracy on the part of those admitted to the house of correction be due to the demoralizing effect of the late war on many men of intelligence, and that we are now returning to the more usual state of society in which the vicious are the ignorant, I will not say.

If the censuses of 1850,1860 , and 1870 be compared, would not the whole country show the same result in regard to illiterates; and can any other result be obtained without compulsory education?

Mr. Cummings, the moral instructor of the California State prison, says:
A great majority of the prisoners on their commitment are illiterate; others have acquired merely the elements of knowledge, without being able to turn their slight educational acquirements to any practical use; while the number who have acquired a systematic or liberal education is so extremely limited that it has been found difficult to supply the classes with suitable teachers. Hence, when these unfortunate men have been approached in a kind and conciliatory spirit, very few have failed to respond in a similar spirit; and when the means of instruction have been provided for them they have eagerly availed themselves of the privileges of the prison school. The progress that many have made in their studies has been truly gratifying, and has demonstrated not only the practicability, but the great importance, of furnishing educational facilities to prisoners.

The fact that most of those who say they can read and write are " not able to turn their slight educational requirements to any practical use" is a fact which mere statistics do not show, but which the warden or chaplain at once discovers; and that fact is simply, that nine-tenths of prisoners have literally no useful education. Mrr. Cummings further says:

The educational acquirements of prisoners here do not differ materially from a general statement that would apply to most prisons in other States. Of 478 prisoners committed from April 11, 1870, to July 1, 1871, 232 were entirely illiterate; 95 could read and write; 120 could read and write very imperiectly, while but 31 were liberally educated.
Those who could read and write "very imperfectly" may without error be put down as uneducated. So that, practically, four-fifths of all the California State prisoners were uneducated; and yet this lact does not half appear in the table of statistics.
The board of inspectors of the State penitentiary of Tennessee say:
One out of every 25 of the entire population of Great Britain is a juvenile delin-quent-a destitute vagabond, abandoned, and, in many cases, a law-breaking child before the age of 17. While the same proportion of such a class can not be supposed to exist in this State, still the number is very large, and augmented daily with our increasing population. While no section of the State is entirely free from their presence, our larger cities swarm with them. They are found at every corner, and in every alley; at the doors of the saloon and the theater; at our depots and wharves; here their faces greet you with features pinched by their necessities into expression of premature shrewdness, bordering on villainy, totally foreign to the faces of well-cared-for childhood. From the teeming crop of ignorant, neglected, and criminal children is produced the large majority, if not all, of the thieves, counterfeiters, forgers, burglars, robbers, and murderers who fill our penitentiaries; as also those subjects for seduction, and consequent prostitution, who fill the brothels of our cities.

Here is society preparing the crime which the criminal commits. Here is the negative preparation of noneducation, and the positive one of temptation.

Mr. Darnell, keeper of the Georgia penitentiary, says:
Of all reformatory agencies religion is first in importance because most potent in its action on the human heart and life. Education is also one of the vital powers in the reformation of fallen men and women, who have generally sinned through the influences of some form of ignorance conjoined with vice. Its tendency is to quicken the intellect, expel old thoughts, give new ideas, supply material for meditation, inspire self-respect, support pride of character, excite to higher aims, open fresh fields of exertion, minister to social and personal improvement, and afford a healthiul substitute for low and vicious amusements.

It is, therefore, a matter of primary importance in the prevention of crime and the improvement of society, as weil as the avoiding of that combat between crime and law which, in this country, has been the bane of our prosperity.

We need not cite any further testimony of this kind; this is in substance the testimony of all the keepers and officers of penitentiaries, prisons, jails, and reformato-
ries in the country. It is the testimony of human experience on one of the most important points which concern human society. The evidence upon the intimate relation of crime and ignorance is clear, complete, and ample. It may be comprised in two general propositions:

First. That one-third of all criminals are totally uneducated, and that four-fifths are practically uneducated.

Secondly. That the proportion of criminals from the illiterate classes is at least tenfold as great as the proportion from those having some education.

If these proportions are true (and we have made rather an underestimate), then, after making due allowance for crimes committed with passion, without regard to education, and crimes, such as forgery, frauds, etc., which require some education, we must come to the conclusion that two-thirds of crimes might be avoided by education, but more especially by religious training. Against this fact some one will reply that so, also, a large nuunber of criminals are intemperate, and, therefore, we may attribute to intemperance a large number of the crimes we now attribute to ignorance. True, if these were parallel causes, but they are not. In the first place a large number of the intemperate are such from want of education, and especially from want of moral and religions training. We see a great many educated persons (that is, commonly educated) who are intemperate, but they seldom commit crime. Secondly, many of those committed to prison have become intemperate on account of previous criminal and vicious habits. But we shall not discuss this topic, except so far as to present some statistics both upon intemperance and upon color.

We give the following examples of the traits of prisoners in regard to temperance and intemperance, in some of the principal prisons, viz:

| Institution. | Temperate. | Intemperate. |
| :---: | :---: | :---: |
| Northern Indiana prison | 105 | 104 |
| Iowa state penitentiary.. | 122 | 158 |
| Minnesota State prison. | 41 | 46 |
| Illinois State penitentiary | 672 | 743 |
| Kentucky State penitentiary | 814 | 1,033 |
| Detroit House of Correction | 3, 045 | 5,655 |
| Total. | 4, 799 | 7,739 |

Or in proportions-
Per cent.


This proportion is rather larger than that which the statistics show as the totally ignorant, but not nearly so large as the very ignorant are reported to be by the keepers of penitentiaries, prisons, and jails.

Probably if we had the statistics of every prison and jail in the United States the result would not be materially different from what we have given above. Let us now look a little at the proportions of the colored people in relation to crime and ignorance, remembering their long enslavement and the prohibition of letters to slaves:

| Section. | Population. |  | Prisoners. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | White. | Colored. | White. | Colored. |
| New York and Pennsylrania. | 1,786, 826 | 117, 375 | 11, 268 | 1,465 |
| Central Northwest.... | 8, 987, 572 | 130,437 | 14, 362 | 1, 524 |
| West and Pacific. | 2, 720, 272 | 29,393 | 1,187 | 2 205 |
| South | 3, 568, 901 | 1., 680, 888 | 2,058 | 2,414 |
| Total. | 23,053, 511 | 1,957,873 | 28,875 | 5,608 |

The abore does not contain the population of all the States in those sections, nor by any means all the prisoners, but it does show the proportions of white and colored people, and the proportions of white and colored prisoners; and this is the only purpose for which we have prepared this table.

In New York and Pennsylvania the proportion of colored population to colored prisoners is 80 to 1 ; but of white population to white prisoners it is 700 to 1 .

In the central Northwest the proportion of colored population to colored prisoners is 90 to 1 ; but of white population to white prisoners, 700 to 1 .

In the West and Pacific, the proportion of colored population to colored prisoners is 140 to 1 ; but of white population to white prisoners, it is 2,300 to 1 .

In the South, the proportion of colored population to colored prisoners, is $\uparrow 00$ to 1; but of white population to white prisoners, 1,78土 to 1 .
The only value attached to these proportions is to show that the negro population, being almost entirely ignorant, presents far the larger proportion of criminals. This we might anticipate, but it is one of many great facts which show that ignorance is really the greatest cause of crime.

The nativity of criminals in the foregoing table is:
Foreign born................................................................................. 57,818
Native born .................................................................................... 42,495
The foreign born in the United States are to the native population as 1 to 7 . Hence, the foreign-born criminals are to natives nearly in the proportion of 10 to 1 . If, then, society suffers a large portion of its people to be ignorant; if it offers temptation to intemperance; if it neglects to encourage industry, is not the proposition of Quetelet most emphatically proved, that society prepares the crime which the criminal commits? Can we have a more serious testimony to the duties of society? * *

## THE PUBLIC SCHOOL FAILURE. ${ }^{1}$

By Richard Grant White..
There is probably not one of those various social contrivances, political engines, or modes of common action called institutions, which are regarded as characteristic of the United States, if not peculiar to them, in which the people of this country have placed more confidence or felt greater pride than its public school system. There is not one of them so unworthy of either confidence or pride; not one which has failed so completely to accomplish the end for which it was established. And the case is worse than that of mere failure, for the result has been deplorable and threatens to be disastrous.

To those who have not thought upon this subject, or who have thought upon it vaguely and without careful and considerate observation of all the facts which bear upon it, this assertion will savor strongly of temerity and folly. The belief that edu-cation-meaning thereby the acquiring of such knowledge as can be got in schools and from books-is in itself elevating and purifying, and is the most potent agency in the formation of good men and good citizens, is so general and so plausible that it has been assumed as an axiom in that which for reasons that do not yet quite clearly appear has come to be called "social science." If this assumed axiom were well founded, if it were really true that book learning and thriit, decency of life, and good citizenship are so directly connected that they must always be found together, it need hardly be said that this sort of education would be of the first necessity in every wisely constructed and well-ordered society, and would be of supreme necessity in a
country in which every man who lives outside of prison walls has a voice in the government. Hence, the assumption on this point being what it is and has been for many generations, it would be strange indeed if public education had not been a subject of grave consideration early in the short history of the United States and if it had not been amply provided for by legislation. The provision was early made, and public education at public cost has been so general here and has been developed into a system so rast and so complete that a better opportunity for testing its worth could not be hoped for. The conditions, too, under which this system has been in operation are singularly farorable. The wealth of the country, its vast expanse of uncultivated, unoccupied land, a homestead in which can be acquired at an almost nominal price, the general intelligence of the people, their freedom from burdensome taxation, the absence of privileged classes and of an established religion supported by the State make its people one upon which education, according to the assumed theory, should have the happiest, the most benign effects; but however great may be the intrinsic value of education as a formative social agency, the effect of that which is afforded by our public school system has proved in every way unsatisfactory, and worse than unsatisfactory.
That the system is of New England origin need hardly be said. It is a development of the New England common school, from which it has been gradually evolved under gradually accumulating influences, some of which were pure and philanthropic, but other some of which were corrupt and self-seeking. The former may be called social, the latter political, using the word in that narrow and derogatory sense which it has unhappily acquired in our discussions of public affairs. In Massachusetts, in the year 1647, and in Comnecticut only three years later, it was enacted that every township of 50 householders should appoint a person within their town to teach all children that should resort to him to write and read, whose wages should be paid by either the parents or the masters of such children, or by the inhabitants in general; and it was also ordered that in every town of 100 families there should be a grammar school set up, the masters of which should be able to fit youths for the university, a grammar school being then a school for instruction in the Latin language, English grammar and the teaching of it to English-speaking children remaining yet unimagined and to men of that time almost unimaginable. This system of compulsory support of common schools and grammar schools spread itself orer all New England and throughout those Northern and Western States which were more or less under New England influence.
The history of public education in the city of New York is of such importance as to merit special although brief consideration. The act establishing common schools in the State of New York was passed in 1812. Before that time money was expended by the State for the encouragement and support of schools, but there was no public school system. The law of 1812 applied to towns and villages, but not to chartered cities, with two or three specified exceptions. New York was not one of these. Public education in that city was in the hands of the Public School Society, a voluntary association, chartered, and in its standing and motives something like the New York City Ilospital. I have not been able, in the time that I could give to this subject, to find the act incorporating this benevolent society, but I find so early as the year 1807 an act for its benefit, of which the preamble is as follows:

Whereas the trustees of the Society for Establishing a Free School in the City of New York, for the education of such poor children as do not belong to or are not provided for by any religious society, lave by their memorial solicited the aid of the legislature; and whereas their plan of extending the benefits of education to poor children, and the excellent mode of instruction adopted by them, are largely deserving the encouragement of Government; therefore, etc.

This makes the original purpose of common school education in the city of New York sufficiently clear. It was intended for poor children whose education was not
provided for by any religious society; but, in fact, its benefits were gradually extended to others-children not at all dependent upon charity. The character, the spirit, and the purpose of the society remained, however, unchanged. It sought to give elementary instruction and moral training to children who would otherwise have been more or less neglected in these respects. The benefits of a corresponding plan of education were conferred upon the people of the State at large by the law of 1812, which established a common school system of a somewhat rudimentary nature; but the city of New York remained without provision by law for public education until the year 1842, when the legislature passed an act extending to the city a participation in the system which prevailed in the State. But the act not only did this; it placed the schools of the Public School Society, with those of the orphan asylum, of the Roman Catholic Orphan Asylum, and of several other benevolent societies, under the jurisdiction and supervision of the board of education. Finding themselves in this position, the corporators of the Public School Society transferred their schoolhouses and all their other property, with their rights, to the board of education, and the society ceased to exist. It was not long before other school societies followed their example. This event was a public calamity-a calamity not only to the city of New York, but to the State; not only to the State, but to the whole country. Nor has the blight of its effect upon morals, upon politics, and upon education been confined to the country in which it first was felt. At that time our present public school system may be properly said to have begun its rapid formation. From that time public education passed rapidly into municipal politics, and became an engine at once of political corruption and social deterioration. The example of New York was widely followed, actually if not avowedly. On all sides there was a cry for higher education, and as higher education meant more teachers to be appointed and paid, more schoolhouses to be built, more text-books to be bought by the tens of thousands, and, in brief, more money to be expended, the local politicians, who with anthropomorphic devotion worshipped their own glorified and gigantic likeness in the Hon. William Tweed, did all in their power-and their power was great-to foster the higher education. Admirable, farseeing, largeminded, philanthropic statesmen! They fostered the higher education until, as I was told about ten years ago by a publisher of schoolbooks, there was no department of his trade so profitable as that in which he was chiefiy interested, but that to "introduce" a set of two or three text-books into public school use cost between fifty thousand and one hundred thousand dollars (for what, pray let us know, oh, philanthropic dispensers of the healing light of education?); and until now there is a College of the City of New York, as a part of its common school system, and a normal school, at which 1,500 young women are instructed yearly in the mysteries of teaching, which but a very few of the 1,500 practice, mean to practice, or have the opportunity to practice, and until the sum of $\$ 3,805,000$ is spent upon public education by the city of New York alone, of which sum no less than $\$ 1,009,207$ is paid to teachers of primary departments.

And such, in a great measure, has the "American" system of public education become in all the country lying north of the Potomac and the Ohio.

Nearly $\$ 4,000,000$ taken in one year from the pockets of taxpayers of one city for education-more than $\$ 1,000,000$ paid to teachers of primary schools, and a similar expenditure throughout the State and in more than half the States, and what is the result? According to independent and competent evidence from all quarters, the mass of the pupils of these public schools are unable to read intelligently, to spell correctly, to write legibly, to describe understandingly the geography of their own country, or to do anything that reasonably well-educated chlidren should do with ease. They can not write a simple letter; they can not do readily and with quick comprehension a simple "sum" in practical arithmetic; they can not tell the meaning of any but the commonest of the words that they read and spell so ill. There
should not be need to say that many of them-many in actual numbers-can do all these things fairly well; but these many are few indeed in proportion to the millions who receive a public school education. They can give rules glibly; they can recite from memory; they have some dry, disjointed knowledge of various ologies and osophies; they can, some of them, read a little French or German with a very bad accent; but as to such elementary education as is alike the foundation of all real higher education and the sine qua non of successful life in this age, they are, most of them, in almost as helpless and barren a condition of mind as if they had never crossed the threshold of a schoolhouse.

The testimony to this amazing and deplorable condition of the mass of the pupils of our public schools is so varied, so independent, and comes from so many quarters that it must be true; it can not be disregarded. It is given by private persons, by officers of school districts, by teachers themselves; and it comes from all parts of the country. It can not be repeated here in detail, for it would fill half the pages that can be afforded to this article. But one example of it may be given which fairly represents the whole. Mr. George A. Walton, agent of the Massachusetts State board of education, in a report on the public schools of Norfolk County, Mass., a county which borders upon Boston and the inhabitants of which are somewhat exceptional in wealth and intelligence, sets forth a condition of things which has thus been graphically but correctly summarized by the Chicago Times:

The examinations were, in the first place, of the simplest and most practical character. There was no nonsense about them. They had but one object-to see if, in the common schools, the children were taught to read, write, and cipher. * * The showing made by some of the towns was excellent, and of them we shall speak presently. In the case of others, and of many others, it is evident from what Mr. Walton says, and still more evident from what he intimates, that the scholars of 14 years of age did not know how to read, to write, or to cipher. They could, it is true, repeat the pieces in their school readers, and parse and spell in classes, and rattle off rules in grammar and arithmetic, not one word of which they understood; but if they were called upon to write the shortest of letters or the simplest of compositions, or to go through the plainest of arithmetical combinations, their failure was complete. They had, in fact, been taught what to them were conundrums without end; but the idea that the teaching was to be of any practical use in the lives of these children, when they grew to be American men and women, formed no part of the system, and evidently had never entered into the heads of the instructors. * * * Then, when the letters and compositions were brought in the ingenuity in bad spelling seems simply incredible. Unless the different misspellings of the word "scholar," for instance, were given, as in this volume they are, who would believe that they would be some 230 in number? Then, again, 65 different spellings are enumerated of the word "depot;" 108 of the common word "whose," and 58 of "which." Out of 1,122 pupils who used the adverb "too" in the narratives, 859 , or nearly 77 per cent of the whole, spelled the word incorrectly. Then on pages 218, 219, and 246-248 of the report we are given facsimile lithographs of these letters and compositions, showing their average excellence in certain of the towns, and anything worse it would be hard to conceive. Language fails to do justice to them; they only can do it to themselves. ${ }^{1}$

This is the intellectual result of the operation of our much-vaunted "American" public school system during the last thirty or forty years. Competent observers in all quarters tell the same story. In the year 1875 it was officially recorded that the candidates for cadetship at West Point had shown a steady deterioration in thorough-

[^6]ness of elementary knowledge during the then last twenty-five years. It is needless to waste more words in secting, forth a fact equally sad, disgraceful, and undeniable.
Nor need we look very far for information which is both corroborative and explanatory of this lamentable and almost ridiculous failure of public school education. The system soon began to bring forth its proper fruits. The superintendent of public instruction in the State of New York, in the eighth annual report from his office, presented to the assembly in 1882, after discussing in general terms the "limited knowledge" among a "large proportion" of the teachers of "that which all teachers ought first to know," a deficiency which had been found a "source of embarrassment," said:
Many [teachers] who have been over a very extended ground of higher mathematics fail utterly in the simplest principles of mental and practical arithmetic. More have spent busy terms in the study of the classics, but have no knowledge of the first principles of their own language; while to find one who knows anything of the geography of his own, much less of foreign lands, is rare good fortune indeed! And yet these are not novices, but representative teachers, as the average term of their experience shows (p.39).

We have here revealed to us the condition into which public education has been brought by twenty years' experience of our public school system, a period just about long enough to mature a second generation of teachers under the influence of that system.
This being the mental condition and the educational equipment of teachers, what may we reasonably look for in their pupils, the time having not yet come when men may gather grapes of thorns or figs of thistles? Mr. Walton's Norfolk County report might have been written in advance by any man gifted with moderate power of forecast. As a mere imparter of useful knowledge the public sehool system has failer utterly.
And now let us consider that system in relation to the reason, the only reason which justifies its establishment. It is supported by enormous sums of money taken by process of law from the pockets of individuals. Will he, nill he, every man who has property is compelled to pay for the education of other men's children in schools to which he may or may not wish to send his own children, if he has any. The only possible justification for this forcible appropriation of his money is that it is for the public good, for the common wealth, that the system for the support of which his money is taken affords security for life, liberty, and property which without that system would be lacking. And this is the reason for it, and the only reason that is avowed. It has recently been set forth very clearly by an able and highly esteemed public-school officer of high position, in a passage which is a very complete expression of the raison d'ètre of our public school system. The superintendent of the board of education of the city of New York (one of the most high-minded and capable members that board has ever had), in his report for 1879 thus remarks:

In our day, and in the condition of American life, we need all the power of an educated intelligence in order to lift the masses, as well as to maintain an equilibrium in the forces of society. The distribution of knowledge is as necessary as the distribution of light. We need the distributive power of systems of education which will reach the lowest abodes and penetrate to the farthermost hamlets of the land. The best education of the people will thus become the best government of the people (p.27).

Here we have the professed and the honestly believed social and political theory upon which the public school system rests. It is to lift the masses. Knowledge is as necessary to healthy social life as light is to healthy physical life. If education reaches the lowest abodes, we may then, and only then, have the best government of the people.

The theory is not merely unsound, it is utterly and absolutely false. Knowledge
will not lift the masses, except as a balloon is lifted, because it is inflated with gas. Mere knowledge does not raise the quality of men's moral natures. Knowledge is light indeed to him who can see, and who can think and feel rightly as to what he sees; but mere intellectual light, without moral warmth, will not produce a healthy social life any more than a healthy physical life can exist in the light of a thousand suns without the genial warmth of one. The road to the best government of the people does not lie only through the door of the public schoolhouse.
This theory itself, however, is the natural fruit of a belief which has obtained general acceptance, and which is embodied in an adage that, like so many adages, is fallacious, and yet is received without question because of its sententious form. It seems conclusive, and it saves people the trouble of observing and thinking. This adage is, "Ignorance is the mother of vice." Among all the hundreds of adages, which are supinely accepted and blindly acted upon, there is hardly one which is more at variance than this is with the truth. On the contrary, the teaching of the world's experience through all past ages, and in the light of the present day, is this:
Ignorance is the mother of superstition, but has no relation with vice.
Ignorance has, indeed, a certain relation with vice--a relation which, however, is merely one of frequent coexistence. But coexistence does not imply connection. It no more implies connection than sequence does. That which follows is not necessarily the consequence of that which goes before. Post hoc does not imply propter hoc. Equaily true is it that two things found often, or even generally, together have not necessarily the relation of cause and effect, nor even that of identity of cause. Vice may, and often does, flaunt unpalliated by ignorance; ignorance may, and often does, walk with its humble purity untainted by vice. Some of the most vicious men that have ever lived have been well instructed, accomplished, and even learned. Some of the purest and best have been ignorant-so ignorant that they could read and write hardly better than the majority of the pupils of our public schools. Ignorance and vice are so frequently found together, not because the former is the cause of the latter, but because both-but chiefly the former-are the common companions of poverty. Want, if not the parent of vice, is at least its faithful foster mother. One among the proverbs that really embody the truth of the world's experience is that which tells us "It is hard for an empty bag to stand upright." Becky Sharp said that she could have been a good woman if she had had $£ 5,000$ a year. The goodness of the Becky Sharps of this world, under any circumstances, is but skin-dcep, like their beauty; but beauty is none the less sought for and longed for; and so decorous behavior and decent life are all that society can demand, no matter what their motive. Thackeray, in this speech of his greatest creation, lays bare the nature of all vice. Vice is the satisfaction of personal wants without regard to right. Now, as the obstacle to the satisfaction of wants is almost always the lack of means-that is, of money or its equivalent--the result is that most vice is directly connected with the need of money. The fact that the need may be actual and healthy-as for the necessities and comforts of life, or fictitious and fan-ciful-as for luxuries of whatever sort, does not impair the truth of the axiom that need is the motive to the vicious life. Hence it is that poverty and vice are so often found together, and that, poverty being so conmon, vice is so common. There are thousands of humble Becky Sharps, and of their male counterparts, in every town and county in the country.

If ignorance were the mother of vice, and if our public-school system were what it is set up to be, the fruits of the latter would by this time have been manifest, plainly visible to the whole world, in our moral advancement as a people, in a higher tone in our society, in the greater purity of our politics and the incorruptibility of our legislators, in the increased probity of the executive officers of our State and municipal governments and of our corporate financial bodies, in the superior wisdom and more solid integrity of our bench, in the sobriety of our matrons,
the modesty of our maidens, in the greater faithfulness of wives, in the diminution of divorces, in the steady decrease of vice and crime and idleness and vagrancy and vagabondage. If ignorance be the mother of vice and the public school is the efficient foe of ignorance, the last fifty years should have seen in all these respects an improvement so great that admiring nations would applaud and humbly hope to imitate. But who needs to be told that in all these respects we have deteriorated? It is not Horace's praiser of the days when he was a boy that tells us this. It is a matter of public record. It is known to every observant man who has lived more than thirty years. Our large towns swarm with idle, vicious lads and young men who have no visible means of support. Our rural districts are infested with trampsa creature unknown to our fathers, and even to us in our youth. The corruption of our legislative bodies is so wide and so deep and so well known that great corporations and business mein of large wealth can almost always obtain the legislation needful for their ends, right or wrong. Bribery at elections is almost openly practiced by both our great political parties. The general tone and character of our bench, both for learning, for wisdom, and for integrity, have fallen notably during the last thirty years. Dishonesty in business and betrayal of trust have become so common that the public record of the last fifteen years on this subject is such that it can not be remembered without shame. Politics, instead of being purified and elevated, has become a trade in which success falls year by year more to inferior men who have a little low cunning. Divorces have multiplied until they have become so common as to be a stock jest in the facetious column of our newspapers. Crime and vice have increased year after year almost pari passu with the development of the public-school system, which, instead of lifting the masses, has given us in their place a nondescript and hybrid class, unfit for professional or mercantile life, unwilling and also unable to be farmers or artisans, so that gradually our skilled labor is done more by immigrant foreigners, while our native citizens, who would otherwise naturally fill this respectable and comfortable position in society, seek to make their living by their wits-honestly if they can; if not, more or less dishonestly; or, failing thus, by petty office-seeking. Filial respect and parental love have both diminished; and, as for the modesty of our young men, and even of our young women, they do not even blush that they have lost it. This is the condition in which we are after more than half a century of experience of our public-school system, the only justification for whose existence is that it was asserted and believed to be a panacea for the cure of social and political disease. Nor is the case of that system at ail bettered by the quite untenable assumption that all this would have been without its influence; for its only justification, the very reason of its being, is the other assumption, that by it all this would have been prevented.

Moreover, there is evidence on record, evidence furnished quite independently of any investigation of this subject, which proves the case against the public-school system as clearly and as undeniably as the truth of Newton's theory of gravitation is proved by the calculations which enable astronomers to declare the motions and to weigh the substance of the planets. For the census returns show that crime, immorality, and insanity are greater in proportion to population in those communities which have been long under the influence of the public-school system than they are in those which have been without it. The system, be it remembered, is of New England origin, and the New England States have been longest under its influence. The States south of the Potomac are those which were longest without it; and, indeed, in them it has hardly yet obtained favor or foothold. Let us compare the statistics of population, of literacy and illiteracy, and of crime in these two classes of States, carefully eliminating from our calculation the influence of foreign immigration upon the criminal record of the Northern States, which the particularity of the census returns enables us to do. The comparison is between the native white populations of Massachusetts, Connecticut, New Hampshire, Vermont, Maine, and Rhode

Island on the one hand, and the same population of Delaware, Virginia, Maryland, North Carolina, South Carolina, and Georgia on the other. These are all original States of the Union, Maine excepted; but Maine was always a part of New England. They are Commonwealths founded at about the same time by people of the same race and the same religion. In 1860 secession and consequent civil war caused in the Southern States an upturning of all the elements of society, which makes it proper that the examination of their social condition should be limited by the census of that year.
The census of 1860 shows that the New England States had a native white population $2,665,945$ in number, and of these there were but 8,543 adults who could not read and write. The six Southern States mentioned above had $3,181,969$ native white inhabitants, among whom there were 262,802 adults who could not read and write. In the New England States, therefore, the native whites who could not read and write were in the proportion of 1 to 312, while in the six Southern States the proportion of wholly illiterate whites was 1 to 12. Now, if ignorance is the mother of vice, of crime, of wretchedness, and of all that goes to make bad citizens, the excess of the criminal classes in the Southern States should have been in something like the proportion of 312 to 12 . But it was not so. On the contrary, the proportional excess of crime, of pauperism, of suicide, and of insanity (and among the native white inhabitants, be it remembered) was very much greater in the New England States; for in 1860 they had in their prisons 2,459 criminals, while the six Southern States had but 477 . New England society, formed under the public-school system, produced 1 native white criminal to every 1,084 inhabitants; while the Southern States, which had been almost entirely without that system, produced only 1 to every 6,670 a disproportion of more than 6 to 1! ${ }^{1}$ The New England States had one publicly supported pauper to every 178 inhabitants, while the six Southern, which were without public schools, had but 1 to every 345. Of suicides, there were in the New England States 1 to every 13,285 of the entire population; but the others had only 1 to every 56,584 . The census of 1860 has no record of insanity; but that of 1870 shows in New England 1 insane person of those born and living in the several States to every 800 native-born inhabitants; bat in the six Southern States in question only 1 to every 1,682 native inhabitants. Strange to say, foremost in this sad record stand Massachusetts and Connecticut, which have had common schools since 1647 and 1650, respectively, as was remarked in the beginning of this article, the former producing 1 native white criminal to every 649 native white inhabitants; the latter, 1 to every 845.
The significance of these facts and figures can not be mistaken or explained away. Does it therefore follow that knowledge is incompatible with virtue, thrift, good citizenship, and happiness, and that education is per se an evil? Not at all. But it does follow that ignorance is not the mother of vice; that ignorance has no necessary comnection with vice. It does follow that the public school system is not the reformatory agent which it has honestly been supposed to be; that its influence is not to make men good, and thrifty, and happy; that it is not adapted to produce the best government of the people.
In 1870 the cost of the system which coexisted with the condition of society indicated by these figures, and which has been previously described in this article, was more than $\$ 64,000,000$.
The remedy? A remedy must be found. It can not be set forth in detail at the

[^7]end of an article like this, which has already exceeded the limits assigned to it. But it may be briefly indicated as a discontinuation of any other education at the public cost than that which is strictly elementary-reading, spelling, writing, and the common rules of practical arithmetic; and in the remission of all education higher than this to parents, the natural guardians and earthly providence of their children. And those children only should be thus educated at public cost whose parents are too poor to give them even an elementary education themselves. Supplementary to this simple system of elementary education, there might be some jealonsly guarded provision for the higher education of pupils who have exceptional ability and show special aptitude and taste for science or literature.
Moreover, if Government is to assume a parental and formative function, and to attempt the making of good citizens, it may, with much more reason and propriety, establish public farms and public workshops, and train in them its future citizens to get their own living honestly and respectably, than it may establish and compel attendance upon schools on a system the result of which, according to the experience of half a century, is deterioration in purity of morals, in decency of life, in thrift, and in all that goes to make good citizens, accompanied by a steadily increasing failure in the acquirement of the very elements of useful knowledge.

## "THE PUBLIC SCHOOL SYSTEM A FAILURE."-A REPIY TO RICHARD GRANT WHITE. ${ }^{1}$

Mr. Richard Grant White says in the December number of The North American Review that, "as an imparter of useful knowledge, the public school system has failed utterly." And, again, "The case is worse than mere failure, for the result has been deplorable, and threatens to be disastrous." Indeed, according to some statements in this remarkable article, it has already proved disastrous to the intelligence and morals of the people where public schools have existed.

This has a rather strange sound to Northern ears. But, like many other discoveries that seem new, those familiar with Shakespeare's Henry VI will recognize it as what the ethnographers call a "survival."
So far as I know, it was Jack Cade who made the original discovery that Lord Say had "most traitorously corrupted the youth of the realm, in erecting a grammar school." Whether Mr. White got the hint from Cade I don't know, but there seems to be a marvelous resemblance in their ideas.

Before following Mr. White through some of the details of his article, it will be well, perhaps, to call attention to his two leading propositions, on which the whole article rests.

His first proposition is that "as an imparter of useful knowledge the public school system has failed utterly."

This proposition he proves to his own satisfaction by the aid of some detached statements in Mr. Walton's report of examinations in Norfolk County, as well as by some exceptional lithographed examples of poor work contained in that report; and by some exaggerated statements of Mr. Charles Francis Adams, jr., which are sufficiently answered by an official document of the date referred to, bearing his own signature.

Having established, as he thinks, his first proposition, Mr. White lays down another, of which it can not be said that it is like unto the first. It is this: That "Ignorance is not the mother of vice," and has no connection with it, except that they sometimes coezist, neither of them being the cause of the other.

And how do you suppose he undertakes to prove this? Why, by assuming that his first proposition is false, and that the States in which a public school system exists

[^8]are more intelligent, have more knowledge, than those that have no public school system ; for he goes on to present such an array of statistics, manipulated to suit his purpose, as shows to his satisfaction that those communities which have been long under the influence of a public school system have more crime and immorality than those which have been without it.

But, supposing it to be true (which, of course, I do not admit) that crime and immorality have been more common in the States where public schools exist than in others, how does this prove that "ignorance is not the mother of vice?"

He has already assured us that "as an imparter of useful knowledge the public school system has failed utterly." Why, then, should we not presume the communities that have not been cursed with a common school system, but where, in the language of Mr. White, education has been remitted to parents, "the natural guardians and earthly providence of their children"-I say, why should we not presume such communities to possess more useful knowledge than those that have had a school system only to find that "as an imparter of useful knowledge it has failed utterly?"

What, then, has Mr. White proved? If the first proposition, then his statisticsif they do not prove that "ignorance is the mother of vice"-do prove that the amount of crime in a community is in direct proportion to the amount of ignorance.

If, therefore, his first proposition is true, he has disproved the second. If his second is proved, it is by a direct denial of the first; for it rests entirely on the assumption that those communities where a public school system has existed are more intelligent-that is, have more knowledge.

It reminds one of the gentleman's servant, who cut off a favorite dog's head to save the pitcher into which he had thrust it, and then broke the pitcher to get the dog's head out.

Such being the character of this article as shown in its two leading propositions, it may be proper to remind Mr. White that logicians have found the same difficuity in proving contradictories that railroad men have in trying to make two trains pass each other on the same track. Thus far the result has always been a damaging collision.

But let us inquire a little into the nature of Mr. White's proof.
Mr. White quotes from a recent statement of Charles Francis Adams, jr., that when, in 1873, they examined the schools of Quincy, "the result was deplorable. They all fell through," etc.

But let us see how this statement-made in 1880-agrees with the annual reports, made when the facts were fresh in the mind of Mr. Adams.

From the school report of Quincy for 1872-73, I take the following:
The standard of education has not been notably advanced during some years, so far as the committee can judge. But while this is substantially true, it is also true that the standard has neither been lowered nor drawn back; and it is possible that an eagerness for exceptional excellence may have blinded us to a steady and substantial, though slow advance. To those who can recall the situation twenty years since, this may appear considerable.

Again,
It has been said that a point has been reached in our schools which seems to be near the goal at which common schools aim; and this is substantially true, taking into consideration the age and average attendance of the pupils.

In the report of 1873-74 I find the following:
The school committe, in entering upon the periormance of the closing duty of their school year, are glad to be able to congratulate the people of Quincy upon the satisfactory general character of the results they have to report.

While there have been no striking alterations in the main system of management, no radical innovation in method of instruction, nor considerable change in the style of teachers, a fair, even, and well-distributed improvement has been noted in most of the departments of study.

Then, after speaking of several schools, one of which "appeared much better," another "not so well," and others bearing "indications of improvement," the report continues:
But, as a rule, the committee saw nothing which leads them to modify the opinion expressed in their last annual report, to the effect that, as regards instruction, a point has been reached which is near the natural term of such force as our present system of schooling is calculated to exert.

At the same time it is to be remembered that, as compared with many years ago, the tests applied to our schools have much increased in severity.
The new principle of conducting the examinations introduced by the committee a year ago, under which a single and the same branch of the studies pursued is in the examinations of all the schools assigned to each member of the committee, has also been pursued this year. During the examinations, the schools are thus taken wholly out of the hands of their instructors and into those of the committee.

Under these circumstances a mere education of "veneering" is sure to reveal its false character. It is wholly impossible to prepare classes for a "show-off." The examinations, therefore, now at least reveal as a whole the real results of our schooling. * * * They do not show all that we might desire they should; but they do show much, and what they do show is there; there is at least no parade of results which have no reality in existence.
So said the two excellent reports of the Quincy schools, 1872-73 and 1873-74; both of which were adopted and issued by a committee, of which Mr. Charles Francis Adams, jr.; and his brother, John Quincy Adams, were members.

But perhaps this inconsistency in Mr. Adams's utterances is susceptible of an explanation creditable to the present condition of the schools, and indicative that he now takes a broader view of what our philosophical friends would call the "potentialities" of our schools.
In 1873 Mr. Adams knew less of our common schools than he does now, after a long term of service on the school committee. When, therefore, in the light of the great improvement he has seen during the last five or six years, he looks back to the examination of 1873 , it is no wonder he exclaims, "It was deplorable." He looks from a different standpoint. It is the old story of the two-sided shield. Mr. Adams had seen only the silver side then; and, like our financiers, previous to that period, he was content with the "dollar of our fathers." Now, having seen the golden side, that "pale and common drudge 'tween man and man" is not satisfactory. He is understood to favor the gold standard, as well in education as in finance.
I may say also that Mr. Walton's report, on which Mr. White relies so much for proof of his first proposition, as a whole, does not justify his indiscriminate condemnation of the schools, even in Norfoik County.

Any one who knows Mr. Walton knows that, while he would be the last man to do injustice to teachers and pupils, he is by nature and habit sufficiently critical to guard against any undue leniency of judgment. And the summing up of the percentages obtained is considerably above what is required in our best colleges for graduation.
So also the lithographs of letters and narratives by primary and grammar school pupils are, I do not hesitate to say, as a whole, creditable. Some are very good; many are creditable; some, I admit, are very poor; and I might have doubted the expediency or justice of circulating them without some explanation.

What is the natural capacity of the pupil whose work is here exhibited?
How long has he been in school?
Has he been regular in attendance?
If it had appeared that the poorest work was done by pupils of average capacity, who had been regular in their attendance during the usual school course, and the best work by those whose limited attendance and other circumstances had saved them from the demoralizing effects of the school system, I should have admitted that there was some force in Mr. White's strictures.

I should like to have some theological Mr. Walton go through a county-I care not
if it be Norfolk, that the parallel may be complete-and test the knowledge and practice of the several congregations of that county in the rudiments of Christianity, marking their progress in the Christian virtues on the same scale of percentages as used in the schools.

Then, if it were possible-I don't know exactly how it could be done-I would hare facsimiles of their knowledge of Christian principles, as it appears in their acts-what they do-that we might see whether "their lips and lives express the holy gospel they profess."

If this report should be found better than the educational report, I should say, so much the more creditable to the clergymen, and so much the less creditable to the school-teachers.

If, however, it should prove otherwise, I should not immediately jump to the conclusion that Christianity is a failure. It may not have done its perfect work. Indeed, we know it has not. It has encountered innumerable obstacles. Like our school system, that perfect system of Christian morality has depended for its promulgation on fallible men, many of whom have had no more appreciation of the principles of Christianity than the average school-teacher has of the principles of pedagogy.

And yet, with all these drawbacks, it may have been, and I believe it has been, the most important factor in the world's progress. No doubt the apostle was justified in speaking of the "foolishness of preaching," and I will not take issue with anyone who speaks of the foolishness of a great deal of the teaching in our schools. Still, poor preaching and poor teaching have been infinitely better than none.

As to the moral influence of our school system, and the ratio of crime in the two divisions, about which Mr. White has so much to say, it is sufficient answer to refer him to the able and exhaustive report of Mrr. Carroll D. Wright, Chief of Bureau of Statistics of Labor. Had Mr. White carefully studied this report, he might have saved himself the trouble of writing a considerable part of his article, and thas refuiing what remained of it.

I have only to make a few brief extracts from this report to show how utterly fallacious all reasoning on the census statistics must be, unaccompanied by such explanation as is contained in Mr. Wright's report.

General Walker, superintendent of census returns in 1870, says:
No single measure can be taken for determining the proportion of crime in the several communities of our country.

The absence of any effort to reduce to a consistent body the returns on this subject in the last census-that to which Mr. White refers-led to misrepresentations of States and sections. In some cases returns were restricted to convictions for grave offenses, while in others convictions for the most petty offenses were equally considered.

Then follows this statement, which seems to have escaped Mr. White's notice: "In the opinion of the superintendent no use of these figures for purposes of comparisons between the States will be justifiable without reference to the foregoing."

And yet this is exactly what Mr. White has done. Is it possible that he is one of the rictims of our public-school system? Was it in a public school that he learned to use the census returns in a manner which the superintendent of those returns says is "unjustifiable?"

But there are other reasons for pronouncing Mr. White's use of these returns "unjustifiable."
Mr. Carroll D. Wright, in comparing Massachusetts and Virginia as representative States, shows that while the criminal code of Massachusetts in 1860 provided for 158 offenses designated as crimes, the code of Virginia recognized but 103 such ofienses punishable at law, and several of these, common to both States, were punishable by imprisonment in Massachusetts, but only by fine in Virginia.

Of the commitments in Massachasetts in 1860 more than half ( 54 per cent) were for offenses punishable in Virginia by fine only.
Perhaps it may throw a little light on the value of Mr. White's statistics to show the demoralizing effects of our schools, to state that the sense of different communities as expressed in their laws differs widely. Thus, while in Nassachusetts adultery, fornication, and many other offenses are regarded as grave, and punishable by imprisonment, in Virginia they may be condoned by a fine. * * *
But because our schools have not made all our citizens intelligent and banished ignorance from the State, I am not prepared to pronounce them an utter failure any more than I am to pronounce Christianity an utter failure because in nineteen centuries it has failed to bring the millennium. * * *

## COMPULSORY EDUCATION IN RELATION TO CRIME AND SOCIAL MORAIS. ${ }^{1}$

By Whlifar T. Hareis, Ll. D.

The question of compulsory education as a means of prevention of crime involves prior questions relating to the nature of education and its different branches or species. It involves likewise a consideration of the nature of crime, and of what constitutes a preventive agency for crime.

If education in general does not act as a preventive of crime, it is useless to expect any good results from compulsory education. If some kinds of education are effective in the prevention of crime, and others not, then the first business of practical importance is to ascertain what branches of education possess this utility, and in what features is to be found the desired rirtue.

Let us open the discussion by reference to some of the statistics bearing on the question of school education. In the Report of the United States Commissioner of Education for 1872 there are valuable special articles on the relation of school education to crime, to pauperism, and to productive industry. These articles are a mine of information and sound reasoning on the topic we are considering. In the essay of Dr. E. D. Mansfield, which forms a part of the Commissioner's Report, we have given: The aggregate number of prisoners in 1870 was 110,588; aggregate who could read and write, 82,812 ; aggregate number who could neither read nor write, 21,650; and of those who could barely read, but not write, 5,931; total illiterates 27,581 , or 25 per cent of the entire number of prisoners.
These returns are collected from 17 States, 14 of these being Western or Middie States. Considering that the mere ability to read and write implies only three or four months' schooling, it is surprising to see that so many of the prisoners come from the very small class of the population in these 17 States that is reckoned illiterate or nearly so.

Taking the State prisons and jails of New York and Pennsylvania, showing an aggregate number of 12,772 prisoners, the number totally ignorant was found to be 19 per cent of the whole; taking the totally ignorant and the very ignorant, the amount was 33 per cent of the whole; adding to these the very deficient, the amount was upward of 60 per cent.

In the prisons and jails of the central Northwest, including Ohio, Indiana, Illinois, Michigan, and Wisconsin, returns from 30 penitentiaries, workhouses, and jails showed an aggregate of 18,931 prisoners. Of these, 40 per cent are classified as totally ignorant; 6 per cent more as very ignorant; 29 per cent more as very defi-cient-making a total of 75 per cent very deficient, very ignorant, or totålly ignorant.

[^9]Taking four State prisons in Minnesota, Iowa, Kansas, and California, of 1,957 prisoners in the aggregate it was found that 21 per cent were totally ignorant, 10 per cent more were very ignorant, and 19 per cent more very deficient, or 50 per cent below the standard fixed upon as the separating line for very denicient.

Taking the States of Maryland, Kentucky, and South Carolina, 2,400 prisoners (a majority colored) were classified as 60 per cent totally ignorant and 25 per cent more as very deficient, or 85 per cent as at least very deficient in school education.

Turning from these statistics to the census returns for 1870, we take next the ratio of illiteracy in the entire population, and compare it with the ratio of illiterate criminals. In New York and Pennsylvania, we see that, while the illiterate in the entire population amount to only 4 per cent-the illiterate prisoners amount to 33 per cent of all the prisoners, and the rery deficient includes 60 per cent of them.

In other words, the 4 per cent of the entire population that is illiterate furnish 33 per cent of the criminals-twelve times as many criminals from the illiterate as from an equal number who were not illiterate. The ratio is found thus: Four per cent of the entire population are illiterate, and 98 per cent not illiterate. The 4 per cent illiterate furnish 33 per cent of the criminals, which is more than eight times the quota that they should furnish if education made no difference in this matter. The 96 per cent not illiterate furnish only 67 per cent of the criminals, i. e., about two-thirds of their quota. Hence, in this capacity for furnishing criminals, the illiterate surpass the not illiterate in the ratio of eight to two-thirds, and thus in fact furnish twelve times as many criminals as an equal number of not illiterates do.

In the central West, $3 \frac{1}{2}$ per cent of the population is returned as illiterate, and 46 per cent of the criminals illiterate. Hence the illiterates furnish thirteen times their share of the criminals. In the far West and the Pacific section, the returns give 3 per cent illiterate as furnishing 31 per cent of the criminals, or tenfold their quota. In the three Southern States, 22 per cent illiterate furnish 60 per cent of the criminals. In these statistics, it is shown that, of the 110,538 prisoners, 91,427 are whites; of the latter, 57,824 are foreign born.

Statistics collected by Dr. E. C. Wines show that in France the number of persons under arrest from 1867 to 1869 was 444,133 , of whom 442,194 were reported as unable to read, making over 95 per cent. Of the illiterates there was an average of 1 arrest for each 41 persons; but only 1 arrest for 9,291 persons who could read. This seems a too great disproportion measured by our American experience.

Further statistics from Dr. Wines show, in England, out of 157,223 committals to county or borough prisons, 53,265 illiterate, or 34 per cent; in Switzerland the average of criminals unable to read, through all prisons, 83 per cent.

These facts go to prove that even a slight degree of school education has an effect to lessen the tendency toward crime. It is to be remarked that statistics are to be used with caution, inasmuch as each quantitative result conceals within it an infinitude of qualitative factors which may possibly assist in the product. Were it possible to eliminate all the qualitative factors but one, the numerical statement would be unambiguous.

In connection with this I give some statistics taken from a recent work on industrial education. In the Philadelphia penitentiary it is said there were, in the period 1860-1870, 1,605 prisoners. Of these, 490 were illiterates, making over 30 per cent of illiterates. In the same penitentiary for this decade there were 1,217 that had never been apprenticed to any trade, or 73 per cent of the total number.

Without further consideration it might seem that the ratio of criminals from those who can read and write is two and one-half times as large as from those who have been apprenticed to a trade. But the illiterates over 10 years of age for Pennsylvania in 1870 were counted at less than 5 per cent of the population, while the proportion of the population returned as engaged in some form of productive industry is nearly 35 per cent. Hence, it would appear that the 35 per cent of industrial population
fumished 24 per cent of the criminals, while the 95 per cent that could read and write furnished only 30 per cent of the criminals. The apprenticed furnished twothirds of their quota of criminals, while the educated furnished less than one-third.
In the decade from 1870 to 1880 it is said that out of 2,383 prisoners 706 were illiterate, while only 433 had been apprenticed to a trade. It would be unfair to suppose that the word "apprenticed" is taken in its ordinary meaning, for certainly not one in ten of the industrial population of Pennsylvania has been "apprenticed" in the old meaning of the word. It must be understood to mean those who have been taught to earn their living in some gainful occupation, whether agricultural, mechanical, mercantile, or personal. With this meaning the 433 apprenticed, or 18 per cent of 2,383 , come from the 34 per cent of the entire population that are engaged in productive industry while the 706, or 30 per cent, of illiterate prisoners have come from the 7 per cent o illiterates reported in the census for 1880 .

The 82 per cent of the prisoners that have not been apprenticed come from the 41 per cent of the population returned as being over 10 years of age and not engaged in any gainful occupation. The unapprenticed furnish twice their quota of criminals, while the illiterates furnish from for to thirteen times their quotas of criminals.

In the face of these statistics let us consider for a moment the characteristics of the two terms with which we are now dealing-education and crime. Crime is defined as breach of the laws of the State. The criminal attacks society. He injures his fellow-man in person or property. He prefers the gratification of some selfish passion or appetite to the good of his neighbor.

Now, what is the training which develops in the child a respect for the social whole, a feeling that society embodies his substantial good-a feeling of preference for the good of his fellow-man over his own whim or caprice?

Certainly, that training is the training phich is given by bringing up the child in the society of others, and causing him to practice perpetnally those customs which respect persons and property. A due sense of public opinion, a respect for the ideal standard of right and wrong set up in the community, is the primary requisite.

It is clear that man can live in society and constitute a social whole only so far as individuals are educated out of their natural animal condition and made to respect social forms more highly than mere animal impulses. Hence it is clear that society itself rests upon education, in this broad sense of the word.

But what has this to do with school education? Wiuch of the education into a respect for social forms and uages is given by the family, and before the age proper for schooling. Then, again, it must be admitted that another part of this education comes later, and is leamed in the pursuit of one's rocation in life-the education that comes from bending one's energies into a special channel for the purpose of earning a living. Another form of education is to be found in the pare that one bears in politics within one's party, or in the exercise of functions conferred by the state, or still further, in the exercise of patriotic feeling. Lastly, there is the church, which furnishes a form of education most important, because it lays fullest stress on human duty, basing it on divine commands. The church educates the individual into the sense of his existence as a mere unsubstantial creature when living in neglect of the divine ideal manhood, but as a substantial and eternally blessed life when lived according to the forms prescribed in religion. These forms are forms that respect the welfare of the whole and measure the conduct of the individual by his preference of that welfare over his own selfish impulses.
The family, the vocation, the state, the church, are the four great cardinal institutions of education. The school is only a device brought in to reenforce these substantial institutions; but it is a very important device, notwithstanding its supplementary character. It may reenforce the family by giving to the youth the command of such conventionalities as reading and writing and moral behavior; or it may reenforce the vocation by giving instruction in arts and trades or professions;

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or it may reenforce the church as a Sunday school, giving instruction in religion; the military school or the naval school may reenforce the education of the state.

Our question deals directly with the education of the school; but we must carefully bear in mind the several educational functions of these institutions, so as not to overestimate the functions of the school, or in any way confound its prorince with what belongs to the great social institutions.
Family education must furnish that indispensable preliminary education in personal habitz, such as cleanliness, care of the person and clothing, respecful treatment of elders and superiors, obedience to authority, the sense of shame, religious observances, and the use of the mother tongue. The school must presuppose that these are already taught by the family, but the school must not neglect them, although it does not make them its special aim. The family does more, in fact, than educate the child in those indispensable things just recited. It builds up within the child's mind the strueture of his moral character, making for him a second nature of moral habit and custom, whose limits and boundaries he regards as of supreme moment. This second nature, or moral nature, is secured by daily sacrifice, and all forms of education lay stress upon self-sacrifice as the foundation of their disciplines.
This process which we call education is, in short, essentially the shaping of man by habit into an ideal or spiritual type of being; a realization of what we call human nature in contradistinction to mere animal nature. It is an artificial life, a conventional form of living, but it is far more substantial and divine than the life of the mere animal man. Man, as an animal, is a sarage; ass civilized, he is an ethical being, who has set up within himseir a system of duties and obligations which he observes at the expense of neglecting the impulses of his merely animal nature.
To what end is all this? Is it not because man, as an individual, wills to combine with his fellow-men in such a way as to avail himself of the united endeavor of all? By the organization of social institutions he converts a multitude of atomic individuals into a social unity. The individuals do not get lost in this social unity, like the wayes of the sea. But the social unity is of that wonderful character that it reenforces the might of each individual by the might of the whole.
Speaking technically, the individual becomes the species; or, in giving up by selfsacrifice his seifish peculiarities and devoting himself to the service of others, he gains for himself the service of all mankind. The individuals are transmuted into one grand individual, of which each individual is the head, and each individual is also the foot. According to Kant's definition, a living organism is such that every part of it is alike means and end to all the other parts. So, in this social body, every individual human being is alike the means and the end for all others. Hence there is a "Grand Man," as Swedenborgians say.
In the matter of food, clothing, and shelter, the individual toils in his vocation to produce a special product, something useful to the rest, and demanded in the market of the world. In return for this gift of his day's labor he is permitted to draw from the market of the world his share of all the productions collected from all climes, brought hither by the commerce of nations. This is a perpetual process of united human endeavor, in which, by self-sacrifice, the individual reenforces himself by the race.
So, too, the family, the most embryonic of human institutions-the family enables the elder to assist the younger, the mature the immature, the well and strong to assist the sick and weak. It equalizes age and bodily condition, reenforcing each condition by the aid of all others.
The great object, then, of education is the preparation of the individual for a life in institutions, the preparation of each individual for social combination. Education inculcates sacrifice of animal proclivities, in order to secure a higher well-being in the life of the community.
Crime is, therefore, a reaction on the part of the individual against the very object of education. It attacks the necessary forms of social life, and asserts for itself the right to persist in the form of the nonsocial individual. Society must defend itself,
and reduce the rebellious individual to harmony with itself. Inasmuch as the social form is such that the individual who puts it on and becomes a member of the family, the community or the State, does not act directly for himself, brit works for others and accepts the service of others in return for his own deed, so, too, punishment for crime takes on the amo form; the criminal is made to receive for his deed an equivalent reflected back from society. As his deed injures society, it is returned upon him by aciety and injures him. If he attacks his neighbors by porsonal violence, his deed is made to come back to him by physical constraint or even by violent death on the gallows. If he attacks the property of his fellow-men, he is made to suffer in property, in the possession of personal freedom and the right to the products of his own labor. Thus, society treats the criminal who rebels against it just as though he, the criminal, had intended to do a social deed, and not a selfish one. It is a piece of irony. The State says to the criminal: "Of course, you recognize society, and expect to reap what you sow. You have an undoubted right to possess and enjoy the fruits of your own deeds. I will see that they are retumed upon you. Your deed of violence on your neighbor shall therefore return upon you. Whatever you do you shall do to yourself."
Tuming now from this view of the general educative character of the institutions of society, and the end and aim of all society to aid the individual by the might of the whole, and from this study of crime, let us define for ourselves the place of the school in education, and try to discover its relation to the prevention of crime.
The school, as we have seen, is a means of education auxiliary to each of the four cardinal institutions, and as such, the school in all of its forms is ethical and preventive of crime. The ordinary type of school-the so-called "common school"receives the child from the family at the age of 5 or 6 years. It receives him into a social body (for the school is a community), and educates him by "discipline" and "instruction," as they are technically called. By "discipline" is meant the training in behavior, a training of the will, moral training. It consists in imposing upon the child a set of forms of behavior rendered necessary in order to secure concert of action-such forms as regularity, punctuality, silence, and industry. These are the four cardinal duties of the school pupil. Without them the school can not act as a unit, instruction can not be given in classes, and no good result achieved. We call these duties mechanical duties, but they underlie all higher ethics. Without silence in the school, without self-sacrifice on the part of each pupil, restraining his impulse to prate and chatter and occupy the attention of his fellow-pupils, there could be no work done. Each pupil would interfere with the work of every other pupil and the result would be chaos or worse-because anarchy is chaos made active and hostile to heaven's first law.
Order is not only the first celestial law, butit is the first law of all social combination. The school could not possibly undertake a more direct and efficient training of the child for social combination than it does undertake in its four cardinal phases of dis-cipline-regularity, punctuality, silence, and industry.
Its method of securing these items of discipline may be good, bad, or indifferent, according to the pains it takes to convert external constraint into willing obedience and unconscious habit. The good school unquestionably shows us the constant spectacle of good behavior idecome or becoming a second nature to the pupils, so that there is a maximum of regularity, punctuality, silence, and industry with a minimum of self-consciousness in regard to it, although there is an insight into the necessity of such conformity to rule, and a conscious conviction in faror of it whenever any untoward occasion brings up the question. Consequently there is a minimum of corporal punishment in the good school. Necessary as it is in dealing with crude depravity, the school must have got far beyond that stage of discipline before it can be called "good."
This training of the will, we observe, is a training of each pupil to behave in such a form of artificial or conventional restraint that he may combine in the best manner
with his fellow-pupils, and be in a condition to give to and receive from them school instruction. Is it not clear that, once trained to observe set forms of behavior in the school, it becomes a second nature to observe such forms everywhere, and the individual has solved the problem of life so far as the prevention of crime is concerned?

But discipline in the school is wholly formal. It exists for an end; this end is instruction. What is the character of this instruction? First of all, school instruction aims to give the child an ability to use the arts of reading, writing, and arithmetic, the famous "three $R$ 's." He must learn to read the printed page, to represent in written characters his own words, and to enumerate the objects of the world.
Here, it is of first importance to note the fact that these fundamental studies of the school concern social combination quite as much as the four cardinal phases of discipline, just considered. To leam to read the printed page is to learn how to use the aggregated experience of mankind. The experience of mankind is ethical; for it contains only one lesson, infinitely repeated-the lesson of the necessity of conformity to law in order to achieve human well-being. Human experience records nothing but the success of combined human endeavor, and the failure of selnshness which avoids such combination. What is reading in itself except the art of appropriating for one's self the thoughts of one's fellow-men? Reading and writing are the arts of intercommunication par excellence. Arithmetic is the art of making quantitative combinations, and is equally fundamental, so far as the quantitative phases of society are concerned. Arithmetic, moreover, underlies all conquest over nature. Divide and conquer the empire of things by means of arithmetic.
As to the practical effects of reading and writing in the prevention of crime, we have had evidence pointing in that direction in the statistics of jails and prisons. The rationale of such effects may now be pariially clear. The ability to read and the actual use of this ability in reading tend to bring to bear the life of society as a whole upon the life of the individual. Suppose he reads a newspaper. He finds interest in the deeds of his fellow-men-chiefly national deeds in wars and treaties, deeds of civil society in trade and commerce and other industries, deeds of crime and deeds of retribution by the tribunals of justice, society gossip dealing with manners. How surprising, when we think of it, is the fact that the most empty species of literature, the so-called "trashy novel," is filled with descriptions of the manners of polite society-in short, full of the details of these forms which appertain not to the individual as mere animal, but to the individual as member of society! The trashy novel portrays for the raw, inexperienced youth its ideal of the behavior of men and women in society. It shows bad manners and good manners, to the manifest advantage of the latter. Manners are superficial? Yes, but indispensable to man's life in institutions. Like the Egyptian sphinxes that lined the avenues of temples at Karnak and Luxor, they form the approach to the spiritual sanctuary itself. All instruction in good manners is of the nature of a safeguard to virtue and preventive of crime.
The man who reads habitually breathes the atmosphere of social human existence, and is in so far made to feel the substantiality of social life over mere brute life. He learns to look upon his every act from the standpoint of public opinion. He views all his own industry in its relation to the industry of his fellow-men.
The school, therefore, in teaching reading, writing, and arithmetic, deals in the most direct manner with forms of civilization by giving the individual the means of appropriating to himself the wisdom of the human race. In the newspaper, he may see the daily spectacle of humanity at large-a vision of his own human nature realized on a large scale in all mankind. As particular person, he is only a possibility of man, having realized only one small phase of human nature. In the human race, he sees the revelation of all the possibilities of human nature. This spectacle of the race is possible through the printed page, the newspaper, and the library.

But the common sehool has other studies, every one of which, however, tends in the same direction as the "three $R$ 's." There is geography, manifestly adapted to
give to the individual a knowledge of the world of individuals. It shows their habitat, their means for production of food, clothing and shelter, and culture. Who are my fellow-men, and how do they live? What are they doing for me, and what from my industry goes to them? The veil of the near horizon liftg, and reveals to this private individual the society in which he exists $-1,200,000,000$ human beings all looking hitherward with their daily tasks! The study of geography is preventive of crime in so far as it teaches the same lesson of social combination that we have already discussed.

Again, there is history as a common-school study. It is the study which looks toward the nation as an institution, for its individuals are nations. This is the one stady that develops patriotism. Take away all knowledge of history, all knowledge of nations, all knowledge of the past and piesent of one's own nation, and there could be no patriotism; even the object of patriotism would not exist in the mind. The high and pure devotion of one's self to his country, the high and pure interest in all peoples on this planet-both these are cultivated by the study of history. The school teaches the pupil how to study history and where to find it.

There is study, more or less, of a purely scientiic character carried on in the school. There is grammar, the science of the organization of language showing how reason reveals itself in its special creation, human speech. The framework of reason is logic, and logic is revealed in the laws of syntax and etymology. Self-knowledge of an intimate kind, therefore, is reached in the study of grammar. Inasmuch as language is not the product of individual industry, but a joint product of human society, it is clear enough, without analysis, that language studies in school all lead to an insight into human combination and tend, therefore, to the prevention of crime.

Doubtless the school alone is only a small part of education, but it is a very important part for the reason that it deals with conventionalities, technical means-instrumentalities shall we call them?-of human intercourse-in short, with the tools of human, spiritual combination.

Now any one or all of the educational agencies may fail absolutely to prevent crime. But social science does not find other recourse than to strive to make more efficient these agencies, improve the family nurture, improve the schools, the trades and rocations, the partisan politics, the Sunday school. All these instrumentalities are rery crude, as we may easily see, in their present condition. The question that immediately concerns us in this paper is the improvement of common-school education as preventive of crime by making it more effective in reaching all the children of the community.
Undoubtedly compulsory education is a valuable means for this end. I do not see why the common form adopted is not sufficiently effective. Children under 10 years of age shall not be employed in any species of labor that takes them from school. Between 10 and 14 years, children shall not be employed in any industry that prevents them from receiving at least twenty weeks' schooling for each two years. So much education as this provides for will prove very efficient in training the average youth in correct ethical habits.

There will be special cases wherein parental education has failed, and there has happened a consequent premature hardening of the disposition of the child to such an extent that the school can not remedy it. Here we must pause a moment to call attention to the kindergarten as a very valuable instrumentality, especially in two directions very diffcult to reach in common schools if neglected until the children are past 6 years of age. The kindergarten takes children at 4 years or even earlier, at the period when the child has begun to be interested in the outer world, as he catches glimpses of it beyond the family circle. The children of very poor parents are prone to neglect the education of the child at this age, and he grows up amid constant lessons in wickedness and vice. On the other hand, in families that have become suddenly rich the parents are so much engaged in readjusting themselves to their new social positions and in directing their business affairs that they leave their
precocious children to incompetent nurses and governesses, who pamper them into self-indulgent youth, destined to early ruin. The kindergarten, all of whose methods are based on true ideas of social combination, has proved very potent in saving both these classes of youth-the depraved of the proletariat and the depraved of the wealthy class.

It is clear, when we study the kindergarten and come to understand its methods of utilizing play, that healthy amusement among young people could be made educative of the social sense more largely than it is, and thus be another preventive of crime.
Industrial education in the form of the school, since the practical abolition of apprenticeship, is also important. The manual training school and the school-shop, moleled on the Russian or on the Swedish plan, ought to be established to a limited extent in all our cities, and made free, like the common schools. They give admirable instruction in wood-working and in metal-working. But when we reflect that the total number of laborers in metals, iron, steel, tin, copper, brass, etc., of all descriptions, counting 22 trades as given in our census, amount only to 585,493 persons, or about one in one hundred of our population, or three in one hundred of all persons actually engaged in gainful occupations, we see that it would be easy to overcrowd the metal industries and cause disappointment to youth whose parents had placed them in industrial schools with the idea that they were preparing to earn their living thereby.

Counting, in like manner, the laborers in the 25 trades of wood-working, we find an aggregate of 763,814 persons, or one and one-half persons in each hundred of the entire population, or say five in each hundred of the people earning their living by gainful occupations. The same danger of overcrowding these trades is apparent. The country is now producing more manufactures of wood and metal than are needed in all its markets, domestic and foreign, and yet it employs in those industries less than 3 per cent of the population and is needing a still smaller ratio on account of its constantly improving machinery.

Turning from this dismal view, one may see clearly that more and more labor is needed in ornamental industries-industries that can produce goods of artistic value. All education that trains the taste of the workman if a positive gain, and makes a place for workmen who will hold the world market firm and secure, and who will never be thrown out of employment on account of overproduction.

One cause of crime that should not escape our attention while we are discussing this question of education is the increasing growth of cities in our country, due to the invention of labor-saving machinery. The city furnishes a hiding-place for criminals who raid on the property of rual districts. There is a constant recruiting of wayward youth in country and town into organized gangs of thieves and burglars. No State legislature seems to have taken up this problem effectively. There ought to be a new form of police invented-a sort of detective force, which makes its business the systematic pursuit of thieves and burglars that raid on the rural districts. At present, left entirely unpunished, they thrive and grow numerous, educating into high criminals a large class of wayward youth.

Increasing urban growth for the most part furnishes us our social problems. Com-- pulsory education in the forms of the common school, the kindergarten, the industrial art school, may furnish us the most valuable preventive agencies against crime.

## PUBLIC sChools as AFfecting Crtue AND vice.

[Extracts from an article by Benjamin Recce in the Popular Science Monthly for January, 1890.]
It is claimed, and almost universally allowed, that the instruction of our public schools serves to ennoble the emotions and to moderate the passions, to regenerate the viciously inclined, and to correct and subdue the tendency to crime. Devoutly as such a result is to be desired, the facts, unhappily, flatly contradict the theory, and,
unless the glaring inconsistencies are reconciled and contravening evidence is satisfactorily explained, the claim must be abandoned as unfounded.

At a session of the National Prison Congress held in Boston during 1888, Mr. Brooker, chairman of the board of directors of the South Carolina Penitentiary, having made the statement that of a thousand convicts in the State not more than fifty were whites, it was asked by a delegate, "What is the condition of the education of the colored people?" To this question MIr. Brooker made the following reply: "Before emancipation the colored people had no opportunity for education. When made suddenly free all negroes trexe illiterate and ignorant. Since that time a young generation has grown up, and of them a very considerable number are well educated. But it is a fearful fact that a large proportion of our prison population is of the cducated class. This is so much the case that the idea has become prevalent that to educate a negro is to make him a rascal. But this idea is, of course, superficial, and does not find lodgment in the minds of thoughtful men. I am totally averse to it myself, and think that all reasonable means should be exerted toward their enlightenment and education. * * *" (Proceedings of the National Prison Association, 1888, p. 72.)

Here was the most astonishing fact that in South Carolina, which in 1880 had more than half of its population returned as illiterate, the educated negroes furnish a large proportion of its criminals, pressed upon a representative body of phifanthropists, publicists, and statesmen, and it did not so much as provoke a comment, while the author of the statement boldly afirmed his unshaken faith in a theory the facts of which he had himself impugned. What deference should we pay to thought unless based upon correct observations, and of what utility are facts and experiences unless their teachings are heeded and their meaning properly interpreted?

In his Political Science, Woolsey tells us that "the fall of the Roman Empire was an effect of a moral ruin." Yet all will admit that Rome and the other civilizations of antiquity were richer and more learned in the time of their decay than during the period of their infancy and growth; but the moral correlative being wanting, they tottered to their fall.

Just look at the records of our mentally and morally deranged as exhibited in our statistics of insanity and crime and vice, and they alone are enough to cast a doubt upon the claim that a public-school education for our illiterates is sufficient to insure a decrease of mental and moral delinquency. For it remains to be explained why, in the decade ending with 1880, population having increased 30 per cent and illiteracy only 10 per cent, a relative decrease, the number of criminals during the same period presents the alarming increase of 82 per cent, while of insane persons there appears the enormous addition of $145^{1}$ per cent.

Can it be possible that with greater educational facilities there is to be increased. crime, and that every enlargement in the seating capacity of our schools is to be followed by a larger corresponding demand for insane accommodations and additional felons' cells? Perish the thought! Yet, if the instruction of our common schools subdues the tendency to crime, why is it that the ratio of prisoners, ${ }^{2}$ being 1 in 3,442 inhabitants in 1850 , rose to 1 in every 1,647 in 1860, 1 in 1, 021 in 1870, and 1 in 837 in 1880; while, upon the authority of the Rev. S. W. Dicke, the amount of hquor consumed per capita was three times as great in 1883 as in 1840?

One naturally looks to the large and constant influx of foreign immigrants as a partial explanation of this growing disproportionate increase of crime; but the facts deny the hope, for the great increase is to be found among the native born. The Rev. F. II. Wines, who conducted this branch of the Tenth Census Report, says that, while in 1850 the ratio of foreign criminals to population was five times that of the

[^10]native born, in 1880 the ratio was only 2 to 1 ; and if we deduct the commitments for disorder and inmorality, the ratio of foreign criminals is but little in excess of that for native whites. So clearly is this indicated by facts and figures that Mr. Wines arrives at the conclusion that "the foreign disregard for law shows itself far more in immorality and disorder than in dishonesty and violence." ${ }^{1}$

An examination of the Compendium of the Tenth Census of the United States discloses some novel and threatening facts. The illiterates of the United States comprise 17 per cent of the total population. The morally and mentally deranged, as shown by the number of criminal and insane persons, bear the ratio of 1 to every 232. The general average of illiteracy is exceeded by every one of the original slave States, with the exception of Missouri, but the average ratio of the mentally and morally unsound is only reached in the State of Maryland. South Carolina, which shows the highest percentage of illiterates, riz, 55.4 per cent, presents the lowest average of any State in the Union as regards insanity and crime, having but 1 delinquent in every 568 inhabitants as compared with 1 in every 167 in California, 1 in 205 in Massachusetts, and 1 in every 222 in the State of New York. With the single exception of the State of Maine, every Northern State east of Indiana has a larger ratio of insane and criminals than the average for the Union, while the States west of Ohio, those on the Pacific slope excepted, fall below the general average.

If we measure the extent of unrecorded rice by the proportion of saloons to population, the showing is no less remarkable. The Report of the Commissioner of Internal Revenue for the year 1887, page xxxiii, shows that, for the entire country during that year, a retail license for selling liquor was granted for every 329 inhabitants. Of the fifteen States showing more than the average number of illiterates, that ratio was only exceeded in the State of Louisiana, while the lowest average in the country was to be found in Mississippi, which, with 49.5 per cent of its inhabitants returned in 1880 as being illiterate, supported but 1 saloon for every 1,695 persons. Even the prohibition States of Maine and Kansas secured licenses for the sale of intoxicants at retail to an extent only equalled by four of the superilliterate States. The proportion of saloons to population throughout the fifteen superilliterate States is 1 for every 700 inhabitants, while of the other States California heads the list with 1 to every 99 persons, New Jersey coming next with 1 . license to every 171 inhabitants, followed closely by New York, with 1 to every 179.

The table which follows presents some disquieting facts which should serve as a salutary warning to those who expect to find in mental stimulation an equivalent for moral growth and culture:
[Compiled from Compendium of Tenth Census and other official sourees.]

|  | Illiterates 10 years of age and (1880). a | Assessed valuation pereapita (1880). a | Ratio of insane and crim inal (1880). a | Ratio of saloons to population (1887). 0 |
| :---: | :---: | :---: | :---: | :---: |
| Fifteen illiterate States c....... <br> Northern States west of Ohio .. <br> Northeri States east of Indiana | Pr. cent. 40.4 5.3 | $\begin{array}{\|r\|} \hline \text { Pr.capita. } \\ 145 \\ 297 \\ 551 \\ \hline \end{array}$ | $\begin{aligned} & 1 \text { in } 402 \\ & 1 \text { in } 379 \\ & 1 \text { in } 265 \end{aligned}$ | $\begin{aligned} & 1 \text { in } 700 \\ & 1 \text { in } 308 \\ & 1 \text { in } 227 \end{aligned}$ |
| A verage. | 17 | 340 | 1 in 332 | 1 in 329 |

$a$ Computed from tables in Compendium of the Tenth Census.
$b$ Retail lieenses issued by the United States in 1887, taken from Report of Internal Revenue Commissioner; population for 1887 from World Almanae, 1888.
$c$ Includes all states having a percentage of illiteracy above 17 per cent, the average for the entire country.
${ }^{1}$ Proceedings of the National Prison Association, 1888, p. 255.

The table unmistakally shows a greater per capita of wealth where the fewest illiterates are enmmerated, but it no less clearly shows that this augmentation of riches has been accompanied by increased insanity and crime and more widespread vice.

But we need not confine ourselves to the general statistics of the United States, for the records of New York present similar conditions which can be analyzed more in detail. The annual report of the superintendent of the New York State prisons, 1880, records that the prisong of Auburn and Sing Sing containel 2,616 convicts; of these, 1,801 are credited with a common-school education, 373 are classed as being able to read and write, 19 are returned as collegiates, 10 as having received classical and 78 academic educations, 97 as being able to read only, and 238 as having no education. Is it not contrary to our most confident predictions and undoubted expectations that the common schools should furnish 83 per cent and the colleges and academies over 4 per cent of the inmates of Auburn and Sing Sing? ${ }^{1}$

When it is remembered that the detected illiterate generally finds his way to prison, while the highly educated or well-to-do are frequently saved by friends, who compound the felony to escape exposure and consequent family disgrace; that many are saved from conviction by the ability of counsel whose services are far beyond the means of illiterate poor, while still many others escape in voluntary exile to avoid imprisonment, it will be seen that even the figures given inadequately portray the extent of crime which, in strict justice, is properly chargeable to the educated classes. Of the prisoners of Auburn and Sing Sing it is further noted that 20 per cent were total abstainers from intoxicants, showing very clearly that a perfect mastery of self is by no means necessarily allied with an honest regard for the rights of property of others. * * *

Far from mental stimulation being essential to moral development, the most perfect order and deepest sense of justice are often found associated with the densest ignorance among the lowest races of humanity. Tum your attention to the Papuan Islanders, ${ }^{2}$ the Veddahs, ${ }^{3}$ the Dyaks of Borneo, ${ }^{4}$ the Fuegians, ${ }^{5}$ and other barbarous races which, in the absence of rulers or organized societies, with no learning, and but little acquaintance with even the rude arts of many primitive people, have dereloped the highest degree of tribal piety, integrity, chastity, and regard for covenants almost unknown to civilized man. The testimony of early travelers proves conclusively that intense poverty and deep ignorance are by no means incompatible with honesty, integrisy, and virtue.

The table shows that where the extremes of poverty and wealth prevail, as in the

[^11]Eastern States, there is found a maximum of moral and mental derangement, as exhibited in insanity, crime, and vice. Where wealth is more evenly distributed, as in the Westem Sitates, there are noted less insanity and crime, but almost as high a ratio of saloons as in the Wast. In the Southern States, although having a low per capita of wealth, yet the mental and moral forces of development are nearly in adjustment with the material of environment; hence the areage of crime and vice is shown by the table to be relatively low.

The Rev. F. H. Wines, statistician and philanthropist, who has made questions of crime and criminals the study of a lifetime, was selected by the authorities at Washington to compile the statistics bearing on delinquents in the Tenth Census, and after a careful study of the mass of figures returned, but few of which appear in the compendium, he makes this very remarkable statement concerning the facts collected and enumerated: "If a comparison is made between offenses against public morals and against public peace, the smallest amount of disorder and the largest amount of immorality, relatively, are found among the native whites; the most disorderly and least immorality among the negroes; and the foreigners occupy a middle ground between the two." (American Prisons in the Tenth Census, Proceedings of the National Prison Association for 1888, p. 268.) When it is realized that the native whites represent the better educated portion of our population and the negroes the more illiterate, while the foreigners are on an educational scale between the two, the significance of the statement can neither be gainsaid nor belittled.

## IS CRIME INCREASING IN MASSACHUSETtS?

By David C. Torrey.

The question which I shall endeavor to decide is not the technical question, whether the number of cases which are brought beiore the courts of justice are increasing from year to year, but the broader and inore important question, whether there is an increase of crime in Massachusetts which indicates a decline in social order.

I use the word "crime" as meaning such violation of law as the civil courts punish when called upon to punish them; and by "increase of crime" I shall mean, not simply an increase of cases dealt with by the courts, but an increase of such cases as the courts might deal with if the cases were brought before them.

A complete study of the prison statistics returned to the Massachusetts legislature during the last forty years compels the admission that the courts are making, from year to year, an increasing number of commitments to prisons. I give below the commitnents to all prisons in Massachusetts during those years since 1850 in which a State census was taken. That the tendeney of crime during these years may be clearly seen, I give the population of the State and the number of people to each commitment.

|  | Year. | Population. | $\begin{aligned} & \text { Commit- } \\ & \text { ments. } \end{aligned}$ | Number of population to each commitment. |
| :---: | :---: | :---: | :---: | :---: |
| 1850 |  | 994, 514 | 8,761 | 113 |
| 1855 |  | 1,132,369 | 16,032 | 70 |
| 1860 |  | 1,231, 066 | 11, 764 | 104 |
| 1865 |  | 1,267,030 | 9,918 | 127 |
| 1870. |  | 1, 457, 351 | 16, 600 | 87 |
| 1875. |  | 1,651,912 | 24,548 | 67 |
| 1880. |  | 1,783, 085 | 17,053 | 103 |
| 1885. |  | 1,942, 1.11 | 26,651 | 72 |

This table shows that the proportion of commitments to population raries much from year to year, and that during the course of the years selected there is a tendency to increase. Pcrhaps this increase can be best indicated by the average number of people to each commitment during the first half and the second half of the periocl. From 1850 to 1865 there was 1 commitment to 103 persons. From 1870 to 1885 there was I commitment to 82 persons, an increase of almost exactly 2 ber cent.
If we stopped our inquiry here we should be made to acknowledge that crime is increasing. But the figures do not always tell the whole truth, and an examination behind them in this case reveals a very different state of affairs from that which the surface indicates. The form in which the reports have been made to the legislature enables us to divide the crimes for which commitments are made into two classes: The crimes more dangerous to society, like murder and burglary, and the crimes less dangerous, like drunkenness and disturbing the peace. To show clearly the movements in crime in the State, I make this division in two ways: First, by separating crimes against persons and property from crimes against public order; and, second, by separating the crimes other than intemperance from crimes of intemperance.
Owing to the form in which the statistics were returned to the State, I can not make the separation by the first plan cover a long series of years. This division was made in the returns for 1865 , but was not in those for 1875. This division indicates well the changes in crime in recent years.

|  | Year. | Commitments for erimes against- |  |  | Total commitments for crimes against personsand property. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Persons. | Propertj. | Orderand decency. |  |
| 1565. |  | 991 | 2,984 | 5,760 | 3, 975 |
| 1870 |  | 1,808 | 3,289 | 11,290 | 5, 097 |
| 1880 |  | 1,67t | 2,105 | 13,274 | 3,778 3,779 |
| 1881. |  | 1,687 | 2,238 | 13,137 | 3,925 |
| 1882 |  | 1,695 | 2,318 | 18,852 | 4,013 |
| 1883. |  | 1,661 | 2, 369 | 20,095 | 4,030 |
|  |  | 1,83! | 2,666 | 22, 239 | 4,500 |
| 1885. |  | 1,880 | 2,959 | 21,812 | 4, 839 |
| 1886. |  | 1,771 | 2,478 | 21,209 | 4,249 |
| 1887 |  | 1,654 | 2,477 | 22, 694 | 4,131 |

This table shows that the marked increase in commitments is confined to the less serious crimes-those against public order and decency. Before discussing this table at length, I present the division of crimes by the second plan, that of the crimes of intemperance seperated from all other crimes. Here I am able to compare the commitments for crimes with the population of the State through a wider range of years. In 1875 the gross commitments were returned, but no division by crimes was made. In commitments for intemperance are included commitments for drunkenness and as common drunkards.

|  | lear. | Total commitments. | Commitwaents for intemperance. | Commitments for all crimes other than intemperance |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1850 . \\ & 1855 . \\ & 1860 . \\ & 1860 . \\ & 1870 . \\ & 1875 . \\ & 1880 . \\ & 1855 . \end{aligned}$ |  | $\begin{array}{r} 8,761 \\ 16,032 \\ 11,764 \\ 9,918 \\ 16,600 \\ 24,548 \\ 17,053 \\ 26,651 \end{array}$ | $\begin{aligned} & 3,341 \\ & 8,221 \\ & 3,442 \\ & 4,302 \\ & 9,350 \end{aligned}$ | $\begin{aligned} & 5,420 \\ & 7,811 \\ & 8,322 \\ & 5,616 \\ & 7,250 \end{aligned}$ |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | 10,962 | $6,091$ |
|  |  |  | 13, 701 | $7,950$ |

As the previous division in Table No. 2 showed that the marked increase of commitments was for crimes against public order, this table shows that the marked increase is in commitments for intemperance. A comparison of the commitments with the population of the State in the years in which the commitments were made proves that the increase in commitments which I have shown in Table No. I is confined wholly to crimes against public order; and even that the commitments for all other crimes than intemperance, taken together, are not only not increasing, but show a marked decrease.
The following table shows the commitments in proportion to population for the more serious crimes during those years in which a comparison can be made with the population of the State:

|  | Year. | Number of inhabitants to each commitment for crimes against- |  |
| :---: | :---: | :---: | :---: |
|  |  | $\left\lvert\, \begin{gathered} \text { Persons } \\ \text { and prop- } \\ \text { erty. } \end{gathered}\right.$ | Public order and decency. |
| 1865 |  | 318 | 219 |
| 1870 |  | 285 | 129 |
| 1875 |  |  |  |
| 1880 |  | 471 | 134 |
| 1885 |  | 403 | 89 |

a This division was not made in returns to the legislature.
It is seen that the average in 1885 and 1870 was 1 commitment for crime against persons or property for about each 301 inhabitants, while in 1880 and 1885 the average was 1 commitment to about 436 inhabitants. This indicates a decrease in the more serious crimes of 44 per cent.
Let us apply the same method of comparison with population to the commitments, as divided by our second plan, into those of intemperance and those for all other crimes. For our purpose only the ratio to population of commitments for crimes other than intemperance need be shown:

|  | Year. | Commitments not for intem perance. | Ratio of commitment to population. |
| :---: | :---: | :---: | :---: |
| 1850 |  | 5,420 | 1 to 183 |
| 1855 |  | 7,811 | 1 to 144 |
| 1860 |  | 8,322 | 1 to 147 |
| 1865 |  | 5,616 | 1 to 225 |
| 1870 |  | 7,250 | 1 to 201 |
| 1875 |  |  |  |
| 1880 |  | 6,091 | 1 to 280 |
| 1885 |  | 7,950 | 1 to 244 |

Here we find again that there has been a marked decrease in the commitments for all crimes other than intemperance, taken together, in proportion to the population of the State. From 1850 to 1865 the average of commitments was 1 to about 174 inhabitants; from 1870 to 1885 it was 1 commitment to about 241 inhabitants. Thus a decrease of 38 per cent is indicated in all crimes other than those of intemperance.

I have now shown, as conclusively as can be shown by figures, that the crimes more dangerous to social order are not increasing, but that, on the contrary, they are diminishing at a rapid rate; more than this, I have shown that all crimes taken together, other than intemperance, are decreasing at a rate almost as rapid. I can now confine my inquiry about the increase of crime in Massachusetts to the one crime of intemperance.

The question resolves itself to this: Is intemperance increasing? The number of commitments indicates that it is. The total number of commitments is increasing, the commitments for all crimes other than intemperance are not increasing; then the commitments for intemperance must be increasing.

I think, however, that it can be shown that the increase in commitments for intemperance does not, as in the case of more serious crimes, necessarily indicate an increase in crime, and also that this increase can be accounted for by changes in law and changes in public opinion.

The common opinion of intemperance as a crime is very different from the opinion of murder, or burglary, or even petty larceny. This is shown by the fact that while it is the exception that a person guilty of these other crimes escapes trial and conviction, comparatively few of the men who drink to excess are punished by the courts. Because of this diference in opinion of crimes the commitments for more serious crimes could not increase without an actual increase of those crimes, but there is a chance for an increase of commitments for intemperance without an actual increase of intemperance.

Changes in the law affect the number of commitments for intemperance. In 1874, under a prohibitory law, the convictions for drunkenness in the State numbered 23,981; in 1877, under local-option law, the number fell to 17,862. In Boston alone in 1874 the convictions numbered 11,428 , but in 1877 , with 2,834 licenses, the convictions for drunkenness were only 7,539.

The number of commitments for intemperance depends also upon public opinion. There is a large and vaguely defined field of intemperance from which increasing commitments may come with increasing intemperance. The number of men who are intemperate and escape arrest is so large that an increase of commitments for a long series of years is not incompatible with an actual decrease of internperance. Public opinion decides the point at which the drinking man is no longer sober, but becomes a subject for commitment. It makes the law and supports the policeman who makes the arrest and the court which commits the drunken man. It is reasonable to believe that continual agitation has aroused public sentiment against intemperance and so affected the laws and the courts that an increase of commitments for intemperance has taken place without a corresponding increase of crime.

The single change which is made when the new legisiation of any year makes a drunkard pay a fine where he wonld have been imprisoned under the old law, or, on the other hand, imprisons him where formerly he would have paid a fine, is not enough to change entirely the proportions of "commitments" to the population. But these changes do not, of course, affect the real proportion of drunkenness.

From the facts I have presented I think the following conclusions can be drawn:
The commitments by the courts of Massachusetts are increasing.
The more serious crimes-those against persons and property-are decreasing rapidly.

In all crimes other than intemperance, taken together, there is also a rapid decrease.

The increased commitments for intemperance do not necessarily indicate an actual increase of intemperance, for they may depend upon changes of law and changes in public opinion.

On these grounds I think it safe to deny that there is an increase of crime in Massachusetts which threatens social order, or which indicates that, in spite of the educational, philanthropic, and religious effort in the State, its civilization is declining.

EDUCATION AND CRINIE.

[From an article by Rev. A. W. Gould, in the Popular Science Month]y for June, 1830.]
In the January number of the Popular Science Nonthly there was an article by Benjamin Reece on "Public schools as affecting crime and vice." \% \% * He thinks that the United States census proves that the increase of prisoners in our prisons is the result of the increase of pupils in our schools. And as I find that these "novel and threatening facts" have aroused some apprehension among those interested in our public school system, it seems to me desirable that some one should point out the figures in our census which seriously modify, if not wholly destroy, Mr. Reece's alarming inference that our public schools are nurseries of crime.

Figures, like Bible texts, may not lie, but they can be made to prove almost anything; and it would not be dificult to establish by our census figures the exact opposite of Mr. Reece's conclusion, if we may be allowed to use the same reasoning that he does. For his statistics only show that crime and education are both increasing. But that does not prove that the increase in education is the cause of the increase in crime. Diseases have increased during the past hali century and so has medical skill; but that does not prove that the one increase was caused by the other. Perhaps the increase of diseases would have been far greater had it not been for the increase in the power to cope with them. So education may, for aught Mr. Reece's statistics prove, be the only thing that prevents a still more rapid growth in crime.

The statistics of our last report show that the most enormous strides in developing a criminal class have been taken in those States where ignorance, and noteducation, most abounds. If we take the 10 States that have the largest number of citizens unable to write we shall find that from 1850 to 1880 the ratio of their prisoners has increased over fivefold; from 1 in 5,400 to 1 in 970; from 1860 to 1880 it has grown threefold, or from 1 in 3,600 to 1 in 970 ; while the 10 States that have the fewest citizens unable to write have swelled the proportion of their criminals only threefold for the longer period and only 50 per cent for the shorter, the figures being, for 1850, 1 in 3,100 ; for 1860,1 in 1,500 , and ior 1880,1 in 1,050 . So that in the States of greatest illiteracy the relative increase of criminals during the last twenty years has been six times as rapid as in the States of least illiteracy. And if we ask in what classes the most ignorance is to be found, our census tells us that the foreign born are 50 per cent more illiterate than the natives, and the blacks seven times as illiterate as the whites; and our census tells us further that the foreign born furnish 100 per cent more than their share of criminals, and the blacks 150 per cent more than their share

Do not these facts prove that the advance in crime is the result, not of education, but of the absence of education? We might think so if figures had not that reprehensible habit of being all things to all men. Therefore, we may find upon a careful examination that there is some other cause than ignorance for this rapid growth of our prison population in certain parts of our country. If I am not mistaken, there are several such causes, some of them entirely independent of the change in the illiteracy of the nation. One of them lies in the transition from an unsettled condition to a settled condition on our constantly adrancing frontiers; another is the change from slavery in the South; and a third is the gradual elevation of the standard of human conduct, making crimes of actions that had hardly been lawful escapades in earlier times.

The first cause comes out clearly if we compare the 10 States that were on the frontier in 1850 with 10 older States-the New England and Middle States, for instance. In the former the ratio of criminals has been multiplied four or five times during the past thirty years, while in the latter it has only been doubled, rising
from 244 to 1,148 prisoners in a million inlabitants on the frontier and from 450 to 1,074 on the seaboard. Of course, it is obvious that in a new country there will be a certain amount of lawless conduct unpunished at first before sheriffs, courts, and jails are in running order. But the rapid increase in the proportion of criminals as the State grows older does not mean more crime; it often means less. The evildoers are arrested and sentenced, and so get into our prisons and our census; and then we are told that crime is increasing. Kansas had only 289 prisoners to each million of inhabitants in the decade before the rebellion, while it had 1,300 to the same number in the last report, yet everyone knows that this State was a far more dangerous place at the earlier time than now. Colorado had only 477 offenders per million at its first census, in 1870, but in 1880 it reported 1,950, a gain of nearly fyefold in a single decade; while on the other hand the older States, like New Hampshire and Connecticut, showed an actual decrease in percentage during these periods.

But the transition from slavery to freedom was a far more efficient cause in swelling the ratio of this class. If we compare 10 of the original slave States with our 10 New England and Middle States, we shall fnd the increase in crime in the slave States has been three or four times as great as in the free States. The former had for each million of population only 161 criminals in 1850 and 240 the next decade; but in 1870 they had 829 and in 1880 1,166. This was an incresse of sevenfold, while the free States only a little more than doubled their criminal element.

That this was the result of the emancipation is seen in many ways. The sudden leap shows it between the decade before and after the war, or between 1860 and 1880 , if 1870 be thought too near the contest to be a fair test. Those twenty years gave a gain of fivefold in the proportion of prisoners of the Southern States, while the Northern States showed a gain of less than 40 per cent. Single instances reveal it still more clearly. Mississippi aprang from 67 to 1,158 criminals in a million inhabitants, and other States of the South show nearly as great a gain; while New York aud Massachusetts actually declined in their criminal percentage during that time, as did some other Northern States.

The explanation is obvious. Before the war the negroes were slaves, and nearly all their offenses were punished by their masters, so that the State had no occasion to imprison them. But now from five to ten times as many blacks as whites, in proportion to their numbers, are found in the jails or chain gangs of the South. And when we remember that the greatest illiteracy is to be found in the former slave States, we see that the increase of the criminal ratio in the South may not be due wholly to ignorance in spite of census figures. The ignorance and crime were both there before the criminals were locked up and counted in the census.

One might indeed claim that the lessened ignorance had much to do with revealing this criminal element and imprisoning it. And this brings us to our third cause of the increased ratio of crime. The gradual elevation in the standard of life, and the intervention of the courts in cases which were formerly decided by the bullet or the knife, occasions a rapid increase in the number of official criminals.

Drunkemness, I suppose, was not a•crime anywhere in our land half a century ago. Now drunkenness and disorderly conduct form one-tenth of all the crime of the country. And, naturally, the restraint of these offenders will be most complete in the most orderly and educated parts of our land. Accordingly, we find that the 10 educated States show a proportion of imprisonments for these offenses tenfold greater than the uneducated States do. The one had 2,885 and the other only 188 in a population three-fourths as large. And the educated States record three times as many prisoners as the uneducated States for assault and battery and simple assault. If anyone wishes to prove from the census that education is a failure, he could find no stronger facts than these-a tenfold larger share of drunkenness and a threefold larger share of violence in the States where men can read and write than in the States where they can not.

But, of course, no one thinks that the South is more quiet, orderly, and innocent than the North. No one believes that there was not a single case of drunkenness or disorder in all Alabama and Arkansas in 1880, and only a score of cases of assault, while Massachusetts, with a less population, had 597 cases of drunkenness and disorder and 337 cases of assault; yet this is what the census tells us. The natural interpretation must be that drunkenness and violence are not punished by imprisonment in certain States, while they are in others, and the States that punish least are most illiterate. This interpretation is amply confirmed by the census itself. Though education shows three times the violence that ignorance does, yet ignorance perpetrates three times as many murders as education, and that, too, while two or three of the educated States imprison the murderer for life, and so swell the number. * * *

One of the results of raising the mass to a higher moral level is that individuals here and there drop out, and the higher we are raised the more will drop, and this will continue until those incapable of self-control have disappeared. It is only among savages-where there is no chance to drop, because all are on the groundthat we find no criminals or paupers. And Mr. Reece actually sighs for the "perfect order" found associated with the "densest ignorance" among the cave-dwelling Veddahs and other tribes. Possibly we might attain this "perfect order" if we would imitate the savages in leading a savage life, but that would be a pretty dear price to pay for such order as savages secure.
: Most of us prefer civilization with all its drawbacks. We prefer to see our country settled, though we know that jails will be built and occupied. The very convenience of city life is paid for by added crime. The disorder that might be allowed in a wilderness among savages can not be tolerated in a crowded metropolis among civilized people. The ten States that have the largest cities punish 50 per cent more violence and 60 per cent more drunkenness than their share, though they have 20 per cent less than their proportion of murders.

I think, then, we need not fear that universal education is to bring us universal crime. We want more and better education. Of course, it is not the mere ability to read and write that is to save a man from prison. He must learu self-control and acquire a loftier standard of life. Mr. Reece dwells much upon the fact that a large percentage of our criminals can read and write. But that does not prove that their education made them criminals. I dare say a still larger percentage of them can see, yet it was not their ability to see that made them criminals. The densest ignorance may, like total blindness, keep men from crime; but we do not propose to put out our eyes of either mind or body. We will have men learn to see betier, morally and physically. It is imperfect education that has brought men to prison, as we see from the constant relation of our criminal class to our illiterate classes. They may, indeed, have some sort of an education, but the vast majority of them are ignorant themselves, and have ignorant kindred and associates; and to be ignorant amid the civilization of to-day is to be jealous and bitter and rebellious.

The very fact that Mr. Reece cites to prove his thesis, that ignorance is innocence and knowledge crime, disproves it most completely. South Carolina, he says, has the highest percentage of illiteracy and the lowest of crime; but if he had taken one glance below the surface, he would have seen a fact far more "novel and threatening" than any he discovered. Out of the 626 criminals of South Carolina, 570 are black and only 56 are white. Why are there ten times as many blacks as whites in jail, when they constitute only three-fifths of the population? The only answer the census gives is in the fact that they are three times as illiterate as the whites. So that the very State summoned to prove that ignorance is exception from crime has ten-elevenths of its criminals from the most ignorant class in the country. But perhaps Mr. Reece thinks that their ignorance is not quite dense enough, as one in four can still write. They certainly have not yet reached the point where ignorance is bliss.

# SCHOOL STATISTICS AND MORALS. ${ }^{1}$ 

By W. T. Harris, United States Commissioner of Education.

The question of the relation which school education bears to morals is a very old one, but it is always coming up again in some new form; and inasmuch as it is always profitable to inquire how we may make the school more effective in the direction of moral training, it is wise to have the question in some shape on every new programme of this association of superintendents. Morals include a wide range of virtues, on the one hand bordering on the province of religion, and even overlapping it in the case of such traits of character as hope, faith, and charity-what the church calls celestial virtues to distinguish them from the secular virtues of prudence, fortitude, temperance, and justice.

Ali kinds of well-wishing and well-doing toward our fellow-men come under divine charity or loving kindness. Under faith as a virtue come all those mental convictions which hold us to the theory of the supremacy of good in the universe, and under hope, as the third of the religious virtues, come all such acts or endeavors as we make on the side of the supreme good. Faith is the intellectual virtue and hope is the virtue of the will, while charity is the virtue of both intellect and will.

The lack of these celestial virtues produces what is called crime, because it sets the intellect and will and the heart against one's fellow-men-that is to say, against the social whole.

Very justly, then, do theologians claim that religious education in this broad sense is the foundation of the institutions of civilization. But it does not necessarily follow that the school should be an appanage of the church, or that anything but secular education should be attempted in it. This will depend upon the further question, whether the secular virtues and the secular work of the school are a real auxiliary to the good work of the church. If the habits taught in the school reenforce the spirit of kindness and mutual helpfulness toward one's fellows, if the intellectual studies aid in the spread of Christian doctrines, then the secular school has a moral tendency, although it does not take up any direct functions of the church.

I think that the most scientific student of social science will admit that the school is no substitute for the church, and that a nation may possibly exist without a school, but that no nation can exist without a church. Even the savage tribes, with their rudimental civilization, have the rudiments of a church, and it occupies a fargreater place in savage life than it does in the most advanced civilization. Religion dictates to the Indians of the pueblos what figures they shall weave into their blankets and how they shall plant and harvest their corn. But the religion of the highest civilization permits and encourages the conquest of nature by science and art, and separates, one after the other, the cardinal institutions-the family, civil society, and the state-from the direct control of the church and emancipates them from its authority. Thus, Christianity is forever narrowing the circle of superstition and increasing the realm of enlightenment.

Right here, however, comes in the first appeal to statistics, and the first attack and defense of the school on the line of moral influence. It is supposed, on the one hand, that purely secular instruction in ideas and habits must be antireligious, and consequently tend toward vice and crime. On the other hand, it is claimed that purely secular instruction reenforces religion and exerts an influence repressive of vice and crime, although it does not include any theologic teaching. Statisties are collated to show that the majority of criminals in our jails have attended school for a longer or shorter period. Statistics are likewise quoted to show that those States which have the oldest and most efficient school systems have the largest number of

[^12]criminals in their jails and State prisons. Assertions are made that education merely changes the character of the crime-for example, from robbery and theft, the crimes of the illiterate, to forgery and embezzlement or breach of trust, which are the crimes of those who have had school education. The returns of prisons and jails have been often studied with a view to get the facts in these particulars. Most teachers are familiar with the collation of statistics made on the census returns of 1870 by E. D. Mansfield and published in General Eaton's Report of the Bureau of Education for 1872. The returns from prisons and jails of 17 States, 14 of which were TVestern or Middle States, gave an aggregate of 110,538 prisoners, of whom 27,581 , or almost exactly 25 per cent, were illiterate or not able to write.

The fact that three-quarters of all the prisoners conld read and write and had had some schooling looked serions enough to challenge the good influence claimed for the schools. If school education is adverse to crime, why should not the statistics show that a majority of the prisoners are illiterate?

At this point the subject was taken up by those who understood arithmetic, and the question was modified so as to ask whether a given number of illiterates in the population furnished as many criminals as the same number of persons who could read and write. Put in this shape the answer was intelligible.

The illiteracy of the population in the seventeen States which furnished the 25 per cent of illiterate criminals was about 4 per cent, according to the census of 1870 . This 4 per cent of the population furnished 25 per cent of the criminals, and the 96 per cent who could read and write furnished only 75 per cent. If 1 per cent of the illiterates had furnished only 1 per cent of the criminals it would appear that education made no difference in regard to crime. But the illiterates furnished more than six times their quota, while those who could read and write furnished one-fifth less than their quota, and the ratio of the two was 1 to 8 . A thousand illiterates on an average furnished eight times as many prisoners as the same number who could read and write.

This result worked out with much uniformity where the same degree of accuracy in keeping statistics prevailed. The very small quotas of illiterates in Iowa, Kansas, and Minnesota gave more than eight times their share of criminals, while the three Southern States included in the seventeen were reported as having 22 per cent of illiterates in the population and as having 50 per cent of illiterate criminals, thus showing the illiterates to have fire and one-third times their proper share of criminals.

Within the pass ten years many of the jails and reformatories have published comparative tables, showing results for a term of years, during which accurate records have been kept. These are, of course, more valuable than the returns for any single year, because inequalities and unusual conditions are eliminated. In 1887, for instance, the jail at Detroit gave a summary for twenty-five years, showing an aggregate of 40,338 committals, of whom 28,652 could read and write and 11,686 could not write. This gives eight times the quota of criminals to the illiterates, because in the total population of the State there were less than 5 per cent of illiterates.

To be mentioned as foremost among institutions keeping and publishing accurate and discriminating records in these matters are the Illinois Penitentiary at Joliet, the Elmira Reformatory of New York, the New York Juvenile Asylum, and the Eastern Penitentiary of Pennsylvania.

The main point in the interpretation of criminal statistics is to consider the ratio between the number of criminals furnished by a given number of illiterates as compared with a like number who can read and write. We must consider not only the numerators, but also the denominators of our fractions in order to get at the true value.

But there are other important items which some future census taker will give us; for example, the number of persons who can read and write but who are so poorly equipped as to be very ignorant. In the statistics taken in the better class of our
jails and prisons a good classification of prisoners prevails. In 1870 the illiterate and the very deficient amounted to 60 per cent of the prisoners according to the returns from New York and Pennsylvania; to 50 per cent in those from Minnesota, Iowa, Kansas, and California; to 75 per cent in those from Ohio, Indiana, Illinois, Michigan, and Wisconsin; to 85 per cent in those of Maryland, Keitucky, and South Carolina.
Many keep careful statistics in regard to previous condition of industry, the character of parents, the time of leaving home, the state of health. A large proportion of criminals were orphans or have left home at a tender age. Many have been brought up by criminal parents; very many have never learned how to work at an honest and honorable occupation.
The question of the prevention and cure of crime is a very complicated one, having many cooperative causes besides that of defect of schooling. But that schooling is a very powerful influence is made probable by these statistics, and it is made certain by considering its nature.
Stated in a word, every school demands good behavior, and most teachers succeed in securing it. Good behavior means respect for the rights of others and regularity, punctuality, self-restraint, and industry at mastering the thought, or at least memorizing the words, of learned and scientific men. It is this requirement of good beharior that secures the moral influence of the school. It is questionable whether set moral lessons produce the desired effect, but obedience to the rules of good order insures moral habits.

This, of course, develops power of self-control. It gives power of inhibiting mere natural impulses and passions and of choosing higher motives. Even selfish motives become purified as they become more general in their scope and bearing, and a perfectly wise selfishness would adopt the golden rule.
To those who have objected to secular education as tending to fill our jails with educated criminals, the defenders of the schools have pointed significantly to the statistics of religious education among criminals which are beginning to be kept in a great number of jails and prisons. For instance, in the Detroit jail, in twenty-five years, there were reported 37,089 out of 40,838 as having religious training, against 2,249 who had none. Of the religious influences, 15 had been under Mormon training, 69 under Jewish, and the remaining 37,000 about equaliy under Protestant and Roman Catholic training.
In the Elmira Reformatory, in twelve years, those reported as having no religious training were only 7 per cent; with Hebrew training, 5 per cent; with Protestant, 42 per cent, and with Catholic, 46 per cent.

In the reports from 200 jails in the United States, with about 55,000 prisoners last year (1892), in reply to an inquiry made by the Bureau of Education, over one-half reported religious training of prisoners; 10,376 with none; 9,934 with Protestant; 163 with Jewish; 9,115 with Catholic training.

I quote these facts to show how statistics may mislead a person who does not consider the qualitative as well as the quantitative side.
It would be preposterous to think that the training of the church or the Sunday school could tend toward the production of criminals. The doctrine of self-sacrifice for others, the example of the Son of God who suffered, the perfect for the imperfect; no one can conceive a more powerful lesson to distrain the youth from a criminal career. The Jewish instruction in the Ten Commandments would produce righteousness instead of crime. And yet the neophyte in statistics would say that the 92 per cent of criminals in Detroit who had received religious instruction made a bad showing for religious education. But he would say this only because he is a neophyte and omitted his denominator, like the bad arithmeticians who have been decrying public education in the magazines and reviews and comparing numerators without a glance at their denominators.

The religious statistics would read when the denominators are applied somewhat as follows: The 92 per cent of criminals who have had some religious instruction have been furnished by the 98 or 99 per cent of the whole population who have been under religious instruction, while the 8 per cent of criminals without previous religious teaching represent the 1 or 2 per cent of their class in Michigan. And none of the criminals came there through religious teaching, but because they neglected its counsels.

The attack on school education as increasing the number of convicted criminalsan increase proved by the returns from the different States-has brought forward a new phase of the question.

Educators will remember the brilliant attack led by Richard Grant White, some years ago, in the North American Review, and recently an article in the Popular Science Monthly, by Mr. Reece. These have been replied to, the former by Dr. Philbrick, in the North American Review, and by Prof. B. F. Tweed, in a valuable pamphlet. That of Mr. Reece was well answered by Mr. H. H. Clayton, who quoted the interesting, analysis of criminal records in Massachusetts, published by Mr. David C. Torrey, in Lend a Hand for January, 1890.

Massachusetts, it was said, committed to its jails and prisons only 8,761 persons in 1850, while in 1885 it committed 26,651 , or nearly three times as many. In 1850 only 1 person to 113 inhabitants; in 1885, 1 to 72 . This evidently demanded a qualitative inquiry. What crimes are on the increase? Mr. Torrey classified them, first, under two heads, and found that the crimes against person and property were, on an average, from 1865 to 1870, 1 to 301 inhabitants, while from 1880 to 1885 they were 1 to 436, thus showing a decrease in serious crimes of 44 per cent. The second heading was commitments for crimes against order and decency, and these had increased largely.

Investigation further into these crimes against order and decency, Mr. Torrey found that they were mostly cases of drunkenness. The commitments for drunkemness in 1850 were only 3,341 , while in 1885 they had risen to 18,701 . The commitments for all other crimes than drunkenness in 1850 amounted to 1 for 183 inhabitants, and in 1885 to only 1 for 244 inhabitants. The average from 1850 to 1885 was 1 to 174 inhabitants, while the average from 1870 to 1885 was 1 to 241 inhabitants, for other crimes than drunkenness.

This showing completely turned the tables on that class of sensational or emotional writers who deal with what I call hysterical statistics. Person and property have become more safe in Massachusetts. Between 1865 and 1885 commitments for crimes against them decreased 44 per cent, allowing for increase of population. The decrease was greatest in crimes against property, but there was a decided decrease of crimes against person. But while pereon and property have become safer in twentyfive years, drunkenness is not nearly so safe; the prisons and jails are crowded with intemperate people, who were formerly allowed to go unmolested through the streets and country roads.

The fact that person and property have become more secure on the whole is very significant, when we consider the fact that the numerous cities of Massachusetts afford hiding places for burglars who raid on the small villages or the rural part of the State by night and escape to the city by railroad before morning. Any species of crime that goes unpunished tends to increase and to multiply criminals. Hence rural districts in the vicinity of the large cities of the Middle and Eastern States suffer more from this species of marauding than any other portion of the United States, not even excepting the borderland.

Of the secular virtues, justice is particularly concerned in this matter of crime. It has two phases, honesty and truth speaking, that are particularly cultivated in good schools. Temperance is a virtue which the school helps to some extent. Fortitude is developed by self-restraint in the school. Prudence or providence is the special
virtue of thrift, and the school nurtures this by increasing intelligence and skill in productive industry.

On the question of the promotion of these virtues by the school, I desire to cite the statistics of thrift in favor of the State that gives the largest amount of schooling to each inhabitant.

It is surprising to the person who has not become familiar with the facts to learn that the total number of years' schooling that each person on an average is getting in the United States is only four and three-tenths, nearly four years of this being furnished by public and less than six-tenths years by private schools. But the amount that Rassachusetts is giving is six years and eighty-six hundredths, or two and one-half years more than the general average. There are only five States that give over six years on an average to their whole population. These are, first, Massachusetts, next New York, third Connecsicut, fourth Ohio, fifth Rhode Island. The average for the whole nation is about equal to the primary school course of four years.

I quote these statistics to point out a connection between edacation and industry.
The total production of the labor of the people of the United States for 1880 was about 40 cents apiece per day for each man, woman, and child; but the production of Massachusetts, with its average of seven years of schooing for each inhabitant, was nearly double that of the average for each inhabitant of the whole nation. I have made on difierent bases three estimates, nsing the data given by Col. C. D. Wright in his census of the State for 1885. The lowest estimate gives 68 per cent more than the national average, the second 84 per cent, the third and best one exactly 100 per cent. The population of Massachusetts is 4 per cent and its production is 8 per cent of that of the whole nation. Who that looks at modern productions of industry and considers how much of it is due to machinery, and considers further the dependence of machinery for its management on alert and educated intelligence, can fail to see the relation of the schools of Massachusetts to its phenomenal production of the items oi wealth?

The virtue of prudence or productive industry insures the existence of other virtues, such as temperance and honesty. For the fact that the people of a State have arrived at the stage of political conscience that they attack not only the crime, but also its source in such vice as intemperance, implies an advance also in regard to many virtues. And can not the well-kept schools claim a large share in producing these favorable moral conditions?

## THE CURSE IN EDUCATION.

[From an article by Rebecca Harding Davis in the North American Review for May, 1899.]
The most urgent of rules-the one in which the American puts absolute faith-is "Educate; send every boy and girl to school."
It never occurs to the American that there can be a mistake or room for hesitancy here. * * * Educate a man, he says; teach him mathematics, chemistry, or what not, and he can take care of himself in the universe. It is this unspoken creed that has made the schoolhouse a fetish in the United States. Whether it stands in a village in New England, or in a Florida swamp, or in an Indian reservation, weall believe that a life-giving ichor goes out of it which will conquer not only ignorance, but poverty and crime.

This idea came naturally enough to Uncle Sam when he found his gates besieged by hordes of ignorant Irish, Germans, Russians, Huns, and Italians, and within his gates other hordes of ignorant negroes and Indians. Their ignorance seemed to him the deadly disease which would destroy the nation. Cure that by a certain amount
of book learning, and the American would be the typical intelligent and moral citi-zen-a model for the world.

Hence the public school.
Has the public school done its work? Has education been always an unmixed blessing to America and Americans?

This question can not be answered so easily and positively as loyal sons of the Republic may suppose.
Two or three facts which come up in my memory seem to me to have a bearing on it.

First. On the table before me lies the annual report for 1898 of the inspectors of the Eastern Penitentiary in Pennsylvania. Here is one item: Ninety-one convicts who were in the prison last year had served one or more terms before. Of these hardened offenders only nine were unable to read and write. Of eight no record had been kept, but as the majority of them were forgers and counterfeiters they had evidently received some mental training. The remaining seventy-four were all educated, having attended school from two to nine years.

Another fact: Three years after the opening of free schools in London a marked increase was noticed in the number of juvenile offenders in the city prisons and reformatories. There was, too, a change in the kind of crimes committed by them. The number of boys and young men convicted of forgery, grand larceny, and intricate swindling schemes was more than doubled, while the number of sneak thieves, drunkards, and pickpockets was lessened by one-half. As years passed the proportion of educated criminals largely increased.
"Are we to understand, then," demanded a zealous humanitarian in Parliament, "that our graded schools are breeding houses of crime?".
But this was too pessimistic a view. Education did not breed crime in the pupils; education only gave crime tools to use. The three R's never begot a desire in the mind of a boy to work harm to his fellows, but finding the desire there already they taught him to forge a note instead of picking a pocket. Without education he tramped barefoot in the mire of the broad road that leads downward; with it he drove in a chariot, but on the self same road and to the same dark end.

Again, about fifteen years ago, I was in a lonely corner of -Louisiana-a district of pale green prairies sloping down to the Gulf, dotted with the half-cultivated farms of the French Acadians. There they had been since they left Acadia years before. An isolated, separate clan, they retained the character, the handicrafts, and the bits of homely, useful knowledge which they brought with them, and also the same utter ignorance of the outer world. Very few of them could read or write. The men tilled the fields on the shores of the black bayous which crept lazily through banks of purple and yellow fleurs-de-lis, and the women in their cabins wove the soft, gay cotton stuffis in which they all were clad. They had no railways, no schoolhouses, no bosses with schemes for making big fortunes, no politics, and no newspapers. For years there had not been a case from among them in the parish court of theft, or adultery, or murder. They worked enough to keep them from want. They went to mass in the morning and to a dance at night. They were faithful husbands, loyal friends, tender mothers, single-minded, honest, merry folk. What more would you have?

When I went away from this Attakapas country and looked back at the great, dull green plain rolling down to the sea, with its pleasant farms and snug little homesteads gay with flowers, soft-floating gray mists now and then clouding the sunshine, it seemed the very land of peace. Sturely its name should be Arcadia, not Acadie.

A year later I heard a philanthropic Northern lecturer descant on the ignorance of this people, and beg for aid to "send the schoolmaster among them, to open the way for railways, business, and civilization."

Would not any intelligent American question seriously whether these people would be elevated or lowered in the actual scale of being by these things? * * *

A still more tragic instance is the negro, who, as soon as he was freed, was taken out of the cabin of the slave field hand, not to be taught to read his Bible and earn his bread as a skilled mechanic, but to study the higher mathematics and Plato, French and German, medicine and law; and then, with contempt and insult, was denied the chance to use his knowledge.

What, then, is wrong? Too much education?
No. No sane man can doubt that to educate a human being so as to derelop his individual capacity and to fit him for his especial place in life is the best thing we can do for him. It is a gift to him from his fellow-men, second only to that of life. But it must be given with wisdom and discrimination. * * *

Into that aforesaid schoolhouse, of which we boast with such fervor, are going to-day countless legions of little Pats and Jans and Sambos-boys with a myriad differing capacities, tendencies, and destinies. And each is crammed with the same dose of unassimilated facts-the alphabets of a dozen sciences which he never learns to put together into an intelligible word. Nothing more cruel and ridiculous was ever done in the world. It is the old story of the boys of Dotheboy's Hall, who were ranged into a row while Mrs. Squeers ladled into each gaping mouth the same dose of treacle and sulphur. * * *

Of course, we all know the secret reason which prompts this American system of education. Every child must be prepared for any possible position. The boy who will end his days behind the counter of a village store, and who has no ambition nor qualification to do other work, must have his smattering of Greek and philosophy, because he may some day be Senator or President. The girl from X-_, who would be fitted for a full, happy life by a course in dressmaking or cookery and arithmetic, studies trigonometry and art. May she not, some day, be the first lady of the land? Dull, good young women by the tens of thousands, meant by nature to brood over homes and to mother children, and to teach them truth and honor and the love of God, grapple with the Semitic tongues or biology, with the hope that they will be club women or scholars, and train their sons for college.

It is, as we all know, the chance for every man that constitutes the true greatness of America. But it is this chance also which is at the bottom of our discontent, of our vulgar pretension, of our intolerable rudeness, and of the false values which we are apt to place upon the things of life. Perhaps the falsest value is that which we set on mere book learning. Without religion, it only qualines the thief to be more expert in his thieving. It it is not assimilated into a man's life, and made a part of his everyday woriz, it becomes a deadly alien weight on both.

When will Americans see that there is no blessing like the education which we can use, but that the education which we can not use is a curse?

## ERRONEOUS INTERPRETATION OF PRISON STATISTICE.

[Interview with the United states Commissioner of Education, reprinted from the Brooklyn (N. Y.) Eagle, October 8, 1899.]
Much comment has been occasioned by an article in a recent number of the North American Review, written by Rebecca Harding Davis, in which she makes some sharp and caustic remarks about the relations of education and crime. The writer takes a very doleful view of the matter and by reference to the number of persons in jail able to read and write attempts to prove that education has served to increase the amount of crime. She even goes so far as to intimate that the graded schools are breeding places for crime and explains the large number of old maids in New England and other portions of the country as the natural result of their disinclina-
tion to marry men of moderate means after having received an academic course of instruction.

The article is a forceful one and has caused widespread notice and criticism. While many people disagree with Mrs. Davis in her gloomy conclusions, no facts have been produced to disprove her contentions. Commissioner of Education IIarris, however, is prepared to take issue with her, and in an interview with the Eagle correspondent to-day he presented an array of arguments and statistics on the opposite side. He believes that Mrs. Davis has made her assertions without a fair and full consideration of all the features of the case, and is not willing to admit that education helps to increase the total number of pickpockets, forgers, or other criminals. When Commissioner Harris was asked to-day what he had to say of the statement of Mrs. Davis that our graded schools are breeding honses of crime, he replied:
"If the statistics on both sides of this question are considered, I think most people will believe our schools do not swell the number of criminals of the country, but, on the contrary, exert just the opposite tendency. Communities that send a very large part of their population into schools have a higher ideal as to what is consideied lawful and decent behavior in public. They are not content with punishing crimes against person and property, but often arrest persons for drunkenness and other vices. There was a time in Boston when a person seen in the streets smoking a cigar would be liable to arrest by a policeman. A multitude of penalties on the statute books, such as arrest for plucking a flower on the public common or crossing the grass from one gravel walk to another, increase the number of arrests every year, but do not necessarily imply an increase of serious crime. Counting the persons in jail in the United States, it is found that the quota of the illiterate is nearly, or quite, eight times as much as the quota from an equal number of persons who can read and write. For instance, the statistics of the Detroit jail for its first twentyfive years show 40,838 committals, of whom 11,686 could not write. In the total population of the State less than 5 per cent were illiterates. Five per cent, therefore, furnished 11,686 committals and the other 95 per cent of the population furnished 28,652. In other words, the illiterates furnished eight times their quota of criminals for the jail. The report of the Detroit jail for 1887 contains the statistics on this subject."
"How about the statement of Mrs. Davis that the number of jurenile offenders in London was greatiy increased after the establishment of the London free schools in 1870?"
"I have before me," replied Commissioner IIarris, "two articles on this subject, one in the London School Board Chronicle for April 16, 1898, and the other in the Iondon Schoolmaster for November 6, 1897. The average daily number of persons in the jail in England and Wales is given for thirty-four years, and a study of them will reveal the true facts regarding the point touched on by Mrs. Davis. There was a marked decrease of crime from 1870 to 1894. The schools had scarce begun to have any effect upon the total in 1870, but in that year there were 128 persons in jail out of every 100,000 of the population. Ten years later the 128 had decreased to 111 in each 100,000 population, and in 1890 this had fallen off nearly one-half. Instead of 111 there were only 68 in prison out of a population of 100,000 . It has been stated that the school educates the intellect, but does not affect the morals. Nearly all the schools of this country and in England lay more stress on good behavior than they do upon learning lessons. In fact, some schools with poor methods of instruction, in spite of that, do a great deal of good, because they teach children how to behare in public. By insisting on regularity, punctuality, silence, and industry in the schoolroom they secure a quality of self-control on the part of the pupils which no other means can accomplish so well. I do not find it strange, therefore, that the effect of the school shows itself in the morals of the community still more than it does in the quickening of the intellect. People in England who are studying this matter seem
to think that the great falling off of criminals in the jails, namely, from 128 in every 100,000 in 1880 to only 68 in every 100,000 in 1890, is due to the wholesome effect of the schools. Quite extensive investigations were made in 1870 by the Bureau of Education on the same lines. The prisons and jails of 17 States, 14 of them being Western or Middle States, reported 110,538 prisoners. Of these 27,581 , or almost exactly 25 per cent, were illiterates. Attention being called to the fact that threefourths of the prisoners could read and write and had had some schooling, the same claim now put forth by Mrs. Davis was made-that education promotes crime. The conclusion was drawn that the schools were 'breeding honses of crime.' Butin this case the numerators were compared and the denominators neglected, for in the 17 States the average illiteracy of the population was about 4 per cent. This 4 per cent of the population furnished 25 per cent of the criminals, and the 36 per cent who could read and write furnished only 75 per cent. The illiterates, therefore, furnished more than six times their quota, while those who could read and write supplied one-fifth less than their proper quota. Thus, 1,000 illiterates furnished on an average eight times as many prisoners as the same number who could read and write. It seems to me that if the discipline of a common school which trains the pupil from day to day in the habit of self-control and respect for the rights of others will not produce law-abiding citizens nothing else is likely to accomplish it."
"What would be the effect of school training on other evil habits outside of the list of schoolroom virtues-regularity, punctuality, silence, etc.?"
"The school impresses upon the pupil the constant necessity of considering the ideal of good behavior, and the boy in school for many months in the year acquires this as a habit; it becomes second nature. Of course, a person who has acquired the habit of regulating his conduct by an ideal must carry this habit into the whole range of his life and modify it to some advantage. Education is far from stimulating evil instincts, but on the contrary serves to suppress them. One of the English writers to whom I referred collected the police statistics as well as the jail statistics, and found that in 1870, while there were 31,225 thieves in jail, there were 50,144 running at large, but known to be thieves by the police. These two items make a total of 81,369 , but in 1895 those in jail had decreased from 31,225 to 18,365 , and those reported as at large had decreased to 18,033, making a total of 36,398 in 1895, as against 81,369 in 1870. In the meantime the population of England and Wales had increased from $23,000,000$ to $30,000,000$. This reduction by one-half of the number of suspicious cases and in jail in the face of a big increase in population is certainly an indication of the good eifects of education. These statisties are of value because they show the state of the whole community, and not merely the number actually convicted and imprisoned. An interesting record lias been made in Massachusetts regarding the relation of the jail population to illiteracy. Massachusetts gives more years of schooling on an average to its population than any other State. It has been claimed that Massachusetts overeducates its children. I have heard this charge, but you have only to consider the average amount of schooling to each inhabitant in order to see that the State does not overdo the matter of education. Massachusetts gives about seven years, of two hundred days each, on an average, to each one of its pupils, but the average for the whole United States is only five years. The average is not enough to take the pupil through the course of study in the ordinary district school. In 1850 there were 8,761 persons in the jails and common prisons of Massachusetts, while in 1885 the number had increased to 26,651 , nearly three times as many as in 1850. This occasioned the remark that with the increase in education crime increased in a still greater degree. An analysis of the crimes reported, however, showed that those against person and property had decreased during that period. Serious crimes had decreased 40 per cent, while the offenses against order and decency, being more vigilantly prosecuted, produced the enormous increase in the total number. For example, in 1850 there were 3,341 commitments for drunkenness, but in

1885 there were 18,701 commitments for this offense. The commitments for all other crimes than drunkenness in 1850 amounted to one for each 183 inhabitants, and in 1885 one to each 244 inhabitants. This showing turned the tables on that class of sensational writers who deal with hysterical statistics. Person and property have become more safe in Massachusetts in the past fifty years, but drunkenness is more dangerous to the drunkard.
"What do you think of the statement that education gives young people a disgust for manual labor?"
"I do not think this charge is borne out by statistics. There is no country in the world in which young people are more ambitious to get into occupations in which they can earn a livelihood than the United States. In fact, the hunger for work is too great for the good of our youth. Again, those youths who get the greatest amount of schooling furnish the most productive populations; as, for instance, Massachusetts, with its seven years as schooling for each boy and girl, produces in manufacture, commerce, and agriculture an aggregate of wealth per inhabitant which is nearly twice that of the average product of the nation. In 1880 this product was from 70 to 80 cents per day for each inhabitant, while that for the country at large was only 40 cents. Of course the educated person wishes to save his hands by the employment of machines, and is not so willing to perform mere drudgery by hand when he can see methods of periorming it by machines, but in the number of hours that he works per day and in the intensity with which he works he excels the illiterate laborer. A man of education does one day's work at his office and frequently does another day's work when he get home for the evening. In regard to the declaration that education for women gives them a distaste for marriage with men of moderate means, and therefore increases the number of old maids, I can only say that I do not wonder that an educated woman is more particular about the kind of husband she gets than an illiterate. Then, again, a woman with an academic training can afford to be independent to a certain degree. In closing I would like to quote these words by famous English authorities on the general subject of education and crime. Sir George Kekewich, the head of the parliamentary school board for England and Wales, says:
""Every time I hear of a new school being opened I say to myself, "There goes another prison."' Sir John Gorst, one of the parliamentary leaders, says: 'Every pound spent on the education of the young saves many pounds in the increased efficiency of the working population in the absence of the necessity for further jails and workhouses.' '
A. B. A.

## INFLUENCE OF TIIE sCHOOLS IN FRANCE.

[Letter of the United States Commissioner of Education, October 14, 1899, to Prof. E. C. Branson, State Normal School, Athens, Ga.]

*     *         * I send you the following figures, made from the most recent French census, namely:

1. From 1878 to 1895 there was an increase in the proportion of conscripts able to read, namely, from 84.7 per cent at the earlier date to 94.6 per cent at the later date, or an alsolute increase of 11.6 per cent.
2. From another source of information we learn that the number of newly married persons able to sign the certificate made the following increase from 1880 to 1890: Nien, from $8 \pm$ per cent up to 91.6 per cent, an absolute increase of 9 per cent; for women, an increase from 75 per cent at the earlier date to 87.4 per cent, namely, an absolute increase of $16 \frac{1}{2}$ per cent.
3. With regard to convictions for crime between the years 1876 and 1892, a period
of sixteen years, there was a decrease from 3,236 convictions in 1876 to 2,755 in 1892, the same being a decrease of $14 \frac{1}{4}$ per cent.
4. From 1892 to 1896 there was a decrease of convictions from 2,775 in 1892 to 2,464 in 1896, the same being a decrease of 11.2 per cent.
5. For the entire period from 1876 to 1896, a period of twenty years, the decrease reads as follows: From 3,236 in 1876 to 2,484 in 1896, the same being a decrease of 772, or 23.8 per cent.
6. The crimes considered in this are homicide (including, under this, assassination, murder, parricide, poisoning), rape of minors, and thefts and breaches of trust. A large class of crimes that come under the head of assault and battery are omitted from this, and as the statistics for the rest of the crimes are very complicated, I have not yet collected them from the census report. For these items see the Revue Pédagogique for May, 1899, and compare it with the extensive report on the prisons of France, by the minister of the interior, "Statistique Pénitentiaire," for the year 1894.
7. Another item which has been obtained is valuable in this comection, namely, of the prisoners included in the figures above given who were between the ages of 16 and 21 , there was for the entire period a decrease of 30.4 per cent for men and of 43.4 per cent for women. For all, a decrease of 36.6 per cent, as against the 23 per cent above quoted for all criminals. This, of course, relates to the youth that have been under the influence of the schools.
8. For the youthful criminals of 16 years of age and under convicted of the crimes abore there was a decrease on the part of the boys of 43.3 per cent, and on the part of the girls of 62.5 per cent, or for both boys and girls a decrease of 50 per cent. This is very significant because of the fact that these persons are young enough to have received the full influence of the schools.

I hope at some time to be able to collect together all of the separate details of crimes against person and property. But the present figures with reference to all the more important items are very signinicant and refute the statement with regard to the increase of serious crimes since the Government schools of France have caused a decrease of illiteracy.

It will be rery clear, even from these figures, that the increase of crimes, if there is any such increase, is to be found in the minor crimes, and that it is probably due to officiousness on the part of the French police, who are seeking to carry out new regulations that have to do with vice rather than with crime. Persons and property are very much safer in France than they were twenty years ago.

STATISTICS FRON TIIE UNITED STATES CENSUS OF 1890.
Literate and illiterate population 10 years of age and over, classificd by nativity and race.

|  | Total. | Native white. | Foreign born, white. | Colored. |
| :---: | :---: | :---: | :---: | :---: |
| United States | 47, 413, 559 | :33, 144, 187 | 8, 786,887 | 5, 482, 485 |
| Literate. Illiterate | $\begin{array}{r} 41,088,857 \\ 6,324,702 \end{array}$ | $\begin{array}{r} 31,079,184 \\ 2,055,003 \end{array}$ | $\begin{aligned} & 7,639,316 \\ & 1,147,571 \end{aligned}$ | $\begin{aligned} & 2,370,357 \\ & 3,112,123 \end{aligned}$ |
| North Atlantic division. | 13, 888, 377 | 9,937,918 | 3,720,601 | 229,858 |
| Literate. Illiterate | $\begin{array}{r} 13,028,388 \\ 859,989 \end{array}$ | $\begin{array}{r} 9,708,021 \\ 229,897 \end{array}$ | $\begin{array}{r} 3,140,407 \\ 580,194 \end{array}$ | $\begin{array}{r} \hline 179,960 \\ 49,898 \end{array}$ |
| South Atlantic division | 6,415, 921 | 3, 912,815 | 196, 454 | 2,305,652 |
| Literate. Illiterate | $\begin{aligned} & 4,434,033 \\ & 1,981,888 \end{aligned}$ | $\begin{array}{r} 3,340,916 \\ 571,899 \end{array}$ | $\begin{array}{r} 172,401 \\ 24,053 \end{array}$ | $\begin{array}{r} 920,716 \\ 1,385,936 \end{array}$ |

Literate and illiterate population 10 years of age and over, etc.-Continued.

|  | Total. | Native white. | Foreign born, white. | Colored - |
| :---: | :---: | :---: | :---: | :---: |
| Sonth Cerimal division. | 7,799, 487 | $5,039,641$ | 307,458 | 2, 452,388 |
| Literate. Hliterate | $\begin{aligned} & 5,480,616 \\ & 2,318,871 \end{aligned}$ | $\begin{array}{r} 4,284,706 \\ 754,935 \end{array}$ | 245,362 62,096 | $\begin{array}{r} 950,548 \\ 1,501,840 \end{array}$ |
| North Central division | 16,902, 613 | 12,652,374 | 3, 908, 466 | 348,773 |
| Literate. Initerate | $\begin{array}{r} 15,945,345 \\ 964,263 \end{array}$ | $\begin{array}{r} 12,216,046 \\ 436,328 \end{array}$ | $\begin{array}{r} 3,494,951 \\ 413,515 \end{array}$ | $\begin{aligned} & 234,348 \\ & 114,425 \end{aligned}$ |
| Western division | 2,400,161 | 1,601, 439 | 653, 908 | 144, 81.4 |
| Literate. Illiterate | $\begin{array}{r} 2,200,475 \\ 199,686 \end{array}$ | $\begin{array}{r} 1,529,495 \\ 71,944 \end{array}$ | $\begin{array}{r} 586,195 \\ 67,713 \end{array}$ | $\begin{aligned} & 84,785 \\ & 60,029 \end{aligned}$ |

Litcrete and illiteraie mrisoners, classified by nativity and ruce-United States census of 1830.

|  | Total. $a$ | Native white. | Foreign born, white. | Colored. - |
| :---: | :---: | :---: | :---: | :---: |
| United States | 82, 329 | 36,519 | 15, 932 | 25,019 |
| Litcrate | 59,422 | 32,879 | 12, 656 | 9,800 |
| Illiterate | 22,907 | 3,640 | 3,276 | 15,219 |
| North Atiantic division | 28,258 | 15,926 | 8,979 | 2,076 |
| Litcrate | 24,492 | 14,769 | 7,091 | 1,490 |
| Illiterate | 3,766 | 1,157 | 1,888 | 586 |
| South Atlantic division. | 11,409 | 2,096 | 264 | 8,865 |
| Literate. | 4,744 | 1,492 | 196 | 2,944 |
| Illiterate | 6,665 | 604 | 68 | 5,921 |
| South Central division | 16,684 | 3, 904 | 864 | 10,480 |
| Literate | 7,191 | 3,051 | 542 | 3,017 |
| Illiterate | 8,893 | 853 | 322 | 7,463 |
| North Central division | 19,854 | 10,960 | 3,929 | 2,827 |
| Literate | 17,217 | 10, 121 | 3,433 | 1,889 |
| Initerate | 2,537 | 839 | 496 | 938 |
| Western division | 6,724 | 3,633 | 1,896 | 771 |
| Literate | 5,678 | 3,446 | 1,394 | 460 |
| Iliiterate | 1,046 | 187 | 502 | 311 |

a Includes 4,859 white prisoners not classified by nativity.
Pcrcentage of illteracy among persons 10 years of age and over, United States census of 1890.

|  | Total. | Native white. | Foreign white. | Colored. |
| :---: | :---: | :---: | :---: | :---: |
| United States | 13.34 | 6.23 | 13.06 | 56.76 |
| North Atlantic Division. | 6.19 | 2.31 | 15.59 | 21.71 |
| South Atlantic Division | 30.89 | 14. 62 | 12.24 | 60.08 |
| South Central Division | 29.73 | 14.98 | 20.20 | 61.24 |
| North Central Division | 5.70 | 3.45 | 10. 58 | 32.81 |
| LWestern Division ...... | 8.32 | 4. 49 | 10.36 | 41.45 |

Percentage of illiteracy among prisoners, United States census of 1830.

| - .- | Total. | Native white. | Foreign white. | Colored. |
| :---: | :---: | :---: | :---: | :---: |
| United States | 27.82 | 9.97 | 20.55 | 60.83 |
| North Atlantic Division. | 13.33 |  |  | 28.23 |
| South Atlantic Division | 58.42 | 28.82 | 25. 76 | 66.79 |
| South Central Division | 55.29 | 21.85 | 37.27 | 71.21 |
| North Central Division | 12.78 | 7.66 | 12.63 | 33.18 |
| Western Division ...... | 15.56 | 5.15 | 26.48 | 40.34 |

Number of prisoners furnished by each 100,000 literates and by each 100,000 iliteraies (over 10 years of age), classifiea by nativity and race, United States census of 1890.

|  | Aggregate. |  | Native whitc. |  | Foreign-born white. |  | Colored. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Iiterate. | $\begin{aligned} & \text { Illit- } \\ & \text { erate. } \end{aligned}$ | Literate. | $\begin{aligned} & \text { Init- } \\ & \text { erate. } \end{aligned}$ | Literate. | $\begin{aligned} & \text { mint- } \\ & \text { erate. } \end{aligned}$ | Literate. | $\begin{aligned} & \text { Hit- } \\ & \text { erate. } \end{aligned}$ |
| United States | 145 | 362 | 105 | 176 | 166 | 285 | 413 | 489 |
| North Atlantic Division | 188 | 438 | 152 | 503 | 226 | 326 | 828 | 1,174 |
| South Atlantic Division | 107 | 337 | 45 | 106 | 114 | 282 | 320 | 426 |
| South Central Division. | 131 | 383 | 71 | 113 | 221 | 519 | 317 | 498 |
| North Central Division. | 109 | 263 | 83 | 192 | 98 | 120 | 807 | 820 |
| Western Division ....... | 258 | 523 | 225 | 260 | 238 | 711 | 512 | 518 |

Multiple showing how many times as many prisoners 100,000 illiterates fumished as an equal number of Titerates, United States census of 1890.


Prisoners per million inhabitants, United States census of 1890.

|  | Total. | Native white | Foreign white. | Colored. |
| :---: | :---: | :---: | :---: | :---: |
| United States | 1,315 | 796 | 1,747 | 3,276 |
| North Atlantic Division | 1,624 | 1,202 | 2,317 | 7,427 |
| South Atlantic Division | 1,288 | , 389 | 1,305 | 2,714 |
| South Central Division | 1,463 | 545 | 2,712 | 3,007 |
| North Central Division | 887 | 614 | 969 | 6,276 |
| Western Division ..... | 2,219 | 1,653 | 2,819 | 4,900 |

Classification of prisoners acconding to place where found, United. States census of 1890.
Prisoners.
Penitentiaries.................................................................................... 45,233






Total....................................................................................... 82, 329

Prisoners classified according to character of offense charged, showing the absolute number and the number per million inhabitanis, United States census of 1890.


## DETROIT HOUSE OF CORRECTION.

> Data from the twenty-fifth annual repori of the offeers of the Detroit House of Correction, being the report for the year 1886. -Stmmary of the tables relating to prisoners for twenty-five years (August 1, 1861, io December 31, 1886).

SOCLAL RELATIONS.
Married and having children.................................................................. 8, 493
Married and having no children........................................................... 3, 305
Unmarried and having both parents. ...................................................... 9, 087
Unmarried and haring only one parent............................................................ 6,858
Widows and widowers having children ...................................................... 2, 21t
No relations ....................................................................................... 9,781
Total.-...-.-.-.-.-.......................................................................... 40,388
EDUCATION.
Could read and write ............................................................................... 28 . 652
Could neither read nor write................................................................... 7, 7 . 372
Could read only ........................................................................................ 4 . 314
Total.-.................................................................................... 40,338
AGE V゙HEN ADMITTED.
Under 20 years.......................................................................................... 6, 264






RELIGIOES TRAINING.
Roman Catholics .-. .-...-........................................................................... 18, 821
Protestants ............................................................................................ 19, 184
Israeiites .-....................................................................................... 69
Mormons .-. ....................................................................................... 15
Without religious training ...................................................................... 2, 249
Total....................................................................................... 40,338
IIABlTS OF LIFE.
Claim to be temperate .............................................................................. 8, 320

Total..................................................................................... 40,338
race.

Black .................................................................................................. 3,516

Chinese............................................................................................ 2

## CHAPTER XXIX.

## EDUCATION IN CANADA.

Dominion of Canada, comprising seven provinces, with an extent of $3,653,946$ square miles and a population estimated in 1897 at $5,185,900$.
Previous articles on education in Canada in the Commissioner's Reports:
Education in Ontario, Report 1892-93, Vol. 1, Chapter VI. Notes on education at the Columbian Exposition, ibid., Chapter X, pages 1213-1215. Nanitoba school question, Report 1894-95, Vol. 1, Chapter VII.
Current and historical survey of the systems of education in the several provinces. Report 1897-98, Vol. 1, Chapter IV.
Topical outtine.-Chief features of the systems of publiceducation: Central and local control, sources of income, statistics of elementary schools (current and compara-tive)-Statistics of universities and colleges-University notes-Current discussions and criticisms-Movement to promote fechnical and industrial educationExisting provision for technical instruction in Ontario-Foundation and original prorisions of the Ontario system of education.

By the British North American act of 1867 the right to legislate on matters respecting education was left to the governments of the four provinces, which were then united under the general name of Dominion of Canada. The same right is assured also to the provinces that have since entered the confederation.

All the provinces have established public schools corresponding to the elementary and high schools of our own States. The control of the schools is rested in central and in local authorities. In Ontario the central authority predominates; in the other provinces the local authorities have more independent action. Elementary schools are secular in all the provinces excepting Ontario and Quebec. In Ontario provision is made for separate schools for Protestants and for Roman Catholics where desired. The latter enrolled 8.6 per cent of the total pupils in 1898; the former an insignificant proportion, less than two-tenths of 1 per cent. The vast majority of the pupils, above 91 per cent, were in the nonsectarian public schools.

In Quebec the schools are sectarian, and provision is made for the separate control of Roman Catholic and Protestant schools; the former in 1896-97 enrolled 86.6 per cent of all elementary pupils. A single superintendent has general charge of the dual system, but he is assisted by a council of public instruction organized since 1869 in two committees, one for the charge of Roman Catholic, the other for the charge of Protestant schools.

In the Northwest Territories provision is made for separate schools for religious minorities (Protestant or Roman Catholic). The rate payers establishing these separate or sectarian schools are relieved of taxes for the public schools.

Tuition fees are charged in Quebec, but may not be more than 40 cents nor less than 5 cents a month. In the remaining provinces the public schools are free, excepting the high schools of Ontario, in which fees are paid.

Local cuthoritics.-The municipal system of Ontario is admirably adapted to the maintenance of local self-government. The Province is divided into counties, which are subdivided into minor municipalities. These consist of townships, incorporated villages, towns, and citiez. The municipal councils have certain powers and responsibilities in respect to education. Through their municipal councils the counties must make grants of money for high schools, and both counties and townships grants of money for public or elementary schools. Erery township is subdivided into school sections, corresponding to a school district in our States, each of which must be provided with a public school. Every incorporated village, town, and city forms a school district. In each of these districts the rate payers (that is, the persons who pay a property tax) elect a board of school trustees, men and women being equally eligible to the positions. These trustees appoint the teachers, who must have a Government diploma, and determine the amounts to be expended for buildings, equipments, and salaries.

The local unit of school administration in Quebec is a school municipality, i. e., any territory erected into a municipality for the support of schools under the control of school commissioners or of trustees elected by those who pay a property tax (rate payers). The commissioners are empowered to divide a municipality into school districts and to maintain one or two schools in each district.

The school law provides that-
"If in any municipality the regulations and arrangements made by the school commissioners for the management of any school are not agreeable to any member whatever of the proprietors, occupants, tenants, or ratepayers professing a religious faith different from that of the majority of the inhabitants of such municipality, such proprietors, occupants, tenants, and ratepayers may signify such dissent in writing to the chairman of the commissioners.
"The notice having been duly served, the dissentients may proceed, after the lapse of two weeks, to elect three school trustees, who will have the same power with respect to dissentient or separate schools as the commissioners have with respect to the schools of the majority. The trustees alone have the right of imposing and collecting the taxes upon the dissentient inhabitants."

In New Brunswick the school district is the local unit of school administration, and the elementary schools are managed directly by trustees elected as in the other provinces.

Nova Scotia maintains a system of free nonsectarian public schools under the general charge of the executive council, which forms for this special interest a council of public instruction.

The province is divided into school commissioners' districts, in charge each of a board of commissioners appointed by the council, subject to the provisions of the town's incorporation act of 1895. Each school section has a board of three school trustees elected by the majority of the qualified voters of the section. The powers and duties imposed upon the trustees are discharged by the appointed commissioners in incorporated towns.

The Manitoba school law of 1890 provides for the formation, alteration, and union of school districts in rural municipalities, and in cities, towns, and villages, and for the election of trustees in each district.

In British Columbia the local unit of school administration is the district. School trustees elected by vote of persons who pay a property tax are empowered to provide sufficient accommodation for all children of the district between 6 and 16 years of age, inclusive.

The system of public schools in the Northwest Territories is under the control of a council of public instruction comprising 4 members of the executive committee and 4 appointed members, of whom 2 must be Protestants and 2 Roman Catholics. The appointed members have no vote, their duties being purely advisory. A school dis-
trict must not exceed in area 25 square miles and must contain not less than 4 resident taxpayers (property tax) and at least 12 children of school age. Each district elects school trustees, who manage the local school affairs.

## SOURCES OF INCOME.

Ontario.-Provincial grant and local taxes. The provincial grant for education comprises (1) grants to elementary schools, (2) grants to secondary schools, (3) grants for the training of teachers, (4) grants for technical education. By statute the amount appropriated for public and for separate Roman Catholic or Protestant schools is divided on the basis of average attendance in each, respectively.

In 1897 the legislative grant for elementary schools was $\$ 366,538$, and the income from local sources $\$ 4,621,617$.

Quebec.-Provincial grant, local taxes, and fees. In 1898 the expenditure by the government for elementary schools was $\$ 170,000$, and by the people $\$ 1,425,986$. Of the amount appropriated by the government $\$ 20,000$ was a special fund for poor districts.

New Brunswick.-Provincial grant, county fund, and district assessment. The income from these several sources in 1898 was, respectively, $\$ 163,022, \$ 90,807$, $\$ 230,000$.

Nova Scotia.-The fixed sum of $\$ 182,500$ for each school year is paid semianntally, or as the council of public instruction may prescribe, to legally qualified teachers employed in the common schools in accordance with law, to be divided between such teachers in conjoined proportion to the number of days the respective schools are taught and the scale of the respective grades. The school law provides further that "in every county (except that in which the city of Haliax is situate) the clerk of the municipality is required to add to the sum amnually yoted for general municipal purposes at the regular meeting of the council a sum sufficient, after deducting costs of collection and probable loss, to yield an amount equal to 30 cents for every inhabitant of the municipality, according to the last census preceding the issue of the rate-roll, and the sum so added shall form or be a portion of the municipal rates. The sum thus raised shall be paid annually by the treasurer upon the order of the superintendent of education. Any sum further needed is determined by the majority of those who pay a property tax (rate-payers) and is raised by a poll-tax, and further, if necessary, by a levy on the real and personal property and incomes of the residents of the section. Ordained ministers and unmarried women are exempt from sectional assessment on property to the amount of $\$ 500$.

Special appropriations are annually made from provincial and county funds toward the support of schools in poor sections. The amounts appropriated for this purpose in 1897 were, from the general government, $\$ 4,308$; from county funds, $\$ 3,762$.

Prince Edward Island.-Provincial grant and district assessment. In 1898 the former yielded 79.63, the latter 20.37 per cent of the school income.

Manitoba.- Provincial grant and district assessment.
British Columbia.-Provincial grant.
Northrest Territories.-Provincial grant and local taxes. The former is distributed among the schools on the basis of average attendance, at the rate of $\$ 1.50$ per capita; number of days in session, at the rate of $\$ 1.40$ a day for a term not to exceed two hundred and ten days; the graded certificate held by the teacher, 10 or 20 cents a day for an annual term of two hundred and ten days, and the grade assigned to the school on the report of the government inspector, at not less than 5 cents nor more than 15 cents a day for an annual session not exceeding two hundred and ten days.

Education is compulsory in all the provinces excepting Quebee, but complaint is urged that no provision is made for the enforcement of compulsion.

The following tables show the status of the elementary schools of the several provinces for the latest year reported, with the corresponding data for previous years. For purposes of comparison the populations are given at the last two censuses.

Populations.

| Province. | 1881. | 1891. | Increase, per cent. |
| :---: | :---: | :---: | :---: |
| Ontario. | 1,926, 922 | 2,114,321 | 9.72 |
| Quebce | 1, 359, 027 | 1, 488,535 | 9.52 |
| New Brunswick | 321, 233 | 321,263 | . 009 |
| Nova Scotia | 440, 572 | 450,396 | 2.22 |
| Prince Edward Island | 108, 891 | 109, 078 | - .17 |
| Manitoba. | 62, 260 | 152,506 | 144.94 |
| British Columbia | 49, 459 | 98, 173 | 98.49 |
| Northwest Tcrritories | 56, 446 | 98,967 | 75.33 |

Enrollment in elementary schools of the Canadian prorinces at specified dates. (a)

| Province. |  | $1881-82$. | $1887-88$. | 1891. | 1896. | $1897-98$. |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  | Increase <br> or <br> decrease, <br> $1887-88$, |  |  |  |
| $1897-98$. |  |  |  |  |  |  |

a Sources of information, Canadian Yearbook, 1898, and reports of chicf cducational officers.
$b$ By a clerical oversight the enrollment in Ioman Catholic separate schools, 41, 620, was omitted from table given in Commissioner's Report for 1897-98 (sce vol. 2, table, pp. 170; also 2616.)
$c$ Also 70,417 in model schools and academies which inciude elementary departments.
d Elementary schools only.
$e$ Also 99,938 in model sehools, etc.
From column 6 of the above table it will be seen that the increase in enrollment during the decade 1887-88 to 1897-98 was much greater in the more newly settled provinces than in the older provinces, and that in the former it increased enormously during the period. A better idea of the relative amount of school attendance is obtained from the consideration of the ratio of enrollment to population as shown below:

Ratio of enrollment to population at census years.

| Province. | 1881. | 1891. | Province. | 1881. | 1891. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ontario | $\begin{array}{r} \text { Per cent. } \\ 24.71 \end{array}$ | Per cent. 23.25 | Prince Edward Island | Per cent. | Per cent. $20.47$ |
| Quebec. |  | 12.36 | Manitoba............. |  | 15.65 |
| New Brunswick | 15.22 | 18.54 | British Columbia. | 5.2 | 9.17 |
| Nova Scotia | 17.58 | 19.04 | Northwest Territories |  | 5.77 |

Average altendance in elementary schools of the Canadian provinces at specified dates.

| Province. | 1881-82. | 1887-88. | 1891. | 1896. | 1897-98. | Inerease or deerease 1887-88 to 1897-98. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ontario. | 215, 264 | 245, 789 | 257, 612 | 246,724 | 273, 544 | 11.29 |
| Quebec $\ldots$....- New |  |  | 131,675 | 139, 876 | 143, 665 |  |
| Nova Seotia.. | 43, 847 | 47, 520 | 50, 820 | 54, 015 | 57, 771 | 21.57 |
| Prinee Edward Island |  | 12, 248 | 12,898 | 13, 412 | 13,377 | 9.21 |
| Manitoba |  | 9, 856 | 12, 433 | 23,247 |  |  |
| British Columbia | 1,420 | 3,092 | 4,980 | 9,254 | 11, 055 | 257.55 |
| Northwest Territories. |  |  |  |  | 8,827 |  |

By comparing column 6 of the above table with the corresponding column in the table of enrollment it will be seen that in the provinces for which the data for comparison are available, the increase in average attendance during the decade 1888-1898 was much greater than the increase in enrollment. This implies improvement in all the conditions that make for efficient schools. The ratios of average attendance to enrollment at the beginning and end of the decade were as follows:

Ratio of average attendance to enrollment.

| Provinee. | 1887-88. | 1897-98. | Provinee. | 1887-88. | 1897-98. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ontario. | $\begin{array}{r} \text { Per cent. } \\ 49.83 \end{array}$ | Per cent. 56.65 | Prince Edward Island | Per cent. 54. 44 | Per cent. 61.21 |
| Quebee |  | 70.33 | Manitoba | 54.75 | 53.96 |
| New Biunswie | 54.43 | 61.88 | British Columbia | 48.52 | 62.64 |
| Nova Scotia | 57.6 | 57.84 | Northwest Territories. |  | 52.68 |

Teachers.

| Provinee. | 1887-88. |  |  | 1897-98. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Men. | Women. | Total. | Men. | Women. | Total. |
| Ontario | 2, 824 | 4,972 | 7,796 | 2,784 | 6,344 | 9, 128 |
| Quebec. |  |  |  | 222 | 5,628 | 5, 850 |
| New Brunswick |  |  | 1, 609 | 400 | 1,464 | 1, 864 |
| Nova Seotia..... |  |  |  | 576 | 1,909 | 2,485 |
| Prince Edward Island |  |  | 509 | 320 | 261 | 581 |
| Manitoba | 267 | 408 | 675 |  |  | 1,197 |
| British Columbia |  |  | 124 |  |  | 414 |
| Northwest Territories |  |  | 150 | 483 |  | 483 |

Relative proportion of men and women teachers in 1897-98.

|  | Per cent of total. |  |
| :---: | :---: | :---: |
| Province. | Men. | Women.' |
| Ontario ..... | 30.5 |  |
| Quebee ......... | 3.8 21.45 | 96.2 78.54 |
| Nova Seotia.... | ${ }_{23.18}^{21.40}$ | 76.82 |
| Prinee Edward Island | 55.07 | 44.93 |

A orral cind model schools for training teuchers (1898).

| Province. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |

a This includes 176 in the Normal College.
$b$ Prince of Wales College and Normal School.
c 143 at long sessions, 101 at short sessions.
Schools for the deaf and dumb, and for the blind, are maintained under government aid in Ontario, New Brunswick, and Nova Scotia.

Expenditures for elementary schools of the Canadian provinces at specificd dates.

| Provinces. | 1887-88. | 1892-93. | 1896-97. | 1897-98. | Expenditure per capita of enrollment. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1887-88. | 1897-98. |
| Ontario | 3, 859,365 | 4, 051, 460 | 4,149, 207 | 4, 215, 670 | \$7. 82 | \$8.73 |
| Quebec | 1, 472, 439 |  | 1,566, 726 | 1, 595,986 | 8.11 | 7.81 |
| New Brunswick | 406,251 | 421,384 | -473, 994 | 483, 829 | 6. 81 | 7.63 |
| Nova Scotia. | 675, 995 | 669, 112 | 810,676 | 838, 810 | 8.19 | 8.28 |
| Prince Edward Island | 147,455 | 152, 698 | 161,444 | 163, 033 | 6. 56 | 7.46 |
| Manitoba.. | 420, 055 | 774, 865 | 810,912 | 805,417 | 23.33 | 20.21 |
| British Columbia | 99, 902 | 160, 627 | 220,810 | 247, 756 | 15.67 | 14.03 |
| Northwest Territorics |  |  |  | 274,648 |  | 16.38 |

In addition to the public schools included in the foregoing survey, the several provinces make large provision for secondary and higher education in seminaries, colleges, and universities, which are classed together as higher educational institutions in the following table:

The higher educational institutions of Canada.

| Name. | Date of foundation. | Endowment. | Value of property owned. | Incomc. | Number of students (about). |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Universities. |  |  |  |  |  |
| University of King's College, Windsor, Nova Scotia | 1790 | \$155,000 | \$250,000 | \$9,000 | 30 |
| University of New Brunswick, Fredericton, New Brunswick | 1800 | a8,844 |  | 12,000 | 80 |
| McGill University, Montrcal, Quebec ........... | 1821 | 2, 750,000 | 2, 800, 000 | 230,000 | 1,150 |
| Dalhousie College and University, Halifax, Nova Scotia | 1821 | 310,000 | 80,000 | 22,700 | 362 |
| University of Toronto, Toronto, Ontario | 1827 | 1,187,683 | 1,457,339 | 119,087 | 1,322 |
| University of Acadia College, Wolfville, Nova Scotia | 1838 | 155, 000 | 120,000 | 12,000 | 142 |
| Unirersity of Qucen's College, Kingston, Ontario. | 1841 | 400, 000 | 125,000 | 46,400 | 635 |
| University of Bishops' College, Lennoxville, Quebec | 1843 | 196, 275 | 166,280 | 21,150 | 165 |
| University of Ottawa, Ottawa, Ontario | 1848 | None. | 225, 000 | 30, 000 | 475 |
| University of Trinity College, Toronto. | 185\% | -750, 000 | 325, 000 | 35, 000 | 350 |
| Laval University, Quebce | 1852 | ivene. | 1,000,000 | None. | 300 |
| University of Nount Allison Corlege, New Brunswick | 1862 | 717,500 | 120,000 | 22,500 | 175 |
| University of Manitoba, Winnipeg | 1877 | 150,000 | 600, 000 | 5,500 | 135 |
| Victoria Uniycrsity, Toronto, Ontaiio.......... | 1836 | 280, 000 | 320, 000 | 26,000 | 234 |
| University of St. Francic-Xavier College, Antigonish, Nova Scotia. | 1851 | 50,000 | 100, 000 | 11,000 | 101 |

The higher educational institutions of Canada-Continued.


[^13]In addition to the colleges tabulated above, there are also 14 denominational private schools in. Nova Scotia not empowered to confer degrees, and 10 in New Brunswick.

## UNIVERSITY NOTES.

The University of Manitoba was founded in 1877 and received from the provincial government a prospective endowment of 150,000 acres, of which it came into actual possession during the current year (1899). The grant of a site for the erection of a building has further increased the favorable outlook of the university. The university was organized originally as an examining body, but teaching functions have since been included. As it is the only degree-conferring institution in the province, all colleges are brought into intimate relations with it. Of this feature a writer in the Winnipeg Free Press says:

It was a great experiment to gather the religious denominations into one common fold, and to lay down the principle that but one source of degrees in arts, medicine, law, and theology should exist in Manitoba. It was a "consummation devoutly to be wished," even if self-denial, difficulty, and at times disappointment were involved in its maintenance.

The most superficial observer may, however, see that the colleges have been the life of the university. Two of them, St. Boniface and St. John's, bring with them the best traditions of the old Red River days. Two of them, Manitoba and Wesley, are of post-confederation date. The college of Esculapius, bearing its symbol of vigor, has now reached a stable place in its history, and it is but just to mention the three excellent collegiate institutes of Winnipeg, Brandon, and Portage la Prairie. All of these institutions have cheerfully and earnestly given the time of their professors and teachers to do the work of the university.

The existence of our provincial university is a matter to us of congratulation, but perhaps we do not fully appreciate its importance as the crown of the educational pyramid of Manitoba. The university gives the tone and direction to the educational development of the country. Those provinces of the Dominion that have a strong and united university life are those that have the best systems of public-school instruction, both primary and secondary. The elevation of the standard for teachers is only possible when the facilities for higher education are good. It is a great maiter to have the assistance of men of university standing and broader training to guide the affairs of the lower schools. It has certainly been an advantage to the school system of Manitoba that 6 out of the 8 members of the advisory board that directs public-school education are active members of the university council. The large infusion of university trained teachers in our public schools has introduced a much higher standard of culture into our schoolrooms than would have been otherwise possible.

A considerable band of earnest studenta, the prospect of ample means of accommodation, such as buildings, laboratories, and apparatus, being given, the question of most pressing importance is, What are our facilities for teaching? The proposal at the present time is to have under the act of 1893 a joint professoriate, a part supplied by the colleges and a part by the university. The terms of the act are that there may be in the university professors of natural sciences, mathematics, and modern languages. A committee of the university is now charged to make with the provincial government arrangements for as much as may be possible in this direction. Natural science and very soon mathematics may be taken by the university. Probably in the meantime modern languages will be left to the colleges, along with classics and
mental and moral sciences. This plan of a joint university and college professoriate is that followed in Cambridge and Oxford in England and in Toronto University.

There seems some reason in this apart from its financial aspect. The colleges all have faculties of theology. To them the teaching of Latin, and especially Greek, is necessary for those who are to be devotees of the "Queen of all the Sciences." 'io theology also it is of first importance that its cultivators should be logicians and philosophers. Classics, then, and philosophy, as being cognate subjects with theology, may well be taught in the theological colleges. In the meantime modern languages would also thus be eared for.
But, whether in college or university, the band of teachers must be looked on as one-one in aim and so, also, in spirit. That higher education may be adranced, the arrangement must be heartily entered upon if the highest good is to be done.

Presuming that the line of action thus laid out is to be that which will be followed for a number of years to come, it is plain that the colleges have certain other most important functions in our system. They are given an individuality under our constitution of a most marked kind. To me it is a most important feature of these colleges that they all have residences for the students. The residential system is a part of the English university system. It has, to my mind, a great advantage over the Scottish and German system of students living in private lodgings all over the city. The residence system, which seems to have been a failure in Toronto University, is a very marked feature of our Winnipeg college life. It produces a strong esprit du corps in the college. College men form here lifelong friendships. They learn to bear with the failings of their fellow stadents, and they receive great impulse and assistance from their associates. Both in my student and professorial experience a large percentage of the best workers and most successful students have been students in residence. The hard worker always has his rights respected, and can have all the privacy he desires, for it is a point of honor even among the greatest trifiers to avoid disturbing the man who "fags."
The fact that the arts colleges are each under the direction of some religious body gives them a special opportunity to exercise a kind, wise, and watchful care over the young men who are committed to their charge. The atmosphere of a religious life may ever be found in a coilege; its morning and cvening prayers, religions opening, and other influences freely exercised supply a most valuable factor in the training and development of the stadents. This feature will be most helpiul in supplying a side of university education.

Coedracation at Dalhousie College.-Dalhousie College was founded in 1819, but did not begin active operations for nearly twenty years afterwards. From that time until 1881 only male students entered. Then two ambitious young women asked to be admitted. The authorities of the college were inclined to refuse their applications, but as there was nothing in the character of the college to exclude women, a more liberal policy prevalled and the two ginls were enrolled as students of Dalhousie. Only one of them finished her course.

In 1882 another woman student entered, and graduated in 1886 with the degree of B. S., with honors in mathematics and mathematical physics. In 1887 three women were graduated. Last year five took the B. A. degree, and the catalogue shows about the same number this year. Besides the regular undergraduate students a large number of young women attend certain courses which are open to them.

## CURRENT DISCUSSIONS.

In all the Canadian Provinces there is unusual activity at this time in respect to public education, and in the two leading Provinces there is widespread criticism of the existing systems.

In Ontario complaint is made of a tendency to excessive centralization, and the demand is heard for greater freedom in respect to the internal conduct of schools, especially those of secondary grade.

The situation as regards the secondary schools was very fully discussed in the annual meeting of the Ontario Educational Association. The following points were especially urged: That the curriculum should be specialized to meet the demands of the three distinct classes of students in the high schools, viz, those who are studying for the university and professions; those who are preparing to be teachers, and those who are merely seeking general training; that the pressure of examinations should be lightened; that greater freedom should be left to the teachers. The sense of the meeting was recorded in the following resolution, which was carried by a vote practically unanimous:

Resolution.- "That this meeting is of the opinion that the undue influence of uniformity, aggravated by too frequent changes, is the cause of grave evils in the matter of secondary education."

The system of departmental examinations has been gradually extended until, it is urged, they have an effect upon the whole work of education entirely out of proportion to their real value. This complaint has led already to a revision of the university matriculation examination with a view to lessening its strain upon secondary pupils.

The school boards of Toronto, Guelph, and Hamilton have resolved to do away with examinations for promotion in the grade schools, and to promote pupils on the recommendations of their teachers, based upon the work of the year.

Among other questions widely discussed is that of increasing the proportion of men teachers in the schools. They form now but 32 per cent of the total number, and the ratio is continually decreasing.

In view of these discussions and demands it is interesting to review the main features of the Ontario system, which will remain essentially unimpaired whatever modifications of detail may be adopted. Such a review is afforded by the preface to the sixth volume of the Documentary History of Education in Upper Canada, by Mr. J. George Hodgins, deputy minister of education, which is appended to this report. (See pp. 1361-65.)

The system of education in Quebec is characterized by provision for the separate control of Catholic and Protestant schools and by a high degree of local independence. A bill was submitted to the legislative assembly of 1897 providing for a secular system under the control of a minister of education. The measure was carried in the
assembly, but rejected by the legislative council. Subsequent efforts to revive this measure have failed, and a bill has been substituted which proposes no radical departure from the existing system.

MOVEMENT TO PROMOTE TECHNICAL AND INDUSTRIAT EDUCATION.
The discussion of the systems of education in the Canadian Prorinces is accompanied with a widespread agitation of the subject of industrial and technical education. The movement for provision in this respect began in Ontario in 1870 with the establishment of a technical college, since dereloped into the School of Practical Science. During the last fifteen years the Government has fostered training in industrial art by means of certificates, medals, grants in aid of art schools, and art exhibitions. Commercial courses have been introduced into the high schools, and more recently efforts have been made to provide for instruction in domestic science and in agriculture in the public schools. Provision for manual training is adrocated by the department, and the city of Kingston has already introduced the branch.
It is generally recognized that the time has come for systematizing and extending this work, and as a preliminary measure the deputy minister of education, Mr. John Millar, B. A., has made an investigation of the systems of technical and industrial training in this country, chiefly in Massachusetts, and submitted a very full report on the subject. The recommendations of Mr. Millar with respect to technical education at the high-school stage are cited at the end of this article. They are based largely upon his observations in the United States.
The subject of technical education is vigorously agitated in Quebee also. Here the schools of the Christian Brothers afford admizable examples of the methods of combining industrial with general education.
An impetus has been given to the whole movement by the ofier of Sir William C. McDonald, whose liberal benefactions to McGill University, amounting to $\$ 2,500,000$, have already proved his interest in the cause of public education. He now proposes to equip a manual-training school in a suitable center in each Province, and to provide for the maintenance of these schools for a period of three years.
The following statements from the report of Hon. G. W. Ross, for 1898, give particulars of the existing provision for technical training:

TECHNICAL EDUCATION, PUBLIC AND FREE LIBRARIES, ART SCEOOLS, AND LITERARY AND SCIENTIFIC INSTITUTIONS.

The annual report of the superintendent of this branch of the educational department is very encouraging. It shows that the legislation during the past four years for the improvement of free and public libraries has been appreciated by the people throughout the whole province.

The act of 1895 changed the name of mechanics' institutes to public libraries, and provided for establishing free libraries either by direct incorporation or by transferring mechanics' institutes, libraries, and reading rooms to the municipal councils of cities, towns, and villages. The annual legislative grant for the purchase of books was then divided as follows, viz, $\$ 200$ for cities, $\$ 150$ for towns, and $\$ 100$ for villages.
In 1896 an amendment to the act was passed increasing the legislative grant for the purchase of books to $\$ 200$ per annum for every public library established under the act; also empowering municipal and school corporations to contribute to the maintenance of public libraries.

In 1898 an amendment to the act was passed for establishing free libraries in police villages.
The results are very gratifying, showing that the liberal grants, $\$ 46,000$ per annum, voted by the legislature for public libraries, have been well expended, imparting valuable information and opening up new avenues of thought to our young people and their parents in the remotest parts of our province. (See Abstract No. 1, giving number of libraries in each county and district.)

The free-library system has been very successful. In 1895 we had only 12 free libraries. There are now 103 free libraries reporting, and several others have been established since 1st of January, 1899.
In 1883 we had 93 libraries, with 13,672 members, who borrowed 251,890 books; while in 1898, 347 libraries reported having 111,208 readers, who borrowed $2,358,140$ volumes. In addition, for 1898 we may add 27 libraries which did not send in their returns in time for this report, and 10 new libraries incorporated since the 1 st of May, 1898, making a total of 384 libraries for 1898.

During the same period ( 1883 to 1898) 16,297,033 volumes have been issued, and $\$ 1,003,115$ expended for public and free libraries, and the assets have increased from $\$ 255,190$ to $\$ 870,167$.

During the past fifteen years considerable attention has been paid to art education. We have endeavored to develop a taste for industrial drawing as the basis of industrial education, now universally acknowledged an important factor in the national wealth and prosperity of every country in which it has been adopted.

During the past fifteen years the education department has awarded to the pupils and students of art schools, ladies' colleges, etc., 51,712 proficiency certificates, and 2,562 full certificates in the primary course, which includes free-hand, model, and blackboard drawing, and primary geometry and perspective; 3,746 proficiency certificates, and 196 full certificates in the advanced course, which includes shading from the flat and round, outline from the round, drawing from flowers, and industrial design; 1,107 proficiency certificates and 39 full certificates in the mechanical course, including advanced geometry and perspective, machine drawing, building construction, and architectural design; 286 certificates in the industrial art course, which includes modeling in clay, wood carving, lithography, and painting on china; 1,245 certificates for extra subjects, including oil and water-color painting, etc. (not time studies); 212 extra certificates for industrial designs, etc. (not time studies) ; 14 gold medals, 64 silver medals, and 106 bronze medals.

Provincial art schools are established at Brockville, Hamilton, Kingston, London, Ottawa, St. Thomas, and Toronto. The annual grant voted by the legislature for these schools, including expenses for examination, etc., is $\$ 4,400$.

Art schools exhibition.-At the request of her excellency the Countess of Aberdeen and the representatives of the National Council of Women of Canada, who met in Ottawa in the month of May, 1898, I gave directions that the Annual Provincial Industrial Art Exhibition should be held in Ottawa during the time of the women's convention, and appointed Dr. S. P. May, superintendent of art schools, to superin-
tend the exhibition, which consisted of the ordinary sessional work sent to the department for examination, viz, paintings in oil and water colors; drawings from life; outline and shading from the antique; original industrial designs; architectural designs and building construction; machine drawing; wood carving; modeling in clay; sculpture in marble; lithography; pen and ink sketches and photogravures; china painting, etc.
Two large lecture rooms in the Ottawa Normal School were temporarily converted into art galleries, the light being properly adjusted in the daytime and the rooms lit up by electric lamps in the evenings. The walls and blackboards were covered with the proper color groundwork for the display of the paintings, drawings, etc., and the rooms were appropriately decorated.
The exhibition was formally opened by his excellency the Governor-General on the 18th of May, 1898.
The exhibition was a great success and a pleasant surprise to the representatives from the United States and this Dominion who attended the convention, as well as the people of Ottawa, including students and pupils from difierent educational institutions, who all expressed themselves as having no idea of the variety and excellence of art-school work done in our province.
The Countess of Aberdeen was so much impressed with the importance of the exhibit from an industrial standpoint in the employment of women that she decided to give a gold medal, which was subsequently awarded to Loretto Abbey, Toronto, for its magnificent display of painting on china.
In connection with the exhibition, Dr. May gave an address on the history of art education in this province.
3. Ontario Socicty of Artists.-This scciety receives an annual grant of $\$ 500$ from the legislature on condition that it holds an annual exhibition of the work of its members, and from pictures exhibited shall select two pictures to the value of $\$ 200$ for permanent exhibition in the museum of the education department.
The society has also to send me an annual report on the progress and advancement of art education in this province.
During the past year the society held its annual exhibition, superintended the art department of the Toronto Industrial Exhibition, and was represented at the Loan Exhibition, Winnipeg, the Y. M. C. A. Loan, and Women's Art Club, Toronto, and the Art Association of Montreal. In addition, several of its members sent pictures to the Royal Academy, London; the Paris Salon, and the National Academy of Design, New York.
4. Provincial art gallery. - In order to encourage native art I entered into an agreement with the Ontario Society of Artists to provide an annual collection of pictures in one of the galleries in the educational museum, from which collection paintings to the amount of $\$ 300$ (in addition to $\$ 200$, for two pictures to be selected by the Ontario Society of Artists from their annual exhibits) are to be purchased every year. The artists in their annual report say: "There can be no doubt that the influence of this patronage by the Ontario govermment is already being felt, and will stimulate our work very beneficially."
5. Literary and scientific institutions.-The following institutions receive financial aid from the Ontario government, viz:
Hamilton Literary and Scientiac Association; Kingston School of Mining and Agriculture; Ontario Historical Society; Ottawa Literary and Historical Society; Ottawa l'Institut Canadien; Ottawa Field Naturalist Club; Ottawa St. Patrick's Literary and Scientific Association; Toronto Canadian Institute; Toronto Astronomical Society.

Lectures are given by these societies on various subjects, including agriculture, architecture, astronomy, botany, biology, chemistry, electricity, natural history,
physics, etc.; also in general and Canadian history and literature. Museums are established in some of them; in others, free evening classes on science, etc., are given.
The grants, $\$ 3,950$, from the legislature to these institutions are well expended, as they teach branches of knowledge which assist in developing the natural talent of our people, and enable them more successfully to compete against the skilled artisans of other countries.

The total number of institutions aided by grants from the legislature in this branch of the education department is as follows:
Public and free libraries........................................................................... 384
Art schools, etc................................................................................................ 9
Literary and scientific institutions................................................................ 9
Total...................................................................................... 402
In addition, about filty ladies' colleges, etc., are affliated with the department for examination in the fine arts.
5. Educational museum.-This museum, established by the late Rev. Dr. Ryerson, chief superintendent of education, was opened to the public in 1856. At that time only one room on the first floor was set apart for museum purposes. Gradually the whole of the rooms on this floor were filled, and the walls of the corridors, etc., had to be used for exhibiting busts, etc. For the past few years increased accommodation was required, and it is gratifying to state that, after frequent applications by this department to the legislature, in 1896 a special grant was voted for the erection of a new story on the top of the old education department buildings. This has been completed, and we now have five extra rooms; also two properly lighted picture galleries. The increased space has enabled me to add four extra departments to the museum.
(1) Archreology.-As the museum already contained an excellent collection of sculptured slabs, monuments, etc., illustrative of prehistoric and classical archæology, it was considered that a collection representing more particularly the primitive archroology of North America would be of great interest to the general public, and raluable to students in assisting them to trace the progressive stages of man from his savage state to that of civilization. Reports of this branch of the museum have been printed as appendixes to my annual report on education.
(2) Zoology.-As natural history museums are regarded as important agents in national education, it was considered advisable that our museum should commence collecting specimens of natural history, and, as it was impossible for us to provide for a full representation of the fauna of North America, we have been content with collecting specimens of Canadian mammals and birds, and in the near future we hope to have our fresh-water fishes and reptiles well represented.
(3) Botany.-As botany is now one of the studies in our schools, and is not altogether a "book study," but a subject which can not be thoroughly taught without a study of plants, it was decided to establish an herbarium of Canadian plants to assist pupils in different parts of the Province in ascertaining the proper methods of mounting specimens, classifications, etc.
(4) Provincial art gallery.-In order to encourage native art talent, an agreement was entered into some two years ago between the education department and the Ontario Society of Artists, by which one of the large art galleries in the museum shall be annually filled with the most recent pictures of the members of the society. The scheme has been successful, and the artists acknowledge that it has assisted in developing more interest in their work and an increased sale for their pictures.

As sculpture is a kindred subject to painting, and has been considered in all ages as one of the most important branches of art for perpetuating the memories of great and good men, I have encouraged this branch of art by employing Canadian sculptore to model busts of distinguished Canadians, and although the annual amount at
my disposal for this purpose is very small, I have succeeded in making a fair representative collection of prominent Canadians. (See contents of museum, Department 4, Modern Sculpture.)

> AGRICULTURE.

The department has made several attempts to promote the study of agriculture in the public schools of the Province. Under the regulations in force for the last ten years instruction has been given in agriculture in all the model schools in the country as well as in the normal schools, and every teacher authorized to teach a public school during this period has had some training in the best methods of teaching the subject.

In 1891 public-school trustees were, by regulation, authorized to introduce the subject of agriculture into the fourth and fifth forms of the school, and where such regulation was adopted the inspector was required to report annually to the trustees as to the course taken by the pupils and their knowledge of the subject. Although this regulation has been in force for seven years, so far as I know no board of school trustees has passed the necessary resolution, and, as a consequence, the subject receives very scant attention.
One reason alleged for the neglect of the study of agriculture was that the textbook authorized by the department was too technical, and was uninteresting to the pupils. In order to overcome this diffculty, arrangements were made by the department with C. C. James, B. A., deputy minister of agriculture and formerly a nember of the staff of the agricultural college, to prepare a text-book, so simple in its language and so elementary in its treatment of the subject as to be within the range of pupils from 12 to 15 years of age. Early in the year Mr. James submitted the manuscript of such a text-book, and aiter fully considering its merits. it was duly authorized by the department.

COMMERCIAL EDUCATION.
The business activity of the age is calling for improved courses of commercial education in most countries, and the demands for what is termed a practical education are repeated from time to time. It is universally admitted that practical skill in every department of life requires intelligence and general mental activity. Educationists now fully recognize that intellectual skill and power are promoted by training in habits of observation and reflection. No better means of promoting this training can be secured than by providing the best instruction in reading, writing, arithmetic, literature, and the other ordinary subjects of an elementary school course. Indeed, it should not be forgotien that failures in life are due more largely to defects in character than to want of knowledge. Apart from this principle, it must be admitted that the subjects taught in our public schools are of the most practical character possible, and that no farmer, artisan, or merchant could possibly dispense with a knowledge of the subjects of the prescribed course. If industrial training is to be promoted, it can only be made successiul by giving suitable instruction in the ordinary subjects of the school programme. Accordingly, the fifth form of the public school provides a course in bookkeeping which will enable students to gain a knowledge of single and double entry; commercial forms, such as draits, notes, and checks; general business transactions. This course is specially suitable for farmers and artisans, or for retail merchants and general traders. This course provides amply for a pupil of 14 or 15 years of age all the bookkeeping that he is capable of comprehending at that age.

Under amendments made in 1891 to the high-schools act, regulations were prescribed for commercial specialists, thus giving in our high schools and collegiate institutes a further impetus to the acquisition of a business education. The course of study prescribed for commercial specialists is a very extensive one, and it may be doubted if in any part of the world the school law calls for teachers of such high attaimments in commercial subjects.

The course for commercial diploma consists of bookkeeping, business forms and usages, and stenography.
[Citation from report on technical education by Mr. John Millar, B. A,, deputy minister of education, Ontario.]

SUGGESTIONS AS TO HIGH SCHOOLS.
Should technical education be carried on in our high schools and collegiate institutes, or should separate institutions be established for the purpose? My impressions have been favorable to the former. I know no reason why there should be any duplication of classes. So far as I have conversed with Ontario high-school masters, they are decidedly in sympathy with technical education, and much may be accomplished if they are relieved in the way I have indicated from the pressure of university matriculation examinations. ${ }^{1}$ I must acknowledge, however, that the exparience of the United States, and the opinions of those on the other side best informed, to whom I have spoken on the matter, are against my view. I was told repeatedly that where technical education is simply attached to the existing course of study there is a danger that it will be slighted and made a mere makeshift to satisfy popular demands. The best manual-training high schools or technical schools are undoubtedly distinct institutions, though under the same school board. The principal in each case is a good administrator, a university scholar, and teacher of years of experience. Those in charge of the technical departments are fully trained for their work, but they are experienced teachers as well. Judging by what I observed in the technical schools on the other side, the employment of persons acquainted with mechanical operations, but not teachers, would make a weak staff.

Under the circumstances, if the municipalities are ready to incur the cost, I think in a large city like Toronto, and perhaps in cities like Kingston, Hamilton, London, and Ottawa, a separate building would be preferable, with equipments resembling those of the institutions mentioned in Boston, Cambridge, or Brooklyn, N. Y. It is notnecessary to refer to the Drexel Institute, Philadelphia, or Pratt Institute, Brooklyn, as they are privately endowed institutions, and their purposes are of a different character. Unless much money can be counted upon, it would be folly to attempt anything so pretentious as either of these institutions would suggest. If a technical school is established in one of our cities, all pupils should be required to pass the highschool entrance examination before admission. No fees should be charged resident pupils, and if the Province is to give assistance, it should be with the understanding that high fees should not shut out nonresident pupils.

Iir other places a separate institution for technical education could

[^14]searcely be maintained. Indeed, a good technical school should give students ready access to the industries of a large manufacturing city. A room in each of our large high schools and collegiate institutes might, however, be provided for manual training in woodwork, but I am not sanguine of immediate results. I see no reason why one of the regular teachers, who has a good knowledge of drawing and who is not arerse to using the tools of a mechanic, could not, in a few weeks, acquaint himself with all that is necessary to begin work of this kind. A large amount of machinery is of course necessary for a technical high school, but for mannal training in mere woodwork the cost for appliances would be very trifling.
Education Departnent, Toronto, August, 1899.
FOUNDATION AND ORIGINAF PROVISIONS OF THE ONTARIO SYSTEM OF EDUCATION.

The following statement is taken from the prefatory remarks to the sixth volume of the Documentary History of Education in Upper Canada, by Dr. J. George Hodgins, M. A., LL.D., barrister at law, librarian and historiographer to the education department of Ontario.
Dr. Hodgins has brought to this work the double qualification of administrator and author. His official connection with the educational system of Ontario dates from its inception. The intimate friend and colaborer of Dr. Ryerson, he became his chief of stafi in 1844 and for thirty-three years labored with him to develop the system for which Ontario is justly distinguished.

Dr. Hodgins's executive ability was fully appreciated by Dr. Ryerson, who said of him: "He is the ablest and most thorough administrator of a public department of any man whom I have met."

In 1846 Dr. Hodgins was made secretary of the board of education for Upper Canada, which body was afterwards designated the council of public instruction, and in 1855 was appointed deputy minister of education. He has written extensively on educational topics, is the author of several valuable text-books and now crowns his labors with a history of the system with which he has so long been identified. The Documentary History has involved immense research and discriminating judgment. Six volumes are already published, and the whole when finished will form, with the volume on history and legislation of separate schools in Upper Canada, a work of great value to all interested in the social and political development of Canada and to all students of educational history.

CITATIONS FROM THE PREFATORY REMARKS.
This sixth volume of the Documentary History of Education in Upper Canada is largely devoted to a record of proceedings, which detail what steps were taken in 1846 in laying "educational foundations."

As this volume deals chiefly with the subject of "first things," in connection with our system of public education, and of "laying foundations," as connected with that system and university education, I think it desirable to specify, in a somewhat general form, what is implied by these expressions in this connection.

The "first things" which this volume records as having been accomplished in 1846 are:

1. The publication of an extended report on a projected system of popular education for Upper Canada.

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2. The preparation and passing of a common-school bill, founded upon that report, and the first school bill prepared under the auspices of Dr. Ryerson.
3. The appointment of a board of education for Upper Canada.
4. The selection of a series of school text-books, which remained in use in the common schools for trienty-two years, and until 1868.
5. The organization of the education department under the school act of 1846.
6. The establishment of a provincial normal school (formally opened in 1847).
7. The substitution of district school superintendents for local township superintendents.
8. General forms and regulations for the government of common schools, including provision for giving religious instruction in these schools, under the school act of $18 \frac{1}{2} 6$.

The only real and effective efforts put forth in 1846 were those of the newly appointed chief superintendent of education, in regard to the common schools of the Province. The strenuous efforts made during that year to settle the university question were practically abortive. They proved, nevertheless, in the end, to be highly useful in clearing the way to a final settlement, at least for the time, a few years later, of that vexed question; but just then they were only tentative in their effects.

On his return from an examination, during 1844-45, of the systems of education and various kinds of schools in Europe and in the Eastern part of the United States, Dr. Ryerson prepared an elaborate "Report on a system of public elementary instruction for Upper Canada," in 1846. This report was based upon his own personal observations and the experience of others, who preceded him in making similar investigations and whom he quotes as authorities in his report.

In the preparation of that report Dr. Ryerson had the great advantage-of which he availed himself freely-of consulting the report of a prolonged inquiry (like the one which he had just made) into the state of popular education in Europe, and the modes of teaching adopted in European schools, by that noted American educationist, the Hon. Horace Mann. Mr. Mann, at the time of his visit to Europe, in 1843, was secretary to the State board of education of Massachusetts. His reasons for making that tour of observation were in effect those which had influenced Dr. Ryerson to visit Europe, with a similar object in view. They were also of a thoroughly practical kind, and they are stated very graphically by Mr. Mann, in the preliminary part of his report, as follows:
"I have attended a great number of educational meetings, and, as far as possible, have read whatever has been written, whether at home or abroad, by persons qualified to instruct mankind on this momentous subject; still, I have been oppressed with a painful consciousness of my inability to expound the merits of this great theme in all their magnitude and variety, and have turned my eyes, again and again, to some new quarter of the horizon, in the hope that they mould be greeted by a brighter beam of light.
"Under these circumstances it was natural that the celebrity of institutions in foreign countries should attract my attention, and that I should feel an intense desire of knowing whether, in any respect, those institutions were superior to our own, and, if anything were found in them worthy of adoption, of transferring it for our improvement. Accordingly, $* * *$ having obtained permission from the State board of education, * * * I embarked for Europe on the 1st of May" (1843) * * *
"Among the nations of Europe Prussia has long enjoyed the most distinguished reputation for the excellence of its schools. In reviews, in speeches, in tracts, and even in graver works devoted to the cause of education, its schools have been exhibited as models for the imitation of the rest of Christendom. * * *
"I have seen countries in whose schools all forms of corporal punishment were
used without stint or measure; and I have visited one nation [Holland] in whose excellent and well-ordered schools scarcely a blow has been struck for more than a quarter of a century. * * *
"On reflection it seems to me that it would be most strange if from all this variety of system and of no system-of sound instruction, and of babbling, of the discipline of violence and of moral means-many beneficial hints for our warning or our imitation could not be derived; and as the subject comes clearly within the purview of my duty, 'to collect and difiuse information respecting schools,' I renture to submit to the Massachusetts board the results of my observations."

In the light of to-day, and noting the great advance which has been made-especially in England-in the matter of public education during more than fifty years, this graphic bird's-eye picture of the state and character of popular education and of schools in Europe is deeply interesting. It is the more so, and also the more valuable, from the fact that the picture is drawn by a master hand-one whose name is still a household word in educational circles in the United States, and especially in New England.
The late distinguished Dr. Fraser, Lord Bishop of Manchester, in his official report of 1865, when as commissioner from England he made inquiry into the state of education in the United States and Canada, speaking both of Horace Mann and of Egerton Ryerson, said:
"What national education in Great Britain owes to Sir James Kay Shuttleworth, what education in New England owes to Horace Mann, that debt Canada owes to Egerton Ryerson." ${ }^{1}$
It was but natural that with so able and experienced an educationist, who had but lately-just the year before-gone over the same field, Dr. Ryerson should "compare notes with Mr. Mann" and fortify his opinions and conclusions by quoting, as he has largely done in his report, those of Mr. Mann on the schools of England and of the continent of Europe. Mr. Mann's report, it should be remarked, was reprinted in England at the time and deservedly attained the rank of an educational authoxity.

This report of Dr. Ryerson was published as a parliamentary paper in 1846, and, in 1847, 3,000 additional copies of it were printed in pamphlet form, and for some years largely formed the basis of subsequent school legislation in Upper Canada.
Soon after the publication of his report Dr. Ryerson drafted his first commonschool bill, which during the parlianentary session of 1846 became the commonschool act of 1846, known as the Ninth Victoria, Chapter XX.
As this comprehensive report on a projected system of public elementary education for Upper Canada is somewhat elaborate, I shall here merely refer to some of the main features of it. In preparing the report Dr. Ryerson wisely laid down certain fundamental principles which he believed to be essential to the success and stability of that system. These general principles may be thus summarized:

1. That the machinery of education should be in the hands of the people themselves, and should be managed through their own agency; they should therefore, he held, be consulted, by means of public meetings and conferences, in regard to all school legislation. This he himself did every few years.
2. That the aid of the government should only be given where it could be used most effectually to stimulate and assist local effort in this great work.
3. That the property of the country is responsible for and should contribute

[^15]toward the education of the entire youth of the country; and that as a complement to this "compulsory education" should necessarily be enforced.
4. That a thorough and systematic inspection of the schools by competent persons is essential to their vitality and efficiency.

It was not to be expected that so comprehensive a scheme of education as that proposed by Dr. Ryerson in 1846 would at once meet with general acceptance. Its outlines were considered to be too broad for a young country like Canada, and therefore objections were urged against it as impracticable. Even his reference to the compact and systematized plan adopted in Prussia was held to be an indication of his intention to introduce the " oppressive" system of so-called "Prussian despotism." This subject at the time was keenly discussed, but I have only devoted a short space on pages 214 and 215, in referring to the discussion itself, as an incident or episode comnected with the introduction of a new school system into Upper Canada.

The school law of 1846, founded upon this report, provided, among other things, for-

1. A general board of education for the province to take charge of a normal school and to aid the chief superintendent in certain matters.
2. A normal school, with practice or model schools attached.
3. The regulations for common-school libraries.
4. Plans of school-houses, rural and urban.
5. Appointment of district instead of township school superintendents.
6. Apportionment of school moneys to each municipality according to the ratio of population, and to each school district according to the ratio of children in such school district, as compared with those in the whole township, (and not, as afterwards by the act of 1850 , according to the average attendance of children at each school.)
7. Levy of a school rate by each district municipal council of a sum at least equal to the legislative grant to each such district.
8. The collection, by the local school trustees, of the balance required to defray the expenses of their school, by rate bill upon parents and guardians. (It was only under the school act of 1850 that trustees could raise this money in the way which the school ratepayers at the annual school meeting might determine.)
9. The recommendation of a uniform series of text-books, with a proviso that no aid would be given to any school in which books disapproved of by the provincial board of education might be used.
10. The establishment of district model schools, aided by parliamentary grants (reenacted from the school law of 1843).
11. Examination and licensing of common-school teachers by the district and not by the township school superintendent, as heretofore.
12. Visitation of schools by clergymen, magistrates, municipal councilors, etc., as "school visitors."
13. Protection of children (reenacted from the school law of 1843) from being "required to read or study in or from any religious book, or join in any religious exercise or devotion, objected to by parents."
14. Establishment (reenacted from the school laws of 1841 and 1843) of Roman Catholic separate schools where the teacher of the locality was a Protestant, and vice versa. (These schools only received grants in accordance with their average attendance of pupils. In 1850 this restriction applied to common and separate schools alike.)
15. Levy of rates by district municipal councils, at their discretion, and by them alone, for the erection of schoolhouses and teachers' residences.

Such were the principal provisions of the first school act, proposed and adapted chiefly from other school laws by Dr. Ryerson in 1846, so far as rural schools were
concerned. In the following year he prepared a comprehensive measure in regard to schools in cities, towns, and incorporated villages.

The establishment of the first provincial normal school of Upper Canada, with its model schools or schools of practice, was a notable event, as recorded in this volume. So essential has this class of schools become that there are now three of them, besides a normal college, in this province.

The county model schools, authorized by the act of 1843, and specially aided by the government, were continued under the act of 1846 . While they have been very greatly improved of late years, yet in these early years they did good service in giving candidates for school-teaching the first general idea of what was necessary to know and to practice in order to become successful teachers in the schools.

The selection of an excellent and well-prepared series of school text-books-the Irish National-was probably the most important practical event of the school year, as these schoolbooks continued to be uninterruptedly in use in the common schools of Upper Canada for twenty-one years, and were only superseded by a new and revised Canadian edition of them in 1868.

The task of introducing these text-books into the common schools in 1846 was indeed a difficult and delicate one. It was done without exciting the latent strong opposition which was known to exist in many places on the part of those who regarded Morse's Geography, Kirkham's Grammar, Daboll's Arithmetic, Cobb's Spelling Book, and a great variety of other such schoolbooks, then in use, as unexceptionally good. The chapter on the "Text-book question in 1845," page 273 of this volume, deals fully with the difficulties then encountered on this subject. Some of these difficulties arose from the efiorts made by the local writers of special and single schoolbooks, forming no part of a connected series, to retain their publications in continued use in the schools.

No compulsion was employed to unduly expedite a change in text-books; nor was any Canadian schoolbook forbidden to be used in the schools. In the case of United States schoolbooks, a reasonable time was allowed before they were disapproved of by the provincial board of education. As a matter of fact, the Irish National schoolbooks, by their intrinsic excellence, gradually superseded all other text-books in the schools.

Among the means employed to give effect to the new common-school act for 1846 was the sending of a circular, in regard to the schools, to the district municipal counculs, embodying in it a strong appeal for cooperation and for active and practical support. Another circular, largely explanatory and suggestive, was sent to the newly appointed district superintendents of schools, giving them all necessary information in regard to their duties, and directions as to the efficient inspection of schools, and also as to how to deal with teachers who apply for certificates of qualification, and on other matters.

## CHAPTER XXX.

# WILIIAM PRESTON JOHNSTON'S WORK FOR A NEW SOUTH. ${ }^{1}$ 

By Rev. A. D. Mayo, A. M., LL. D.

No school year begins as the year before it evolved to its triumphant ending. One change in the superintendency of the public-school system of an American city may become the most potent factor in the educational development of that community for a generation to come. The death of President William Preston Johnston; of Tulane University, New Orleans, La., at the home of his daughter in Lexington, Ky., on July 17, was an event of so much public importance, apart from a wide personal acquaintance, that for the coming few months the attention of the betterinformed educational public of the whole country will be directed to that city. It is not too much to say that any arrest of the educational policy represented by President Johnston would just now be a greater calamity to that city and State, and, indirectly but surely, to the whole Southwest, than any political action of the entire group of States included in this section.

William Preston Johnston was born in Kentucky, the son of Gen. Albert Sidney Johnston, in 1831. After a miscellaneous preparatory schooling at home, he graduated at Yale, studied law at Louisville, and, in 1882, at the age of 31, became aid-de-camp of President Davis till the close of the civil war. After several months of confinement as a political prisoner, he was called, in 1867, by General, then President, R. E. Lee, to the chair of English literature in Washington and Lee University in Virginia. During this period he wrote the life of his father. In 1880 he was called to the presidency of the Louisiana State University at Baton Rouge, where he remained until his final position was found as president of Tulane University in New Orleans in 1884.

Here, first, during the memorable fifteen years of the development of this remarkable seat of learning, the young colonel, professor, and temporary president of a demoralized State university attained a national reputation, beyond question, with the exception of his friend, Dr. J. L. M. Curry, the most notable of the new educational leaders of the South. What men like the late Bishop Haygood and Dr. Curry have done as missionaries at large in the great development of the American system of universal education during the past thirty years, President Johnston, in a work almost exclusively local, but of enduring value and increasing reputation, has achieved by the planting and nurture, in the very heart of the old South, under the most embarrassing circumstances, of the group of schools now included under the general title, Tulane University. With no disposition to depreciate the excellent .work now being done in several of the more progressive colleges and universities in these sixteen States, we have no hesitation in declaring that in what it now is, what it represents, and what it can be made in the near future, this institution stands for an educational policy that signifies more to the future of those States than everything that has been written and said concerning Southern affairs since its establishment in 1884.

The two men who seem to have been born and educated as the permanent representatives of the new education of the Southern people, including both races and all classes, were S. C. Armstrong and William Preston Johnston. Both were of New England descent and graduates of New England colleges. Both were specially trained in their youth, in the most characteristic circles, for the great work of their future. Both were engaged in the civil war, in positions especially valuable for wide obserration and in intimate relations with the group of remarkable men that surrounded Lincoln and Davis. Neither of them would probably be regarded by the experts a great schoolmaster; yet both were, in the best sense of the word, educational statesmen, fit associates of Mann, Barnard, Winthrop, Haygood, Curry, and the only man yet developed from the colored race worthy of such designation, Mr. Booker Washington. They both were given time to plant the new departure so firmly in Southern soil that Johnston could say on his deathbed, like Armstrong, that he was no longer a necessity in the institution which owed its existence and character essentially to his great personality.

Armstrong, at Hampton, Va., solved the question of the true education of the negro-the question on which the whole future of the South depends-so completely that the Southern educational public and every Southern State have organized the elementary, secondary, industrial, and higher education for their $8,000,000$ colored people on the Hampton plan; and, within the coming twenty years, if not earlier, the entire missionary and educational work in our new colonial possessions will be pitched on the Hampton keynote.

In a way less exposed to national observation-indeed, perhaps even now not appreciated in many of the "educational centers" of the North-President Johnston, in the very heart of the most intensely southern portion of the South, like Dr. Curry personally and by training a Southerner of the Southerners, in fifteen years has built up an institution that in the honesty and thorough excellence of all its instruction is not the inferior of any school of the higher education in the country. And, beyond this, in its ideal of organization, methods of college discipline, adaptation to the most embarrassing variety of population in a city and State whose previous experiments in education had been little more than a series of brilliant failures, Tulane University to-day represents more completely the imperative Southern necessity of the broadest education and the most comprehensive method of dealing with this necessity of any school south of Mason and Dixon's line. Indeed, to find its companion work in the North would be difficult. Perhaps the new University of Chicago is the only eminent representative of the same policy of adaptation in the Northern States.

When President Johnston came to Louisiana, in 1880, as president of the State University, he found the educational system in the midst of what might be called a struggle for existence. The university at Baton Rouge was without funds, in a hired house, with 39 students. The fifteen years of fearful political agitation since the days of ' 65 had made the proper development of the new public-school system almost an impossibility. In New Orleans the common school was practically in a state of siege, with the teachers unpaid and the educational public greatly discouraged. The one thoroughly live spot in city and State seemed to be the University of Louisiana, an excellent collegiate school in New Orleans, doing more work on its moderate income of $\$ 10,000$ a year than any similar institution in the State. The gift of Paul Tulane of a great block of real estate for the founding of a college for white youth could easily have been disposed of after the method by which every previous donation in Louisiana had been robbed of its vitality, or the college established by it could have easily added another to the long roll of institutions for all races and both sexes which during the past century have played fast and loose with the highest educational titles, with varied results.

The coming of President Johnston at the age of 53, in the full development of his
magnetic and conservative manhood, with his training for the past twenty-five years, was the most pronounced new departure in the higher education in the Southwest. Under the leadership of Dr. Sears and the Peabody education board of trustees, backed by the progressive section of the Southern educational public, the commonschool system for the whole people had been inaugurated in every State and was literally waiting, with great expectation, for the action of Congress on the Blair bill for national aid to education. But it can truly be said that in 1880 the American system at best had only effected a lodgment in the Southwest. In this entire group of five States there were not a dozen good free high schools for white pupils, probably not twenty graded school systems; and the State universities, either ruined by the war or not yet established, had before them a battle for life with the old established system of ecclesiastical denominational education, still in possession of the ground. In Louisiana the problem was complicated by the obstinate social and religious distinctions which, from the beginning had successively met and almost overthrownevery attempt to plant the American system even for the white race. Happily for the new experiment, the new-come president found himself supported by the most intelligent, resolute, and tacfful board of trustees in the South, with Hon. Randall Gib son as its chairman, all personal friends, and with such wise confidence in their leader that he was virtually given a free hand.
The record of the great work of President Johnston and his excellent faculties of Tulane, in both its departments for men and women, requires more than the allotted columns of a metropolitan daily. But in brief, the different steps may be noted-

1. The new president faced the situation with a courage that in a weaker man would have been professional destruction. He simply told the people that a State, full of so-called "colleges," had not in it the material for a proper university, and that the only hope of one was the vital connection of Tulane with erery live element of popular education in the Commonwealth. In the face of the most relentless ecclesiasticism he planted Tulane on the broad American platform of the State university in its character-training of youth of all sorts and conditions of theological beliefs. In a State which had just emancipated a majority of its people from chattel slavery, he announced that every boy entering Tulane must take off his coat and fight it out on the manual-training line of mechanics, and sent to Boston for a group of experts in this direction. By a wise stroke he utilized the admirable school known as the University of Louisiana, with its corps of accomplished teachers, as the preparatory training school for his collegiate and university departments.
2. It was soon found that Tulane was to be no hospital for educational invalids, worn-out veterans, and impecunious social celebrities. The new president had already, in the academical, medical, and legal schools, probably the ablest corps of instructors gathered around any Southern institution of learning; the majority young men of promise, one of whom has already graduated to the presidency of a great State university, representing every section of the country with up-to-date educational ideals. A most important department, really the outcome of the industrial training, was the organization within and without the university of a proper school of ornamental design; on the one hand attracting the most accomplished women, and on the other extending a friendly right hand to the mechanical and operative class of the city, recognizing the fact that the final office of New Orleans is to become a great center of ornamental manufacturing industry for the Southwest. In every position in this extended scheme was found an expert, insisting on a thorough dealing with the work in hand.
3. The president displayed the qualities of the true educational statesman in avoiding all controversy and provoking no unfriendly criticism from the regulation college or university anywhere. In the line of the famous maxim of Napoleon, "In any new departure, let the leaders alone and go direct to the people," for the first time in Southern educational history a university president faced right about and,
with neither apology nor explanation, harnessed Tulane to every vital agency of universal education in Louisiana and the Southwest. He was the soul of the Louisiana Education Society, that, in the ten years of its activity, gathered the friends of the common school in the city of New Orleans into a powerful organization, which, in the ten years of its activity, repulsed the assault of its enemies, woke up its friends in city and State, and laid the broad foundation of what is now one of the most hopeful of the public-school organizations of the Southwest. Along with this he placed the entire university at the disposal of the common-school teachers and educational public, through a system of free public lectures by his faculty and eminent gentlemen from the whole country, during one whole season supporting a campaign of education that reached almost every considerable village in the State. He was always ready to answer the call to speak anywhere, through several months in company with the author of this paper, meeting the workingmen of both races in their labor unions in New Orleans. Indeed, in this way the city teachers of New Orleans for several years received from Tulane University a course of instruction equivalent to a normal school of the broadest and highest grade. He began at once the development of the free public library which has grown into the present free library of the city. By a system of free scholarships from all the parishes or counties of the State, and others offered for competition in the leading schools, he built up a constituency which can not be diverted while Tulane retains its present ascendence. By a fortunate early investment in school buildings in the city, with an addition to the original endowment, the university has now been enabled to house itself in an admirable situation adjoining Audubon Park, while the medical department has been favored in a similar way in town. The time will come, with the inevitable coming prosperity of the city, when additional endowments will furnish the necessary funds for the complete development that always haunted the mind and burdened the heart of its great president.
4. But perhaps the most characteristic feature in this almost romantic story of Tulane is its remarkable success in handling the delicate subject of the higher education of woman. Although no part of the country can show a more enthusiastic group of young women, often longing in vain for the means of obtaining but no less praying for the best in the higher education, up to ten years ago the South had been slow to answer the call. There has, indeed, been a gratifying advancement in the character of the so-called female colleges of the section, many of which are becoming valuable secondary schools for women with an upper grade college attachment. A few of the State universities have opened their doors to girls; and six of these States have established the free normal and industrial college for white girls, while every Southern State has now a State normal school. But the most complete institution of the higher education for women is doubtless the Sophia Newcomb College-the proper woman's department of Tulane University. Under the masterly administration of President B. V. B. Dixon . . . . . . . the Sophia Newcomb College has grown in ten short years into a genuine companionship with Tulane. By its conditions of admission it has sensibly lifted up the entire system of female seminaries in the city and State. Its new buildings, with their furnishings, are the most attractive spectacle in the new side of New Orleans. Aiming at thoroughness in all its work, it has in its president one of the most competent representatives of the higher educational philosophy; and it already has become a power in the cultivation of the literary and artistic life of New Orleans and the Southwest. Its graduates are admitted on equal terms to all the privileges of the university.

This great work, which still remains far short of its own complete development at home, but in the future is to make a radical change in the entire organization of the secondary and higher education through the South, is a good illustration of the imperative need of first-class leadership. No State, perhaps, in this section had a larger number of broad-minded and well-disposed people for such work than Loui-
siana fifteen years ago. Tulane University is the result of the best thought of this group of people, under the fit leadership of President Johnston. Indeed, in his state of failing health, which for ten years made him almost an invalid, it would have been impossible even for him to have done his work without the hearty cooperation of trustees, faculty, and a resolute educational public. Randall Gibson used to say that he "never knew a man of finer fiber than President Johnston." It was only by the power of a marvelous personality, in which an indomitable will was harnessed to a childlike Christian faith, a rare social charm, and a magnetic quality of Ieadership, that this man could face the inevitable coming of the end; through years of suffering and weariness, denying himself the luxury of dying that he might leave his great task so far accomplished that it cain hardly fail of becoming his noblest monument in the future.

## CHAPTER XXXI.

## REPORT ON EDUCATION IN ALASKA.

Departinent of the Interior, Bureau of Education, Alaska Division, W'ashinglon, D. C., June 30, 1899.

Sir: I have the honor to submit my fourteenth annual report as United States general agent of education in Alaska for the fiscal year ending June 30, 1899.

Twenty Government schools, with an enrodment of 1,369 , were in operadion during the year. The following reports give an idea of the character and scope of these schools:

Sitka, No. 1.-Miss Cassia Patton, teacher; enrollment, 31; population, white, American and Russian. Miss Patton reports as follows:
"My work during the past year has been very pleasant. The yard has been inclosed by a new picket fence which adds much to its appearance. We have one of the most desirable sites in town, facing a sandy beach with an unobstructed view of Sitka's island-dotted bay. The schoolroom is well lighted, but owing to the cloudiness of the short days, I found it necessary to use lamp light more than usual.
"I have added to my circulating library 100 of the 5 -cent classics, and the children have enjoyed them. I have found McMurry's Methods in Reading a help in making the list of books which I hope to add during another year. A good library is one of the greatest needs of our village. In our 'story period,' fifteen minutes each afternoon, story reading has been the greatest success. After hearing stories read to them several of the children would borrow the copy of the book and read it again to themselves many times.
"Believing that proper food would do much toward making many homes happier we have had a few cooking lessons. I placed on the blackboard carefully worded recipes which the girls copied in their notebooks and tried at home. They seemed very much interested, and I hope this attempt may result in much good."

Sitka, No. 2.-Miss Anna Kelsey, teacher; enrollment, 175; population, Thlinget. The following is Miss Kelsey's report:
"The year now closed has been pleasant, but greatly broken in upon by the old customs of the natives and trouble between the different factions, which at one time threatened to be very serious. Finally they were induced to let the United States judge adjust their differences. He deferred his decision until the hard feeling had in a measure subsided. I find the native children bright, but restless. During the winter there were quite a number of visiting children belonging to the Taku and Killisnoo tribes, who were here for weeks feasting, dancing, potlaching, etc. Thousands of dollars were spent in this way by our natives. Many made themselves poor. Later in the season they were obliged to go out and hunt or work for themselves.
"I used all sorts of devices to attract the children to school, with some success until their troubles broke out; then our numbers became small. Only one pupil attended throughout the year. I presented him with a suit of clothes at the end of the term. His mother is a widow with three small children, of whom he is the oldest. Both mother and boy were very happy indeed."

Sitka Industrial School.-Room No. 1, Mrs. E. C. Heizer, teacher; enrollment, 91; population, Thlinget. Mrs. Heizer writes:
"The interest throughout the year has been very good. Some of my pupils are as enthusiastic students as I ever had in any school. One young man has repeatedly expressed his regrets that he had not entered several years ago. His zeal is an inspiration, so eager is he to advance.
"The examinations conducted by our superintendent on the completion of a study have been an incentive to thoroughness.
"They have given several very creditable entertainments during the year, in which the pupils showed their individuality.
"Several of the girls want to be seamstresses. 'They have a knowledge of fractions which will aid them in cutting out work. A few of my pupils show by their interest and earnestness that in course of time they may become teachers themselves. One young woman has received special attention, and has been placed in training in the primary department in order to acquire experience in teaching. She spends two and a half days of each week in this way.
"Our school compares favorably with the leading Indian schools of our country. The greatest hindrance is that the native parents are not willing to place their children in school for a sufficient length of time to acquire a thorough preparation. This hinders them from becoming first-class carpenters or independent workers in any of the industries. Until the native parents realize the great advaintage of a thorough education, I suppose we can only do our best and not grow weary in well-doing."

Juneau, No. 1.-C. C. Solter, teacher; enrollment, 7t; population, white. The following is Mr. Solter's report:
"As in every new country, many of the residents are not permanent settlers. As soon as business grows dull in one place they leave for a more promising field or return to the States, taking their children with them. This is a serious cause of discouragement for the teacher. Even when a class has been well organized and interest kindled a number of pupils will drop out, to be replaced by others, who are new to the work. I see no remedy for this evil in the near future and believe it will simply have to be tolerated for many years to come. The weather in this part of Alaska is frequently very dismal, the days are so short and it rains so hard and continuously that it is an impossibility for the children to get enough fresh air. The larger boys have changed our small anteroom into a gymnasium, where they have excollent opportunity to give vent to their animal spirits. The small boys and girls have the schoolroom for their play room during recesses. A large shed in the school yard, in which the children could play in bad weather, would be an excellent thing for them and would greatly lighten the burden of the teacher.
"The progress of the pupils has not been as marked as I would have desired for reasons already mentioned. All those who were regular made very good progress."

Juneau, No. 2.-Miss Elizabeth Saxman, teacher; enrollment, 71; population, Thlinget. Miss Saxman writes:
"I have nothing new to report of this term's work except my effort to have a sewing class in connection with my regular work. I found to my delight that the girls took a great interest in it. I supplied all the materials that were used, such as gingham, calico, thread, buttons, etc.
"It is almost impossible to keep the native children in school during an entire terin. Their minds seem to crave a change of work, surroundings, etc., and off they go unless anchored by the Mission Home. Education and Christianity must go hand in hand in accomplishing any good for the natives. The minister must preach education just as much as Christianity as the first steps to salvation."

Douglas, No. 1.-Miss Kate Spiers, teacher; enrollment, 70; population, white. Miss Spiers reports as follows:
"The transient population incident to a mining town accounts in part for the
great difference between emrollment and average attendance. Pupils whose parents reside here during the entire year have been exceedingly regular in attendance-one pupil, Clair Jones, not having been absent a day in two years.
"We have had a rery pleasant and successful year"s work. The school is well graded; a regular course of study followed and promotions made at Christmas and at the end of June. The progress in reading, language, and map drawing has been marked. The interest of the pupils in music also deserves mention. A choral class consisting of fifty voices selected from two Government schools and the parochial school has been organized. This class sang at various entertainments during the year and received especial compliment for its singing at the public exercises on July Fourth.

Douglas, No. 2.-Miss Gertrude H. Spiers, teacher; enrollment, 28; population, white. The following is Miss Spiers' report:
"Regarding the year's work which has just closed, there is very little to be said except that we have had a quiet, satisfactory, and pleasant year. The patrons have continued to be very kind and helpful and have cooperated in all the work. The death of our kind friend and committeeman, Mr. Robert Duncan, was a great loss. The attendance during the year has been exceedingly regular except in a few cases. The enrollment during the winter months was small, as many families spent the winter in the States. In the spring it was increased to our usual number. The school has been quite thoroughly graded, and a system of monthly examinations and reports was adopted and used during the spring months. The work in German, bookkeeping and drawing has been continued on the same lines as during last year. Some of the pupils now sketch from objects quite rapidiy and accurately. A circulating library has been maintained for the two schools during the year. Fiity new volumes have been added, making a total of 114 books. The school now possesses an organ, the gift of our former committeeman, Dr. Campbell."

Fort Trangell.-Miss Nellie Green, teacher; enrollment, 80; population, white and Thlinget. Miss Green writes:
"There were enrolled in my school during the year pupils whose ages ranged from 4 to 15 years, almost equally divided among whites, Russian creoles, and natives. As a rule, I find the white children hardest to control. They were kind, however, to the native children, and were a help to them in using the English language. The Russian creoles in disposition are much like the natives, quiet and happy. In their studies they are as bright as the white children, but often lack the energy and independence that characterize the whites. Some of them dislike the natives, I believe because they know that one or both of their parents have Indian blood in their veins; many of the children are very attractive; the little native children amused me often by their quaint ways. The parents of nearly all of them have been influenced by civilization-many are quite advanced in their studies. Irregularity of attendance is my greatest difficulty.

Jackson.-Mrs. C. Taylor, teacher; enrollment, 67; population, Thlinget. Mrs. Taylor reports:
"School began September 1, with a very fair attendance. I taught the first month at Klinquan, as at that time there were a great many native children there and none here. Through the kindness of Mr. Miller I kept school in a room over his store. Dry goods boxes furnished seats and desks. The weather was bad and the temporary school room leaky. The attendance, while not large, was regular, the interest good, and the progress satisfactory. In October I came orer to Jackson and opened the regular school. My school was largest in January. Many visiting natives were here at that time who brought their children with them; after January the attendance gradually decreased until the close of the term. In the spring of the year the natives began their trapping and took their children with them to their hunting grounds. After the trapping came halibut fishing, gathering of seaweed,
etc. This migrating they kept up until July. The children adrance very slowly on account of this irregular mode of living. When the children are in school regularly they learn rapidly, take interest in their work, and are interesting children to teach. The general health of the children has been very good. Our school room is warm and well lighted. The schoolhouse has had a new coat of paint, which adds much to its appearance. We received from the Bureau of Education a valuable addition to our library, consisting of a large quantity of magazines and a bound volume of Harper's Weekly. We are all delighted with them, and I am sure they will prove of great value and interest both to teacher and pupils."

Hoonah.-Mrs. J. W. McFarland, teacher; enrollment, 126; population, Thlinget. Mrs. McFarland writes:
"In looking over the record of the past year I find much to encourage me. When the natives begin their feasting and dancing during the holidays, you may consider yourself a successful teacher if you can keep up enough interest to attract any of them into the school. I had received a Christmas box which contained a great many marbles and other playthings that I used in attracting the boys to school. However, this proved to be more of a hindrance than a help, as it became impossible to get the boys interested in anything else. We had no regularly appointed police in the village this year; consequently it was harder to secure regular attendance. I have found gymnastics of great help by way of recreation and physical culture. The progress of those who attend regularly was very satisfactory. We were sorry to lose four of our number by drowning."

Saxman.-James W. Young, teacher; enrollment, 62; population, Thlinget. Mr. Young reports:
"We have had a year of quietness and progress. More buildings have been erected in the village than during any previous year. You are aware that this place was started for the purpose of gathering the Cape Fox and Tongass natives into one community, as the superintendent of schools thought there were not enough of one tribe to justify the opening of a school for each of them. This plan has been a success so far as the Cape Fox Indians are concerned. There are old feuds and jealousies that have kept them apart; these, however, seem to be quieted down. A few of the Tongass tribe have joined us, and more promise to come next autumn. Some of the Hydah tribe have also come and cast in their lot with us in order that their children may have school privileges.
"The recent discoveries of gold-bearing quartz in this region have made a great demand for laborers, and this, with the high prices paid for furs, has made good times for the natives-they all seem to have their pockets full of money. We have had very little trouble with liquor during the past year. The Rev. Edward Marsden unites with me in excluding it from the community. The natives have improved very much in morality, temperance, and intelligence since the school was started."

Kodiak.-Miss Anna Fulcomer, teacher; enrollment, 44; population, Russian crooles. Miss Fulcomer writes:
"In regard to my year of teaching in Kodiak, I can say that as a rule the children are just as bright as a similar set of children in the States-just as bright and just as naughty. My second reader class was the most interesting that I have ever taught. It was a large class of boys and girls who, with two or three exceptions, displayed considerable rivalry. I have never seen so much enthusiasin in children of that age. It was most amusing to me to watch the expressions on their faces when the new spelling books came. I gave them permission to take them home with them. The next morning the books were brought back neatly covered with brown paper in order to keep them clean. Much more interest and ambition is shown by the younger pupils than by the older ones; they want books and papers to read outside of school, and it was hard for me to keep them supplied. In number work they are somewhat backward. All had drills in English language lessons, a chart serving as a reader
and as a basis for exercises in the use of English. The attendance decreased rapidly during April and May owing to the work they had to do in their homes; hauling summer's supply of wood, fishing, preparing for and attending the Rassian Easter services."

Wood Isiand.-Robert G. Slifer, teacher; enrollment, 56; population, Russian creoles and natives. Mr. Slifer reports:
"The school at Wood Istand for the year 1898-99 was held in a room belonging to the Kodiak Baptist Orphanage. The desks are made out of rough lumber, and many of them have no place in which books can be kept. That the school is appreciated is shown by the fact that pupils have come from distant villages in the Kodiak district in order that they may have school privileges. During the greater part of the term a few of the older native children who worked during the day were taught in a night school. The majority of my pupils do very good work; many of them excel in reading, writing, and drawing. They memorize very well, but few of them have the faculty of thinking for themselves, so that it is difficult to teach them arithmetic. The attendance was quite regular. The Russian Church holidays did not interfere with the sessions of the school to any extent.
"During the summer of 1898 the natives of Wood Island did not get a single seaotter during their annual hunt, so they have been unusually poor. Some of the older boys had to stay out of school to hunt and fish. Though discouraging in some respects, the work has become attractive to me."

Unga.-O. R. McKinney, teacher; enrolment, 36; population, white. Mr. McKinney reports:
"School commenced on September 6 with 33 pupils in attendance, but was interrupted during the latter part of the month by an epidemic of dysentery which lasted four weeks. I opened school again on October 24 and continued until February, when all the children in the village took the whooping cough, and for nearly eight weeks there were no children in Unga able to attend school. I started in again on March 27 and continued until May 20, when the mail steamer returned from the west. After considering the condition of the children and my own family's poor health, I made up my mind to close the school on the 21st instead of the 30th, and I accordingly took passage on the steamer for the States."
Eaton Reindeer Station.-Francis H. Gambell, teacher; enrollment, 11; population, Lapp. Dr. Gambell writes:
"As to the school work, I have the honor of making the following report: School opened on the 18th of October and closed on the 16th of June, being in session all the time, with the exception of the holidays and a spring vacation of a few weeks' duration. The enrollment consisted of 11 children, ranging from 5 to 16 years of age, and all griltless of having spoken English. Their faces were bright and expectant as they gathered on either side of a rough table made for the purpose, and seated themselves on benches similar, probably, to the school benches of early times in other new settlements. Their first lesson was an object lesson, and so was their third and fourth, and so have all their lessons been during the whole year.
"They are apt and quick to learn, and while they are anxious to advance in all their branches, they seem to give particular attention to their writing, in which they are very neat and careful.
"Their attendance has been very good. Sickness alone has prevented them from coining, and in two or three instances I have sent them home after coming, as they were not in a fit condition to be in school. They have an average attendance of $97 \frac{1}{2}$ per cent for the whole year, taking the figures from the register. Their punctuality has been as good as their attendance. Often during the short winter days I have had to light the lamp at the beginning of school, as they would come long before the stars had gone out of sight.

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"They have but few games and play very little, but they are always kind and affectionate and never seem to quarrel as they mingle together.
"During the evenings in the fall and winter I have instructed those of the older ones who wished to come. While some attended, I think more will attend when they realize more fully their need of learning to speak the English language well.
"As there have been no native. living near the station, I have had no Eskimo children, although some have expressed their desire to have their children attend, and probably will move nearer next winter, that their children may come."

Historical table-Statistics of public schools in Alaska, 1892 to 1899.


Note.-In addition to supporting the above public schools, the Burcau of Education pays the salaries of five industrial teachers in the Sitka Industrial School, which has an enrollment of 150.

Public schools in Alastia, enrollment and atiendance of pupils duriney 189s-99.



Cost per capita of enrohment, $\$ 21.89$.

## APPROPRIATIONS FOR EDCCATION iN ALASKA.

For the past six years the annual appropriation for the education of children in Alaska has been $\$ 30,000$, increased yearly since 1895 by the sum of $\$ 5,000$ from the Indian appropriation bill. By strict economy it has been possible with these amounts to support the present sehool system. Within the past three years thousands of white men have settled in Alaska, many of them taking their families with them. The population of the older settlements has largely increased and several new towns have sprung up which are clamoring for school facilities. If Congress regards it as the duty of the Secretary of the Interior to continue to provide schools for the white population of Alaska, I can not state too emphatically that it is absolutely necessary that the appropriation for education in Alaska be largely increased. In order to provide school facilities which shall approximate the present needs of the increasing population of Alaska an annual appropriation of at least $\$ 80,000$ is an imperative necessity. This is the amount which has been urgently recommended by the governor of Alaska.

Dr. Sheldon Jackson, general agent of education for Alaska; William Hamilton, assistant agent of education for Alaska; William A. Kelly, superintendent of schools for the southeastern district of Alaska.

Teachers in publia sekools.

| School. | Teacher. | State. |
| :---: | :---: | :---: |
| Sitka, No. 1. | Miss Cassie Pation ... | Pemsylvania. |
| Sitika, No. | Miss Annie R. Kelsey... | DO. |
| Juneau, No.i | Charles C. Solter...... | Kansas. |
| Juneau, No. 2 | Miss Elizabeth Sax | Pennsylvania. |
| Douglas, No. 1 | Miss Kate Spiers | Kansas. |
| Douglas, No. 2 | Miss Gertrude H. Spier | Do. |
| Skagway .. | Miss Anina Clayson | Alaska. |
| Fort Wrangell | Miss Nellie Green. | Kansas. |
| Jaekson | Mrs. C. iaylor ... | Alaska, |
| Mietlakahila | David Leask .... | Alaska. |
| Do... | Miss Selina Leask. | Do. |
| Saxman | James W. Young. | Washington. |
| Kodiak. | Miss Anna Fuleome | Illinois. |
| A fognak | Miss M. Salamatof | Alaska. |
| Wood Islan | Robert G. Slifer. | Pennsylvania. |
| Unga. | O. R. McKinney | Do. |
| Unalaska | Miss Mary Mack | Alaska. |
| Do....... | A. W. Newhall, M. D | New York. |
| St. Lawrence I | William F . Doty | District of Columbia. |
| Point Barrow. ${ }^{\text {a }}$ - | I. Richmend Marsh, M. I | Illinois. |
| Sitka Industrial sc | George J. Beck. | New York. |
| Do. | M. A. Carty | Alaska. |
| D | Miss Olga Hilton | Do. |
|  | Mrs. M. A. Saxman | Do. |
|  | Mrs. E. C. Heizer. | Do. |

Note-In the above list the following denominations are represented: Presbyterian, Methodist, Baptist, Congregational, Moravian, Russo-Greck, United Brethren, Independent (English).

## I.OCAL SCHOOL COMMITTEES.

In order to place the several schools established for white children on the basis of local self-government as far as possible, local school committees were organized as long ago as 1891 in Sitka, Juneau, Douglas, Fort Wrangell, Kodiak, Unga, and Unalaska. Of these committees, some of the members have continued since their first appointment in 1891, but a larger number have resigned or moved to other places and new members have been appointed in their stean. The following list shows the present membership and the dates of appointment:

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. Belırends and J. B. Deuny, 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 Wiliiam Mackie, appointed July 25, 1899.

Fort Wrangell, Thomas Willson, appointed March 29, 1892; Rer. II. P. Corser, E. P. Lynch, T. G. Wilson, appointed Cebruary 20, 1900; William Lewis, appointed May 14, 1900.

Skagway, I. N. Wiicoxen, 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.

Sazman, James W. Young, W. L. Bumard, Rer: Edward Marsden, appointed April 9, 1900.

Gravina, Mark Hamilton, Roderick Mirchison, Benjamin Dundas, Alfred B. Atkinson, appointed April 9, 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; Fort 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. Resoff, 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 hachers at mission stations in Alaska.
PRESBTTERAN.
Fort Wrangell, Rev. Harry P. Corser, missionary.
Haines, Rev. W. W. Warne, missionary.
Hoonah, Rev. W. M. Carle, missionary; Mr. Willis Hammond (native), interpreter.
Jackson, Rer. D. Rankin Montgomery, missionary; Miss Minnie J. Taylor (native), interpreter.

Juneau, Rev. W. S. Bannerman (white church), missionary; Rev. L. F. Jones (native church), missionary; Mr. Fred L. Moore (native), interpreter.

Point Barrow, Rev. R. H. Marsh, M. D., missionary.
St. Lawrence Island, W. F. Doty, missionary.
Saxman, Rev. Edward Marsden (native), missionary.
Skagway, Rev. Norman B. Harrison, missionary.
Sitka, Rer. MI. D. McClelland, missionary; Mrs. Matilda K. Paul (native), interpreter.

Sitka Training and Industrial School, Mr. William A. Kelly, superintendent; Mr. Dean W. Richards, assistant superintendent; Miss Susan Davis, boys' matron; Miss Sadie Martindale, girls' matron; Miss Frances Willard (native), assistant matron; Miss Anna May Sheets, assistant matron; Miss Lacile Owen, sewing teacher; Mr. John E. Gamble, industrial teacher; Mr. Howard George (native), shoemaker.

Ilospital, Dr. B. K. Wilbur, physician and surgeon; Miss Esther Gibson, trained nurse.

Sitka, Bishop Peter Trimble Rowe, D. D., A. W. Kierulfi.
Juneau, Rev. H. J. Gurr.
Skagway, Rev. L. H. Wooden; Miss Anna Dickey, matron of hospital.
Ketchikan, Miss Agnes Edmond.
Circle City, Dr. James L. Watt, Mrs. James L. Watt, Miss E. M. Deane.
Fort Yukon, Rev. J. Mawksley.
Rampart City, Rev. J. L. Prevost, Mr. E. J. Knapp.
Fort Adams, Mr. A. A. Selden, Miss Selden.
Anvik, Rev. J. W. Chapman, Mris. Chapman, Miss B. W. Sabine, Miss L. Proebstel.
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, Nuhklakuhyct.

MORAVIAN.
Bethel, Rev. J. H. Romig, M. D., Mrs. J. H. Romig, Rey. 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.
Nome, Mrs. Anna H. Foster.
Douglas, Charles Replogle, Mrs. Charles Replogle, Miss Jennie Lawrence
Kake, Silas R. Moon, Mrs. S. R. Moon.

BAPTLSTS.
Wroud Island, Rev. Curtis P. Coe, Mrs. C. P. Coe, Miss Hattie Denniston, Mrs. M. G. Camplell.

METHODIST EPISCOPAL.
Unalaska, A. W. Newhall, M. D., Mrs. A. W. Newhall, Miss Ella A. Darling.
CONGREGATIONAL.
Cape Prince of Wales, Mr. W. T. Lopp, Mrs. W. T. Lopp. Native assistants, Sokweena and Elobwok.

Nome, Rev. Loyal L. Wirt, Rev. Raymond Robbins.

SWEDISII EVANGELICAL MISSION COYENANT.
Yakutat, Rev. Albin Johmson, Mrs. Agnes Johnson.
Unalaklik, Rev. Julius Qvist, Rev. A. E. Karlson, Mrs. A. E. Karlson, Mrs. Selma Peterson, Stephen Ivanoff (a native worker), Mrs. Ivanoff, Mrs. Ojeark Rock.

Golovin Bay, Rev. J. Hendrickson, N. O. Hultberg, Mrs. N. O. Hultherg, Miss Amanda Johnson, Rev. P. H. Anderson, Mrs. P. H. Anderson.

ROMAN CATHOLIC.
Juneau, Rev. 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); Rev. John Lucas, S. J.; Rev. A. Robaut, S. J.; Rev. F. Monroe, S. J.; Rev. J. B. Post, S. J.; Brothers V. 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.; Rev. J. Perron, S. J.; Brothers C. Giordano, S. J., and J. Negro, S. J.

Dawson 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, Mery of the Passion, Mary Magdalen.

ORTHODOX RUSSO-GREEK MISSIONARIES AND CTURUIES IN ALASKA.
Sitka, Rev. Anthony Dashkevich.
Juneau, Rev. Alexander Yaroshevich.
Killisnoo, Rev. John Soboleff.

Nuchek, Rev. Constantine Pauloff. Chapels: Tatitlak, Kanihlak, Chanig.
Kenai, Rev. John Bortnovsky. Chapels: Alexandrovsk, Seldevoe, Nenilchik, Kusitan, Tayounak, Shushitno, Knik, Wood Island.

Kodiak, Rev. Tikhon Shalamoff. Chapels: Spruce Island, Uzenkoe, Shiok, Anhtalik, Trehsviatitelskoe, Arlovo.

Afognak, Rev. Nicholas Kashevaroff. Chapels: Karluk, Katmai, Kagnak, Duglass.
Belkovshy, Rev. Euthemius Alevine. Chapels: Unga, Korovinskoe, Peregrebenskoe, Protasevskoe, Chigit, Mitrofanievskoe, Sannahk.

Unalaska, Rev. Alexander Kedrovsky. Chapels: Atha, Attu, Borca, Makushi, Kashig, Chernorskoe, Akutan, Ummak.
St. George (ishand), Rev. Peter Kashevaroff.
St. Paul (island), Rev. Nicholas Riseff.
St. Michael and Ikogmiut, Rev. James Korchinsky. Chapel: Koshlik.
Kuskokvim (Pavlovskoe), Rev. John Orloff.
Nushagak, Rev. B. Kashevaroff. Chapels: Ekuk, Kaluak, Paugvik, Igiashk, Ugashek, Ikagmiut, Inagnasha, Lliamna, Kichek, Aliagnak, Knagnak, Kagvak, Kahonak, Agimek, Tugiak.

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SCHOOLS AND TEACHERS.
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Sitka, Rev. Anthony Dashkevich, Sergius Popoff, 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. Portnoveky and Alex Ivanoff; Alexandrovskoe, Munin; Seldovoe, A. Demidoff, Minichek, and Kvasuikoff; Taiunak, (vacant); Kodiak, Rev. T. Shalamoff 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; Unnak, Krukoff; Kashiga, Kudrin; Akutan, Petuchoff; Attu, Prokopieff; Atkha, (vacant); St. Paul, Rev. N. Riseff; St. George, Rev. P. Kashevaroff; Nushagak, Rev. B. Kashevaroff; Yukon, Rev. J. Korchinsky; Kuskokvim, Rev. J. Orloif.

## Presbyterian Missions in Alaska.

The Rev. George F. McAfee, superintendent of school work, Presbyterian Board of Missions, has kindly sent the following account of the board's work in Alaska:
"The Presbyterian Church has had missionaries in Alaska continuously since 1877. Mrs. A. R. MeFarland has the honorable distinction of being both the first Presbyterian missionary, as well as the first white woman teacher in Alaska, being stationed by Dr. Sheldon Jackson at Fort Wrangel in the fall of 1877.
"Fort Wrangel.-Rev. Harry P. Corser is now in charge. The native church is in good condition, the people having greatly improved in manner of life during the past few years. A white church has also been organized, and Mr. Corser gives part of his time to it.
"Ifaines Mission.-This mission is among the Chilkats near the head of Lynn Canal. Rev. W. W. Warne is the missionary in charge. The pupils in the industrial part of the school have been transferred to Sitka, where they can be more thoroughly trained.
"Hoonah.-The work among the Hoonahs was undertaken in 1881 by Rev. and Mrs. J. W. McFarland. Since Mr. McFarland's death Mrs. McFarland has remained on the field and is now in charge of the Government day school. Rev. Wm. M. Carle and wife now occupy the mission house and carry on the work. It is most interesting and successful at the present time. The people are making rapid advancement in the Christian life and are showing their faith by their works.
"Jackson.-This mission to the Hydahs has had no missionary of the board for two years. Rev. D. Rankin Montgomery, a recent graduate from the Western Theological Seminary at Allegheny, Pa., with his bride, has gone to the field. The mission property has been well cared for by friends, and the Government day school teacher, who occupies one of the buildings, is especially deserving of praise for her interest in the matter. The boarding department of the school was closed two years ago and the pupils sent to Sitka.
"Juneau.-The native work at Juneau was begun in 1881 by Rev. Eugene S. Willard and wife. The mission is now in charge of Rev. L. F. Jones and wife. It is in a very satisfactory condition. There have been over 100 converts during the year. The industrial work which was carried on for several years, having served its purpose, was ciosed in 1888 and the pupils transierred to Sitka.
"Douglas Island. - Many natives are employed in the mines and about the famous Treadwell mills. Rev. Mr. Jones, of the Juneau Mission, has opened a work among them, placing in charge Mr. Frederick L. Moore, an educated native, who has been his efficient interpreter and helper for a number of years. The mission gives promise of success.
"Juneau (white church).-This is the noted Log-Cabin Church, always pointed out as one of the attractions of Juneau. It has been replaced by a beautiful, new, modern house of worship, and a neat and commodious manse completes the plant. Rev. W. S. Bannerman and wife are in charge.
"Saxman.-Rev. Edward Marsden, the first educated, ordained native minister, was instructed to open a mission at Saxman in 1898. The work has been fully as successful as was anticipated. Mr. Marsden has built a steamer, Marietta, named after his alma mater, and by means of it is enabled to preach the gospel to many isolated groups of people.
"Skagway.-A church was established at Skagway in 1898 by the Canadian Presbyterian Church. In 1899 the work came to our body by exchange. It is a flourishing white church, with house of worship and manse on the way to completion. Rev. Norman B. Harrison and wife are in charge. Many a poor, weary, homesick Klondiker on his way out or back has found comfort and cheer in this little church and home. Skagway is at the head of Lynn Canal and the beginning of the White and Chilkoot passes to the head waters of the Yukon.
"Sitko.-The Sitka mission is in charge of Rev. M. D. McClelland. He ministers to both the native and white churches. The great revival of the winter of 1899-1900 brought into the church nearly 100 native souls. The white church is also in good condition.
"Sitka Training and Industrial School.-This work was begun in 1880 by Rev. and Mrs. A. E. Austin. It has grown in interest and efficiency each year since its organization. As indicated, in connection with Hydah, Haines, and Juneau, the industrial work among the Alaskans has been concentrated at Sitka. This enables us to do better and more thorough work in training the youth for the active duties and responsibilities of life. In order that they may meet the changed conditions of life made necessary by the influx of white people, the taking up of fishing streams, the opening of mines, etc., this more liberal and broader education along both intellectual and industrial lines was necessary. A common English education is given. The girls are trained in the domestic industries so that they are fitted to become intelligent housewives. The boys have a training in trades, such as boat building and carpentry. They also make all the shoes worn by the entire school. One of the most interesting parts of the work is that of settling the graduates who unite in Christian marriage in the model village which is on the mission grounds. The terms are so liberal and the arrangement so satisfactory that these young people are anxious to avail themselves of the opportunity to secure a home for themselves.

They have without exception so far proven themselves worthy of this effort in their behali.
"Hospital.-The hospital work is an important adjunct to the school and mission work. It is under the efifient supervision of Dr. B. K. Wilbur, who has associated with him Niss Esther Gibson, as trained nurse. There were during this year treated as in-patients, 227, as out-patients, 1,580 .
"St. Lowerence Istand.-Mr. and Mrs. V. C. Gambell went to St. Lawrence Island in 189t. They returned to the States in 1897, and in returning hither were shipwrecked. Their place was taken by Rev. IW. F. Doty in 1898, and he was relieved by Dr. Lerrigo in 1899. Mr. Doty returns to the field in 1900. Notwithstanding these interraptions the work has gone on successfully.
"Point Barrow. -This, the most northerly mission station in the world, opened in 1890. Dr. H. R. Marsh and wife have been in charge since 1897. The mission aided in the rescue of the icebound whaters in 1898, and received and cared for the reindeer relief expedition. A herd of deer are now at Point Barrow, and the hope is that they have passed safely through the winter, and thus this industry will be successfully established in this far-off country.
"Nome.-There went into the Yukon Valley in 1899 a heroic band of missionaries. They were under the leadership of that noted pioneer, Rev. S. Hall Young, D. D. After stationing his associates, Dr. Young found himself icebound at Nome. Like an apostle he went to work, and in conjunction with the Congregational missionary on the ground did heroic service until he was prostrated with typhoid fever. At last accounts he was sufficiently recovered to begin preaching, and doubtless at this time-May, 1900-is exploring the unknown regions of the Yukon Valley.
"Eagle City.-Passing over the ranges with Dr. Young, from Skagway, Rev. and Mrs. James Wollaston Kirk found their way to Eagle City, and hung out the banner of Christ on the Yukon. Their home is the center of attraction to the weary and lonesome miners. Mrs. Kirk's piano thrills with its sweet sacred music the hearts of the men who are so far away from home and loved ones. These two noble souls are known and beloved by the miners in all that region around Circle City. For the love of Christ and souls these two Christian people were willing to give up their delightful home and prosperous church in the city of Philadelphia and go to the wilds of the unknown, far-away frozen land. Great was the sacrifice, but greater is the reward.
"Rampart City.-Rer. M. Egbert Foonce, Ph. D., a young man of promise, with flattering home offers, turned away from them all and set his face like a flint toward the Yukon. His soul was afame with love for his fellows buried in those northern snows, and in the name of his Master he went forth bearing the glad message of salvation. He built his own hut, manufactured out of 'poles and tin cans' his own furniture, erected his house of worship, hung up the bell, and its gladsome ring called in many a poor, lonely miner who by its sound was reminded afresh of home and lear ones."

## Gradulates of the Sitha Industral School.

Mr. William A. Kelly sends the following information regarding the graduates of the Sitka Industrial School:

Sitka, Alaska, Yovember $25,1899$.
Rev. Sifmbox Jackson, D. D.,
Bureau of Education, Washingion, D. C.
Dear Sir: In accordance with your request of November 4, 1899, I herewith send you a list of the names of pupils who have graduated from the industrial school at Sitka, Alaska, and who, at the time I wite, are following such trades as were taught them at the school, or are profiting by the instructions they received. These names represent the three principal tribes of southeastern Alaska, viz, Thlinget,

Tsin:shean, and Hydah. Many oî the pupils whose names are not appended have earned and are still earning good wages simply by their knowledge of the English language by acting as guides, interpreters, and packers for the large number of white men who have come into the territory within recent years. Especially was this. true during the memorable season of 1897-98, when the miners found the assistance of our boys of incalculable value. The miners found the boys invariably honest and trustworthy.
As far as I can trace them, their names and employments are as follows:
Boot and shoe trade.-Don Cambren, Sitka; Daniel Shate Ish, Sitka; Chas. Kadashan, Haines; Howard George, Sitka; Chas. Willard, Juneau; Abraham Nelson, Gravina; Aaron, Wrangell; Chas. Bates, Metlakahtla; Geo. McKay, Ketchikan; Chas. Cutter, Klawack; Bert Weir, Chilkat.

Boat buitding.-Roderick Davis, Lake Benuett; Benjamin Pooth, Metlakahtla; Thomas Hanbury, Cape Nome.

Carpentry.—Jack Tugaha, Juneau; LouisJones, Wrangell; William Cutter, Klawack; Alexander Milne, Metlakahtla; Thomas Buxton, Douglas; Philip Minne, Metlakahtla; Thomas Cook, Sitka; Haines Delbert, Klawack; John Willard, Thomas Jackson, Sitka; Jack Eska, Haines; Joseph Campbell, George Eaton, Arthur Milton, Robert Ridley, Gravina; Matchew Snake Ish, Killisnoo; Frederic Shirkey, Klockwan; Daniel Reece, Metlakahtla; John Baronovitch, Carters Bay; Sam Newman, Chilkat; Robert Lee, Klawack; Marry Leeds, Juneau.

Coopering.-William Stewart, Loring; Maurice Wadham, Sitka; Mark Minne, Metlakahtla.

Clerking.-Thomas Eaton, Metlakahtla; William Wells, Sitka.
Camery.-Jonah Hudson, Abel Carlton, Robert Alford, Edward Bolton, Metlakantla.

Cooking.-Carrie Skinner, Sitka Hospital; Med., Millmore Hotel, Sitka.
Dressmaking.-Jennie Willard, Sitka; Annie Korratt, Juneau; Lottie George, Sitka; Mabel Skilli, Howean.

Engineering.-James Mason, Gravina; Andrew Usher, Metlakahtla.
Mining--Jamie Daniels, Gilbert Jackson, Ben Butler, Douglas.
Missionaries.-Mrs. Tillie K. Paul, Sitka; Rev. Edward Marsden, Saxman; Mr. Freleric Moore, Juneau; Fanny Willard, Sitka.

Teachers.-Miss Olga Hilton, Miss Selina Leask, Miss Flora Campbell, Sitka; Miss Florence Wells, Chemawa, Oreg.; Mr. Howard George, Sitka; Mr. Job Nelson, Kincolith, B. C.

Merchants.-Henry Phillips, sr., Skagway; Joseph Verney, Frederic Verney, Metlakahtla; Willis Shadahay, Hoonah.
Nurses.-Miss Annie Leask, Metlakahtla; Miss Anna Hines, Sitka.
Painter and paper hanger.-Joseph Jones, Carpers Bay.
Suwill.-Peter Simpson, superintendent Mills Sawmill; Bartlett Layick Tah, Cyrus Peck, Sitka; Peter Fawcett, Port Simpson, B. C.

Silversmith-Rudolph Walton, Sitka.
Following are the names of girls who have graduated irom the Sitka Training School, who have married and are living Christian lives:

Mrs. Rudolph Walton, Mrs. Howard George, Mrs. Thomas Cook, Mrs. John Willard, Mrs. Peter Simpson, Sitka; Mrs. George McKay, Ketchikan; Mrs. Bernard Hirst, Mrs. Russell, Mrs. Cyrus Peck, Mrs. William Mills, Mrs. John Hannah, Mrs. Andrew Usher, Sitka; Mrs. Gertrude Johnson, Mrs. Max Italio, Yakutat; Mrs. John Yokoss, Mrs. Elizabeth Jackson, Mrs. Frederic Moore, Haines; Mrs. Mary Davis, Skagway; Mrs. Jack Eska, Haines; Mrs. Josephine Choquette, Wrangell; Mrs. Alíred Andrews, Mrs. Eli Tate, Chilkat; Mrs. Patience Strong, Mrs. Elizabeth Hubbard Jacksoin, Juneau; Mrs. Minnie Shotter Ross, Douglas; Mrs. Eliza Willis, Hoonah; Mrs. Nellie Miller Choquette, Wrangell; Mrs. Frank Judson, Sitka.

Of the names of those pupils who are general workers I have not appended any list. Many of the names of ginls who are not married, but who are at home, living sober, industrious, Christian lives, are also not on the list. Enough has been sent to show that the Sitka school is an absolutely necessary factor in the lives of the young people of Alaska.

I am, sir, your obedient servant,

Willifa A. Keley, Superintendent of Schools.

Coxgregatoral Missions in Alaska.<br>By the Rev. Charles J. Ryder, D. D.,

> Correxpondiny Sceretary, American Missionary Association.

Cape Prince of Wates is on the point of the peninsula that juts out from northwestern Alaska. It is the farthest west of any mainland on the American continent. A mission was planted here by the American Missionary Association in 1890. The point is one of strategic value. Mr. and Mrs. W. T. Lopp have occupied this station for ten years. Many of the Eskimos pass back and forth through this portion of Alaska and are thus reached by the influence of this mission. During the year 18991900 both Mr. and Mrs. Lopp have made excursions on sledges into the north and interior regions of Alaska. They have visited the Eskimos on these excursions and have become acquainted with their methods of life and general conditions. They speak the language of the native people with considerable fluency. This greatly increases their usefulness in winning the people and bringing them under the power of Christian civilization.

Two native missionaries have been chosen for special work under the direction of Mr. and Mrs. Lopp. Sokweena and Elobwok are the names of these missionaries, and they have accomplished a good work during the year. It seems the principle of civilization here as elsewhere that only when a native leadership is furnished for the people can the mass be reached. Missionaries of a foreign people and tongue may bring influences to bear in training a leadership. It is only, however, when this leadership is prepared and sent out among the people that the masses can be reached. These two faithful Christian Eskimos have labored during the year with devotion and courage. Their influence and work are most encouraging features of this mission. Reenforcement of their work is needed. Other mission stations at which a native missionary shall gather the people of his own race, teaching them the industries of life as well as leading them in intellectual and spiritual development, will doubtless open more and more in the future.

A letter from Mr. Lopp brings the following message. It is the most recent news received from this field:
"Now that the American Missionary Association is out of debt we hope you will be able to send us a missionary with a missionary wife to be with us. It is hardly necessary for us to cite reasons for this. He should be a minister, if possible. It would not be right to subject children of school age to the influences of the life here. You wrote us up last year as having 'no time for gold hunting,' and yet gold has been discovered within a few miles of the Cape. This brings upon us new anxiety and greater work. Should these claims turn out well the American Missionary Association will not be forgotten.
"The Bear has made a wonderful cruise this season. I doubt if she ever made a longer one. The present captain has made a very conscientious commander, and has surely exerted himself to perform his duty vigorously and honestly. He has administered the law toward the Eskimos as well as white men, and arrested those who were guilty of crime. He was very kind to the natives, giving them help in coming
from Cape Prince of Wales to this point, and also across the straits to Siberia. When the sea was too rough for their skin boats he would have them hoisted up on deck. The United States surgeon has also been exceedingly kind to us.
"We now have 437 reindeer, and have sent an order signed by Dr. Jackson to the station on Norton Sound for the 277 which are yet due us. These will be driven up some time this winter. After they come we will make an estimate of the number belonging to the Eskimo boys and mark them. I have taken one new herder as an apprentice, and hope to take another or two next year. We sold reindeer at $\$ 30$ per head to the Bureau of Education, which furnished money for training other apprentices. Our old apprentices can now pay their own way, and the sale of the reindeer in the future will go toward helping new apprentices till they can help themselves.
"The Woman's Home Missionary Association, of Boston, has contributed toward the support of native workers. We received word about it and rejoiced in their generous gifts. I will use it in helping support Sokweena at our little mission at Mitle-tot. As I wrote last year, we were enabled to start this mission through a small contribution of about $\$ 25$ from the generous Endeavorers of Westboro, Mass. Then some other friends sent in a little help that went toward the support of Sokweena and his wife. It is not enough, but we will try to make it do for the present. We were unable to visit Sokweena but three times last winter. If we could only visit him oftener and help him more he would be able to accomplish more. But some of the children at his mission learn to spell and write a little, and to sing. We had some very good meetings. Lucy and I went up and stayed three days. We took a lantern. Many of the old folks had professed Christ and seemed to be earnest and sincere in their prayers. The position of Sokweena is a hard one at times.
"Adlooat, one of our brightest boys, was typo and artist for the Eskimo Bulletin. We will not be able to get the Bulletin out before November, I am afraid.
"We have just erected a building 20 by 40 feet, which we have decided to call 'Thornton House.' It is to be used as a workshop, clubroom, and for other purposes for the natives. The need of such a building had occurred to Mr. Thornton and myself in 1890. Last year Mrs. Thornton succeeded in gathering $\$ 127$ dollars, which was sufficient to purchase the lumber and pay the freight on it. Two natives and myself have put up the building. The natives did most of the work on it, as I could not leave our house long at a time."

This report from Mr. Lopp presents an impressive picture both of the value of this work at Cape Prince of Wales and the methods which have been adopted. The herd of reindeer has increased largely. The method of herding, using natives for such purposes, has familiarized this people with the care of the deer and at the same time created in them a desire to possess herds of their own. This gradually produces higher standards in industrial life and larger views. Convenient transportation back and forth tends to civilization. An isolated people is generally an undeveloped people. Contact with others, especially those of higher civilization, is the important factor in race development. By means of the reindeer these Eskimos go rapidly from place to place and little by little the unfortunate influences of isolation are being overcome.

These reindeer bring also better food both in milk and flesh to the people. Diseases produced by the large consumption of fat will, little by little, pass away and the Eskimos will become physically a stronger people. The very care of such animals is also civilizing. It creates gentler characteristics and makes necessary self-control on the part of herdsmen. This mission of our Congregational churches at Cape Prince of Wales finds large value in the reindeer herds.

The finding of gold in this part of Alaska brings very perplexing problems inci-
dental to such novements. Not only must this mission reach and influence the natives, but it must more and more become a means of grace to the white men coming in. Mr. and Mrs. Lopp are well fitted for these diffcult responsibilities, and the mission was never more needed than to-day.

Methonist Missions in Amaska.<br>By Mrs. S. I. Beiler.

Cnchucku.--The Jesse Lee Home has at the present time 27 children. Four have retumed to their homes on the Aleutian Islands; 2 have married. We have sent none to the Government school at Carlisle, Pa., this year. There are already 13 from our mission it Carlisle, and 1 in Chicago being educated by Mr. P. B. Weare, and 1 in Canada taken ly the sister of one of our missionaries, who writes: "Yasha is doing so well. The improvement in her spiritual life was a joy to me."

The Eskimos we expected this summer did not come, on account of the crowded condition of the Government revenue cutters, which had to care for the Cape Nome miners and others who were stranded. We are looking for them next season.

You ask, "What is our relation to the Government school there?" None whatever; it is entirely separate. About 200 yards from us is the new school building, which is used this winter for the first time. Miss Mann is the superintendent. There are 65 pupils, which includes 30 from the boys' school connected with the Greek Church. Because of this, Dr. Newhall has been requested by the United States Government to assist until another teacher can be provided.

The children from the Jesse Lee Home attend this school, taken to and fro by their teachers. The public school teachers have boarded in the home, because there was no other suitable place. The self-support is increasing. The past year has been the best in this respect. We rented a part of our land to build boats upon. Three hundred dollars was received in this way, which has been sont to the treasurer, toward the hospital.fund. We find that the cows are self-supporting by the sale of milk.

Industrial classes have been formed and more practical work is being pursued.
Dr. Newhall has proven oí great service in unnumbered ways. He writes: "The attendance at services varies with the number and kind of vessels in port. Great interest is taken in the singing of hymns. On a recent Sabbath there were gathered together an interesting company-American sailors, miners, and natives. There were represented Americans, Englishmen, Norwegians, Irishmen, Swedes, native Aleut, Germans, Creoles, also Indians and a number of native mothers with their babes. The Sunday school is in a prosperous condition. During the past six months the children have purchased a call bell, blackboard, and crayons, and have some money left.

The Cape Nome gold field has made quite a stir. Thousands of miners have gone there this summer in search of treasure. The lowland, covered only by the deep and swampy growth of moss, has proven a hotbed of disease, and the unsanitary condition of affairs has added to the spread of the disease. Cape Nome fever is rife and has taken away many lives. The country is devoid of timber. The supply of coal is small, likewise provisions. As a result the miners have overcrowded the steamers in order to leave the country. Many will be unable to get out and much suffering will result. Two hospitals have been erected, but have not met the demand. Every steamer has had many sick on board, and not having sufficient accommodations for them, some have been left here at Unalaska. The mission has done its share in caring for them.

A few incidents :
Mr. Buckley, age 58, has been up the river six years. The past year he has been
sick with pueumonia, etc., and soon was left without means save the fare to Unalaska. While boarding the steamer at St. Michaels at night he was crowded through an open door and fell into the engine room far below. Three ribs were fractured. When consciousness returned someone had relieved him of his baggage. He had no place to sleep save on the floor of the second deck, with only a borrowed blanket. His suffering was intense. The ship's company allowed him to sleep aboard while the vessel lay at the wharf, but on her departure his only shelter was a leaky bunk house, with the old floor for a bed. On October 1 he came to the mission. We were glad to give him a bed and food to eat. The man was suffering much, but soon began to improve. Instead of the dirty, rough-looking miner, he became a clean and respectable-looking man. He appreciated the kindness shown by helping on the chores as his strength would permit. After a stay of seventeen days the United States revenue cutter Bear called, and Lieutenant Jarvis kindly gave hin passage to the States.
The S. S. Bertha called and had four sick men on board. Would the mission care for them? To leave them would mean a chance of life; for them to go on would mean a grave in the deep. A room at the Jesse Lee Home was transformed into a ward. A sailor was the only one who could be obtained as a nurse.

One Sunday morning (October 22) at 3 o'clock we were aroused by persons at the door. The S. S. Portland was at the wharf. An Englishman of wealth had died on the steamer. Would the mission receive the body and give it a burial? The service was held on Monday evening at 8 o'clock. The room was well filled with officers from the S. S. Roanohe. The choir was composed of Eskimos, Aleuts, and Creoles. In the darkness of the night, with the wind and rain to wail their mournful dirge, the procession wended its way to the hillside, where the remains of Mir. Girling were laid to rest. (Mr. Girling was financial agent of a London company operating in Alaska.)

> Baptist Missions in Alaski.
> By Mrs. Jahes Mchuinne.

In the western part of the Gulf of Alaska is a cluster of islands known as the Kodiak group. These islands are in the center of the district assigned to the Baptist denomination which extends from Mount St. Elias around the Gulf of Alaska to the Shumagin Islands, a distance of 1,100 miles. Upon Wood Island, one of the smallest of the group, a Baptist mission to the natives of this part of the Territory was established by the Woman's American Baptist Home Mission Society in 1893. This island was chosen because it was the headquarters of the North American Comnercial Company, who have al ways been favorable to missionary work, Upon the 4th of July, 1893, an orphanage was opened, and during the past seren years over 50 children have been cared for; there are at present 28 in the home. This orphanage is under the special care of the Baptist women and children of New England who aim to raise $\$ 5,000$ annually for its support.

There have been many changes in the workers in the severs year, but the present efficient superintendent, Mr. C. P. Coe, is now entering his fifth year of service. The work has steadily grown under his care, and great improvements have been made upon the buildings and grounds. The children are bright and intelligent, and for the most part interested in their work. After a short visit to the States, Mrr. Coe retumed with his wife and children to Alaska last April. Mrs. Campbell, of San Francisco, accompanied them and has proven a very efficient matron for the orphanage. Miss Hattie Denniston is the industrial teacher. In October Mrs. Coe commenced a work she had had in mind for a long time. She invited the native women to the orphanage for one afternoon a week to show them how to sew. This class has been well attended and much interest taken in the work; the promise of having the
quilt they piece is a great incentive to work. About 30 tons of ensilage have been cut during the summer for the silo, and 6 tons of hay placed in the barn; much of this was brought in the boat from an island 12 miles down the bay. During the haying season our people met with a very sad accident. Conrad Egeter, who had been for a number of years in the employ of Mr. Coe and who was a most faithful servant, with a number of the mission boys went to the end of the island to secure the last load of hay. Upon the return trip the boat was overturned and Conrad, with one of the boys, was drowned. This was the first accident at the mission and has caused deep sorrow and gloom.

The great need at present is for a boys' dormitory. Until this can be supplied Mr. Coe has transformed his own cottage into a place for the boys. He has established a reading room not only for the children, but for the natives and for the sailors who may be in port.

The Government has for the last two years sustained a teacher at this place and the school is taught in the mission building. Mr. Robert G. Slifer is the Government teacher.

The first Baptist Church in Alaska was organized in July, 1897, and a church building erected. At present the church has ten members; two of the children in the orphanage have been baptized during the past year, and three others have been received for baptism. This is the only Baptist Mission to the natives in the Territory, and is under the care of Mr. Coe, who is pastor of the church. We believe the new condition of affairs in Alaska will bring this station into greater prominence in the near future.

Of the good work done in the mission, I quote from a letter of Mr. Robert Slifer, the Government teacher, who has spent the winter at the orphanage:
"The work here is worthy of the attention it is receiving. It is doing a vast amount of good. It has never been my lot to meet a people who were so degraded, and in many ways so hard to work with, as the creoles of this section. The mission children are in most cases the very worst that could be found to deal with when they come into the mission; in a short time they are better than the rest of the outsiders."

> Morayian Missions in Alaska.
[From the annual reports of the missionaries.]
Bethel.-The work at Bethel, as in the past so in this year, has been much with those who are traveling up and down the river or from the tundra to the river. This station from its very location naturally has a wide influence and is admirably situated as a center from which to do traveling missionary work. We regret exceedingly that lack of means has necessitated the closing of the school. If we have the children the parents are easy to influence, and the children are likely to remain permanently ours.

In March we had the pleasure of a visit from Brother Rock, of Carmel. His visit was prolonged beyond his calculations, owing to the early spring, which forced him to remain at Bethel and go home by water. Also in March we were visited by Chief Engineer Crow, of the steamer Hamilton, on the Yukon. He put our engine and sawmill into good rumning order free of charge. He came at the request of the mission for that purpose, and when finished donated the value of his work to the mission.

On May 27, 1898, the ice on the Kuskokwim broke up, leaving the river free of ice in a few days. It froze up again for the winter on October 18, 1898.

In August the mission was visited by a party of the United States Government Geological Survey, under the direction of Professor Spurr.
During the fall and winter several white men visited the mission, chiefly traders from Yukon. The high prices caused by the Yukon rush are making themselves
felt on the Kuskokwim. Last year the price of dogs was $\$ 6$ to $\$ 10$ each, now it is $\$ 20$. Ready-made furs, wages, etc., are likewise much affected.

The year has been an active one. Fifteen trips for the performance of actual missionary work were made during the year, different brethren sharing in this duty. The shortest round trip was 10 miles, and the longest 400 miles, the average trip being 186 miles, and the average absence of the traveling missionary from home was ten days to the trip.

Owing to a severe epidemic of the influenza the death roll in our villages is very large. Thirty-five were buried by one or the other of the missionaries. Quite a number were buried in the non-Christian villages, and for these no reliable data can be given.

The out-stations-Naposikagamute and Pinehagamute.-Naposikagamute is located near us and has always been very indiferent to missionary effort. Last year one of the shamans, or "doctors," said if our missionary would give him plenty of tea he would make the people good to us. This year he as well as the whole village want a missionary all of the time, and show signs of much deeper interest than in former years. Helper Neck, who is stationed at this village and at Pinehagamute, though sickly, has labored faithfully and earnestly. He takes down our discourses in hiss native form of hieroglyphics, and then delivers these sermons to the people.

The four villages between here and Quinehagamute.-These villages are just opening up to missionary influence. Especially among these heathen villages is the use of medicine gratifying in its results. The cure of the itch, so common and so persistent among these people, exercises a great influence over them. There are many school children anong them, who, if they could be taken into school, could be readily influenced, and not only they, but their parents also. We may say, medicine and the school together are the best means of winning these villages.

Quinehagamute.-This large village of coast people, "sea pirates," as one of the captains called them, has been under missionary influence to a limited extent in previous years. Here for about six weeks the missionaries and traders stop each spring, while they are waiting for the coming of the vessel. Native missionaries have also been at work for some time at this place. Last year we were encouraged by the conversion and baptism of the first resident member of the village, Albert. This year we have to encourage us the awakening to the glorious hope of salvation of the mother and sister of this pioneer Christian. That other hearts are melting. under the warmth and light of God's word is evident from the increased call for medicine, which means less of superstition and shamaning, and also from a general development of the villages with increased friendliness to the missionaries.
The helper stationed at Quinehagamute, Stephen by name, has been faithful and zealous. Last fall he was called upon to mourn the death of his wife. Our hearts go out in sorrow for him, as he was away botll from his and her people when she died, and he is left with five small children. He will necessarily have to return to his home village.

Togiak.-Togiak is a district not properly within the bounds of Carmel or of Bethel, being 130 miles from Carmel and 230 miles from Bethel. The people on this river have sent repeated messages both to Carmel and to Bethel asking that a mis-sionary should risit them, and asking for a native missionary to live on their river.
Some of the people being related to the Kuskokwim people, they have asked for Helper Kawagleg of the Ougavig district. With the consent of the other missionaries I will send him to visit these people, and will communicate to you the report of his visit by the spring mail.

Helper David.-It may be wondered what he is doing, as he is in the Bethel district. His duties for this year are those of interpreter for Brother Romig. This takes the bulk of his time and is a very responsible position. His delivery is excellent, and his ability to grasp the thought and properly render it in order to give it its true-
weight and value make his services very valuable. We would feel comparatively helpless at Bethel were it not for the confidence we have in him to perform his work in an acceptable manner.

The medical work.-The medical work has been on the increase each year, but this year time has not permitted me to keep a detailed record.

When we returned from the coast this spring, there were natives from near and far to welcome us; people of three tribes, our home people, the Youtes, a few Ingalicks, and also a few Kaltchan Indians. These upper Indians had come for medical care, some for a distance of 300 or 400 miles. They had hoped to find me at home, but as we had gone to the coast, they were compelled to prait six weeks until we returned. They had come with the trader and were to return with him. They were, however, hopeless cases, and two of them were overtaken by the infuenza on the homeward trip and died. Our hearts were moved for them. They had come through storms and calms, tortured by innumerable mosquitoes and unprotected from the rain, to see an earthly physician. They produced from their meager store as a present to insure the best attention a well-tanned moose skin or some deer sinew, only to learn through the cumbersome channel of double translations (from English to Eskimo and from Eskimo to Kaltchan) that their chances of recovery were few, and that their long journey was in vain. Poor people! could they only recognize their heart's condition and seek the Great Physician as they do an earthly one, they would not return sorrowing from their search.
The Bethel missionaries officiated at about 35 funerals, as stated above, but this can not be taken as the total death roll. One village of about 100 souls lost 11 of its number. Wre judge that the young and strong that are left will naturally recover in more instances, and that the death rate will not be so great.

Food supply. - The food supply of the natives is annually becoming a graver problem. However, the past summer was one in which all who were active could secure plenty of fish. But in the spring, before the ice left, one whole family and several individuals of other families starved outright. Other cases, which came short of perishing, suffered severely from lack of food.
We still look with interest to the domesticated reindeer. As yet no herd has been granted us.
Should mining develop, which it may in time, the natives will have greater facilities for making a living. However, the remedy of frontier civilization is, as a rule, no better for the natives than the disease of idleness and short food supply.

Carmel.--The mail carriers arrived at Carmel, on the Nushagak River, so much earlier than was expected that the detailed reports were not ready.
Sister King was apparently in better health than at last reports, and was able to perform her noble duties (as a nurse) very successfully. She tells of the distressing amount of sickness, especially among the children of the natives. The missionaries, through God's blessing, have been spared serious sickness. She speaks very modestly of what she has been able to accomplish. But Brother Rock reports that she has the stuff in her of which heroes are made, and relates how she went in a little kayak, while the river was filled with floating ice, which might easily have crushed the frail skin boat, to minister unto those who were sick and whom she was fortunately able to save from death.
Brother Rock reports how he induced the natives to work for the support the mission had to give them, and thus secured a good wood supply for the mission. It is interesting to hear that, though they had to work "like slaves," yet they succeeded in raising a splendid crop of garden vegetables and so many potatoes that they actually had some to sell. In this way and in many other ways they try to save the board expense, and thus lessen the amount that has to be sent to them from the States.
Brother Schoechert reports that every child in the native community under 2
years of age died. There are 167 souls in their charge at Carmel proper and nearly 300 persons, classed as "new people," on the Togiak River, who earnestly desire the truth as it is in Jesus and who are eager to have a missionary. The white settlers greatly appreciate the school. The Greek Church at Nushagak has been left in charge of Deacon Kaseveroff and is shorthanded, as the priest has received permission to leave. There is a steady growth in the interest of the natives up the river. There are, besides Carmel, two out-preaching stations on the Nushagak River and six on the Togiak.
Brother Schoechert describes his visit to Bethel and the mission conference there in February, 1899. He speaks very appreciatively of Dr. Romig's medical work. He also mentions the eagerness of the natives to build chapels in certain of the villages in that district and that the mission conference had resolved to encourage them to do so.

Missions of the Protestant Episcopal Churcii in Alaski.
The following extracts are taken from the annual report of the Rt. Rev. P. T. Rowe, Bishop of Alaska.
I left Sitka for a visitation throughout southeastern Alaska. My first stop was at Juneau and Douglas Island. The Rev. I. J. Gurr is now the missionary in charge. Juneat is growing slowly and seems to be assured of a permanent and stable futuremore so than any other place in Alaska, as far as I am able to judge. Property is very high. The lots on which our church and mission house stand were purchased, less than four years ago, for $\$ 375$, exclusive of the buildings. To-day they could be sold for $\$ 5,000$. Juneau, therefore, has a future, and I have hope that our church will become a strong organization in time.
St. Luke's Mission, Douglas City, was visited, services conducted, one person confirmed, and two children baptized. The Rev. Mr. Gurr is attending to the needs of this mission, but we ought to have a young man in holy orders to take up this work. The place is growing, the population is probably 2,000 , and it has every appearance of a future. A small chapel is very much needed, and just as soon as there are funds enough available will be commenced. At present the services are held in a hall.

## KETCHIKAN.

This mission is situated on Tongas Narrows and on a very large island-with a name quite as large. It is 15 miles from Metlakahtla and about 100 miles south of Fort Wrangell. We have two humble buildings, once Indian cabins, and one of these, set up on a point of rocks, is used for a school. The buildings will hold the ground or rock on which they stand, at least. Until quite recently "squatter's" title was the only title we had in Alaska. Miss Agnes Edmond is the teacher and only representative of our mission.
I arrived in Ketchikan on June 8. I saw that quite a change had taken place since my last visit. There were many more men around. The reason of that is that the district lying on all sides is highly mineralized, and already some good prospects have been discovered. It is entirely a quartz region-copper as well as gold. The surrounding country for many miles is being prospected by several hundred men. I ran across three prospectors in Squawl Arm, Helen Bay, and many other places. I visited the men wherever it was possible. I held services in Ketchikan, and the congregations were, with the exception of three or four women, of men. They seemed to appreciate the services and wished that I could stay with them. But there were other destitute points, the country is great, and as the bishop is the only traveling missionary, I had to deny their request and move on.

I hired a boat, crossed Clarence Straits, and went up to the head of Kasa-an Bay, which runs far into Prince of Wales Island. Here is the old village of the Hydah Indians. It has a beautiful situation, and the village looks very strange as
you approach it. Before every cabin there stand two or three totem poles, large, moss-covered, and seem to have stood there for a hundred years or so. The Indians were not at home, to my disappointment, but they had left behind four dogs and a cat. They had gone to their summer fishing grounds. These Indians have asked Miss Edmond to come and live with them and teach their children. They are anxious for a mission and are urgent for Miss Edmond to make the beginning. They are a superior class of Indians, more intelligent and industrious than others. They have been far removed from the trend of civilization, but now that "propsects" have been found near their village, they will soon be surrounded with whites. Here, as in other sections of Alaska, that means a fearful menace to the native population. The outlook is serious, and the need of missions and workers is greater than ever. It is to these agencies that the natives are looking hopefully for protection and guidance and salvation. May the church realize the importance of these days in Alaska!

Miss Edmond is willing to go to these Hydahs, but until we have a missionary to center at Ketchikan I can not let her go. She not only teaches the children, does all the good she can, but she also occupies and protects our property. There is a native population at this point, and its condition is deplorable. They seem to get liquor without any trouble. Women and men drink alike. Often do the little children seek the shelter of the mission house when their parents get drunk. Moral sense seems dead, too. Miss Edmond has done and is doing much among these conditions to inculcate a higher sense of morality.

I visited Squawl Arm and some other points on Prince of Wales Island, then sailed over to Metlakahtla and had a very pleasant visit with Mr. Duncan, finally reaching Tongas Narrows in time to catch a steamer for the north, and thus ending an interesting visit to this part of Alaska.

## SKAGWAY.

Since my return from the East in May I have made four visits to this mission, which has been in charge of the Rev. L.J.H. Wooden for the past year. On Sunday, June 4, I preached, confirmed two candidates, and celebrated the Holy Communion. It was a great happiness to have with us at this service the good Bishop of Olympia. Skagway is a place of considerable importance. Its people are bright, progressive, and enterprising. There is a small church element here, and it is of the very best quality. I have transferred the Rev. L. J. H. Wooden to the vacant mission at Fort Yukon, so that we have no one in charge at present, but I hope, through the help of Mr. Kierulff, to keep up the services until another missionary is appointed.

Our hospital at Skagway, which was such a blessing to the sick and distressed miners a year ago, has continued its good work under the manager, Capt. F. A. Wise, and the highly-esteemed matron, Miss Anna Dickey. A woman's ward has recently been added, and other improvements have been made, so that we possess an institution which is a credit to the church and has made a great name for itself in these parts. The number of patients has decreased, owing to the better conditions of the country and the freedom from sickness. But even now, whenever a man is taken sick on the trail his first thought is to reach the hospital as soon as possible, for the skill of the physicians in attendance, the efficiency and gentle kindness of the nurse, and the comforts of the hospital have become widely known and confirmed everywhere. The craving of these strong men in their sickness for a woman's care, and their dependence on it, is a marvelous and pathetic thing to witness, while their gratitude is deep and genuine. We can not be too thankful for this service of woman, nor for the church which enables us to carry on such a merciful work. The hospital is entirely dependent upon the uncertain ability of the patients to pay, and the voluntary contributions of friends outside to meet the cases of charity that are always cared for. May I quote the words of Senator J. J. Boyce, of Santa Barbara,

Cal., whose son was recently nursed through typhoid fever, contracted on the trail: "Under these circumstances, reverend sir, I feel it incumbent upon me to express to you my heartfelt thanks for your noble work in establishing, at such a place, such a desirable place for the afficied. * * * Daring a visit to Alaska, sometime ago, I heard many reports of its good work throughout the Territory, and I little thought then that I should personally come into contact with this evidence of your practical Christianity."
Bishop Barker has been kind enough to receive all contributions for this hospital and hass continued to disburse the same. From his statement to me, he says that he has paid out for-
Building the addition ............................................................ $\$ 1,000.00$
Medical supplies and freight ................................................................... 296.73
For support ................................................................................ 2, 2000.00
Total................................................................................ 3, 296.73
From Captain Wise I am informed that there have been 121 patients received and treated; 19 deaths; that there is charged to charity $\$ 1,105$.
The rest of my report will be made up from the letters of the missionaries along the Yukon, etc., because I have been unable to visit all these places since my return, and partly because I found it necessary to give attention to the work in this rapidly developing section of Alaska, "set in order" things that were in need of it, so that I might feel free to start on a long and distant visitation, God willing, next spring.

CIRCLE CITY.
The Rev. J. L. Prevost has been in charge of the work at this mission up to June last, when he left for Rampart City, transferred to that work. Mrs. Prevost and children, who are not well, are on their way to the States, accompanied by Mrs. Demonet. I commend Mrs. Prevost to the loving esteem and kindness of all our church people, for she certainly has "endured hardness" in that region, and returns after a good work, faithfully and bravely done.

Dr. James L. Watt, whose wife and child are with him, and Miss E. M. Deane, "Sister Elizabeth," deaconess and nurse, have had charge of "Grace Hospital." Dr. Watt will continue in that work and at the same time act as lay missionary in conducting the services. Both he and Sister Elizabeth have written most hopefully and enthusiastically of their work. Dr. Watt says: "Our work is looking better and brighter all the time; *** the hospital has been full of patients all the month; * * * they are all broke, bad with scurvy, victims of the Edmonton trail; * * * steamer which brought these from Fort Yukon made me pay the fare of one of them, \$12.50."

## STATISTICS FOR HOSPITAL.

"We have received and treated in the hospital 42 patients, 31 white, 11 Indians; total number days of treatment, 832. Deaths, white, 1; Indians, 3. Less than onehalf paid. Patients treated outside of the hospital were: Whites, 20; Indians, 147. Deaths: Whites, 2; Indians, 2. Total visits made, 487. In September last I went to Fort Yukon, distance 90 miles, at the request of the Rev. Mr. Hawksley to visit the Indians, many of whom were sick. I treated 46 patients and made 116 visits, and was gone six days. Again in January, with sled and dogs, I made a journey over the ice, temperature from 40 to 50 degrees below zero, to attend to the sick, and also Mrs. Hawksley. I treated 15 patients, made 20 visits, remaining five days; was three days going and three days returning. It is expensive traveling here, but I met the expenses by bringing mail and freight on my sled. I have had successful operations for appendicitis and laparotomy, with one exception. These are the first of such operations on the river. Our hospital needs are a sterilizer, a good supply
of needles, sutures of all kinds, tonsilotomes, forceps, bone, artery repair, abdominal dressing forceps, compressed-air tank, pump and spray tubes for throat and nose, silver wire, catgut, silkworm gut, kangaroo tendon, fine suture for intestinal work, good reading matter, sheets, towels, ete.
"The hospital receipts were $\$ 2,675.79$; disbursements, $\$ 2,613.07$; the assets, $\$ 2,783.57$; liabilities, $\$ 1,242.98$.
"On July 3, I heard that the steamer Scult Ste. Marie was hard on a bar 6 miles below Circle City, and that 4 men had scurvy very badly; also little food on board. I took medicines and some fresh potatoes, and went in a canoe to their relief.. The current was running 10 miles an hour, and we made the steamer with difficulty. After seeing to the relief of the men I started for home. The current carried me downstream in spite of myself. Finally I made the opposite shore, where the water was rushing at a terrible rate. I climbed the bank to pull the boat along, when the bank fell in and down I went, with dirt and all, into the water. I swam to the boat and pushed it to the shore, where I crawled out. The water was cold and the air was colder; between the two I lost heart and took a rest. We started again, but were carried 2 miles down the river before we could reach the mainland. There we worked our way along the shore; at 4 in the morning we saw Circle City. I left the boat and started out to walk. Word must have been passed to the mosquitoes that we were coming and were good to eat, for there were myriads of them at every step; for everyone we killed a million seemed to take its place. After falls and scratches, with clothes torn and more dead than alive, we roused Sister Elizabeth, who gave us something to eat, and I went to bed at 6 a. m. Such was my trip to the relief of these six men 6 miles down the Yukon."

## FORT YUKON.

This mission has been in the charge of the Rev. J. Hawksley for the past two years. He was obliged to leare and go to the help of Bishop Bompas. He did so, to my regret and his own, but his work has been blessed to a very great degree. The mission is likely to be a very important center for Indian missionary work for a long time to come. The Indians of Gen du Large, Rampart House, Beaver Creek, the Ratband, and Fort Yukon all center here. We have a small log mission house, which is used for school purposes as well as for church services. Mr. Hawksley built a mission residence while he was there and I have just received the bill for the same, $\$ 1,100$. He was also obliged to hire a teacher, and paid him $\$ 175$ for a little more than three months' service, the bill of which I have also received. He strongly urges the employment of a teacher, and Bishop Bompas is willing to pay half of his salary, $\$ 2.50$; but I do not think we should accept his kind offer-it is our work, and we should bear the responsibility. He urges sending in a missionary at once-the work otherwise would be seriously menaced. I have sent the Rev. L. J. H. Wooden to this mission and he will be there by September 1. He reports again the faithful and loyal services of William Loola, a native reader, to whom I pay $\$ 150$; but he gives all of his time that he can-often lacks food-so Bishop Bompas increases the offering. This I will endeavor to do myself. Mr. Hawksley has failed to send any detailed statement of his work, although he informs me that this will come later.

FOPT HAMLIN.
This is an Indian village about midway between Fort Yukon and Rampart City. The Indians are our baptized people, and the only attention we can give them is such as Mr. Prevost is able to give occasionally as he passes up and down the river. Hereafter he may be able to give them more of his time, now that he is transferred to Rampart City, at which point he will make his center.

It gives me great pleasure to report that Mr. E. J. Knapp, who offered his services to me for any place in Alaska that I might choose to send him, and at his own expense, has reached Rampart, which is to be the scene of his labors. He writes in the most hopeful spirit, and has entered most zealously into the work. He feels happy and very much strengthened in the fact that the Rev. Mr. Prevost is to be there and assume the charge of the work.

Rampart City is a mining camp, with small camps or villages of our Indians near it. With regard to its future I can not speak. It may to some extent suffer the fate of similar camps-here to-day and gone to-morrow. It is this feature or aspect that makes the work in Alaska so trying, difficult, and discouraging. It is a mission to a movement-a procession. Nothing can be more striking than the contrast between the conditions of missionary work among wandering bands of Indians, stampeding gold seekers, and that in a settled and populous country. The fundamental need and malady are the same, the supply and cure are the same, but the variety of conditions, methods, and often of agency, is immense, forever showing the necessity of diligent adaptation and watchful supervision.

We own a mission site with two buildings on the same. The hospital is one of these. It was erected on our lot by Mr. Prevost's arrangement that the camp should put up the building, and this spring we should take it off their hands, paying therefor $\$ 500$, and conduct it as a church hospital. The work is promising; the camp is one of 1,500 inhabitants, and these are among the most enterprising, intelligent citizens of our country, and I can not but rejoice that our church is established in their midst.

## FORT ADAMS.

Mr. A. A. Selden sends me a very gratifying report of his work. The Indians lived in a large number at the mission last winter. School went on without intermission, and so pleased were the Indians with the results of its work that at Christmas they made an offering of skins, meat, moccasins, etc., amounting to $\$ 128$, in order that Mr. Selden might send out for such school necessities as were required. Mr. Selden and Miss Selden do, each of them, a missionary's work in teaching school, helping the natives in all the ways that tell upon their lives and homes and character. In addition to the work of holding services and instructing adults, Mr. Selden has before him the great task of removing the old buildings-the good ones-to the new site for the mission, which is opposite the Tanana River, using the material which was bought and brought in by Mr. Prevost four years ago in the erection of St. Saviour's Memorial Chapel, the hospital, etc. Many are the trials, difficulties, and hindrances which he has before him in executing this work. In the first place, it is very expensive; secondly, he has no stated amount-no funds, in fact-so that he may know how far he ought to go. Therefore he has been obliged to use his own judgment and "do the best he can." I did tell him that he might go to the amount of $\$ 1,000$ this year, and I am now afraid of seeing that bill. The lumber, etc., have to be taken up the swift Yukon, labor has to be employed, which in that country of high prices, scarce food, etc., is not less than $\$ 5$ a day, the logs rafted from above the mission site and hauled up a steep bank-still, if any one can do it, and can do it for very little, it is Mr. Selden.

The mission had the advantage of having the Rev. Mr. Westley in the neighborhood last winter, and he celebrated the Holy Communion at times, baptized the children, and in many ways proved a help and comfort to the missionary flock in the wilderness.

Mr. Selden made two trips to Rampart City last winter-distance, 80 miles-to look after the interests of the church and hold services. He provided food, sled, and
dogs, and sent "blind Paul" and Stephen on a journey way up the Tanana to tell in the Indian village the "good tidings" of a Saviour-tidings which they themselves had found to be so good. They were gone twenty-one days and had visited many villages when poor Paul was taken sick. Stephen, afraid that he would die, had him carefully wrapped in fur, and started quickly for the mission, reaching it only after many days of forced travel. Paul recovered in time, and I gave a heartfelt prayer of gratitude to God when I learned that he had; for he is a good man-so humble and simple, and yet it is sweet to see his trust and love and faith in God.
ANVIK.

I have received no news from our good friends in this mission, nothing but a letter dated at Anvik in February, and received in Sitka, via New York, early in August. He reported all well at that date and the mission work progressing.

POINT HOPE.
I have not heard from Dr. Driggs since last year.
Alaska, where "men are few and miles are many," where sections of it are practically more distant than Japan or Africa, where one mission is separated from another by hundreds of miles, where the missionary is alone, in a great measure, for years at a time face to face with many adverse powers, and his vigorous fight against these but invites the enmity of those who are seeking at any price the things of this life, with no one from the great world outside to show him that he is sure of backing against these odds-no one but the visit of his bishop-Alaska, under these conditions, is distinctly a foreign mission, and the board is dealing wisely with it in treating it still, in a way, as such. These religious pioneers are conducting most faithfully a noble work, and the church must and will hold up their hands-send them the cheering and prevailing message, Sursum corda.

## friends' mission.

Kotzelue Sound.-The following paragraphs are taken from the report of Mr. Robert Samms, one of the inissionaries at Kotzebue, which was kindly forwarded by Mr. I. H. Cammack, of the California Yearly Meeting of Friends, which supports the mission on Kotzebue Sound:

Perhaps the most interesting item at this time would be a description of our journey up the Kowak River. This was undertaken in order to ascertain the condition, location, and number of the natives living on that river, all of which information was necessary before we could make arrangements for starting a mission among the natives in that section of Alaska. This seemed to be a propitious time for such a journey, as the white men scattered along the river would be able to help us in the way of food and shelter. My wife and $I$, in company with a man who was carrying the mail, left the mission at $7 \mathrm{a} . \mathrm{m}$., December 18, with two sleds and nine dogs. The first cabin was 70 miles from the mission, so we had to sleep on the ice three nights; rather a cool bed, but our deerskin sleeping bag proved to be a good thing. We arrived at the first cabin late in the evening of the fourth day out-worn-out, hungry, and foot-sore. The kind-hearted miners sat up all night in order to give us the use of their only bed.

The increasing snow compelled us to leave part of our load and at intervals go back and bring it up. In the course of time we reached the lower Penelope camp at Hunt River, where a hearty welcome was extended to us. Their easy chairs and warm cabin were very much appreciated. After a week's rest we proceeded on our journey with 11 dogs, and C. C. Reynolds and another man accompanying us. Arrangements having been previously made for my wife to remain at their camp and teach school, there being about 40 natives living there, we proceeded about 100 miles
farther and were unfortunate in having our dogs accidently poisoned with strychnine. Eight of them died in a short time. Three of these belonged to the mission. As we conld neither go ahead nor turn back without dogs, a new dog team was purchased. We continued our jouney to the Par River, the farthest limit of the native villages. Here we found about 230 natives wintering. This is by far the largest village on the river, and would be the place for a mission. It is 300 miles from our station here. The natives expressed themselves as desirous of missionaries, and promised to build a house and assist in other ways. There are about 500 on the river. There seemed to be a scarcity of food in all the places on the lower river. Game of all kinds is very scarce, and the fish supply is not always adequate. We find plenty of timber for fuel and building purposes, but not enough for a sawmill. Perhaps the heaviest item of expense in operating in this region will be the transportation.

We are indebted to many of the miners for kindnesses, and especially to the Penelope men.
The hardest thing in the management of the mission this year has been the finances, the loss of our goods on the schooner in the fall, and the demands for help and hospitality and our trip up the river have amounted to considerable. Our return found the natives short of food. We purchased 30 sacks of flour from miners and distributed about 800 pounds, taking in pay such things as they had, as seal rope, dog feed, some money, etc. It seems to be the general opinion among the white men that the only way of solving the food problem is to introduce reindeer. We paid $\$ 1.30$ per sack for the flour, that being the price paid in Seattle last year.
It has been a great disappointment to us not to have received any mail from the States this winter. The mad rush for gold seems to have blockaded us on the south.

The Swedish Evangelical Mission Covenant's Missiovs in Alaska.
By Rev. D. Nyvald.
Our work in Alaska has been pursued this year under many disadrantages, owing partly to the great influx into northern Alaska of gold seekers and white adventurers, putting our mission stations and workers under new and difficult responsibilities; partly to the necessity for many of our missionaries to return home on account of poor health and our inability to find a sufficient number of new missionaries and teachers to take their places.
From Unalaklik both A. E. Karlson and his wife and Miss Malvina Johnson were obliged to return home and in their places we could send only one missionary, Rev. J. F. Qvist, who has been obliged to superintend that station during the winter as best he could with the aid of the native workers, Stephen Ivanoff and Miss Alice Omigetjoak, an Eskimo young lady, who has been educated in the United States for her present work as an assistant teacher. From Golofnin Bay, also, both Rev. N. O. Hultberg and Rev. P. H. Anderson returned to the States. In their place we had to send Rev. E. J. Henrikson from Yakutat, our southern station, and send to his aid Miss Amanda Johnson, a school-teacher educated at North Park College, our school in Chicago. Rev. Qvist is also a graduate from the same school.
Soon after her return to Chicago Miss Malvina Johnson, from Unalaklik, was obliged to submit to an operation. Although the operation was successfully performed she was too weak to recuperate and died sometime after. In her death our society lost a most noble and successful missionary, a loss which was felt so much more keenly as she was the first missionary in the service of this society who has thus departed from the ranks.
Reports from Unalaklik and Golofnin Bay tell of distress and sickness at both stations during the winter, especially at Golofnin Bay, where our interpreter, Gabriel, a native, and Miss Amanda Johnson, the new school-teacher, were taken danger-
ously ill last autumn. Rev. Henrikson was left all alone to do the work and attend to the sick ones uatil he succeeded in getting a physician. In February Miss Johnson was well again, but Gabriel was still sick and unable to do any service as an interpreter. Still, our workers have persevered nobly. If their work has not succeeded this winter as it usually has, in many converts and in any remarkable increase of the church members, it is no less a victory, under the circumstances, that the mission has been able to hold its own.
The native Christians are naturally deeply impressed and not a little alarmed by the great immigration of white people to their shores.
At Yakutat, our station in southern Alaska, our people have been free from the amoyances mentioned in connection with the northern stations, but they were last autumn greatly shaken up by a terrible earthquake, of which I shall not need to say more, as it was so fully described in the papers. Rev. Albin Johnson writes that they have experienced smaller shocks now and then during the whole winter, but being accustomed to it they have not greatly minded it. Rev. Johnson and his wife have been our only workers at that station during the last winter. They report a successful season. The congregation numbers 62 members at present. In the Sunday school about 60 children and young people are enrolled and in the day school 50 pupils. The branches taught in the school are the following: English, reading, penmanship, history, arithmetic, English grammar, and the Bible.
A great improrement in the communications with Yakutat is mentioned by Rev. Johnson-namely, that the place has been reached during the whole winter by a mail steamer every month, although he reports that these steamers have not been as lucky in geting back; not less than three were probably lost on their return trip. The report adds that, in consequence of these improved communications, Yakutat has been visited by a large number of adventurers whose influence upon the natives is always to be dreaded and in some instances has proved to be disastrous. It would be a great help to the work of Christian missions and civilization in Alaska if the laws of the country could be enforced against acts of brutality and lawlessness committed by some of the white people up there against the native, seemingly in the belief that Alaska is outside of civilization and life there exempt from the laws of decency.

The missions in Alaska have reason to be thankful to the Congress of the United States for the legislation enacted in regard to land held by missionary societies for the sake of mission and school work. But of no less inportance is the present aid of laws enforced to save the natives of Alaska from the fate of becoming, so to speak, buried alive in this industrial awakening of their country, occasioned by the late gold discoveries. The eyes of Christian America ought to recognize above the rich soil of golden Alaska the Alaskan himself.

Very respectfully yours,
Sheldon Jickson, United States General Agent of Elucation in Alaskt.
The Commissioner of Education.

## CIIAPTER XXXII.

## NINTH ANNUAL REPORT ON THE INTRODUCTION OF DOMESTIC REINDEER INTO ALASKA.

Departient of the Interior, Bureau of Education, Alaska Division, Washington, D. C., December 30, 1899.

Sir: I have the honor to submit to you my Ninth Annual Report on the introduction of Domestic Reindeer into Alaska.

The year covered by this report has been one of many changes and stirring events.
The 67 Laplanders, Finns, and Norwegians and their families who were brought from aretic Norrway in connection with the relief of destitute peoples in the mining regions of Alaska, arrived at the Eaton Reindeer Station, Unalaklik, July 30, 1898, and on the 31st of January, 1899, they were transferred from the care of the War Department to that of the Interior. Thus there was an unusually large number of employees during the year in connection with the reindeer herd. The discovery and opening of the Cape Nome gold mines caused a sudden demand for transportation. The services of all the trained reindeer were required, both of the Government and mission herds in the vicinity. The fulfilment of the Government pledge to return to the American Missionary Association mission at Cape Prince of Wales and to Antisarlook and other Eskimo owners the reindeer which had been borrowed by the Government in January, 1898, to carry food to the ice-imprisoned whalers at Point Barrow required the return to those several parties of 934 head of reindeer. To meet this large demand Congress made a special appropriation of $\$ 20,000$ for fitting out, under the auspices of the Treasury Depar tment, for the use of the Interior Department, the naval vessel Thetis, in order that said vessel might give her whole time to the transportation of reindeer from Siberia. Through the courtesy of the Treasury Department, the United States revenue cutter Bear was also allowed to give some time to securing reindeer. Further arrangements were made with the firm of J.S. Kimball \& Co., San Francisco, to procure and deliver reindeer in Alaska for the use of the Government.

These several enterprises have made the year just closed one of great interest and activity.

> PERSONNEL.

Mr. William $\Lambda$. Kjellmann remained as superintendent.
Mr. Hedley E. Redmyer, in charge of the special expedition for driving reindeer from Haines Mission, on the southeast coast of Alaska, across the country to Circle City, having, after great hardship and much personal danger, fulfilled his mission, resigned October 10, 1899.
F. H. Gambell, M. D., remained at Eaton Station as surgeon and school teacher, and, during the long absences of the superintendent, as acting superintendent looked after transportation and other interests between St. Michael and Nome.

Herders.-On the 30th of July, 1898, 67 Laplanders, Finns, and Norwegians, with
their families, reached the Eaton Reindeer Station. This large number would have been required if the original project of taking food during the winter of 1898 into the Yukon Valley for the relief of destitute miners had been carried out, but, when happily it was found that this measure of relief was not needed and the project of taking relief was abandoned, there was a larger number of employees on the hands of the Government than was needed. A request was made by the contractor for carrying the mail on the Yukon Valley, also by one of the large transportation companies, for permission to hire a number of these extra Lapps. Through a combination of circumstances both the mail contractor and the transportation company failed to carry out their intentions. In the meantime a number of the Lapps had caught the gold fever ${ }^{1}$ and asked permission to be released from their contract with the Government. As they were not needed, their request was granted, and they left the station for the mines at Golovin Bay and Cape Nome, as follows:

July 31, 189S.-Jafeth Lindeberg.
February 1, 1899.-Berit Nilsdatter Eira, Ida Johansdatter Hatta, and Magnus Kjeldberg.

March 1.-Thoralf Kjeldberg, Nilkelina Bassie, Otto MI. Leinan, and Ole G. Berg.
March 4.-Samuel Hansen and Otto Greiner.
March 10.-Ole Johansen Stenfjeld.
March 20.-Ole Keogh.
Mferch 27 .-LLuritz Larsen and Ole Olesen.
March 28.—Johan Peder Johannsen Stalogargo.
March 31.-Karl O. Suhr and Johannes Aslaksen Rauna.
April 1.-Peder Johannesen, Samuel Jonfren, Suders Johansen, Iver Persen Vestad, Lauritz Stefansen, Johan M. Johansen (Toerle), Nils Klemetsen, Ole M. Rapp, Rolf Wiig, Mathis Klemetsen (Nillokka), Ole Klemetsen Hatta, Alfred Salamonsen Nikina, Samuel Johannesen Balto, Isak Johannesen Hatta, Hans Samuelsen, and Johan Himnar Hansen.

April \%.-Karl Johan Sacariasen.
May 1.-Olai Paulsen.
May 15.-John Andersen.
June 10.-Isak Salamonsen Nikkila.
June 15.-Emil Kjeldberg.
June 30.-Peder Berg.
July 31.-Jeremias Abrahamsen.
September 1.-Klemet Persen Boini and Anders Allaksen Bar.
September 20.-Hans Andersen Siri.
October 10.-Hedley E. Redmyer.
The following remained in the employ of the Government:
Nils Persen Bals, wife and 1 child; Alfred Hermansen and wife; Ole Olesen Bahr, wife and 2 children; Nils Persen Sara, wife and 4 children; Anders Johannesen Balto, wife and 2 children; Per Andersen, wife and 1 child; Johan Nango, wife and 1 child; Aslak Johnsen Bals, wife and 1 child; Nellogotoak (Eskimo), wife and 1 child; Anders Biti and wife; John Eriksen Eira, wife and 1 child; Johan Isaksen Tornensis and wife; Aslak Aslaksen Gaup, wife and 1 child; Johan Petter Rista, wife and 1 child; Per Mathisen Spein, Per Josefsen Porsanger, Lars Larsen Anti, Isak Bongo, Isak Tornensis, Ole Olesen Pulk, Nils Klemetsen, Anders Persen Utzi.
In addition to those at Eaton Reindeer Station there were in charge of the herd

[^16]crossing the country from Haines Mission to Circle City Messrs. Hedley E. Redmyer, Klemet Persen Boini, Anders Aslaksen Bar, Hans Andersen Siri, Per Nilsen Siri, Per Johannesen Hatta.

In charge of the herd at Point Barrow and Point Hope were Messrs. Lars Larsen Hatta and Jacob Larsen Hatta, wife, and two children.

At Point Clarence was Mr. Per Larsen Anti.

RENEWAL OF APPOINTMENT AS SPECIAL, AGENT OF THE WAK IEPAR'AENT.
As the herders brought from Lapland in 1898 were under contract with the War Department until January 31, 1899, and from that time under the Interior Department, on the 21 st of April, 1899, I was appointed by the Secretary of War as special agent of the War Department for the purpose of closing the accounts of the Lapps for salary due under their contract with the War Department for services in connection with the Alaska Relief Expedition. During the following September, through Capt. E. S. Walker, Ninth United States Infantry, commanding the post at St. Michael, the Lapps were paid the salary due them from the War Department in full and receipts were given.

## ETATIONS.

Teller Station.-During the absence of Rev. T. L. Brevig from the Teller Reindeer Station I have placed Mr. Charles E. Chard in charge of the buildings. Arrangements are in progress by which it is expected that Mr. Brevig will return to the station next summer.

Notwithstanding the demand for transportation to the new mines at Nome, I was able to secure freight on the supplies for the reindeer stations from San Francisco to the Teller and Eaton Reindeer stations at the low rate of $\$ 10$ per ton, ship measurement, the prevailing rate being from $\$ 40$ to $\$ 60$.
Eaton Station.-This station, the location of which was selected in the winter of 1897-98, was not occupied until the fall of 1898. It is situated in a well-sheltered valley on the north bank of the Unalaklik River, about 8 miles from the seashore. During the winter of 1898-99 the logs were cut in the surrounding forest and whipsawed into lumber, from which was erected a large two and a half story main building, a large warehouse with a workshop in the basement, together with six double cabins one and a half stories high for the herders.

School. -School was kept by Dr. F. H. Gambell at Eaton Station, as usual, during the year, and reports indicate greater progress than during any former year. The enrollment consisted of 11 children of the Lapps, with the occasional attendance of the parents, the purpose being to assist the Lapps in acquiring the English language. They are reported to be very apt and quick at learning, and during the dark days of winter would oiten come to school long before the stars had gone out of sight. The character of the pupils makes the school one of more than ordinary interest.

Medical.-Dr. F. H. Gambell, physician in charge, reports having treated at Eaton Station 106 cases during the year, besides numerous minor ailments, such as bruises, sprains, etc. Eskimo came to hin from Kings Island and the Diomedes, hundreds of miles away, by small skin-covered native boats. In the same room have been Indians from a long distance up the Yukon River, with Arctic Eskimo and miners traveling from the mines on the Yukon across to the new-found diggings at Cape Nome.

IIERDS.
Eaton Station. -The herd at this place numbered 620 adult reindeer and 194 fawns. During the summer and winter over 100 animals were broken in and trained to harness. This served last spring the excellent purpose of teams being in readiness for the transportation of the troops to the new mines for the purpose of keeping order, the transportation of Lapps, and also provision for the miners. During the summer

96 of the sled deer were left at the Tehter Reindeer Station as the nucleus of a herd into which could be placed the reindeer brought over from Siberia. During the fall the herd was depleted by the sending of 328 head to Point Rodney to replace the deer which, in 1898, were borrowed from that station by the Government, so that the herd at this station at present numbers but 419. If it were possible to get a central herd of 5,000 head, the increase would be sufficient to do away with the necessity of further importation from Siberia.

Colovin Bay.-From the 395 reindeer in the joint herds of the Swedish Evangelical Union, and Episcopal societies, and Eskimo apprentices, 9 died during the year and 157 were born, of which 10 died, leaving at the station 533 reindeer. During this winter 159 deer belonging to the Episcopal Society, with 52 deer belonging to Apprentice Moses, will be driven to the mouth of the Tanana, in the Yukon Valley. There the portion of the herd that is trained to harness will be used during the winter in the transportation of the United States mail between Tanana and the Eaton Reindeer Station.

One hundred head of deer loaned to the two societies by the Government in 1895 were returned to the Government in the fall by the societies and sent by the Government to Antisarlook to repiace in part those borrowed from him by the Government in Jannary, 1898.
During the scarcity of provisions at Nome and the rush of the miners to that place the herd at Golovin Bay performed very important service in the way of transportation.

Point Rodney. - The herd at this.place, numbering 328, belongs to Antisarlook, and was given to him in the fall of 1899 in return for those loaned to the Government in the winter of 1898.

Teller Reindeer Station.-Three hundred of the reindeer at this station belonged to Tautook, Sekeaglook, Wocksock, and Tatpan, Eskimos who had served an apprenticeship of five years at the station.

Cape Prince of Trales.-In August, 1898, 167 reindeer were returned to this station of those previously loaned to the Government. Of this number 11 died during the early part of the winter, leaving 156 in the herd. To this herd were born in the spring 79 living fawns, and during the summer 479 deer were brought to this station, making the 714 head that were required to replace the 292 and their natural increase that were loaned to the Government in January, 1898. The absence of the herd during the winter of 1898-99, when there was such a demand for transportation to reach the Cape Nome mines, was a loss of several thousand dollars to the Mission Station and the Eskimo herders. The herd at this station is the joint property of the American Missionary Association and five or six Eskimos comnected with the mission.

Point Hope. -The herd at this station belongs to Electoona and Ahlook (Eskimo), and numbers 52. It is expected that during the winter 48 additional deer will be furnished the young men from the Point Barrow herd. For various reasons this herd has not done very well during the past season.

Point Barrow. - When in the fall of 1898 the shipwrecked whaters were brought from Point Barrow to the States on the revenue cutter Bear, 378 deer were left in the herd that had been driven to that point for food. During the last spring 118 fawns were born to the herd. Three deer were killed by dogs and three by wolves during the season. At the close of the fiscal year there were at this station 500 head of reindeer. Lieut. D. H. Jarvis, commanding the revenue-cutter: Bear, during his visit to Point Barrow arranged for leaving 100 head of reindeer at that point for the Presbyterian Mission, and 25 head for Ojello, an Eskimo apprentice. The rest of the herd is to be driven during the present winter, under the care of Mr. William Marshall, to Cape Prince of Wales or Teller Reindeer Station, leaving 48 head at Point Hope while en route. The total number of domesticated reindeer in Alaska
is 2,837 , divided into nine herds. Of the 2,837 reindeer 1,159 are the personal property of 19 Eskimos, who have learned the management of reindeer by five years' apprenticeship at the Government reindeer stations.

## Number, distribution, and ownership of domestic reindere in Alaske, 1899.

## Point Barrow:

Presbyterian Mission...................................................................... 100

Point Hope:


Cape Prince of Wales:
American Missionary Association and several apprentices.-...-............ . itt
Teller Reindeer Station:
Tautook (Eskimo)75



Point Rodney:

Golovin Bay:
Evangelical Mission Union ................................................................... . . . 209


Eaton Reindeer Station:


Tanana:


En route South:
Government herd, in charge of William Marshall ............................ . . 327

Increase from 1892 to 1899.

|  | 1892. | 1893. | 189. | 1895. | 1896. | 1597. | 1898. | 1899. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total from previous year |  | 143 | 323 | 492 | 743 | 1,000 |  |  |
| Fawns surviving........ <br> Purchased during summ |  | 79 124 | $115$ | 276 | 357 |  | $\begin{aligned} & 625 \\ & 161 \end{aligned}$ | 638 322 |
| Purchased during summ Imported from Lapland | 171 |  |  |  |  |  | $161$ |  |
| Total, October Loss.............. | $\begin{array}{r} 171 \\ 28 \end{array}$ | $\begin{array}{r} 346 \\ 23 \end{array}$ | $\begin{array}{r} 588 \\ 96 \end{array}$ | $\begin{aligned} & 891 \\ & 148 \end{aligned}$ | $\begin{array}{r} 1,100 \\ 100 \end{array}$ | $\begin{array}{r} 1,466 \\ a 33 \pm \end{array}$ | $\begin{array}{r} 2,062 \\ 185 \end{array}$ | 2,887 |
| Carried forward | 143 | 323 | 492 | 743 | 1,000 | 1,132 | 1,877 |  |

[^17]Of the above the following are the property of the Government: In the herd en route from Point Barrow south, 327; Teller Reindeer Station, 100; Eaton Reindeer Station, 419; making a total of 846.

Congressional appropriations for the introduction into Alaska of domestic reindeer from Siberia:


Expenditure of reindeer fund, 1898-99.
Amount appropriated. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\$ 12,500.00$
Supplies for stations. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 5 5, 749.57
Barter goods for purchase of deer. ....................................................... 6, 272.67
Reprinting of report, 1,000 copies ...................................................... 416.43
Copies of 29 electrotype illustrations, at $\$ 0.48 . \ldots$. . . . . . . . . . . . . . . . . . . . . . 14.00
Photographs for use in illustrating report .......................................... $\quad 3.60$

Total
12,500.00
REINDEER DISTRIBUTION.
Instructions were left with Dr. F. H. Gambell, acting superintendent of reindeer stations, to procure from Golovin Bay the reindeer belonging to the Episcopal mission at the mouth of the Tanana and turn the same over to Mr. N. V. Hendricks, agent of the mission. Further instructions were given to renew correspondence with the Roman Catholics at Nulato and Koserefsky to arrange for the loaning of a herd to the Roman Catholic missions. The Moravian missions on the Kuskokwim were notified that they could receive their loan of reindeer during the fall of 1900, at which time it is also probable that a herd can be loaned to the Friends' mission at Kotzebue Sound.

OVERLANI EXPEDITION.
The following is a statement of the final disposition of the reindeer which were brought from Lapland by the War Department for the purpose of carrying relief supplies to the destitute miners in the Yukon Valley. While procuring the reindeer the necessity for such relief passed away, and when the herd arrived in Alaska, not being needed for the original purpose, it was turned over by the War Department to the Department of the Interior; and I was sent, by the direction of the Commissioner of Education, to the Alaska coast to receive the deer for the Department of the Interior and send them across the country from southeast Alaska to Circle City, Yukon Valley.

The reindeer were landed from the ocean steamer on the 27 th of March, 1898, at Haines, Alaska.

Through a combination of circumstances the military authorities were unprepared to receive and forward the reindeer to the moss pasturage, 60 miles from the coast. While these preparations were in progress the deer were delayed at this point without moss until the 15th of April, during which time 362 of the herd died. At this time the remaining deer were transferred by the War Department to the Department of the Interior, and on the 6th of May following, after great hardships, I succeeded in reaching the moss pastures with 185 reindeer out of the 526 that were landed at Haines.

From this time the deer were placed in charge of Hedley E. Redmyer, assisted by
six Lapps, to be driven, when they should regain their strength, across the country to the neighborhood of Circle City, in the Yukon Valley.

On the 1st of September Mr. Redmyer had reached Lake Kukshu, Northwest Territory, with 144 reindeer, 41 of the 185 with which he started having proved too weak to recover their strength and died on the way. Of the 144 remaining on the 1st of September, 3 subsequently died from exhanstion. The balance of the lierd (141) had regained their health and strength and were in good condition.

On the 28th of Febraary, 1899, the expedition safely. reached Circle City and went into camp with 114 reindeer. Of the 30 deer last by the way, some met with accidents and were killed; a few were killed by wolves; a few that had strayed from the herd were shot by the natives, mistaking them for caribou; a few strayed away and were not recovered.

Mr. Redmyer kept a diary in which he graphically narrates the hardships and diffculties encountered in driving across an unknown wilderness without roads or trails or guide. He states that often a wolf or mountain lion would appear and cause a stampede of the herd and compel the Lapps to chase them through miles of unbroken snow, woods, and underbrush before they could be gathered together for another start. Again and again, coming to ranges of mountains too precipitous to be crossed, the expedition was compelled to retrace its steps and try another route; again and again, through the delays, provisions ran out and the men were threatened with starvation; they were often compelled to lie down to sleep in wet clothing, which froze upon their bodies; but notwithstanding all these difficulties and hardships the expedition was carried through successfully, and the reindeer proved their ability to make a journey that could not have been made either with horses or dogs.

During the spring and early summer, at the request of the United States Army officers stationed at Circle City, two or three distant military explorations were made with the reindeer.

To aroid the expense of driving the herd from Circle City to the Eaton reindeer station, 1,000 miles westward, I exchanged the herd with the Protestant Episcopal mission at the mouth of the Tanana River for an equal number of deer owned by that mission. The deer belonging to the Episcopal mission were at Golovin Bay, from which place they were proposing to remove them to the mouth of the Tanana, 800 miles eastrard.
This exchange was consummated on the 1st of September, 1899, and the reindeer received from the Episcopal mission at Golovin Bay were driven to Point Rodney, 80 miles to the west, to help replace the herd which in the winter of 1897-98 the Government had borrowed from Antisarlook for the rescue of the whalers at Point Barrow.

PURCEASE OF REINDEER IN SIBERIA.
On the 7th of July, in Baroness Korfg Bay, Kamchatka, 116 reindeer were purchased and taken on board the Bear by Lieut. D. H. Jarvis, commanding. The journey of 900 miles from Kamchatka to Cape Rodney proved to be a stormy and rough one, and a large number of the fawns died en route. Upon reaching Cape Rodney July 13, the surf was found too rough for landing, and on the 14 th anchor was hoisted and the Bear went to Port Clarence for shelter. That evening 83 deer were landed at Cape Riley, near Port Clarence, from which point they were to be driven from 40 to 60 miles across the peninsula to Antisarlook, at Cape Rodney. On July 18, 14 deer were landed at Cape Spencer from the revenue cutter Thetis, Lieutenant Buhner commanding. These deer also were to be driven to Antisarlook.
On the 27 th of July 15 male and 90 female reindeer were landed from the steamer Albion at Cape York, Alaska, for the herd of the American Missionary Association, and 67 reindeer were subsequently landed at the same place from the revenue cutter Thetis.

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Since the beginning of the introduction of domestic reindeer into Alaska I have kept steadiiy before my mind the fact that sooner or later the reindeer would prove a very important element in the rapid transportation of the mail in winter over the frozen tundra of artic and subartic Alaska, between the widely separated mission stations and isolated mining camps of that region. When, therefore, in the spring of 1898 it was announced in the press that the herd of reindeer which had been brought from Lapland for the purpose of carrying freight and food to the mining regions of the Yukon Talley for the relief of the destitute miners would not be needed for that puxpose and were for sale, Mr. P. C. Richardson, the contractor for carrying the mail through the Yukon Talley, immediately telegraphed me, March 16, 1888, that he wanted me to rescre him 100 head of reindeer and all the Lapp drivers that could be spared by the Government. In the following June I was waiter upon by Mr. Richardson and Mr. Emerson, his associate, with the proposition that the Goremment shoukl not only sell them the reindeer needed to carry the mail on the Yukon, but also that Mr. William A. Kjellmann, superintendent of the reindeer stations, be allowed to take charge of the carrying of the mail between St. Michael and the mouth of the Tanana. As the Govermment had been waiting for an opportunity to give a practical test of the utility of the reindeer in mail transportation, I agreed to their proposition. Through a combination of circumstances Mr. Richardson failed to meet Mr. Kjellmann during the summer at St. Nichael or the Eaton Reindeer Station and consummate the arrangement.

In the spring of 1899 the North American Transportation and Trading Company, which had secured a contract for carrying the mail from St. Michael to Kotzebue Sound and Golovin Bay, sublet the same to Mr. Kjellmann, of the reindeer station. About the same time Mr. Richard Chilcott, of Seattle, secured a contract for carrying the mail from Taldes to Circle City, Alaska, and at the suggestion of the PostmasterGeneral made application for a few reindeer for transportation purposes. His agents delayed so late last fall in consummating the agreement that the reindeer which the Government had to sell for that purpose were otherwise disposed of

During the summer the new gold mines in the neighborhood of Cape Nome had proved so rich that a large popalation had been attracted to the vicinity. In order to furnish them with a winter mail, the Post-Office Department entered into a contract with Mr. William A. Kjellmann to carry the mail during the winter semimonthiy between Eaton Reindeer Station and Nome City.

REINDEER TRANSPORTATION OF TROOPS.
The failure to complete arrangements during the summer of 1898 between Mr. Richardson, the mail contractor, and inr. Kjellmann, in charge of reindeer, was providential. Late in the fall gold mines were discovered on Snake River, near Cape Nome, Alaska, and during the winter there was a stampede to the new mines from St. Michael, Kotrebue Sound, and the mining districts on the Lower Yukon that received the information. The influx of a large population into a region where there was an insufficiency of supplies and shelter required the presence of United Stater troons to preserve the peace. An application was made by Captain Walker, in command of the camp at St. Michael, to Mr. Kjellmann for transportation, in response to which Lapps and reindcer were sent from Eaton Station to St. Michael, and transported troops, with their tents, rations, and camp equipage, from St. Michael to the Golovin Bay mining region. When there was no longer any need for their presence at Golorin Bay the Lapps and reindeer returned the soldiers to St. Dichael without accident or difficulty. If the reindeer had been engaged in the mail service they could not have performed the transportation thas unexpectedly required of them.

## REINDEER TR.INSPORTATION゙.

In order to further demonstrate the possibilities of reindeer transportation. and as an act of humanity and relief to the crowd of miners that had focked into the Cape Nome region and were shoft of provisions, the reindeerstation agreed to transport a limited amount of food from St. Mifichael to Nome, which was done, and payment was rendered for the same by the transportation companies, hy fumishing necessary food supplies to the station.

REINDEER AS A PACE ANIMAL.
During the summer Mr. Hank Summers, for fifteen years a miner and prospector in Alaska, and secretary of the Pioneer Association of the Yukon Talley, procured the loan of a reindeer from one of the mission stations. Upon this deer he packed his tent, blankets, provisions, and tools during the entire summer. When not engaged in packing his reindeer was picketed out, and everywhere found the reindeer moss-his natural food. Mr. Summers had had many years of long and painful experience in packing prowisions on his back, and worrying with dog teams. After the experience of the summer's prospecting with a pack reindeer he testified at the close of the season, "I can not say too much in praise of the reindeer; they are a decided success; I have never found anything so useful for packing or for food as the reindeer."

REQUESTS FOR REINDEE』.

- In the contract made between the War Department and the Laplanders, on Fel)ruary 1,1898 , was a clause that, after two years' service, such of the Laplanders as might wish it could have a loan of 100 head of reindeer for from three to five years, at the end of which time they would return the 100 head of deer to the Gorernment, retaining the increase as their private property. Several of the Laplanders have made such requests for the season of 1899. Nearly all of them dewed to secure herds for themselves and go into the business of raising reindeer in Alaska, considering it a much more remunerative field for that industry than Lapland.
I have also received a petition from a number of miners in the region of Kotzebuo Sound, who were so impressed by the destitution of the natives with whom they were surrounded, and of the relief that would be afforded by the introduction of domestic reindeer in that section, that they asked that the reindeer might be thus introduced.

A request has also been received from missionaries in Alaska connected with the Swedish Evangelical Union Mission for the privilege of purchasing $\$ 20,000$ worth of domestic reindeer for the purpose of introducing them among the native adherents of their mission stations.

## IREINDEER ATTRACTING ATTENTION IN CANADA.

The success of this Government's introduction of reindeer into Alaska nas attracterl the attention of thinking minds in Canada, and a public sentiment is growing in fayor of a movement on the part of the Canadian Government to introduce the reindeer industry among the Eskimo population in the regions of IIndson Bay, Great Slare Lake, and in fact the whole of arctic and subarctic Canada, so that it will not be necessary to feed them at public expense, on account of the growing scarcity of fook supplies in that section.

## REINDEER FOOD.

Daring the year interesting letters were received through the State Department from Mr. Victor Ek, vice and acting vice consul at Helsingfors, Russia; Edward D. Winslow, consul-general at Stockholm, Sweden, and W. R. Holloway, consul-general at St. Petersburg, Russia, with reference to the natural food of the reindeer in their respective sections of the country. OTHERS.

On January 20, 1898, Lieut. D. H. Jarris, R. C. S., in charge of the relief expedition to the ice-imprisoned whalers at Point Barrow, borrowed from Antisarlook, an Eskimo living near Point Rodney, Alaska, 133 reindeer; and on January 25, from Mr. W. T. Lopp, at Cape Prince of Wales, representing the American Missionary Association, 292 reindeer, making a total borrowed for the Government of 425. These reindeer were loaned to the United States Treasury Department with the understanding that they were to be replaced in the summer of 1898, together with the estimated increase in the herd for the coming season, and if for any cause they were not returned during the season of 1898, that the increase of the following years until the debt was paid be also taken into account.

In the summer of 1893 there were due, under the above arrangement, to the American Missionary Association 432 reindeer and to Antisarlook 213, making a total of 645 to be replaced by the Government. The Government, however, was unable to procure during the season but 159, which were given to the American Missionary Association at Cape Prince of Wales. The delay in replacing the full number of deer required still further obligated the Government to take into account the natural increase during the spring of 1899. This increased the number to be paid to the American Missionary Association to 714, less the 159 delivered in 1898, and to Antisarlook 328, aggregating 1,042 head for which the Government was liable. This is a striking illustration of the rapidity of increase of the herds. In January, 1898, 425 were loaned to Mr. Jarvis, and in July, 1899, two fawning seasons having intervened, 1,042 head were required to cancel the obligations of the Government to the above-named parties. This was so large a number it was felt that unusual preparations should be made for securing a largely increased importation orer that of previous years, when the greatest number procured has been less than 200 head in any one year. Accordingly, on the 24th of January, 1839, the Commissioner of Education addressed a letter to the honorable the Secretary of the Interior, which was duly transmitted to the honorable the Secretary of the Treasury, requesting that instructions be issued to the commanding officer of the revenue cueter Bear authorizing him to receive on board the general agent of education in Alaska, and proceed to cruise along the coast of Siberia northward for the double purpose of securing additional information with regard to Siberian herds of reindeer and for the purchasing of the reindeer. In repiy the honorable Secretary of the Treasury stated that owing to the increase of business in Alaskan waters caused by the present mining excitement the Bear would be unable to devote the time necessary to the work of obtaining the reindeer, and suggested that Congress be asked for an appropriation for fitting out the naval vessel Thetis, which had been condemned as unserviceable for naval duty and yet would be seaworthy for a trip like the one proposed. Accordingly the Secretary of the Interior, with the cooperation of the Secretary of the Treasury, applied to Congress for an appropriation of $\$ 20,000$ for the fitting out and support of the Theits for this season's cruise in Alaskan waters. This appropriation was granted and the Thetis was placed in commission.

On the 1st of May, when we were expected to sail from San Francisco, steam being got up, it was found that the boiler tubes were leaking badly and that it would be necessary to replace them before proceeding; which repairs were at once ordered by the Treasury Department. These repairs, however, would delay the sailing of the ressel so long that it would be impossible to make the trip proposed to lower Kamchatka, and the cutter Bear, that was ready to sail, was substituted for the Thetis between Petropavlovsk and Bering Straits.
To still further increase the number of deer purchased, and as the coast to be visited was much greater than any one vessel could efficiently inspect during the few months
that those shores would he free from ice, I further arranged with J. S. Kimball Company, San Francisco, to purchase, in behalf of the Government, all the female reindeer they would deliver on the coast of Alaska cluring the season. Through the combined efiorts of the three vessels we secured during the season 322 reindeer. This left 455 head of reindeer to fully settle up the obligations of the Government to the American Missionary Association and to Antisarlook, and these 485 reindeer were taken from the Govermment herd at the Eaton Station.

## REVENUE-CUTTER SERVICE.

As in former years, so in this, the Treasury Department, through its division of the Revenue-Cutter Service, has rendered hearty cooperation and valuable assistance; indeed, it would have been practically impossible for me, without the transportation of a revenue cutter, to have visited the coast of Kamchatka, thereby securing valuable information with reference to the supplies of reindeer from that section of Siberia; also without their assistance it would have been impossible to procure and transport the large number of reindeer that were obtained during the season.

The instructions of Capt. C. F. Shoemaker, Chief of the Revenue-Cutter Service, indicated his special interest in the successful securing of a large number of reindeer. The same interest was also manifested by Lieut. D. H. Jarvis, commanding the Bear, and Lieut. A. Buhner, commanding the Thetis, together with their officers and men in the execution of the above instructions. The carrying out of the details of procuring, loading, and landing the reindeer was made the special duty of Lieut. E. P. Bertholf on the Bectr and of Lieut. H. G. Hamlet on the Thetis. I was also indebted for valuable assistance to Capt. W. C. Coulson, R. C. S., commanding the cutter McCulloch, and Capt. W. F. Kilgore, commanding the catter Perry.

ITINERARY.
Under your instructions I left Washington on April 25, 1899, spending the following Sabbath at Salt Lake and arriving at San Prancisco the $2 d$ day of May.

The revenue steamer Thetis, upon which I was expecting to joumey, was under instructions to sail on the $2 d$ of May. In getting up steam it was found that the boiler tubes leaked badly. Capt. C. L. Hooper, in charge of the repairs of the revenue cutters, immediately telegraphed the Treasury Department for permission to put in a new set of boiler tubes, which was granted. As this would detain the Thetis for a month and would prevent my visiting the coast of Kamchatka to confer with the general manager of the Russian Sealskin Company, of St. Petersburg, with regard to the purchase of reindeer, I at once telegraphed, asking that the cutter Beur, which was ready to sail, might be substituted for the Thetis on the trip to Kamchatka, that I might join the Thetis at Bering Strait, which vessel would then engage for the rest of the season in the purchase and transportation of reindeer. Through the kindness of the honorable the Secretary of the Treasury and the hearty cooperation of Captain Shoemaker, Chief of the Revenue-Cutter Service, this request was granted, and instructions were sent to the commanding officer of the Bear to receive me on board and convey me to Kamchatka and then coast northward along the Siberian coast until the Thetis should be met in the neighborhood of Bering Strait.

The Bear sailed from San Trancisco for Seattle on the afternoon of the 5th of May. On the 8th, having completed arrangements with Capt. B. Cogan for the transportation of freight and supplies to the reindeer stations on Bering Sea, also with the J. S. Kimball Company for the purchase of reindeer, I took the train for Portland that evening.

On May 10, at the request of the Secretary of War, I called at the First National Union Bank, of Portland, Oreg., and completed arrangements for the payment of the salaries of the Lapps upon my arrival in Alaska. I reached Seattle the following' evening.

On the 12 th of May the Bear arrived at Seattle and found orders to await the arrival of dispatches from Washington. This meant a week's delay in Seattle. In the meantime Capt. Francis Tuttle, commanding the Bear, receiving news that his wife Was dangerously ill, telegraphed to the Treasury Department asking to be relieved from the command of the Bear and allowed leave of absence to return to his family. This resulted in another week's delay, while a captain could be sent out from the Atlantic coast.

On the evening of May $2 t$ Lieut. David H. Jarvis, the hero of the Point Barrow relief expedition, arrived in Seattle to take the command of the Bect, which he did on May 25.

At $9 . \frac{15}{2}$ on the morning of the 26 th the Bear raised anchor and steaned away from Seattle. That night was spent at anchor at Port Townsend.

On the morning of the 27 th, a gale raging outside of the Capes, the captain delayed starting until the afternoon. At 2.20 o'clock we got under way for Unalaska, in the Alentian Islands.

The morning of June 5 we raised land. At 3.15 a. m. Mount Shishaldin, 8,953 feet in height, was sighted, clean-cut and beautiful against the horizon, covered with a mantle of snow from peak to base. A cloud of rapor was floating lazily furm the crater. At 6.30 Pogrumnoi volcano, 5,875 feet high, came in sight. During all the forenoon, which was bright and sumy, with a smooth sea, we skirted the sonthern shore of Tigalda, Akutan, and Avatabak islands, standing for Unalga Pass. Akutan voleano stool out clear and cold, covered with an unusual amount of snow. The crater is not at the highest point, but upon the eastern shoulder of the mountain. Its location was plainly marked by a large black spot on the snow, made by the snow being melted away from the warm rocks that formed the rim of the crater. On the West shoulder of the volcano a large pile of perpendicular rocks, forming a small montain of themselves, corered sides and top with snow and ice, glistening in the gun, and seemed like a gigantic fairy ice palace. This appearance was still further heightened by some bare rocks at the base, giving the appearance of a large arehed doorway. At the mouth of the pass for a chort time the tide rips made a rough sea, causing the ressel to roll badly.

Tuming northward into the straits, we passed Egrg Island, so called for the abundance of the eggs of wild foml found there. In the distance was the village of Biorka, noted as the cleanest village on the Alcutian Island. At 3.15 p. m. We were passing the south end of Unalga Island. Off in the distance to the southwest was the little village of Biorka. At 3.30 we passed Point Erskine and at $\frac{1}{2}$ we were abeam of Kaletcha; soon after the celebrated Priest's Rock was passed. We entered Unalaska Bay, and at $5.15 \mathrm{p} . \mathrm{m}$. made fast to the wharf at Udakhta (Dutch Harbor).

Three busy days were passed in risiting the Jesse Lee Memorial Home of the Methodist Woman's Home Miscionary Society at Unalaska, also the public school, and auditing the accounts of Mr. James C. Blaine, who had been in charge of the removal of the old and the reconstruction of the new school butding.

It $4.10 \mathrm{p} . \mathrm{m}$. June 8 the ship cast off fom the wharf, and, after taking on board the steam lauch, passed out of the harbor and headed westward for Asia.

At 2.30 , the 9 th, we passed the celebrated Bogoslov volcano, 13 miles distant. Our route lay to the north, parallel with the Aleutian Islands. These, howerer, were so fai distant that only occasionally the peaks of the highest mountains were visible.

During the morning of the $13 t h$ we crossed the one hundred and eightieth degree of west longitude, and owing to the change from west to east longitude dropped a day in the calendar, making six instead of seven in our present week. At $10.14 \mathrm{a} . \mathrm{m}$. on the 14 th Attu Island was raised, and at noon we were distant from it about 23 miles. At 4 p. m. Cape Wrangell became visible. A high mountain range seemed to trayerse the island from south to northwest, covered with snow down to the water. The coast seemed to be precipitous and desolate.

The moming of June 17 dawned with a sky orercast and cloudy. According to our reckoning we should have been in sight of the mountains of Asia. We had already passed south of Cape Tahipunski (although the fog prevented us from seeing it) and were rapidly approaching the mouth of Aratcha Frarbor. An anxious lookout was kept for the land. At $12.30 \mathrm{p} . \mathrm{m}$. the officer of the deck thought he saw a bold headland through the fog. A half hour later there was no doubt about it; rocky cliff loomed up all around us; the great montain range that incloses the bay like a gigantic amphitheater was partially concealed by a curtain of fog. Afterwards, When, on the 23 d , we steamed out of the bay under a clondless sky, great precipices of rock appeared, walling in the waters of the sea, and great columns of rock rising out of the sea stood like eternal sentinels guarding the coast; range upon range of snow-covered mountains encircled Avatcha Bay, crowned with the white rolcanic cones of Wilinchiniski ( 7,257 feet high), Kozelska (5,333 feet), Avatcha ( 9,081 feet), and Korianski (11,406 feet); we stood as if entranced by the scene. Some day the wonderful scenery of the Kamchatkan coast will attract thousands of tourists. Soon the light-house on Dalni Point, 449 feet above the sea, was made out; the light is used from April to October. The keeper's residence is a long white buiding with its broad side to the sea; a tall white column some distance in front of the residence shelters the light. The two brildings are so placed that from the sea they represent a great white cross. Later the "Brothers"-three great sentinel rocks inside the heads-came into view; their tops were alive with sea gulls and sea parrota nesting and laying their eggs. Sweeping up the bay and rounding Pimnacle Rock, the small rillage of Petroparlorsky, with its red and green and brown roois, was seen nestling at the foot of the encircling mountains that stood guard around it. Isnenai Bay and Point, Rakorya Point and Bay, were successively passed, and rounding to at 4.10 p. m. We came at anchor off the village cemetery. The ship could hare entered the imer harbor and anchored within a stone's throw of the rillage, but did not.
We were now in Siberia, the battle ground of the conquering Cossack and freebooting Promyshlenki in their century's march across Asia. In its northern and northwestern sections a dreary waste of low rolling and frozen tundra; in its sonthern and central sections. rugged snow-covered and storm-swept mountains, the land of the fierce howling poorga, of wild beasts and scattered tribes of brave, hardy and half-civilized people.

Directly in front of our anchorage mountain brooks were visible, tumbling down the mountain side and running through the rillage, furnishing in summer, at least, an abundant supply of pure water to the inhabitants. Shortly after, Mr. A. Jacoyleff, bookkeeper of the Russian Seal Company, came on board. He is a Russian naturalized as an American citizen, and is now engaged in business in Siberia. He, homever, looks forward to making his home in California, where he has spent a number of years. He speaks English and Russian fluently, and proved serviceable as an interpreter during our stay in port. Before leaving the ship we were invited to call upon him whenever we had need of his services.
After dinner I accompanied Lieutenant Jarsis ashore to call upon the iwprarnik (governor), who represents the authority of the Russian Govemment over the lower part of the peninsula and is magistrate, govemor, and chief of police for this whole section.

Upon reaching the governor's house we found that he had gone out. Leaving our cards, we called upon the lieutenant-governor. He also was out. We then went to the Russian Sealskin Company's store, and afterwards returned to the ship.
June 19, Sunday, after breakfast, we went ashore to attend the Russo-Greek Church, morning service being at 9 o'clock. There were about 100 present. The singing and chanting were good. Father P. Donskoi, the senior priest, although but 65 years of age, had the appearance of being 75 or 80 . For many years he had made 3,000 miles a year with dog teams, traveling about his extensive diocese. The hard-
ships of such travel in this semiarctic region have broken him down. During the service the communion was administered to some babes in arms. There were no seats in the church, and all remained standing during a service that lasted two hours. After service we returned to the ship, and soon after Governor Oshurkoff came, with Mr. Jacorleff as interpreter, to call upon us. Mr. P. Oshurkoff is a large, wellformed man, with a face that indicates force of character. They were accompanied by Mr. G. Chupiatoff, agent of the Russian Sealskin Company.

June 19, after breakfast, the captain and myself went ashore sightseeing, also to secure what information we could with reference to procuring reindeer. Interviews were had with the governor, employees of the fur company, and private citizens, but the man who could give us the fullest and most reliable information was Capt. Philip II. Powers, general manager of the fur company. Captain Powers is an American, from New London, Conn., who came out here thirty-five years ago as a whaler and has made his home in this section ever since. A few years ago he went into the service of the fur company, and step by step has become their general manager. He now spends his winters in Japan, but was expected to arrive at this port in a couple of days.

The principal objects of interest in the place are a cenotaph sent out from Russia and erected to the memory of Bering, who fitted out his expedition and sailed from this bay to discover Alaska and explore Bering Sea. His remains are buried on Bering Island, one of the Commander group. His cenotaph is in the yard of the Russian Church.

Near by is a monument to Capt. Charles Clerke, who, upon the death of Captain Cook, February 14, 1779, at the Sandwich Islands, succeeded to the command of the expedition. The exposures and hardships of the expedition in search of the straits between Asia and America were so great that his health gave way, and on the 22d of August he died at sea ofi the coast of Kamchatka. He was buried at Petroparlovsky. On a ridge separating the inner from the outer harbor is a monument in memory of the French arctic explorer, La Perouse, who visited this place in the summer of 1787. He sailed from this harbor over a hundred years ago, called at Botany Bay, and disappeared with crew and ship. His monument consists of a large rough bowlder set upon a pedestal. Into this bowlder has been deeply carved the name and date "La Perouse, 1787." A real anchor and anchor chain have been placed across the face of the stone, and the anchor chain encircles the base of the pedestal.

The remaining objects of interest are the remains of the earthworks and batteries which were destroyed by the allied fleets of England and France in 1854 and 1855. In 1854 the fortifications were shelled and silenced by the allied fleet. Marines and sailors were then landed from the ships and an attempt was made to capture the place. As the attacking party was advancing through the woods their officers were nearly all killed by sharpshooters, and the troops, thrown into confusion, were slaughtered, and a number of them driven over a precipice and dashed to pieces. The English and French lost 170 in killed and wounded. Hoisting anchor, the fleets sailed away. Returning, however, in 1855, they found the village abandoned by order of the Czar. They then destroyed the fortifications and burned the Government buildings. The fortifications have never been rebuilt. A few troops are kept there as a local police force. On a sand spit in the harbor the Russian Government has erected a monument in honor of the victory of 1854. This obelisk, 25 feet high, is built of stone, painted black, and surmounted with a gilt star and cross. On the eastem side is this inseription in Russian:

## In memory of the fallen

at the
Repulse of the attack of the Anglo-French fleet,
20 th and 24th August, 1854.

On the reverse side:
Erected in 1881.
In the outskirts of the village there is a well-kept plat of ground in which three crosses (one English, one French, and one Russian) mark the spot where the men of the three nations were buried. Upon the anniversary of the battle religious services are held at the graves. The grounds are kept in better order than any of the yards of the citizens.

The spring has just opened, the buds of the birch and cottonwood are swelling, and in sheltered places the leaves are partly out. To-day I saw specimens of the famous Yakoot pony, a hardy animal that will find his own food, eren in a semiarctic siberian winter. On this peninsula are said to be large bands of wild horses that have started from strayed domestic stock. They would be a good breed to introduce into Alaska. The Siberian cattle are an undersized breed, but very hardy.
June 20: Last night about 11 o'clock the Japanese steamer Setsuyo MFart, in the employ of the Russian Fur Company, arrived from the northern coast, where it had been locating Japanese and Korean fishermen for the season. The output of the fisheries finds a market in Japan. As the steamer sails from here for Japan an opportunity is aforded for sending out a mail.

After breakfast I went aboard the Setsuyo Maru with Captain Jarvis and called on Captain Powers, jr., master. With the exception of the captain all the crew and officers are Japanese and Koreans.
June 21: A rainy day. During the morning I called on Father Donskoi, the old Russian priest. His diocese at one time covered all Kamchatka Peninsula and north to the Anadyr River. Since 1888 he has been an invalid. He still, however, has charge of the services of the church. His son was a few years ago Russian priest at Sitka, Alaska.

At $11 \mathrm{a} . \mathrm{m}$. I. I. M. S. Futut, of the Russian navy, arrived from the Commander Islands and dropped anchor. Captain Jarvis made an official call.
June 22: The forenoon was cloudy; the aftemoon clear, bringing out the snowcovered volcanoes and mountain range that surrounds Avatcha Bay as an amphitheater in clear relief around the horizon. It was the first good view of the whole horizon that we have had. The scene was one of marvelous beauty and grandeur. The ward-room officers invited the captain and officers of the Iratut to dinner at 5.30, after which the officers of the Bear retumed with their guests to the Yakut to spend the erening.
At $7.15 \mathrm{p} . \mathrm{m}$. the steamer Kotik, of the Russian Seal Skin Company, from Japan, for which we had been waiting, passed in and dropped anchor. Captain Jarris called on Captain Powers, manager of the fur company, who came on the Kotik and aranged for a business interview immediately after breakfast to-morrow.

June 23: Captain Jarvis had breakfast at 7.30, and soon after $8 \mathrm{a} . \mathrm{m}$. We were on board the Kotik and had a satisfactory interview with Mr. Philip II. Powers with reference to the prochase of reindeer in large numbers. He had no doubt they could be purchased in any number we wished, driven over to a good bay on the Bering Sea side of Kamchatka, and shipped to Alaska. It was arranged that on his present trip he would ascertain the cost, etc., and write Mr. Blum, agent of the company at San Trancisco.

After finishing our business with Mr. Powers, we went ashore for a final settlement of bills and a farewell call on the ispravnik. The governor gave Captain Jarvis a letter to the starosta (local governor) at Karaginsk, instructing him to give us all possible aid in procuring reindeer on Karaginski Island. The starosta is the local magistrate and highest Russian officer in the small settlements. At 11 a. m., by invitation, Captain Jarris and myself took breakfast with Commander Norakovsky, R.I. N., of the Russian crusier. His quarters are comfortable; he has an office and
dining room, a large bedroom with an iron bedstead, lounge, and a large bath and toilet room. The breakiast passed ofi pleasantly.

Returning to the Bear we had a call from the Government physician, who has charge of a large region of country. He is employing his spare time in writing a history of Kamchatka and its people. I returned ashore with him for a couple of charts he kindly offered the captain; also bade adieu to Mr. and Mrs. A. Jacovleff. During the forenoon the Bear steamed into the bay, taking various courses to ascertain the compass deviation. At $3.45 \mathrm{p} . \mathrm{m}$. the anchor was again hoisted, and at 6.30 p. m. we stood down the bay and put to sea. The sky was clear, and the mountains and rolcanoes stood out in bold relief against the sky.

June 24: Last night there was a total eclipse of the moon. At $6.30 \mathrm{a} . \mathrm{m}$. we passed Cape Shipunski. This cape is a rocky cliff 200 feet high, and extends inland along a succession of mountain peaks to Jumanova Volcano, which is a rocky cone 10,608 feet high, and can be seen 120 miles at sea. Avatcha and Korianski volcanoes are also visible. During the afternoon Kronotski, 10,608 feet high, was prominent. This region is a famous resort for mountain sheep.

June 25: At 4 a. m. Cape Kronotski was abeam, 12 miles distant. At $11 \mathrm{a} . \mathrm{m}$. sighted Cape Kamchatka. During the day we passed to the westward of the Commander Islands. These islands belong to Russia and are the resort of the fur seal. They are 79 miles distand from Kamchatka and 180 miles from the island of Attu, the nearest of the American possessions. They form a connecting link between the volcanoes of the Aleutian Islands and those of Kamehatka。 Bering, the largest of the group, is 50 miles long and 16 to 17 miles wide at the north end, which is the broadest point. A chain of mountains, 2,210 feet high, extends the length of the island. Bering, the discoverer, died and was buried on the east side of the island, about three-quarters of a mile west-northwest of Cape Khitroff. Copper Island, the companion island to Bering in the group, is 30 miles long and 5 miles broad in the widest part. At the time of Bering's discovery in 1741 there were no inhabitants on the islands. Aleats were placed upon the islands in 1826 by the Russian-American Fur Company for the purpose of procuring seal skins. Fifteen reindeer were introduced in 1882 and have multiplied until there are now from 600 to 1,000 , the increase furnishing the inhabitants with fresh meat. The yellow raspberry and whortleberry are found in great abondance. Foxes abound, and, in their season, ducks and geese. The present population of the two islands is about 600 . The killing of the fur seal is done under Govermment supervision and the skins tumed over to the agent of the Russian Seal Skin Company of St. Petersburg.

June 26: At 2 a. m. Cape Famchatka was abeam. This cape is a bold headland 1,500 feet high, and at its sea base terminates in a pile of rocks 40 feet high which has the appearance of a castle with turrets. We are now opposite the mouth of the Kamchatka River, the largest stream on the peninsula. On the sonth side of the river, and visible many miles at sea, is a remarkable group of volcanoes-Kluchefskaya, 16,988 feet; Uskorska, 12,508; Kojererska, 15,400; Tolbatchinska, 11,700; Mount Gordon and Mount Herbert Stewart, about s,000 each. Kluchefskaya is more or less active all the time, throwing out ashes two or three times a year, sometimes covering the earth for a hundred miles around, as in 1879, when ashes fell 3 inches deep. From the years 1727 to 1731 it was in constant eruption. Deginning with September 25, 1737, it burned with such fierceness for one week that the rocks appeared red-hot. In 1762 and 1767 other outbursts are recorded, and in 1829 Adolph Erman, a German scientist, found the burning lava pouring out in a continuous stream. In 1854 and again in 1885 it was in active eruption-the pillar of flame in calm weather being visible for 250 miles. On a quiet day it is reported that smoke and steam would ascend forming a perpendicular column thousands of feet high.

An agricultural colony of Russians from the valley of the Lena River were settled
at Melcova, on the Kamchatka River, as early as 1743. Among the seven church bells in the little belfry is one with the date of 1781.

At noon Cape Oserni, 9 miles distant, was abeam, and the southern end of Faraginski Island was sighted. The coast line between Cape Kanchatka ant Oremi was found to be from 4 to 7 miles north of charted position. At 6.30 p . m . we were abreast of Cape Nagikinski, which is the boundary line between the Koriaks of the north and the Kamchadales of the south. We came to anchor abreast of Tivinski village, on the west side of Baroness Korfg Bay. No natives putting off shore for the ship, at 10.10 our anchor was hoisted and we were again under way. At 3.25 p. m. we anchored behind a sand spit which forms General Skoveleff Harbor, in the northwest corner of the gulf. At 7 p.m. Lieutenant Bertholf, Dr. Call, and myself went ashore to communicate with the natives. We visited the village at the mouth of Kultuznaya River. On our way over Dr. Call shot several eider ducks. Learning that a prominent deer man with 2,000 reindeer was a day's journey inland, we hired a rumer to go and notify him that a ship was in the harbor and that the captuin wished to buy reindeer. The villagers were drying fish, long racks of which were to be seen. At $10 \mathrm{p} . \mathrm{m}$. We returned to the ship. At $11.35 \mathrm{p} . \mathrm{m}$. we came to anchor off the mouth of the Karaga Harbor, it being too dark to attempt to enter. Karaga Bay is 9 miles long and from 4 to 8 miles wide.

June 27: Temperature, $56^{\circ}$. The morning was foggy. Two parties were sent out in small boats to make soundings to find the best way into the barbor. After lunch the steam launch was put into the water and Lieutenant Bertholi, Assistant Engineer Lewton, Dr. Call, and myself, with a rowboat in tow, at $1.45 \mathrm{p} . \mathrm{m}$. , startel ashore to communicate with the natives and get the starosta or headman of the village to go with us to Karaginski Island for reindeer. Within a mile of the shore, at the upper end of the harbor, the steam launch got aground and could go no farther. We then transferred ourselves to the rowboat and started for the mouth of the river, the village sought "being 2 or 3 miles up the river. As we were passing a small fishing village the natives raised a flag and signaled us to come ashore, which we diu, although the water became so shallow that those who had on rubber boots reaching to the hip were compelled to get out and help pull the boat over the shallow places. To our gratification we found the man we were looking for at this village. The tillage consisted of several earth hats for the people, and eight or ten storehouses raised on poles, beyond the reach of the dogs. These storehouses hat conical roofs thatched with wild grass. Dr. Call secured some photographs, and later in the afternoon I secured for the Alaska Society of Natural History at Sitka a good specimen of one of these notched logs that serve as a ladder. Having completed our arrangements with the headman and a friend who wished to accompany him to the herd, in half an hour we returned to the beach. The sailor in charge of the launch, misunderstanding the orders given him, had steamed back to the ship. Rowing was hard work; we had a head wind and strong tide against us, and soon decidel to go ashore on the sand spit and camp until the steam launch should retum in search of us.

A good fire of dxiftwood was soon burning, water was boiled for tea and cofiee, bacon was fried to a crisp, sundry cans were opened, and with gool appetites we at down in the sand to enjoy our lunch. Aiter lunch those who had guns strolled off after wild ducks. About 9 p. m. we caw through the fog the smoke of the stean launch, and at 10 o'clock we were again aboard the ship, having had an enjoyable afternoon.

June 28: Temperature, $51^{\circ}$. The fog lifting; pleasant day. It 7.10 the anchon was raised and we steamed away for Karaginski Island, reaching there at 11.35 a. m., and anchoring in Lozhnuikh Tyestei Bay.

While we were at Petropaylovsk the trader of the Russian Sealskin Company stationed at Karaga had arrived and had informed us that on this island was a herd of 3,060 reindeer. According to his statement, about twelve years ago the ice hetwecel
the Karaginski Island and mainland became so firm that a band of reindeer had been driven across to the island, and these had increased until now there were 3,000. He said that the Koriak owners, being cut off from all markets, would make haste to let us have all we could carry in return for the supplies with which we could furnish them. At Karaga the starosta (Russian official) whom we had brought with us to the island placed the number of reindeer at 2,000 head. That there might be no umecessary delays, the trade goods were brought on deck, the litters for carrying the liobbled deer and sling for hoisting them on shipboard were made, and the pens cleared out for their reception on deck. Lieutenant Ulke and Dr. Call were sent ashore to procure the headman of the island and bring him aboard. At $4.15 \mathrm{p} . \mathrm{m}$. the boat returned with the leading deer owner. He was furnished with crackers and a cup of hot tea in the pilot house, and the captain proceeded to negotiate for the deer, when, to our extreme disappointment, we found that the people had no reindeer to spare; that while it was true that a year ago they had from 2,000 to 3,000 , during last winter an epidemic had broken out among the deer and there were but a few over a hundred left. All our expectations were in a moment dashed to the earth. He was willing to let us have five, but as it would require three days' time to go to the herd and drive them to the sea, we could not afford to wait for so few. The people seemed very poor. The population of the island numbers 27 . The island is about 60 miles long and traversed by a snow-covered range of mountains 2,000 feet high. Foxes, bears, and ptarmigan are found upon the island. Reindeer moss abounds every where.

June 29: At 5.15 a. m. we got under way for Karaga to return the starostas, Iran and his friend. Anchorage was reached at $9.35 \mathrm{a} . \mathrm{m}$. The steam launch, with steam already up, was lowered into the sea and Lieutenants Bertholf and Gamble, Dr. Call, the two Koriaks, four sailore, and myself started with the steam launch and boat in tow for the shore at 9.55 . Within 2 miles of the village the watershoaled milil the steam launch could go no farther. Dr. Call, Tran, and I got into the dingey with the understanding that when we reached shore we would send the dingey back for Lieutenants Bertholf and Gamble. When we were about a mile distant from the village the dingey went aground. Dr. Call, having on rubber boots, and Iran waded ashore, while the two sailors and I sat two hours in the boat until the tide had turned, and with considerable lifting and pushing the boat was once more got afoat. We then returned to the stean latuch. Putting the other native ashore on the sand spit, we returned to the ship, arriving at $3.40 \mathrm{p} . \mathrm{m}$. At $3.55 \mathrm{p} . \mathrm{m}$. we were under way down the bay and out to sea.
June 30: At $9.45 \mathrm{a} . \mathrm{m}$. we came to anchor abreast of Yivinski village, on the west sile of Baroness Korig Bay. No natives putting offshore for the ship, at 10.10 a . m. the anchor was hoisted and we were again under way. At $3.25 \mathrm{p} . \mathrm{m}$. we anchored behind a sand spit which forms General Skobeleff Ifarbor, in the northwest comer of the gulf. At 7 p. m. Lieutenant Bertholf, Dr. Call, and myself went ashore to communicate with the natives. We visited the village at the mouth of Kultuznaya River. On our way Dr. Call shot several eider ducks. Leaming that a prominent deer man with 2,000 reindeer was a day's journey inland, we hired a runner to go and notify him that a ship was in the harbor and that the captain wished to buy reindeer. The villagers were drying fish, long racks of which extended along the beach. At $10 \mathrm{p} . \mathrm{m}$. we returned to the ship.
Summary for June: Traveled 2,921.4 miles; under steam and sail 1,722.9 miles; coal used, 164.713 tons.

July 1: Skobeleff Harbor. Warm, sumny day. At $1.50 \mathrm{a} . \mathrm{m}$. Lieutenant Bertholf, Engineer Spear, Dr. Call, and myself went ashore at the village to hire the natives to gather grass or moss for the reindeer while en route. Had lunch on the
 Bertholf went ashore to communicate with the natives. They found that the run-
ner sent last night for some cause had only gone part way to the deer man and then returned. Another rumer was secured and started off. Lieutenant Ulke went hunting and returned with some ducks.

July 2: Beautiful day. Temperature 63. Spent the day quietly reading. As usual on Sunday, we distributed reading matter among the crew, sailors, firemen, and cooks.
July 3: Two deer men came off this morning and news was received that there was a Russian trader at the village on Sibir Harbor, across the bay. After breakfast Lieutenant Bertholf, Dr. Call, and myself went in the steam launch to fetch the trader. He was found and brought off to the ship as interpreter. Dr. Call could talk Russian with the trader, and he in turn could talk Koriak with the natives. While on shore Dr. Call took a number of photographs. In the village were two large tents covered with reindear skins and a large sod house used as a store, which was without windows, all the light being received through the open door. The contents of the store were a few boxes of trade goods and large piles of furs-bear, fox, squirrel, wolverine, ermine; also swan and reindeer skins.

Upon returning to the ship it was learned that the runner who started off on Saturday night to notify the deer man while en route had met a bear which had killed his dog and had so frightened him that he had turned and fled. Immediately two other men were secured and started off. A conference was held in the pilot house between the captain, myself, and the two deer men. They looked over samples of our barter goods and discussed the matter somewhat with Peter, the trader. It was a new problem to them. They had frequently slanghtered deer and sold them for food, but had never been asked to sell their deer alive to be carried off they knew not where. They finally concluded not to come to any decision until the arrival of the third deer man, and they had had an opportunity of coming to an understanding among themselves. In the meantime a number of sacks were sent ashore to be filled with food for the reindeer while en route.

After dinner Peter, the Russian, and the deer men were taken ashore to wait until the arrival of the third man.

July 4: Rained all day. No natives on board. It was the most quiet day we have had on the trip. At noon a salute of 21 guns was frred in honor of the day. In the evening the launch was sent over to the village to learn if the third deer man had arrived. No tidings yet.

July 5: Launch was sent early to get news of the decr man. At $3.30 \mathrm{p} . \mathrm{m}$. the launch was sent again. No tidings. The captain has concluded that he can not wait longer. One of the deer men has agreed to let us have some reindeer without waiting on the others. His herd is a few miles down the bay, and we will go there early to-morrow morning.

July 6: Hore anchor at 6 a.m. and got under way. Crossed over to Sibir, on the northwest side of the bay. Peter, the interpreter, and three Koriak deer men were brought on board. At $7.41 \mathrm{a} . \mathrm{m}$. we were again under way for the reindeer herd, on the east side of the bay, which was reached at $11.35 \mathrm{a} . \mathrm{m}$. The interpreter and deer men were at once landed. At $1 \mathrm{p} . \mathrm{m}$. I went ashore and remained on shore until work was stopped in the evening. Fifty-three reindeer were received on board during the afternoon, after which, up to $10.30 \mathrm{p} . \mathrm{m}$., the Koriaks were being paid off for their deer.

July 7: At 6.30 a. m. Lieutenant Bertholf and the men went ashore for deer. Received on board 47 reindeer. At 11,30 the deer men came aboard for pay. At 3 p.m. the steam launch and boats were sent ashore for more deer and moss, and at 5.45 returned with deer, the interpreter, and three Koriaks, who wished to return with the ship to Sibir. At 6.35 under way. At 10.10 we came to anchor at Sibir. The three deer men that came with us were paid off in barter goods for their reindeer, which took until $1.30 \mathrm{a} . \mathrm{m}$.

July 8: It $7.40 \mathrm{a} . \mathrm{m}$. Lieutenant Bertholf, with the steam launch towing cutters and men, left for the village across the bay to procure moss. At $8 \mathrm{a} . \mathrm{m}$. a boat was sent to fetch Peter, the interpreter. Peter and Ahlaticah came aboard, and at 9.35 a. m. the ship got under way. Came to anchor at $10.30 \mathrm{a} . \mathrm{m}$. During the day the leading deer man in this region, and the one for whom we waited in vain all the week, arrived and remained on shipboard until we were about to go to sea in the erening. He had a little boy with him about 10 or 12 years old. At 8 p. m. Lieutenant Bertholf and men returned to the ship, having secured 296 bags of moss. At 8.40 hove anchor and returned across the bay. Peter, Ahlaticah, and attendants were sent asbore at $9.20 \mathrm{p} . \mathrm{m}$., and at $10.15 \mathrm{p} . \mathrm{m}$. we started for the sea and Alaska.

July 10: Six fawns died from seasickness and were thrown overboard. In the evening sighted land (Cape Nararin). The cape is formed by a range of mountains extending seaward and ending in a peak 1,690 feet high, from the eastern flank of which the rock descends almost perpendicularly into the sea. It is surrounded by a group of peaks ranging from 1,200 to 2,300 feet high.

July 11: Having crossed the one hundred and eightieth degree of longitude, we changed from eastern to western time, making a day. At $8 \mathrm{p} . \mathrm{m}$. land was sighted on the Asiatic coast, and at $10.30 \mathrm{p} . \mathrm{m}$. St. Lawrence Island was sighted.

July 12: At 7.05 a. m. Aropped anchor at Indian Point. Alarge number of natives came aboard the ship, among them being Koharri, who has a herd of reindeer. He promises Lieutenant Jarvis to let him have some for the Government. Both Koharri and his adult son were under the influence of liquor. At $11.35 \mathrm{a} . \mathrm{m}$. hoisted anchor and steamed over to Gambell, St. Lawrence Island, where we dropped anehor at 5.20 p. m. Lieutenant Bertholf and myself at once went on shore, the lieutenant taking a number of empty acks with him for moss for the reindeer. After distributing the sacks among the natives we proceeded with Mr. Doty and Abrahamsen, who had net us at the landing, to the mission houses. As Mr. Doty's and Abrahamsen's time had expircl they immediately commenced preparations for departure. The house was fastened up and their baggage sent to the landing. In the meantime word had been sent to Lieutenant Jarris that some of the natives had secured whisky from the whalers and one had attempted the life of the missionary, in response to which an officer and some sailors were sent ashore to arrest Captain Jack (Gablah), the guilty one, and take him to the ship in irons, which was done.

Mr. Doty reported that from the latter part of April to the early part of June there was an epidemic of influenza, which had affected every person in the community. During the prevalence of the epidemic there were 7 deaths in a population of about 300; 5 of these deaths occurred within forty-eight hours, and 4 of the sufferers had been killed by their relatires and friends at their own request. One of them, a blind man, had his friends place a rifle so that he could discharge it with his foot, and then shot himself. Another man, after certain heathen ceremonies, was shot by his aister-in-law. A man and woman were strangled by hanging. All these persons were sick and asked to be killed. It is their belief that when sick and about to die if they, or their frients for them, take their lives they will thereby escape the deril and go direct to God. Therefore this killing is regarded as a favor. After a person is thus killed his relatives and those that assist make great lamentation orer the deceased. It is rarely that a man is strangled at St. Lawrence Island. He is either expected to take his own life with a knife or rifle or have his friends do it for him. In the above cases Mr. Doty had been informed of what was about to take place, but his protests and expostulations were of no avail. The influenza extended also along the Siberian coast. It was reported that at Indian Point 6 adults and 18 or 20 children died, and that among the reindeer men inland from the point there had been 60 deaths. Probably many of these were assisted deaths. Captains S. F. Cottle and B. T. Tilton, of the whaling fleet, report that on the Diomede Islands a woman was hung and a man stabbed by their friends.

The whating vessels Jeanette, Grampus, Thrasher, Borhead, Betredere, Fearless, Alexander, and Wm. Bayliss had called at Gambell. The Belena, Bonanza, and Marwhal passed without stopping. The Albion, with freight and the cutter Thetis, had also called. Charles E. Buckler, captain of the Wm. Bayliss, who had been drinking hard, aceidentally shot himself and was buried at St. Lawrence Island. Mr. Doty conducted the funeral services. Four whales had been taken by the fleet up to June 20. They also had done a large amount of trading. At Gambell the natives secured one whale by hunting and another was found dead in the ice and the bone secured. Two whales floated ashore, but the bone had been removed. It was reported that one whale had been captured by the natives at Indian Point, one near St. Lawrence Bay, one at East Cape, and one at Plover Bay. At the latter place fiye boat loads of natives off whaling were gone five weeks and given up for lost. They had sulbsisterl on raw walrus meat. The whaler Alexander, in 1896, took down a head of bone for Kelly \& Siem from the Government reindeer station at St. Lawrence Bay, Siberia. At $10.35 \mathrm{p} . \mathrm{m}$. we hoisted anchor and steamed for Point Rodney, Alaska, where we expected to land our reindeer for Antisarlook.

July 13: Rained all day; dropped anchor ofif Point Rodney at 9 p.m. Surf two high for landing.

July 14: Being too rough to land the deer, at 6.30 we hoisted anchor and started for Port Clarence, dropping anchor at the sand spit at 1.15. The following vessels were at anchor: Bark J. D. Peters, with coal; steamer Balena, schooner J. D. Colemun (coal and supplies), Wm. Bayliss, steamers Grampus, Narwhal, and Thercisher.

Finding Per Larsen Anthi (Lapp) and Tautook (Eskimo) at the spit, Tientenant Jarvis employed them, with two Eskimo assistants, to drive the herd of deer across to Charlie's, about 40 miles distant. At $4.25 \mathrm{p} . \mathrm{m}$. the anchor was hoisted and we steamed up the bay to Cape Riley, where the reindeer were landed. After dimner I went ashore and remained until ail the deer (83) were landed. Returned with Lieutenant Bertholf and the sailors to the ship at 1.15 a . m.

July 15: At 8.10 the anchor was hoisted and we steamed across the bay to the Teller Reindeer Station, where we anchored at 9.45. Lieutenant Bertholif was sent of with the steam launch to visit schooner Mary Bitwell, that had gone ashore near Grantley Harbor. In the meantime supplies for Tautook that had been brought up from San Francisco were "broken out" and preparations made to land theru at Teller Station. The surf was so rough that this was given up and at $\pm \mathrm{p}$. m. anchor was hoisteri and we retumed to the sand spit, where we anchored at $5.30 \mathrm{p} . \mathrm{m}$. Several whaling captains came on board to call upon Captain Jarvis. Mr. Charles E. Chard, applying for permission to occupy one of the buildings at Teller Station, he was permitted to use the $\log$ schoolhouse until June 30,1900 , upon condition that he take charge and care of all the other buildings belonging to the Government at the station. Four boat loads of natives who wished to return home to Cape Prince of Wales were taken on board and their miaks hung to the darits.
July 16: At $2.50 \mathrm{a} . \mathrm{m}$. we got under way for Cape Prince of Wales, where we anchored at $8.30 \mathrm{a} . \mathrm{m}$. The water was so rough and the surf so bad that only one of the native boats made the attempt to land. They had great difficulty in getting ashore. As it was impossible to land the supplies or communicate with shore, and fearing to miss the revenue-cutter Thetis, that ras at St. Lawrence Island, the captain concluded to run over to St. Lawrence Bay, Siberia. At $10.50 \mathrm{a} . \mathrm{m}$. the anchor was hoisted and we got under way. At 11.55 we met the Thetis coming to Cape Prince of Wales with 14 reindeer. We turned around and returned and anchored at 2.10 p. m. off the village. After anchoring, Lieutenant Hamlet brought off a small mail for the Bear. Learning that Dr. Call was very sick, he returned to the Thetis and brought off Dr. Hawley. The waves were running so high that the Bear han to get under way and take Lientenant Hanlet and his boat to the windward of the Thectis
to enable him to get back to his vessel. As the motion of the ship was injurious to Dr. Call, at $7 \mathrm{p} . \mathrm{m}$. we started to return to Port Clarence.

Jaly 17: The sea was so rough and the current so strong that we were twelve hours steaming 60 miles, reaching anchorage at Port Clarence at $7.13 \mathrm{a} . \mathrm{m}$. The day was rainy and stormy. At $7.40 \mathrm{p} . \mathrm{m}$. the revenue-cutter Thetis arrived from Cape Prince of Wales.

July 18: At anchor off Point Spencer. Immediately after breakfast went over to the catter Thetis to confer concerning reindeer with Captain Buhner. There were 14 reindeer on the Thetis, and fodder exhausted. As there was a herd of reindeer on shore (which he did not know), for the purpose of receiving small lots of deer Lieutenant Hamlet and myself went ashore to hunt up Dumnak and Sekeogluk (reindeer men) and make arrangements for landing. As the Thetis was a long distance from the landing place anchor was hoisted and the vessel steamed abreast of the point of landing. Immediately after 12 o'clock the 14 deer were loaded into two boats and Lieutenant Hamlet and I again went ashore. The landing was made without difficulty and the deer driven off to the herd by Dunnak and Sekeogluk.

After dimer I went to the Thetis, and in company with Lieutenant Hamlet went in search of a young Siberian from Whalen, known as Chio, Captain Buhner needing him as interpreter in the purchase of reindeer. It was from two to three hours before we secured him as interpreter.
During the afternoon I took ashore and left in Dumnak's tent for Per Larsen Anthi the following supplies: One sack of flour, 2 pounds ground coffee, 5 pounds of sugar, 6 cans roast beef, 3 cans condensed milk, 5 pounds butter, and 25 pounds of salted pork.

July 19: At anchor at Point Spencer. After breakfast received on board, from the whaling bark Mermaid, Trank Temple for transportation to St. Michael, he having assaulted with a knife and cut Clutchpid, of that ressel, July 6. He was placed in the forehold in double irons. Clutchpid also was taken on board and placed in charge of the surgeon.

At $11.30 \mathrm{a} . \mathrm{m}$. we got under way for Teller Reindeer Station, where we anchored at $11.10 \mathrm{a} . \mathrm{m}$. A native boat was loaded with supplies belonging to Tautook, which had been paid him for services connected with the relief expedition to Point Barrow in the winter of 1897-98. Went ashore withothe boat and inspected the Government buildings at Teller Reindeer Station. They are already commencing to run down. At 1.15 p . m. We got under way for Point Spencer, stopping at 1.25 to board the schooner Jessie, of Los Angeles. At $3.15 \mathrm{p} . \mathrm{m}$. anchored at Port Clarence. Lieutenant Bertholf and the master at arms left the ship to arrest As-sher'-ruk, who murdered Frank Boyd, a miner, on the Noatak River, in the fall of 1897. At 4 p. m. they retumed with the man in double irons. He was also imprisoned in the fore hold. At 6.58 we got under way for Cape Prince of Wales with four boat loads of Eskimos. A native from the Diomede Islands, Noo-var-loo, while drunk shot Arkiard, a Diomede boy, but he escaped before he could be arrested.

June 20: Came to anchor at Cape Prince of Wales at $12.35 \mathrm{a} . \mathrm{m}$. Got up and dressed so as to be able to see Mr. Lopp, the missionary at that point. The sea proving too rough to land supplies, we lay at anchor all day. Mr. Lopp came off and spent the day and night on the ship. Stormy and unpleasant day.

July 21: At anchor off Cape Prince of Wales. During the night the sea calmed down, so that very early in the morning the landing was commenced of the stores which had been brought to pay Mr. Lopp's herders for their trip to Point Barrow in 1897-98, in the relief expedition. The supplies having been landed, Mr. Lopp bade us good-bye, and at $8.55 \mathrm{a} . \mathrm{m}$. the anchor was hoisted and we steamed away for Cape Blossom, Kotzebue Sound.

July 22. This morning about 8 o'clock we met the schooner General McP'herson, loaded with miners en route from Kotzebue Sound to Cape Nome. As the schooner
had leen taken off last fall contrary to the orders of the owners, and a warrant being out for her seizure, Lieutenant Jarvis arrested the captain and placed Lieutenant Ballinger on board with instructions to convey the ressel to St. Michael and deliver it up to the court. It proved to be a warm, pleasant day. At $4.20 \mathrm{p} . \mathrm{m}$. the ship anchored off Cape Blossom and very soon after, in company with Lieutenant Bertholf and Dr. Hawley, I was on my way to the settlement, some 12 mites distant, which we reached about 8 o'elock. As we came abreast of the Quaker mission, where from 200 to 300 miners were assembled, they gave three hearty cheers at our arrival, knowing that the steam launch had on board their first mail this season. We soon learned that the Kotzebue mining district had not met expectations. There were from 350 to 400 miners in the camp, three-fourths of whom had had the scurvy, and many of them were destitute. There had been a large number or deaths from scurvy, drowning, and freezing. They were sick, without means, and disheartened. Lieutenant Bertholf and the surgeon immediately proceeded to investigate the condition of things, while I spent the time at the mission. Toward morning the lieutenant came in and announced that he would take ofi to the Bcar 33 of the worst cases of scurvy. At $5 \mathrm{a} . \mathrm{m}$., having been up all night, a start was made to return to the ship, but the tide being out the steam launch was soon aground and the party returned to the village. The lieutenant then hired a small sternwheel steamer to take the miners off to the Bear. We finally left the shore about $10.15 \mathrm{a} . \mathrm{m}$., and reached the ship soon after noon. The captain, hearing of the sad condition on shore, sent the steamer back for others.
July 23: At 1.30 p . m. the steamer Apctic Bird arrived, bringing 33 survy-stricken men to the Bear. The men were taken on board and the steamer sent back to the camp for another load. It was a beautiful day-temperature $55-$-mosquitoes very bad on shore. I regretted that I could not have remained on shore to attend the Eskimo service of the Quakers and also preach to the miners.
July 24: At 3.45 a. m. the steamer Arctic Bird arrived with 48 men, 2 women, and 1 babe, all destitute. At 5.20 a. m. we were under way for St. Michael. A fine day. During the day we passed a number of small boats with miners, en route from Kotzebue Sound to Anvil City.

July 25: About 6 a. m. passed Cape Prince of Wales. The Bear swung around by Cape Spencer to see if the bark Aluske was in Port Clarence Harbor. Not seeing it (aiterwards it was learned that it was there waiting for the Bear), the Bear continued on to Synrock, Antisarlook's place, where we anchored at $8.30 \mathrm{p} . \mathrm{m}$. , in the lee of Sledge Island. The supplies brought up from San Francisco for Antisarlook, due him for his trip to Point Barrow in the overland relief expedition of 1897-98, were landed. Upon the return of the boats Antisarlook, wife, and child came aboard to go to St. Michael. While on shore the officer learned that Asheuk, the Diomede murderer that shot and killed Naribuck, a boy, at Point Spencer on the $15 t h$ and then escaped, had left there only a few hours before.

July 25: At $12.30 \mathrm{a} . \mathrm{m}$. the Beur was under way. At $6.40 \mathrm{a} . \mathrm{m}$., seeng a mative camp on the beach, Lientenant Bertholf went ashore and found and arrested Asheuk. At $7.40 \mathrm{a} . \mathrm{m}$. we got under way, taking in tow the seized schooner General McPherson, which we had overtaken. At $10.50 \mathrm{a} . \mathrm{m}$. we anchored abreast of Anvil City, the new village which has sprung up in comection with the Cape Nome placer mines. At 11.30 went ashore with Lieutenant Bertholf. Our boat got aground in trying to cross the bar at the mouth of Snake River, and it was with difficulty that we got ashore. Met Mr. Redmyer, assistant superintendent of reindeer, who had come down from Circle City; also Dr. Kittlesen and Messra. Andersen and Elliott, of the Swedish mission at Golofnin Bay. Learning that Mr. Kjellmann was at the mines, some 5 miles away, I sent a Lapp with a note for him to come at once to go with me to the reindeer station. Mr.D. In. Smith, United States depaty marshai, and the principal owner of the schooner Generul McPherson, in company with an officer of
the Betw, went aboard the schooner and arrested Capt.J. B. Neilson, who had stolen the schooner in the fall of 1898. Jeremias Abrahamsen, whom I had brought from St. Lawrence Island, was given his discharge from the Government service and allowed to goashore. Messrs. Kjellmann and Redmyer came off for passage to St. Michael. At $7.40 \mathrm{p} . \mathrm{m}$. we got under way for St. Michael. Nome (Anvil City) is a conglomeration of tents, with half a dozen frame houses or shanties, and two or three iron warehouses in process of erection by the transportation and trading companies. The ocean front is staked ont with claims for from 10 to 20 miles. We saw men panning out gold on the beach in front of the most densely populated part of the place. Some fine teams of horses were being used in hauling.

July 27: A beautiful day. At 10.15 a. m. anchored at St. Michael. The place had greatly improved since I left it last September. The cutters Cornom, Rush, and Numivak were in the harbor. Went ashore with the first boat, and at once proceeded to military headquarters to arrange with Capt. E.S. Walker, Eighth Infantry, U. S. A. for the payment of the Lapps by the War Department.

July 28: A beautiful day. All day on shore attending to business. During the forenoon Mr. Gray, as agent of the North America Transportation and Trading Company, sublet to Mr. William A. Kjellmann the mail route between St. Michael, Golofnin Bay, and Fotzebue Sound. Mr. Hendricks and I went on Mir. Kjelhmann's bond. Returned to the ship at midnight. Mr. William F. Doty left the Bear and took up quarters at Hotel Healy.
July 29: Fine weather continues. All day on shore attending to business. About 11 p. m. Captain Walker took me off to the ship on the army stean launch. The trade of St. Michael has greatly changed since a year ago. Then there was a rush of miners up the Yukon River; now very few are seeking passage up that river, but thousands are coming down, some to leave the country in disgust and others to try the Cape Nome mining district. The up-river business is now mostly freight. Owing to the decrease of the passenger traffic, many of the small river steamers are laid up. The harbor is full of them.

July 30: After lunch I went ashore to attend divine service, held in the dining room of the Hotel Healy, and conducted by Rev. Loyal L. Wirt, territorial superintendent of Congregational missionary work in Alaska. About one hundred persons were present at the service, which was of great interest. The theme of the discourse was, "Christ the wonderful." After service I returned to the ship.
July 31: During the night there was a change of weather. A storm commenced, with a low barometer, which increased during the forenoon to a gale. During the night the Xukon River steaner Jessie, of the Alaska Commercial Company, went ashore with three barges, loaded with military supplies for Colonel Ray. At 5.30 a. m. the liear commenced dragging its anchor and was thumping on the bottom; in half an hour we were under way, and at $6.45 \mathrm{a} . \mathrm{m}$. anchored in deeper water. The gale increasing, at $10 \mathrm{a} . \mathrm{m}$. we were again under way, seeking shelter behind Egg Island, where we dropped anchor at noon. In the harbor at St. Michael a large number of vessels dragged their anchors and a number of the smaller boats went ashore. Towark evening, the force of the gale being spent, the Bear hove anchor at 8.40 and returned to St. Michael at $10.15 \mathrm{p} . \mathrm{m}$. The depth of water in the harbor was lowered 5 feet by the storm.

August 1: Tient ashore on the first trip of the steam launch and was very busy with Captain Walker, U. S. A., completing the drawing of checks for payment of Lapps. At 4.30 p. m., with Mr. Kjellmann, returned to the Bear on the army steam launch, and at 4.50 we were under way for Unalaklik. A boat was lowered, and Mr. Kjellmam and I were sent ashore with the mail. On shore we fortunately found five Lapps and a boat from the station. They were routed out of their tent, and preparations were made to proceed at once up the Unalaklik River 8 miles, to the Eaton Reindeer Station. As we left the ship a steady rain commenced, which
lasted until we reached Eaton. A piece of driftwood was laid across the loat and a tarpaulin stretched across, which formed a shelter from the rail. Under this shelter Mr. Kjellmam and I crawled. Innumerable mosquitoes also sought shelter under our improvised tent. Mr. Kjellmann made an ineffectual attempt to drive them out with tobaceo smoke; failing, he resigned himself to his fate and went to sleep. I alternated my time between fighting mosquitoes and sitting in the raia.
August 2: At 5 a. m. the night trip closed with our arrival at Eaton Station. Dr. F. H. Gambell had given up our coming and had gone down to St. Nichael to meet us, and we had passed on the sea. Dr. Lerrigo was awakened, and soon we had a good warm breakfast. After breakfast the Lapps were summoned and the payment of their salaries from July 1, 1898, to January 31, 1899, by the War Department, was commenced. Thus, with the signing of vouchers and arrangements for the deposit of their surplus salaries in banks to their credit, the whole forenoon was consumed. After payment closed I had the 12 children of the settlement brought into the schoolroom, heard them recite and sing and made each the present of a picture book. After dimer supplies were got out for the reindeer herders in the arctic, and at is p. m. We were off on our return to the ship. A stop was made at Unalaklik to call on the missionaries of the Swedish Evangelical Union, where we were presented with beautioul bouquets of wild flowers and a box of fine radishes from their gardens.
After our arrival at Eaton, in the morning, the rain ceased and the sun came out. When we started on our return in the aftemoon the rain again set in and lasted until our arrival at Unalaklik. Whike at Eaton Station a fishing party returned with the seine. When they were asked what success they had had, they replied, "Not much, only a hundred salmon." At 5 p. m. Mr. Kjellmann and I reached the ship with supplies for the overland expedition which was to drive a portion of the reindeer back from Point Barrow to Cape Prince of Wales, and also with barter goods for the reindeer trade of the Thetis. At $5.45 \mathrm{p} . \mathrm{m}$. we were under way for Nome.

On the 24th of December, 1898, Klemet Nilsen had died at the Faton Station.
August 3: At $1.55 \mathrm{p} . \mathrm{m}$. we anchoied abreast of Nome. The sea was rough and badly breaking on shore. Captain Jarvis and Mr. Kjelimann went ashore and got wet in the breakers. The place was wild with the large returns being received both in the gulches and the black ruby sands on the shore.
August 4: During the morning Mr. John IT. Kelly cane aboard to be taken to Point Hope, where he will make headquarters for taking the census next winter between Point Hope and Cape Prince of Wales, inchding the Kotzebue country. At $10.20 \mathrm{a} . \mathrm{m}$. the ship get under way, and at $1.30 \mathrm{p} . \mathrm{m}$. stopped at Synrock to place Antisarlook (Charlie) and his family on board his umniak, which had come out to meet him. As we passed Cape Spencer a dense black cloud hung over Port Clarence, where the Thetis was at anchor waiting for us.

August 5: At $1.20 \mathrm{a} . \mathrm{m}$. we came to anchor off Cape Prince of Wrales. Going on deck about $6 \mathrm{a} . \mathrm{m}$. I was surprised to find that Mr. W. T. Lopp was on boad. During the forenoon Mr. Lopp, Captain Jarvis, and I had a conference with regard to the reindeer. The bark Alaska and river steamer Johm Riley were also at anchor in the roadstead. I wrote two or three letters to send by the John Riley to the postoffice at Nome. In the afternoon Captain Jarvis and I went ashore with Mr. Lopp. Took a look through the village; returned on shipboard about $5 \mathrm{p} . \mathrm{m}$. Mr. Summers, a mining expert, whom the captain had brought up from St. Michael to prospect some mines that Mr. Lopp and his herders had found, was sent ashore with Mr. Lopp. At 5.45 p. m. we were off for Port Clarence.

August 6: Reached Port Clarence early in the morning ( 3 o'clock), where the Theits was waiting for us. As it seemed best that the rest of the cruise shonld be made on the Thetis, during the forenoon I transferred from the Beap to the Thefis. The wind was fresh and the sea rough.

August 7: During the forenoon my trunk and personal effects were brought over
from the Bear to the Theetis; also the reindeer barter goods brought from the Eaton Station. Captain Buhner during the morning furnished rations on shore for Per Larsen Anti, who is keeping a herd of reindeer at this place. Upon going ashore found that the herd had been removed to Cape Riley. During the day the Bear went over to Cape Riley to water.

August 8: At $4 \mathrm{a} . \mathrm{m}$. received word from the Bear that Anti was out of rations. As the Thetis was prepared to go to sea, Captain Buhner hove anchor at $4.30 \mathrm{a} . \mathrm{m}$. and steamed down to Cape Riley, where we dropped anchor at $7 \mathrm{a} . \mathrm{m}$. I was at once sent ashore with a boat and crew and left rations for Anti. He himself was away from camp after some straying reindeer. Returning to the ship, we were soon under way for sea. In the evening we passed King Island and saw the cutter Bear at anchor.

August 9: About noon passed Indian Point. At 9.55 p . m. we dropped anchor at Port Providence, Plover Bay. A boatload of natives visited the ship. Learned that there was a large herd of reindeer 30 to 35 miles to the westward.

August 10: Left our anchorage at $5.05 \mathrm{a} . \mathrm{m}$. During the morning we stopped to communicate with some natives who rowed out to meet us. They also testified that there was a large herd to the westward. Reaching the bay where the herd was supposed to be, the ship anchored at 4.20 p. m. Lieutenant Hamlet, Chisthe (interpreter), and I went ashore, where we met the reindeer men. Their herd was five days' inland and they declined to drive it down to the coast. Thus again our hopes were blasted. A few miles farther west another herd was reported. In attempting to launch the boat from the shore it swamped in the surf, and I was wet through and through. Had difficulty in getting through the surf. Returning to the ship at $7.05 \mathrm{p} . \mathrm{m}$., we were under way for the next herd, but the fog setting in thick, at $8.25 \mathrm{p} . \mathrm{m}$. we anchored for the night.

August 11: At 8.05 made a start and at 10.55 a. m. anchored off Managen, where a number of deer men's huts or tents were seen on shore. Soon after a boatload of natives came off to the ship and we heard again the same story. They had deer and would like to trade, but their deer were pastured many days distant and they conld not drive them down to the coast. Being convinced of the uselessness of further search along the north shore of Anadir Gulf, at $12.55 \mathrm{p} . \mathrm{m}$. we hove anchor and steamed away for St. Lawrence Island. A beautiful day.

August 12: At $7.40 \mathrm{a} . \mathrm{m}$. dropped anchor on the northeast side of the point at Gambell, St. Lawrence Island. The wind shifting, we hove anchor and steamed around the point and anchored on the southwest side. Went ashore to the Mission Station and brought off a lot of reindeer barter goods that were not needed at this point, but were needed at the Eaton Station. The wind increasing and being a head wind, we lay at anchor until $7.25 \mathrm{p} . \mathrm{m}$., when we put to sea and steamed away for Teller Reindeer Station.

August 13: Head wind and sea, making about 3 miles an hour; I was seasick all day. Distributed magazines to the crew.

August 14: At $11.15 \mathrm{a} . \mathrm{m}$. dropped anchor abreast of Teller Reindeer Station, Port Clarence. Went ashore with the carpenter and nailed up all the doors but one of the large frame house and left the key with Mr. Chard, who has agreed to look after the buildings in return for the use of the log schoolhouse. Also posted notices on the doors of the several buildings, warning against trespassing. The sailors attempted to procure some moss, but in the immediate vicinity of the station, where it had been closely pastured, there was none large enough to gather.

August 15: At $6 \mathrm{a} . \mathrm{m}$. hove anchor and steamed across the bay to Cape Riley, where we dropped anchor at $7.20 \mathrm{a} . \mathrm{m}$. At once went ashore and commenced preparations to take on board 40 sled deer to be removed to Cape York for Mr. Willian T. Lopp. On July 14, 83 deer had been landed to be driven across to Charley, at Point Rodney, in charge of Per Larsen Anti, Tautook, and two other Eskimos.

By 6 o'clock p. m. 40 deer had been caught and placed on board ship. One was killed on shore in handling. The deer are large, heavy, and in excellent condition. The two umniaks that had been hired were paid for, and at $7.15 \mathrm{p} . \mathrm{m}$. anchor was hove and we steamed away for Cape York and Cape Prince of Wales. The cloud effect at sunset was remarkably brilliant and beautiful.

August 16: Dropped anchor under the lee of Cape Prince of Wales at $4 \mathrm{a} . \mathrm{m}$. The wind was blowing a gale and a driving cold rain storm in progress. No commonication with shore or landing of deer possible to-day.
August 17: At $8.50 \mathrm{a} . \mathrm{m}$. hove anchor and steamed to Mr. Lopp's herding grounds near Cape York, where we dropped anchor at $10.10 \mathrm{a} . \mathrm{m}$. At once went ashore, where I found Mir. Hank Summers, mining expert. Sent to have the herd driven down to the beach. Also had gathered a few sacks of reindeer moss. The herd arriving about $10 \mathrm{a} . \mathrm{m}$., we at once went off to the ship and commenced landing the deer. I remained on shore until the deer were all landed ( $8 \mathrm{p}, \mathrm{m}$. ). Good weather until midnight.
August 18: At 9.20 hove anchor and steamed to Cape Prince of Wales, where we anchored at $11.25 \mathrm{a} . \mathrm{m}$. Mr. Lopp and some natives came aboard. Reindeer barter goods for the use of the Bear were landed. Reindeer matters and other business was finished up with Mr. Lopp, and at 3.50 p . m. we were under way.

August 19: At 5.45 a. m. dropped anchor of Cape Riley, and I went ashore to make arrangements for shipping reindeer. Hired three native skin boats and all the men I could procure. A number of the women and children were employed in gathering moss for the deer. During the day 33 sled deer, 3 bucks, and 10 female deer were taken on board, making 49 in all. Fine day. At 5.30 p . m. finished loading. Took on board Per Larsen Anti, together with Government dogs and sleds for Eaton Reindeer Station.

August 20: At $4.05 \mathrm{a} . \mathrm{m}$. hove anchor and steamed away for Point Rodney. Beautiful forenoon; afternoon rainy. At $5.25 \mathrm{p} . \mathrm{m}$. anchored ofi Charley's (Antisailook's) place.
August 21: Last evening Lieutenant Hamlet was sent to the shore, but could not make a landing on account of the surf. Waited all day anxiondy for the wind to change and the swell to go down, so that we could land the deer, as we were without food for them. In the evening moved inshore.

Angust 22: Finding no landing, this morning we hove anchor and started for Golovin Bay. The day proved a beautiful one, with sunsline and a crisp, in vigorating north wind, hut still there was no landing on the beach. Anchored at 8.40 p. m. in the mouth of Golovin Bay under the lee of the west shore.

August 23: At $4 \mathrm{a} . \mathrm{m}$. went ashore with Lieutenant Hamlet to hire native boats. It was a long pull of several miles. Secured at the village 4 umniaks. Took breakfast and found some late papers at the Swedish Mission. Returned to the ship about 10 o'clock. After giving the natives some coffee and crackers the work of unloading the deer was commenced. Per Larsen Anti was set ashore in charge of the deer. Word had been sent to the Golovin Bay herd and Owikkon (native herder) came down to help Anti. By $3.45 \mathrm{p} . \mathrm{m}$. the deer were unloaded, and at 7.05 we were under way for Anvil City.

August 24: At 7.30 a . m. dropped anchor ofi None. Immediately aiter brakfast went ashore and remained all day. Sent word to Mr. William A. Kjellmann and Mr. D. Johnson Eliott that I wished them to come down from the mines to see me. Met Judge Johnson, of the United States district court of Alaska, and was present at the opening of the first court at Anvil City. Saw some of the citizens with regark to a block of ground fur school purposes. Had several conferences with the Lapps in the settlement of their accounts. Governor Brady having returned from the mines, invited him to go to Unalaklik with us. Hove anchor at $8.55 \mathrm{p} . \mathrm{m}$.

August 25: At 4.10 1. m. dropped anchor off Unalaklik. The stean launch took Governor Brady, Messrs. Kjellmann, Karisen, and myself ashore. Had some dificulty in getting over the bar at the mouth of the Unalaklik River. Providentially Dr. P. H. J. Lerrigo and a party of Lapps were down the river with the reindeer station boat. At 10 p. m. Mrs. Karlsen kindly gave us a lunch and soon after Mr. Kjellinam and $I$, with the Lapps, started for the station in a rowboat. Mr. Lerrigo's supplies and baggage were sent off to the ship by the steam launch. Bright moonlight, crisp and cold. Mr. Kjellmann and I laid some blankets in the bottom of the boat and got some sleep on our way to the station.
August 26: The curvent was so swift in the river that wherever the banks would allow it the Lapps landed and towed the boat. It was nearly 4 o'clock in the morning before we reathed the station. Throwing myself on a bed, I slept until 6.30, when we had breakfast, and at $7 \mathrm{a} . \mathrm{m}$. were hard at work with the accounts and other business of the station. At 12.30 noon we started on our return trip to Unalaklik, Dr. Gambell accompanying us. It rained hard all the way. Reached Unalaklik about $4 \mathrm{p} . \mathrm{m}$. and a flag was set as a signal for the launch. Inspected the new Government warehouse on the south side of the river at the mouth. Instead of sending the launch two boats were sent off, which were between two and three hou's reaching shore. As the crews were wet, cold, and hungry, Reverend and Mrs. Karlsen gave them coffee and a warm lunch. It was expeeted that Mrs. Karlsen and Miss Johnson would go out to the ship with us en route to St. Michael. Miss Johnson being an invalid, the doctor forbade her going out to the ship (8 or 10 miles) in an open boat in a rain storm. Consequently Dr. Lerrigo, Mr. Kjellmann, and I went off to the ship in the boats, and the governor remained to come off with the ladies in the launch. Reached the ship at $9 \mathrm{p} . \mathrm{m}$.

August 27: Early in the morning the launch was sent for the governor and ladies. After recciving them on board the launch started to return to the ship. When in the surf it lost its propeller and had to signal to shore for assistance. Rowboats went at once and towed the launch to shore. In the meantime, the wind rising, the ship hove anchor at $10.05 \mathrm{a} . \mathrm{m}$. and proceeded for shelter to the lee of an island in the bay, where it dropped anchor at $1.15 \mathrm{p} . \mathrm{m}$.

August 28: Remained all day at anchorage.
August 29: The gale haring somewhat abated, at $5 \mathrm{a} . \mathrm{m}$. we were under way for Unalaklik, where we dropped anchor at 8.05 a. m. Governor Brady, Mrs. Karlsen, Miss Johnson, and an Eskimo girl going East fur an education, came off in a rowboat, and a ship's boat was sent in to tow off the disabled steam launch. The boat and launch returning at 12.45 noon, the ship was soon under way for St. Michael, where we anchored at $8.05 \mathrm{p} . \mathrm{m}$. Went ashore for mail.

August 30: Major Ray, U. S. A., haring placed the army steam launch at my service for the forenoon, we had an early breakfast and went ashore. Left youchers and reporte at Captain Walker's office. Adjusted business matters with the North American Transportation and Trading Company. Let Mr. N. V. Hendricks have some reindeer for carrying the mail. Had a conference with Dr. Romig, superintendent of the Moravian Mission on the Kuskokwim River, and at $11.50 \mathrm{a} . \mathrm{m}$. returned to the ship. At 12 noon we were under way for Nome, Major Ray, U. S. A., accompanying us to that place.

August 31: At $6.20 \mathrm{a} . \mathrm{m}$. dropped anchor at Nome. After an early breakfast, went ashore, accompanied by Lieutenant Buhner. Mr. D. J. Elliott and Dr. John Johnson Elliott made application for $\$ 20,000$ worth of reindeer for the Swedish Evangelical Union Mission Station at Golovin Bay. At 11.20 a. m. we got under way for Gambeli, St. Lawrence Island.

September 1: Reached Gambell at $3 \mathrm{p} . \mathrm{m}$. Landed Dr. Lerrigo and opened the mission house. Steamed away for Dutch Harbor (Udakta) at 6.45 p. m.

September 7: Reached Udakta at $10.30 \mathrm{a} . \mathrm{m}$., having seen no land for six days.

Found the United States transport Athenion at the dock with 100 soldiers and t.50 cavaly liorses hound from Seattle to Manila.
September 8: In the harbor were two British men-of-war, revenue cutters McCulloch, Grom, Corwio, and Thetis, steamer Tounsend, and Cuited States transport Tictorict with soldiers and cavalry horses. Went to Unalaska and inspected school building. Lunched at the M. E. Mission.
September 9: Went aboard the catter Moculloch and steaned away for Unga.
September 10: Beautiml day. At 2 p.m. reached Unga and went ashore and looked over the schoolhouse and teacher's residence.
September 11: At 7 a.m. a term of court was held by Judge Johnson on the Meculloch; about a dozen men were naturalized. At $9 \mathrm{a} . \mathrm{m}$. we steamed away for Kodiak. In the afternoon a southeast storm had developel, and the captain, at $10 \mathrm{p} . \mathrm{m}$. , headed out to sea and hove to.

September 12: Hove to and weathered out a gale. No table was set for lunch or dinner; took a little food in our hands. Was seasick and very uncomfortable.

September 13: The severity of the gale having somewhat abated and the wind having hauled around to the southwest, at $10 \mathrm{a} . \mathrm{m}$. the ship was headed to the northeast for Kadiak, with a fair wind and sea. Made good progress.

September 14: Early in the morning sighted Kodiak Tcland. About $2 \mathrm{p} . \mathrm{m}$. dropped anchor opposite Wood Island. Went ashore at Kodiak. Tisited the school; Mrs. Hill, teacher. After dimer called at Wood Istand.

September 15: Spent the forenoon and took dimner at the Baptist Mission, Wrood Island. Appointed Miss H. I. Demiston teacher at Afognak. Sailed about $3 \mathrm{p} . \mathrm{m}$.

September 17: Reached Yakutat and learned of the earthquakes that had been going on since September 3. The whole population is living in tents upon the hills. The severest shock was on the afternoon of the 11th of September. Called upon and comforted the Swede missionaries. At noon steamed away for Sitka.
September 18: When the steamer reached the neighborhood of Sitia the fog was so dense that the captain did not dare venture in, but stool out to sea for the night.
September 19: The fog lifting a little, the harbor was made, and we anchored at Sitka about 2 p. ni. Mail steamer Cottuge Chty was in. I was the guest of Governor Brady.

September 20: Spoke at the native prayer meeting in the erening.
September 21: Moved from Governor Brady's to the mission. Governor and Mrs. Brady gare a dinner to Captain Coulson, Captain and Mrs. Kilgore, Bishop and Mrw. Rowe, the land commiswioner and his wife, and myself.

At $8 \mathrm{p} . \mathrm{m}$. a large reception was given to the officers of the cutters Mchulloch and Peryy and the citizens.

September 22: Addressed the teachers in the evening.
September 23: In company with Governor Brady, Senator Shoup, Marshal Shoup, Collector MeBride, and Superintendent Kelly, went aboard the cutter Perry, Capt. William F. Kilgore commanding, Third Lieut. Eben Barker, Chief Engineer Harry L. Boyd, Second Assistant Taylor TV. Ross. Anchored for the night at Killisnon. Went achore.
September 24: Started at daylight for Juneau. Anchored at $5 \mathrm{p} . \mathrm{m}$. After dinner went ashore and addressed the congregation at the First Presbyterian Chnreh on Alaskan schools and missions.
Sentember 25: Mr. Keily and I visited the public schools at Douglas Island.
September 27: Steamed from Juneau at daylight; reached Wrangell about $10 \mathrm{p}, \mathrm{m} . ;$ went ashore and called on Miss Creen, the teacker. Gorernor Brady, Mr. Kelly. and I also called on Rev. II. P. Corser, the Presbyterian minister.
September 28: At midnight started south, calling at Ketchikan and Saxman, and reaching Metlakahtia at 2 p.m. Went ashore and looked over the place. In the evening met the leading men in conference.

September 29: In the forenoon a conference was held in the church. At $3 \mathrm{p} . \mathrm{m}$. the Perry started on its return to Sitka, learing me at Saxman.

September 30: Rev. Edward Marsden took me in his steam launch Marictte to Gravina, where I met the teacher, Miss Hamblet. At 12 noon the church bell rang and I had a conference with the leading men.

October 1: A beautiful day. At 2 p. m. steamer City of Seattle came along and I went aboard for Seattle.
October 2: Reached Seattle at $2 \mathrm{p} . \mathrm{m}$., forty-eight hours from Alaska. After attending to a few items of business and procuring my mail, took $4.30 \mathrm{p} . \mathrm{m}$. train to Tacoma, where other matters of business were arranged. Took the train 11.30 1. m. for Portland.

October 4: Transacted business for the Laplanders at First Xational Bank. Took the $6 \mathrm{p} . \mathrm{m}$. train for San Francisco.

October 6: Reached San Francisco at 9 a. m. Spent the day at S. Foster \& Co.'s office looking up accounts, arranging business, etc. Mr. Blum, whom I wished to see on reindeer matters, was out of the city. Took the $6 \mathrm{p} . \mathrm{m}$. train for Salt Lake.

Dctober 8: Spent the Sabbath at Salt Lake.
October 9: Took ? a. m. train for Chicago. During the night had a heary snowstorm.

October 11: Reached Chicago about $1 \mathrm{p} . \mathrm{m}$. , the train being between four and five hours late. At $5.30 \mathrm{p} . \mathrm{m}$. took the Pemsylvania Limited for Washington. During the night we were detained five hours by a freight wreck.

October 12: Reached Washington at 8.45 p . m., about four hours late.
Very respectiully, yours, Shemdon Jackzon, Lnited Sates General Agent of Education in Alask:
The Comisseroner of Education.

## CHAPTER XXXIII.

## CONSULAR REPORTS.

Contents.-Commercial Education in Antwerp; Study of Commerce in France; The Vienna Export Academy; The Study of Tropical Diseases in Great Britain; The Education of German Censuls; Educational Statistics in Russia; Care of Children in German Schools; Embroidery Schools in Piauen, Germany; German Schools in Foreign Parts; Industriai Schools in Saxony; Education in Russia; High-Art Reproductions for America; Household Schools in Liége; Manual Training in Germany; Mutual-Aid Societies for Arench School Children; Workingmen's Aid Societies in France; Music Library in Geneva; Colonial School in France; Colonial Training in Relgium; Liége School of Firearms; Chbinetmaking School at Nagdeburg; Commereial University for Hamburg.

## COMDEROLAL LDUCATKOS IN ANTWRRP.

Consul-Gencral Lincoln sends from Antwerp, February 25 , 1899, ain article taken from the Belgian Times and News of even date, giving an account of the higher commercial institute of that dity, which is summarized as follows:

The students are divided into two classes--the "regrar" and the "free." The former attend all the lectures with a view to obtaining a diploma at the end of two years, which period constitutes the prescribed course of study, except for those preparing for the Belgian consular scrrice, for whom a third year's course has been added. The "free" student follows only the courses of lectures which he consiler" of importance to his commercial career.

The instruction is practical as well as theoretical. The transactions of commercial and counting houses are practiced, and all questions relating to the theory of exchanges are accurately described. The correspondence of the "offce" must be conducted by the student himself, and that, too, in French, Creman, and English, which languages are obligatory. He must also be competent to correspond in one other foreign language, the choice gencrally being from the Spanish, Italian, or Dutch. The Russimu language is also taught; its study is not obligatory. The principles of political economy, of international commercial law, and of custom legisation are also inculeated. The geographical and economical condition of foreign countries are studied from carefally compiled data, and the relative value of raw material, from diferent sources of supply, is inquired into and noted.

The student is also encouraged to take a close interest in the political events of the day, so far as these affect commercial interests; and the latest consular reports from all countries are placed at his disposal, so that he limself later on may be in a position to make a report upon the commereial prospects of any country in which hemay happen to be.
Another important feature of the Antwerg) institute is the bestowat of traveling scholarships on the most deserving students of Belgian nationality. A sum of nearly $£ 2,000$ per annum is devoted to this onject. A student, who has passed his fnal examination with credit, is entitled to offer himself as a candidate for one of these scbolarships or "bourses," as they are called. If one be granted, he proceeds
abroad, with the certainty of enjoying, for three years at least, an amual income of about $£ 200$. He is thas relieved of the necessity of accepting the first situation that is offered to him and can devote the whole of his time, if necessary, to the study of the economic condition of the country in which he resides. He must periodically send home a detailed report of the result of his observations. By his previous training he is enabled to do this effectively; and these reports, after being noted by the Govermment, are utilized by the students in the prosecution of their studies.

Down to the end of 1892, 62 students had been thus sent abroad, the countrics chosen for residence being Algeria, Morocco, the Cape, Japan, China, India, Canada, the United States, the Argentine Republic, Brazil, Colombia, Venezuela, Chile, Mexiro, Cuba, Philippine Islands, Australia, and New Zealand-in fact, those countries in which Belgium is seeking to place her manufactures. Of these 62 students, 27 have remained in the countries to which they proceeded and are how doing well as merchants or commercial agents; 16 are established in European countries, also as merchants; and two have entered the service of the Japanese Govermment as tearhers of the commercial sciences.

It will now probably be asked what is the cust to parents of a higher commercial education, such as that given at the institute at Antwerp. It is very small, the axpenses of maintaining the establishment being borne by the Belgian Govermment in part and the rest by the Antwerp municipality. Wach student pays a fee of about $£ 10$ the first year and $£ 12$ the second, the total amount thus raised being given as honorarium to the professors to supplement their salaries.

The Government does its best to procure a really competent teaching stafi, and pays so much a year to each "chair," giving a pension to the professors after a certain number of years' service.

## study of commerce in france.

Consul Skinner writes from Marseilles, March 24, 1899:
The commercial organizations of France are doing all within their power to promote the study of foreign commerce and foreign languages and to overcone the national habit of indifference to the latter. To this end the Society for the Protection of Commerce in Marseilles maintains a free commercial school, and the National Ninistry of Commerce grants "purses for residence in foreign lands." Purses of the first category ( 4,000 francs $=\$ 772$ for the first year, 3,000 francs $=\$ 579$ for the second $)$, are reserved for young men of not less than 16 and not more than 18 years who desire to establish themselves in some country outside of Europe and who, by virtue of the law of July 15, 1899, are relieved of the obligation of active military service if they reside regularly in foreign parts until they shall have attained 30 years. The purses of the second category (varying from 2,500 to 4,000 francs, or 8482 to $\$ 772$ ) are for young men aged not more than 26 years, graduates of a high school of commerce, who, after having accomplished their military service, are desirous of completing, by a practical apprenticeship, their theoretical knowledge gained at the school. This year two purses are to be granted for each category.

## THE YIENNA ENPORT ACADEMY.

A consular report from Viemna on the export academy in that city gives a minute description of the efforts of Austrian merchants, combined with those of the Government, in increasing the exports of the Austrian Empire. The report is here given in full:

Since the 10t of October, 1898, there has existed in Vienna a commercial school of an entirely original organization. This is primarily shown from the fact that the
institution is directed by a high official of the Austrian ministry of commerce. This direction is not merely nomina!, but is evidenced, apart from daily infuence on the life of the pupils, by weekly conferences under the chairmanship of the director himself, which have the purpose of receiving from each of the teachers a report of the studies of the past week and those to be kaken up in the coming one. Every topic, even in its smallest details, is in direct relation to the object of the institution. This object is the promotion of the Austrian export trade. It is not designed that the young men, immediately after finishing their studies, should become Austrian exporters. On the contrary-and this is the second original phase of the scheme-it is desired that the graduates, on leaving the academy, act as clerks in exporting and manufacturing firms, there to learn the practice of some special branch of business, whereupon, under further support of the ministry of commerce, the graduates are to be placed with larger foreign firms; and finally, by the joint aid of the Austrian Government, the chambers of commerce, and the particular foreign consulate concerned, they will be aided to establish themselves abroad.

One hears constantly the complaint of Austrian exporters of the sad lack of national commercial representation abroad. It is mach more difficult for an Austrian exporter to find in India, China, or South America a market or bank for Austrian wares or drafts than it is for the German merchant, who is naturally preferred by the German firms in foreign countries. Austrian merchants are rarely to be found, even in the most important cities of other lands. This state of things it is now proposed to remedy by educating ambitious and gifted young men in all loranches necessary for the future exporter to know, and inducing them to adopt such carece by the certain prospect of aid from the Austrian Government.
The academy has a preparatory course of one year and a regular course of two years. Further, there are special courses of greater or less duration. The tuition fee is 150 florins ( $\$ 60$ ) a year. The pupils will, besides, be given opportunity to risit occasionally, under the supervision of thoroughly informed teachers as guides, the prominent industrial establishments of all typical export articles, as well as certain commercial cities and ports of special importance. Thus, for instance, an excursion to Hamburg is now planned, while trips to mills, sugar refineries, breweries, and furniture factories have already been undertaken.

The Imperial Royal Commercial Museum, of which the export acatemy has been made an integral part, has put at the disposition of the academy its library, its valuable trade collections, and the requisite geographical maps and apparatus. The academy has a yearly subvention from the ministry of commerce of 20,000 florins $(\$ 8,000)$, and a like sum is being raised by popular subseription.
First of all, graduates of the higher commercial schools are entered as regular students in the academy. Further, pupils are admitted who have passed the grammar schools and possess such knowledge of commercial branches and of the French and English languages as can be acquired in an commercial school of two classes.

All desiring to be admitted as regular students must pass a preliminary examination. In exceptional cases pupils who have completed their studies in an anusually excellent manner in a commercial school, and can show testimony of already having done praiseworthy work of a practical kind, may be admitted as regular students by the faculty, without preliminary examination. This rule of exception has already been applied in many instances, and gives the academy some of its most promising pupils. Two groups of students can be plainly distinguished-those with and those without practical experience. The academy would perhaps attain its highest plane if only students who have had practical experience were admitted.

In no class of the academy are more than thirty students admitted, and only twenty in the preparatory course. The actual number of pupils at present is near the maximum allowed.

Attendance at the chasses and lectures of the export academy is compulsory and
subject to strict supervision. An absence of eight days without proper justification is followed by striking off the student's name from the roll. This is another distinguishing feature of the school, wherein it differs from all other Austrian and German high schools and recalls the Paris École des Hautes Études, as well as French schools in general.

At Christmas and Easter during every year oral examinations are held in all the branches of study. During the first year the annual examination takes place in the first half of July.

By reason of a special order of examination the regular students have to undergo a severe final examination at the close of the second year, before a board of examiners presided over by a representative of the ministry of commerce. The names of students who do not pass one oral examination without good excuse are stricken from the rolls. In some cases, the board of examiners may permit the repetition of a year's course, or of the severe final examination.

Only those students are admitted to the second year who have favorably passed the annual examination in all branches of the first year's course.

There are thirty-four hours weekly in the preparatory course, and in the first year thirty-four or thirty-five obligatory hours every week, besides some that are not obligatory. The preparatory course has for its purpose to advance graduates of gymnasia and other high schools about as far in one year as an ordinary commercial school does the undergraduate in two or three years.

Of the two yearly courses of the academy only the first has so far been opened, and the students have in all the examinations up to now given brilliant evidence of the excellent curriculum. In this course great stress is laid on the stady of the French and English languages, with practice in correspondence (six hours each weekly). Four hours a week are devoted to domestic and foreign law, so far as it concerns commerce. Three hours are given to practical exercises in the office work of export, import, and factory businesses. Instruction in this important branch is intrusted to the rice-director of the academy. The limited time given to this work is only the natural consequence of the fact that all students must be familiar with the principles of office work before their admission.

In view of the burden entailed by the large number of school hours home time is demanded only for languages and office lessons. Instruction in economics, with special regard to tarifis, in the usages of export trade, in commercial geography, and in knowledge of the world's wares according to kind and production, is imparted in so-called seminaries-that is, institutions which afford immediate practice of what has been learned from the teacher's lecture, and, as far as possible, actual inspection of the modes of production and of samples. This experiment of giving the pupil the most important facts right in the school, instead of letting hin learn by heart what he is sure to forget speedily, and of having him practice it on the spot until indelibly engraved on his memory, is one of the most daring as well as important innovations in the field of pedagogics, and deserves to be propagated.

Besides all this, lectures on selected subjects of actual interest are given by the professors of the export academy, by manuacturers in the various industries, and by ministerial officials, and are attended voluntarily by the students, who display deep interest in them. In this manner they become acquainted with special questions of the day that are engrossing public interest, in a manner that is unbiased by party standpoints.

I had the pleasure of observing the practical working of this feature of the acadeny in a lecture which was a comprehensive description of the world's commercial institutions devoted to the export trade. The lecturer spoke, in particular, with great admiration and thorough knowletge of the Philadelphia Commercial Museum and the National Association of Manuiacturere, as well as of our other export associations. Abotit the lecture room was displayed printed matter bearing on the
subject. In the American exhibit I noticed a cony of the tariff, consular invoice certificates, consular reports, the newly issued American Trade Index of the National Association, a copy of American Trade, and a number of other publications.

This export academy should be of special interest for us in the United States. The addition of a similar school to the excellent means for information at the command of the Commercial Museum in Philadelphia might cause young men to be of great use in our export trade and achieve even better results than the academy here, which is proving so practical a measure. Such a school would be of untold benefit to our national commerce if attended for a year by men about to enter our consular service. It would be an ideal consular training academy.

Carl Paley Hurst,
Consul-General.
Viexva, April 18, 1899.

THE STUDY OF TROPICAL DISEASES IN GREAT BRITAIN.
A consular report from Liverpool on this subject may be of more than passing interest. The report is here reproduced in full:

A movement has recently been started in England for the special study of tropical diseases, and, now that it has developed into concrete form, there is an endeavor to give it an international character. The originator of this hamane project is the Hon. Joseph Chamberlain, the British colonial secretary. The advancement of commerce with tropical regions, particularly Africa, has brought civilization face to face with diseases peculiar to those countries, which science has so far not been able to successfully combat, first, because of lack of exact knowledge as to their nature and, second, because of the inadequacy of the remedial agencies employed. These diseases are of a malarial type, but it has been found that they differ somewhat from those known as belonging to that class in Europe and in North America, although to a certain extent they are similar to the malarial diseases existing in the swampy districts in sereral of the Southern States.

There are now two organizations in England that have taken up the work of the study of tropical diseases, one at London and one at Liverpool. The Colonial Nursing Association, of London, has also identified iteelf with the movement. The organization at Liverpool is independent of governmental control and has not as yet received any financial aid from the Government, while that at London is, to a certain extent, under Government auspices. The Liverpool school was started by the head of a large shipping firm, and the project has received the enthusiastic support of the local business community and medical profession. Both the London and Liverpool institutions are working together harmoniously for the same end, and it is confidently expected that the Liverpool enterprise will be given Government support. It is claimed that no other city offers such facilities as Liverpool does for the study of tropical diseases, largely because of the fact that, owing to its enormous traffic with. the Tropics, there are more cases of these diseases here than in any other European city. Last year there were in one of the Liverpool hospitals (the Royal Southern) nearly three hundred cases of malaria, and quite a number of cases of beriberi, tropical anæmia, yellow fever, scurvy, etc. All these cases were brought to Liverpool by ships trading with tropical countries.

The Liverpool School of Tropical Discases is in comnection with University College and the Royal Southern Hospital. Students must be qualified medical men of this or foreign countries, or fifth-year students. In other circumstances, special application must be made. A separate ward has been set apart at the hospital for the treatment of tropical diseases, and there is a ward laboratory for the immediate examination of blood and excreta. At the University College there are the Thomp-son-Yates laboratories, opened by Lord Lister last October, and probably the most
complete in the United Kingdom, where ample facilities will be given for the special scientific study of the subject.

The managers of the Liverpool school urge that their work is not a local one, nor even limited to the British Empire in its beneficent scope. They plead that all countries haring commerce in tropical countries should interest themselves in the work, as, quite apart from humanitarian considerations, tropical diseases are one of the greatest barriers at present to the extension of commerce in the countries where they prevail. A short time ago letters were received from Professor Koch, of Berlin, heartily indorsing the mndertaking, and stating that Germany was about to found a similar institution. The matter has been officially brought before the foreign consuls in Liverpool, and they, after several conferences, expressed their appreciation of the great value of the movement, and the suggestion was made that each consul should, in such manner as might be deemed best, bring it to the attention of his government and of the medical profession and others in his own country.

Pecuniary aid from foreign governments will not be solicited, hut would be gratefully received. The Liverpool school would be pleased to exchange information and the results of scientific observation upon all phases of the subject with any foreign government, or any foreign medical society or hospital, or with any individual traveler or profersional man, and foreign students would be cordially welcomed. Those interested are invited to commmicate with Professor Boyce, University College, Liverpool. The international feature of the Liverpool School of Tropical Diseases has already received recognition from America. Several months ago Bishop Hartzell, of the Methodist Episcopal Church of the United States, passed through Liverpeol en route to his field of labor, which embraces the whole of Africa. While here be became greatly interested in the Liverpool School of Tropical Diseases, and arranged that one of his medical missionaries who was shortly to follow him should study for three months at the school. Several consuls representing maritime nations say that they will advise either direct support to the Liverpool school or cooperative action, for the reason that many victims of tropical diseases that have come under their observation at Liverpool have been sailors of their own nationality.

It is the expectation that the Liverpool institution will become the recognized school for the training of Government medical officers proceeding to the west coast of Arica. A special sphere of activity will be the organization of expeditions to Africa to study tropical diseases, and I am officially advised that students from American medical colleges are invited to accompany these expeditions. Professor Christophers is now conducting an expedition in Africa with this object. He is working under the auspices of the British Government, and was specially selected for that purpose by the Royal Society on request of Mr. Chamberlain. He is operating in cooperation with both the Liverpool and London schools.

It is suggested here that in view of the new responsibilities and opportunities in the West Indies and the East, this enterprise should meet with sympathetic interest in the United States.

James Bovie,
Liverpoole, Apeil $20,1899$.

THE RDUCATION OF GERMAN CONSLLS.
No attentive reader of current newspaper discussion in Germany can have failed to notice the earnestness and intelligence with which the leading journals have seconded the plans which are now understood to be under consideration by the Imperial Government for the reorganization of its consular service.

The scope and purpose of the proposed reform have been dictated by the new and enlarged functions which are imposed upon the foreign service of Germany, by the
expansion of her foreign trade and by the valiant fight which this country is preparing to make for a leading and permanent place in all important foreign markets.

As long as Germany was an agricultural State, without colonies or any large export trade, except in manufactured products which went mainly to the United States and neighboring countries in Europe, her consular service, organized on the old lines, served satisfactorily for the protection of German subjects residing abroad and such other incidental duties as might be required of it. Under that system consuls were educated as lawyers and diplomats, passed the preseribed assessor's examination, underwent a period of training in the foreign ofice, and became typical Prussian offcials, with a good command of languages, a fair knowledge of diplomacy, international law, and the history of treaties, but no practical acquaintance with industrial processes, commercial values, or mercantile usages. As trained officials belonging to the privileged class, many of the imperial consuls and their subordinates-as is now asserted by the German press-hare evinced a certain contempt for trade and those engaged in it, and hare rejected requests for commercial aid and information as forming no part of their official duties.

The exigencies of the wholly new situation that has been developed duriug the past ten years-stimulated, as is broadly hinted, by the recognized efficiency of American and other consuls in obtaining valuable information and promoting export trade-have created a demand for a radical reform of the entire consular system and its reorganization upon wholly different lines.

In so far as the leading newspapers are informed, the propositions now madex consideration are two:

First. To retain practically the present consular organization and to strengthen the commercial efficiency of the consulates by assigning to them commercial attachés, a plan that has been found to work well in the German consulates in the United States.

Second. To abolish permanent consuls (Berufsconsuln) and appoint in their stead experienced and capable merchants, who will give to the consular office a definite commercial character, while its legal and purely official duties are performed hy young attachés trained in the usual nanner.

Whichever of the plans may be adopted, there is a general demand that the consular service shall remain, as now, a life career; that the basis of its personnel shall be a corps of consular pupils, selected by competitive examination for their intelligence, energy, and efficiency as students of modern languages, commercial lam, and technology, trained by special studies for their carcer, and then sent out to foreign parts to begin their life work as apprentices. For the purposes of this service, the world will be divided into four or five districts, for each of which the consular papil will be specially educated in all that relates to languages, history, and special commercial conditions. In such a division, Great Britain and its Englisli-speaking colonies would constitute one district, the United States a second, South America a third, China and Japan a fourth, the East Indies a fifth; and the consular pupil, prepared and assigned to one of these, would remain there during his carcer, thus saring the reckless waste of valuable knowledge and experience that occurs where a competent consular officer, familiar with the language and commercial uses of one foreign country, is suddenly transierred to another.

To emphasize the need of a radical reform on this point-in respect to which the proposed new German system would be a step beyond what has been hitherto embodied in the consular service of any other government-the Cologne Gazette says:

The essential condition to the practical success of this reform will be a radical change in the plan by which our consuls are assigned to duty. Iitherto, the whole world has constituted for our foreign service bat one district. A consular officer now begins his career at Pekin and during his two or three years' service there learns the language and begins to feel at home. Just as he becomes of real value to the consulate his experience and attainments are wasted by a transfer to Bucnos

Ayres. What he learned in China is now lost and worthless. But he begins zealously the study of Argentine conditions and the Spanish language. At the end of three years he is so far advanced that he has practical command of his district, when he is transferred to the consulate at Odessa. There he has to forget his Spanish just as he forgot his knowledge of Chinese at Buenos Ayres. He now works three years more to learn the language and commercial conditions of Russia, when he is promoted to consul-general and transferred to, say, Palermo. Chinese, Spanish, Russian, and all the peculiarities of those countries which he had laboriously acquired, and which would have been so valuable at either of his former posts of duty, are now lost and worthless capital, and he is naturally too discouraged and indifferent to begin the study of Italian and the peculiar conditions in that country, because he knows that sooner or later he will be transferred-perhaps to Chicago-where his Italian would again become useless.

This is, of course, an extreme picture, but it shows what has been a serious weakness in the bureaucratic system of consular administration, and shows how fully the German press at least realizes what governments have been so slow to learn, viz, that the higher, more valuable work of a consul requires special attainments and capabilities, not only in different countries, but often in different districts of the same country; that given intelligence, industry, and patriotic devotion to duty, the practical value of a consul to his country and people increases with each year that he remains at a given post for which he has been prepared by proper antecedent education; that the system of transfers with each advancement in grade or fixed period of service is only less wasteful and ill-considered than the plan of filling important consulates with wholly inexperienced men who are in danger of removal before they have become competent through experience and practically acquired knowledge of their duties.

Whatever else may happen, this much may be recognized and taken into future account: Germany has set herself to the task of remaining what she has become-one of the foremost manufacturing and exporing nations of the world. What she lacks in native materials and resources she will make up for by superior education, organization, energy, and mastery of details; and in the furtherance of this policy every energy of the Government and the people, from Emperor to operative, will be enlisted and exerted with a persistent, unswerving, patriotic purpose.

The consular service is to be made, like the great subsidized steamship lines, the effective agent of the Govermment for pushing the trade of German merchants into every comer of the civilized world; and it will be reorganized, trained, and equipped for its work with the same scientific thoroughness that characterizes the military, industrial, and educational systems of this country.

If present indications are fulfilled, the officialism which has heretofore restricted the usefulness of the German consular service will be sacrificed to practical utility. Young men, carefully selected and specially educated for service in a designated field, will go out and pass from clerk through the successive grades to consul-general in that one district, and as the final reward of competent, faithful service, will be recalled for duty in the foreign office, which will in time become a bureau of experts, whose aggregate knowledge will cover the whole realm of German export trade.

As has already happened in law, medicine, engineering-in nearly every field of applied science-the day of the all-round man, with a smattering of many things but a thorough knowledge of nothing, is definitely past, and the successes of the future will be won by the nations as well as by the individuals who can bring the highest attainments, the largest experience, and the most consummate proficiency to bear where competition is keenest and the richest prizes are to be won.

## EDUCATIONAL STATISTICS IN RUSSIA.

Consul Smith, of Moscow, under date of Mareh 2t, 1399, sends the following statement of the universities in Russia, with the number of students in each:

| University. | Students. | University. | Students. |
| :---: | :---: | :---: | :---: |
| St. Petersburg | 2,634 | Odessa | 492 |
| Moscow. | 3,693 | Tomsk (Siberia) | 478 |
| Kharkof. | $\frac{1}{2}, 059$ | Jurjev .. | 1,323 |
| Kief'. | 2,558 | Warsaw (Poland) -... | 1,085 |
| Kazan | 781 | Helsingförs (Finland) | 1,500 |

The number of high schools (not including the military schools) and lyceums is stated as follows:

| Description. | Number. | Description. | Number. |
| :---: | :---: | :---: | :---: |
| Technical. | 7 | Languages (oriental). |  |
| Medical. | 2 | Law................... |  |
| Philological | 3 | Veterinary. |  |
| Ecclesiastical | 7 3 | Agricultural |  |
|  |  |  |  |

Siberia has 2,501 schools, with 80,002 scholars.
The expenditure for education in Russia in 1896 (more recent figures not having been published) was $\$ 12,747,000$. The complete report of Consul Smith is given is this chapter. (See pp. 1443-46.)

## CARE OF CHILDREN IN GERMAN SCHOOLS

Commercial Agent Stern writes from Bamberg, January 7, 1899:
A resolution which is well worthy of being imitated, and which ought to be widely circulated in the American press, has just been passed by the city council of Würzburg, Bavaria, the seat of a university. According to this resolution, the teeth of the poor pupils of the public schools of that city are to be examined and cared for free of cost, provided that the parents give their consent. It is intended to treat diseases of the ear and throat in like manner, should the first experinent prove successful.

## EMBROIDERY SCHOOL AT PLAUEN, GERMANY.

Consul Monaghan, of Chemnitz, under date of April 15, 1899, reports that a school for teaching embroidery is about to be opened in Plauen. The Government has appropriated 9,000 marks ( ${ }^{(12,142}$ ) and the city 3,000 marks ( 8714 ) for the initial expenses; 5,000 marks ( $\$ 1,190$ ) and 3,000 marks ( $\$ 714$ ), respectively, will be contributed annually for its maintenance. The number of applicants for admission is said to be so large that hardly half can be accommodated. Consul Monaghan speaks of the excellent system of technical education in Germany; nearly every important branch of industry in the Empire, he says, has its school, and the country's industrial development is in large measure due to these educational facilities.

## GERMAN SCHOOLS IN FOREIGN PARTS.

Censul Monaghan sends the following from Chemnitz, June 3, 1899:
It may not be generally known that Germany maintains schools in foreign countries. A fund is yearly voted by the Reichstag for this purpose. There is now an agitation in favor of granting the schools the right to award exemption from the long periods of military service; in other words, to grant the one-year service diplomas. It is argued that when young men in foreign parts, born of German parents, can pass examinations and earn the right to serve in the army only one year they will have greater inducement to retain their German citizenship. It is pointed out that boys born abroad, deprived of this right, go into other armies, and necessarily assume citizenship of the state under whose flag they stand. These facts have had great weight with the Government. The efforts of this people in foreign countries not only in selling the products of its industry, but in propagating its language and maintaining its hold on its offspring, are untiring.

## INDUSTRIAL SCHOOLS IN SAXONY.

> United States Consulate, Chemnitz, Saxomy, Gemany, June $22,1899$.

The commendable efforts now being made among the educational elements of the United States to develop the industrial, industrial art, and technical education of our people are equaled by renewed efforts among the educators and manufacturers of this Empire. June 1 and 2 a meeting was held in Eisenach to consider the question of how best to improve commercial education. The meeting was made up of members of the German Union for the Encouragement of Commercial Education. Twentyone of its members had been at the last International Educational Congress. They were very much pleased with its work, so much so that a vote was passed to send delegates to the next one, to be held next year in Paris. It was voted further to prepare comparative reports on industrial education in different countries and to present them at the congress in Paris. The union is interested in the preparation of a book dealing with this Empire's industrial conditions, history. progress, and prospects. Some very able writers are employed on the work. It will be exhaustive and exact. A book is to be out this year dealing with the commercial schools of all countries. The union roted also to join the general or imperial union for the encouragement of mercantile and industrial education now forming.
A proposition to still further encourage the so-called Fortbildungsschulen, or supplementary elementary schools, was unanimously adopted. A memorial secting forth how best to establish, fit up, and conduct such schools is to be laid before a school congress that meets this year in Hanover. This congress will discuss the following questions: (1) What fundamentals are necessary for the establishment of mercantile schools? (2) Why should the network of commercial schools be extended, and how shall it be done? (3) How can the apparently contradictory elements now opposing a satisfactory general and technical development of young merchants in commercial matters be equalized or neutralized? (4) How are the pensions and appointment of commercial school teachers to be regulated?

This is interesting and important. It goes to show how eager, how earnest, these people are in all that pertains to education. They are following Bismarck's advice, to "keep ahead."

I am, sir, your obedient servant,

## STATISTICS OF EDUCATION IN RUSSTA.

## Higher education, institutions, and lycerms.



The following is a list of universities and number of students in each town:


Military schools (higher).

|  | Academies. | Stucients. |
| :---: | :---: | :---: |
| General staff (only for officers) <br> Artillery <br> Engineers <br> Court-martial <br> Medical. | 1 1 1 1 1 | 327 54 99 58 760 |
| Total. | 5 | 1,292 |

Secondary schools.


ARMY CADET SCEOOLS.
There are 30 of these schools with 8,118 cadets for the army, and 5 schools with 960 cadets for the navy.
The following is a list of third-class land schools in the Cossack tervitories, with about 182,803 male and female scholars:

| Territories. | Number of schools. | Territories. | Number of schools. |
| :---: | :---: | :---: | :---: |
| Amoor (Siberia) | 27 | Semiretschinsk |  |
| Astrakhan.. | 1,273 | Oussourisk (Sioeria) | 15 |
| Trans-baikalia (Siberia) | 139 | Ural.. | 129 |
| Kubanski | 629 456 | Siberia | 166 |

The annual cost of maintaining these third-class schools amounts to $\$ 1,747,359$, out of which amount $\$ 413,328$ is expended by the Government.

| Male 8 | 178 | Female gymnasiums | 157 |
| :---: | :---: | :---: | :---: |
| Male progymna | 58 | Female progymnasiums | 173 |
| Male grammar schools | 103 | Male ecclesiastical seminari | 55 |
| Male teachers' institut | 10 | Eparchial schools (male). | 186 |
| Male teachers' seminaries | 61 | Eparchial schoola (female) | 61 |
| Iale foreign creed schools | 10 | Teachers (male and female). | 17,812 |
| Male private schools. | 31 | Scholars (male and female) | 256,598 |

Annual expenses, $\$ 12,725,549$, out of which amount the Government contributed 87,296,945.

Third-class common city and rural schools (male and female).

|  | Schools. | Scholars. |
| :---: | :---: | :---: |
| Russian central districts. | 39, 435 | 3,061,404 |
| Russian northwest districts. | 1,424 | 310, 812 |
| Russian southwest districts. | 5, 891 | 246, 149 |
| Other districts in European | 2,565 | 114, 148 |
| Baltic provinces | 3, 170 | 141,544 |
| Poland. | 6,428 | 257, 295 |
| Caucasus. | 4,236 | 143, 785 |
| Total. | 63, 052 | 4,275,188 |

Siberia has 2,501 schools, with 80,002 scholars.
Technical and professional schools.................................................................... 575
Mining schools (second class) ............................................................... 6
Common and elementary " church" (male and female).


Second-cliss schools.

Technical.............................. 14 Industrial.................................... 144
Foreign languages ...................- 6 Medical and surgical..................... 8
Dentist ............................... 8 Agricultural................................ 70
Horticultural............................. 20
Miusical conservatories and dramatic art schools.
Private, for males and females............................................................................ 44
Imperial dramatic, for males and females ......................................................... 2
Imperial ballet, for males and females ........................................................ 2
There are two imperial music and vocal conservatories in St. Petersburg and two in Moscow; also, 14 art academies and schools for painting and drawing for males and females, 2 printing schools, and 36 orphans' institutes and schools for males and females.

## Special female schools and institutes.

Imperial institates for the daughters of the nobility and military officers. ..... 23
Femaze (pricate)
[European Eussia, Cancasus, Siberia, and trans-Caspian.]
Gymnasiums and schools ..... 78
Boarding schools ..... 265
Professional ..... 62
Mixed schools and Froebel's kindergarten ..... 362
Athletic and gymnastic (male and female) ..... 6
City and private charity schools, asylums, and institutions ..... 423
The annual expense of the universities amounts to $4,544,031$ rubles, or $82,272,040.50$,out of which amount $3,507,667$ rubles, or $\$ 1,753,833.50$, is contributed by the State.There are 1,701 Jewish schools with-
Nale scholars ..... 25,326
Female scholars. ..... 4, 868
Mohammedan schools.
Melktebs and Medresses schools ..... 1,785
In European Russia, Siberia, and Central Asiatic Dominions: Male scholars ..... 55, 779
Female scholars ..... 17, 477

Schools for crdinary recruits and soldiers are established in every regiment of the imperial army and navy.
Children's and soldiers' education is in Finland obligatory.
The following languages are taught in Russian schools, and are obligatory:
Gymnasiums: Latin, Greek, French, and German.
Church academies: Latin and Greek.
Female imperial institutions and frst-class schools: French, German, and English. (N. B.-English not obligatory.)

## Oriental languages (specialty).

Asiatic imperial institution at St. Petersburg: Arab, Turkish, Persian, Chinese, Japanese, Tartar, Sartian, and others; Mongolian idioms and Hebrew.
The Armenian institutions at Moscow and St. Petersburg: Armenian, Hebrew, and all the principal languages of the Caucasus.
Special schools connectid with the asylums for blind, deaf, and dumb children have been incorporated since 1886 .
The following is a list showing the percentage of each religion in military schools:

|  | Per cent. |  | Per cent. |
| :---: | :---: | :---: | :---: |
| Orthodox | . 88.70 | Anglican. | 0.09 |
| Roman Catholic. | 3.30 | Armenian Gregorian . | . 37 |
| Lutheran | . 7.26 | Mohammedan. | 28 |
| Reformed. |  | Hebrew .. |  |

Out of every 100 recruits, different nations and creeds, the following statistics show the percentage of those who can write:


Finland's recruits are all obliged to read and write.
The financial budget of Russia for its educational expenditure for 1891 to 1896 is as follows:

|  | Year. | Roubles. | United States equivalents. |
| :---: | :---: | :---: | :---: |
| 1891 |  | 22, 769, 131 | \$11, 384, 565 ${ }^{\frac{1}{2}}$ |
| 1892 |  | 21, 745,718 | 10, 872,859 |
| 1893 |  | 22, 409,954 | 11, 301, 977 |
| $189 \pm$ |  | 22,144,918 | 11, 072, 459 |
| 1895 |  | 23, 566, 944 | 11, 783, 472 |
| 1896 |  | 25,495, 487 | 12, $747,743 \frac{1}{2}$ |

The above includes the administration and management of the institutions.
The budgets for 1897 and 1898 have not yet been published.
Thomas Suith, Consul.
Moscow, Russia, March 2́4, 1899.

## HIGII-ART REPRODUCTIONS FOR AMERICA.

Consul-General Mason, of Berlin, under date of September 1, 1899, sends a report giving a description of an association organized in Berlin some years ago for the purpose of applying a new process of colored photogravure to the reproduction of the masterpieces in the royal galleries of Europe. The educational character of the work, Mr. Mason thinks, makes it worthy of notice. The report reads:

It will doubtless interest the friends of resthetic culture in America to know that a society in Berlin known as the "Vereinigung der Kunstfreunde für die amtlichen Publicationen der Königlichen National Gallerie" (Union of Friends of Art for the Official Publication of the Royal National Galleries), which is organized under a charter issued by the Prussian ministry of worship and education, is aboat to send a delegate to our country for the purpose of establishing a branch office in the United States. As its name implies, the society is the vehicle for distributing among the educational and religious institutions of Germany, and the people in general, facsimile coples in colors of the great masterpieces and famous paintings in the royal galleries in Lurope, thus planting the seeds of art education in the minds of the rising generation and fostering among the intelligent classes a cultirated taste for wholesome art.

As particular stress has been laid by the most eminent authorities in American art education upon the fact that, much as our own art culture has improved within the last twenty years, the improvement in refined æsthetic taste has not kept pace with it, unless in exceptional individuals, and that it has been of necessity limited more or less to the wealthier classes, the establishment of a branch of the Art Patrons' Society of the Royal National Galleries in the United States seems to deserve the earnest attention of our art educators at home.

The popularity which the society enjoys here and the success which has crowned its efforts must be accredited to the artistic standard of its productions, which rise far above the meaningless black-and-white prints, cheap chromos, photogravures, etc., that flood the German art market. This superiority is due, in the main, to the peculiar process owned and employed by the society in its reproductions, a process which, in due course, it intends to transplant to the United States. It difiers in its method from any heretofore employed, inasmuch as it enables the reproducing artists not only to create true facsimiles of the original in every outline, by means of photography and steel etching, but also to produce the depth of coloring and the peculiarities of manner of each master by a special employment of the colors called heliotint, thus reproducing the characteristic handiwork of the artists.

The process, although an intricate and costly one, has not been patented; but strict secrecy is kept as to the manipulations of the plates in some of the stages through which they have to pass. After the original paintings have been photographed, for which purpose special cameras have been built and negative plates of particular sensitiveness are prepared, the photographic productions are transferred. to steel plates, the surfaces of which, by some peculiar treatment, have been prepared to receive the impressions from the negatives.

The outline work is thus obtained from the steel with an exactitude and clearness never before known. In the meantime the colors, ass true to the original painting in the distribution of light and shade as manipulation of the brushes of eminent artists can make them, have been reproduced on the photographic copy first obtained, and the complex "color tableau" thus created is transferred to as many lithographic stones as there are colors represented in the picture, from which impressions are taken on presses worked by hand, as it has been found that presses worked by machinery can not do the work with the minuteness and cleanliness necessary to effect perfect reproductions.
The methods employed by the society for the distribution of its productions among the educational and reigious institutions of the country and the people at large are somewhat unique.

It obtained at the start a list of patrons, who, in consideration of certain annual contributions, caused the society to distribute a number of the works among the educational institutions of the country. This list of patrons gradually grew, beaded by the Emperor and Empress of Germany, who are followed by many of the members of other royal and princely families in Europe, until it has reached an aggregate membership of more than 16,000 .

These patrons gradually introduced the society's productions into the homes of subaltern officers, teachers, civic employees, and people in the humble walks of life, who, however, before becoming entitled to the privilege of receiving such art reproductions, had to sign the society's roll of membership and thus become active agents in the missionary work of spreading culture in art.

Keeping its educational tendencies continually in mind, the society has always exercised the greatest care in the choice of subjects for reproduction. It has made selections from the great classical and modern religious painters, Rafael, Murillo, Guido Reni, Paolo Veronese being among the former, and Hoffmann, Plockhorst, Gerhardt, and others among the latter. It has also endeavored to foster the love of home and country by giving reproductions from famous masters which represent scenes from history, and it will adhere to a like policy in the conduct of its American branch. Each year a nimber of subjects from the history of the United States, these subjects to be chosen by an American advisory board, will be selected for reproduction, the originals•to be painted by American artists. (Leutze's famous canvas "Washington crossing the Delaware" is already on the stocks in the society's ateliers to open the American series.) These American historical paintings will be placed on exhibition both in the United States and in Europe, and gold medals will
be awarded by the society to thoze American artists whose works are chosen for reproduction. Imerican landseapes and marine views will also be included in this line, and it is proposel, in time, to erect a suitable building in one of the principal cities of the Union, which is to serve the purposes of an artistic workshop for the American branch of the society.

## HOUSEHOLD SCHOOLS IN LIÉGE, BELGIUM.

Consul Winslow sends the following from Liége, November 27, 1899:
There are in the city of Liége ten free household schools (schools for domestic science), five of which were founded in 1890 and the others in 1898. Nine of these are evening schools, lasting two hours on four nights of each week during the school year. These erening schools are attended by girls from 12 to 13 years of age who have finished their elementary course in the day schools.

One day school is attended by the girls of the sixth school year in the public schools, divided into groups of 24 , each group attending a week at a time. Each group forms four divisions of 6 pupils each, who undertake the different tasks, such as cooking, mending, washing, etc. The authorities intend to open three more day schools during the school year 1899-1900. There is talk of connecting a household school with each elementary school.
The branches taught in these schools are cooking, washing, mending, hygiene, household economy, and, in fact, everything relating to housekeeping. Of late, the care of little children has been added. These schools are founded and inaintained by the city, with the aid of Govermment, which pays from 40 to 60 per cent of the expense. The term lasts from the 1st of October until Easter, when the pupil gets a diploma. From Easter to the last of July the courses are attended by the higher classes for four weeks-a week at a time, in order not to interfere with their ordinary studies.

## MANUAL TRAINING IN GERMANY.

On the 1st of October twenty-four years had elapsed since the movement having for its object the manual training of boys was inaugurated in Germany. In this space of time the idea has certainly been disseminated largely in this Empire, and over 2,000 teachers have given their cooperation to the movement; nevertheless, both the internal and the external conditions connected with this new branch of tuition leave much to be desired. The original training in home industries and home occupation has almost entirely disappeared; it is carried on at present only in a few places in Holstein and in 17 institutes for the blind. Most of the other educational establishments in Germany, including 18 orphanages and 46 institutes for the deaf and dumb, have already introduced manual training into their curriculum. But the endeavor to prepare the pupils in the schools direct for the eventual handicraft has obtained importance in only two of Germany's institutions of learning. The majority of the German home-industry schools only deal pedagogically with the subject.
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, spread over 435 places and distributed among 596 workshops. Industrial centers take the lead, as follows: Prussia, Upper Silesia, the Rhenish Province, and the Kingdom of Saxony.
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 grammar schools, 41 high schools (made up of 8 classical schools, 12 realistic or
modern high schools, 6 mixed high schools, and 15 boarding schools) 7 proparatory institutions, 28 normal schools, and 93 boys' asylums, while the remainder is made up of various kinds of private educational establishroents. The organization of the handicraft tuition in the individual schools and instiontes is varied in character. Sixty-nine institutes have adopted the whole curriculum as recommended by the German Association for the Dissemination of Manual Skill, while 16 dispense with the preparatory work; of the rest, 177 schools and institutes confine themselves to three branches, 261 limit themselves to two, and the remainder to one branch only. Five hundred and thirty-five workshops are devoted to wood carving, 527 to working in cardboard, and 336 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 turnery, and 11 with modeling in clay.

Pedagogical manual tuition has branched out in three directions-the practical formal method, which regards handicraft as a means to general culture; the direction advocated by those who aim at the so-calied school manual dexterity, and the system which would make the manual training serve as the basis of individual branches of teaching and utilize these in order to influence the method of instruction in schools. The first two are becoming more and more amalgamated. In the third direction, Professor Kumpa, at Darinstadt, School Inspector Scherer, at Worms, and Rector Brückmann, at Königsberg, Prussia, are at present engaged in making thorough experiments in public schools.

The participation of German teachers in the efforts of the German association is steadily increasing. Over 2,200 German teachers have up to now been taught to become instructors in manual training. Of these, 950 were taught in Leipzig and 1,250 acquired training in 33 places in other parts of Germany.

Geo. Sahter, Consul.
Glauchau, Norember 20, 1899.

## MUTUAL-AID SOCIETIES FOR FRENCH SCHOOL CHILDREN.

A great many mutual-aid societies, called petit-cavés, from their founders, Edouard Petit and J. C. Cavé, are now being organized among the school children of France. They are established under a law of 1856 , amended and made more operative by a law of 1898. Their object is to afford assistance to their child members during sickness and to furnish a pension fund for old age, to be drawn upon when 50,55 , or 60 years old, according to the amount deposited or as the beneficiary may elect. The maximum pension is 360 francs ( 869.48 ).

The children deposit 10 centimes, or 2 sous ( 2 cents), per week, which is divided into two equal parts, 1 sou going to the mutuality fund for aid in sickness, the other to the pension fund. This money is deposited in a government depository, where it is invested in government bonds and draws $3 \frac{1}{2}$ per cent interest.

The especial feature of these societies is the aid given them by the Government. For every child who contributes during an entire year the State adds 1 franc (19.3 cents) to the common fund. It also gives a sum equal to one-fourth of the entire amount deposited by the children.

The 1 sou deposited weekly which goes to the pension fund can never be recovered except in the form of a pension. If the child dies before reaching the age limit, or for any reason drops out of the list of depositors, his sous go to the state. The money derived from the reserve fund passes to the next of kin in the event of the death of the depositor.

Every school child is given a "livret," or bank book, upon the cover of which is printed a brief tabulated statement of the pension rate that 1 franc will produce at the age of 55 if deposited in childhood. The table states that if 1 franc is deposited at 3 years of age the depositor may draw 74 centimes (about $14 \frac{1}{2}$ cents of our money)
annually when he is 55 years of age, and that this sum will be increased in proportion to the number of francs deposited until it reaches the limit of 360 francs ( $\$ 69.48$ ) annually. The table computes the interest on 1 franc deposited when from 3 to 12 years of age, running up to 55 years.

The 1 sou deposited as a reserve capital, which swells the mutuality fund for sickness, does not draw as high a rate of interest as the pension fund. A franc deposited at 3 years of age will yield but 12 sous ( 12 cents) pension at the age of 55 . But the depositor does not part with his reserve capital. He can never possess it again; but if he should die before the age to receive it his next of kin can take the entire accumulations dexived from the 1 sou deposited weekly for the reserve fund, and the depositor in the meantime would receive the benefit of it during sickness. This capital is also strelled by national and sometimes communal appropriations, as well as by legacies and gifts from other sources.

There is a trust company in Lycns and a number of other cities, called the Caisse des Dépots et Consignations, under the immediate direction of the Government, in which these mutual-aid funds are deposited, and by whose officers they are invested in government bonds and other securities approved by the state. These moneys are also loaned to public institutions, such as hospitals, the government pawn shop, etc.

The aims of the children's societies, as set forth in a circular addressed to all the parents of pupils, briefly stated, are:

To aid parents by paying them an indemnity, during the sickness of their children, of 10 cents per day during the first, and 5 cents per day during the second and third months of sickness.

To create annual pension funds from the payment of monthly dues, government appropriations, and donations, which can be enjoyed by all persons after a membership of fifteen years.

To imbue all children at an early age with the elements of economy; to accustom them to the use of a bank book, and to the consciousness of having money at work earning something for them and held in reserve for their old age.

To create and maintain a fund called "trésor de l'avenir" (a treasury for the future), the product of which will be exclusively used to provide means of industrial education; to assist the depositors later in life to become members of mutual-aid societies, and to aid them in establishing themselves in business.

This society is very rapidly spreading throughout France, especially among the working classes, who look upon it as furnishing more substantial relief than the savings banks. The latter are becoming gorged with money. The limit for any one depositor at present is 2,000 francs ( $\$ 386$ ) ; but after August, 1500, it will be reduced to 1,500 (\$259).

There are other societies similar to those herein described, but they are more especially for men. They have recentiy taken a very wide extension in France and will be the subject of a future report.

Joun C. Covert, Consul.
Lyons, December 29, 1899.

## WORKINGMEN'S AID SOCIETIES IN FRANCE.

A meeting of the presidents of the mutual-aid societies of the Rhone, recently held in Lyons, calis attention to a movement among the working classes of France in the direction of solving the labor problem. There were present a number of high functionaries, one minister of the Government, senators, members of the lower house of Parliament, judges of courts, bankers, and other prominent business men, the mayor of Lyons, and representatives of the local and departmental governments.

These societies are organized under national larrs, and are partly sustained by
public funds. They are under the immediate supervision of the "superior council of mutual-aid societies." This council is a part of the interior department of the national government, and is composed of 30 members, among whom are senators, members of the lower house of Parliment, offcers of the financial, agricultural, labor, and commerce ministries, and of the Academy of Nedicine. It is beliered in France that these associations will be effective in diverting workingmen from communism and attaching them more closely to the Republic, with which their interests are inseperably involved.

These workingmen's unions are the growth of over a century and are declared to be the final development of the scheme of liberty, equality, and fraternity announced in 1793. Societies of workingmen abounded before the Revolution, but they were abolished because their chiefs used them for their own personal aggrandizement, and they became a part of the despotism against which the Revolution was a protest. The assembly declared that it was "the duty of the nation and of officials, in its name, to furnish work to the healthy and able-bodied, assistance to the infirm, and education to children." To the end that despotism, civil or religious, might find no secret conclave in which to plot, the assembly prohibited the organization of all societies and "all groups of workingmen of the same trade." The guilds and various societies in the country at once disappeared.

Notwithstanding the rejection of petitions pleading for the permission to organize, 45 societies "composed of many different kinds of tradesmen" were reported before the end of the eighteenth century. In 1806 they numbered 90 ; in 1821, 124 , and in 1830,387 . From 1830 to 1848 , by encouragement and pectuniary assistance from the Governinent, the number rose to 1,100. At the end of the Second Republic, in 1852, they numbered 4,721, with 700,000 active members and 80,000 honorary members. Almost stationary under the Second Empire, new life was imparted to them by the advent of the Third Republic. In 1880 the mutual aid societies numbered 6,500 , with 900,000 members; in 1890, 8,000, with $1,200,000$; in 1898, 12,000, with $2,000,000$ members, and to-day their membership foots up nearly $2,500,000$. They have distributed over $700,000,000$ franes $(\$ 135,100,000)$ to their needy members, have on hand over $300,000,000$ francs ( $\$ 57,900,000$ ), and annually pay pensions to 60,000 aged pensioners.

Mr. Bleton, who presided over the meeting held in this city, said in his address that these societies "originated in a natural disposition among men to help each other, and were perpetuated by a profound sentiment of fraternity sustained by the national government." Employers encouraged the movement, became honorary members, and contributed to the treasury. The speaker continued:

A society is the family enlarged. Women infuence their husbands and their children to conform strictly to the regulations of the societies. Husband and wife enjoy equal rights in a society, are bound by the same duties, and the dignity of the family is enhanced by its association with the Govermment, whose officers become, in a measure, its direct inancial managers.

There are two kinds of matual-aid societies in France-free and approved.
The first has a legal existence, is empowered to receive gifts and legacies, and is under but one legal restriction, to wit, it can not hold real estate. It does not receive direct assistance from the state.

The approved society is under government control. The Government appoints its president, but his name is generally proposed by the society. After a first meeting is held, a copy of the by-laws and constitution is deposited with the prefect for approval and remains there as a part of the archives. Any class of citizens-workingmen, clerks, small or large shopkeepers, girls or boys-can organize a society and have it approved. It must be proved that its members are able to pay the monthly dues, to give aid in sickness, and to deposit in the Government bank. This bank is called• La Caisse des Dépots et Consignations. The money deposited is invested in govern-
ment bonds-national, departmental, or communal-which never draw more than 3 per cent interest. Sometimes the premium is so high that the interest is less than this figure; but the Government always appropriates enough to bring the interest up to $4 \frac{3}{2}$ per cent, which is left to accumulate for the old-age pension fund.

This pension fund has received numerots contributions, the most important being $10,000,000$ francs $(\$ 1,930,000)$ from the estate of the Orleans family, confiscated in 1852. Cities, communes, and departments now and then appropriate a few hundred francz for a local society; employers give aid at times; legacies are bequeathed to the societies; and at the end of every thirty years the unclaimed deposits in the savings banks are turned into the general fund.

Che members oi these societies may be men, women, and children from 3 years of age up to 50 . A marked increase is noticed of late among the depositors ranging from 3 to 19 years of age. During the year 1898 that class represented 46.75 per cent of the total depositors. There were over 1,200 depositors among the school children of Roubaix and Tourcoing, and they all decided to enter upon the enjoyment of their pension when they reached the age of 55 . Nearly half of them were not over 10 years old. They calculated that, whatever might befall them, they could take care of themselves up to 55 years of age, and keep up their deposits as a provision for the rest of their lives. Over half the depositors elect to begin living upon their pensions when 55 years old.

During 1898 what are called "collective accounts" represented the largest amount of deposits. These are accounts opened by large business concerns, railroad companies, banks, etc. The Crédit Lyomais, a bank which has branches all over France, made 8,185 deposits for its employees. The Northern Railroad Company deposited a large sum, the product of contributions from all its employees, to which the company added an almost equal amount. The employees of the arsenals, manufactories of arms, foundries, and powder magazines earn about 5 francs ( 96 cents) per day, and 4 per cent of their wages is withheld every month and deposited as a pension fund. In the army, 5 per cent of the salaries of officers is withheld and deposited as a pension fund.

In a small circular, which is distributed broadcast among the workingmen of France, is a printed statement of the amount of annual pension which a man can eajoy at the age of 55,60 , or 65 years by a monthly deposit of sums ranging from 1 franc ( 19,3 cents) up; also, how much money must be deposited yearly to yield an income at 50 or 55 of 360 or 1,000 francs ( $\$ 69$ to $\$ 193$ ). If a father deposits 100 francs ( $\$ 19.30$ ) for a child 3 years old, it will form a pension at 50 , "reserved capital," of 41 francs ( $\$ 7.91$ ); "alienated capital," 51 francs ( $\$ 9.84$ ). At 60 years it will be 92 and 115 francs ( $\$ 17.75$ and $\$ 21.92$ ); at 65,153 and 190 francs ( $\$ 26.82$ and $\$ 38.67$ ). "Reserved capital" reverts to the heirs if the principal dies before the date for enjoying the pension. "Alienated capital" goes to the general fund at the death of the principal.

An cconomy of 2 sous ( 2 cents) per day, or 36 francs (\$6.95) per year, for sixteen years, yields an income at 50 , reserved capital, of 139 francs ( $\$ 26.83$ ) ; alienated capital, 208 francs ( $\$ 4.14$ ); at 55 , 210 and 219 francs ( $\$ 40.53$ and $\$ 42.37$ ); at 60,331 and 509 francs ( 863.83 and $\$ 98.28$ ).

According to the bulletin recently published by the Government the deposits made in 1898 numbered $2,284,224$, amounting to $44,543,697$ francs ( $\$ 8,596,930$ ). Ninety-one thousand six hundred and four new accounts were opened; $15,323,576$ francs $(\$ 2,957,450)$ were paid to the heirs of depositors in the reserve fund. The grand total of receipts from May 11, 1851, to December 31, 1898, is 1,612,841,576 francs ( $\$ 311,278,424$ ).
Deposits can be made in every village where there is a post-office or tax collector. No sum less than 1 franc ( 19.3 cents) is received; but as postage stamps are accepted, many people begin by a 1 -cent stamp, making the deposit when the savings amount
to 20 cents. Not over 500 francs ( $\$ 96.50$ ) can be deposited by one person in one year. The pension up to 360 francs (\$59.48) can not be seized for debt. If the pension is the result of a gift, it can not be seized for debt, however much it may exceed the 360 -franc ( $\$ 69.48$ ) limit. If a wife and husband deposit in one account and one of them dies, the entire pension passes to the survivor. If an aged pensioner receives but 200 or 300 francs ( $\$ 38.60$ or $\$ 57.90$ ) per year, he adds to this the franc a day, more or less, that he can earn as porter in an apariment house. The average wages of the porter are 200 francs ( $\$ 38.60$ ) per year and the use of two rooms. As people prefer old soldiers, porters are often retired gendarmes who have an army pension, an old-age pension from their economies, porter's wages, and free rent. The porter at the bank of the Dépots et Consignations, where all the pension business in Lyons is transacted, is 79 years old. He and his wife have 2,500 francs (\$482.50) per year from pensions, rent free, and they deposit in the savings bank every month. There are 8,000 pensioners enrolled at the bank in Lyons; but the number is destined to grow very rapidly now, as it is made obligatory for employees of mills and factories to lay by from 1 to 2 francs ( 19.3 to 38.6 cents) per month, this sum being withheld from their wages.
Of the monthly dues paid into the mutual-aid societies, a small sum is withheld for the assistance of the sick. Those who are out of work for other cause than a strike receive a daily allowance from their society of from 1 to 2 francs.
The custom of making provision, by government intervention, for the support of the aged and infirm is a natural outgrowth of French institutions. As a boy can not be drafted into the army if he is the only support of aged parents, the maintenance of the defense of the nation exacts that the number of the needy should be made as small as possible. As the Government takes possession of the boy for three years for army service at a time when he might be learning a trade and laying the foundation for a future livelihood, it deems it a duty to intervene in his behalf and aid him in providing for the day of need.
The Government withholds a certain percentage from the salary of army officers against the day when they will be on the retired list. Subordinate officers-lieutenants and captains-are not allowed to get married until they show to the satisfaction of the war department that the wife will bring 1,200 francs (\$231.60) per year to the household. This rule is suspended only to legitimize children. The salary of a marshal of France is 30,315 francs $(\$ 5,850.30)$ per year, but he only receives 28,800 francs ( $\$ 5,558.40$ ), the rest going into an old-age pension fund. Of the 19,894 francs ( $\$ 3,839.54$ ) which constitute the salary of a general of division, 994 francs ( $\$ 191.84$ ) is withheld. But if a general is located in a city like Paris or Lyons and is the military governor thereof, an important sum is added for his household expenses. The process of laying up a store for old age runs through the army until the private soldier is reached. He receives 6 cents per day for his services, 5 cents of which are withheld for board and lodging, leaving him 1 cent per day for spending money and his bank account, which he often invests in postage stamps.

Lyons, January 19, 1900.

## MUSIC LIBRARY IN GENEVA. ${ }^{1}$

A rather unique enterprise of certain music dealers in Geneva may be of interest in the United States.
The dealers in question keep very large stocks of all sorts of classical and popular music, both instrumental and vocal, to all of which access may be had by students

[^18]and others for a subscription fee of from 50 cents a month up. In other words, these dealers in this particular operate their music stores on the plan of a circulating library. Subscribers may take from three to twelve pieces of music at a time, and may change as often as they please. To students who desire to have access to a large and varied repertoire of music and who can not afford to buy at will, this admirable plan comes as a benison, and the dealers who have inaugurated it in Geneva are being well repaid for their enterprise, not only by the patronage of the students, but by a large and general clientele. The subscription fees are as follows:

| Description. | 1 month. | 1 year. |
| :---: | :---: | :---: |
| 3 pieces of music at a time. | $\$ 0.50$ | \$2. 40 |
| 5 pieces of music at a time. | . 70 | 3.C0 |
| S pieces of music at a time. | . 90 | 4. 00 5.00 |
| 12 pieces of music at a time | 1.10 |  |

Subscribers are held responsible for damage done to the music beyond ordinary wear and tear.

I do not know whether or not an enterprise of this character exists in the United States. If not, it seems to me that it might be generally and advantageously put into use in our larger cifies. It might even be made a feature of circulating libraries.

Beny. M. Ridgely, Consul.
Generd, Jemuary 19, 1300.

## COLONIAL SOHOOL IN FRANCE.

Consular Agent Harris, of Eibenstock, under date of February 12, 1900, writes:
A colonial institute is to be opened in Marseilles to prepare young men to fill positions in the French colonies. Expeditions of students will be sent out at the expense of the State, and commercial houses will receive the information thus obtained in the form of detailed reports. Instruction will be given in botany, zoology, natural history, colonial geography, and history, etc. There will be a museum of plants, minerals, etc., so that the student may become acquainted with the actual products of the colonies; also a school of medicine to familiarize him with the diseases peculiar to tropical countries. It is probable that arrangements will be made for teaching oriental languages. For grounds and buildings the city of Mrarseilles has donated $\$ 193,000$.

## COLONIAL TRAINING IN BELGIUM.

Consul Roosevelt writes from Brussels, February 23, 1900:
In view of the increasing prosperity in the Belgian Kongo, this Government is considering means of interesting the people in the subject of colonization. One of the most practical is the recent establishment at the horticultural school, at Vilrorde, of a special department for the training of students who intend to seek a fortune in the colonies. There will be practical demonstrations of the sort of buildings a settler must construct, and instruction in rules of sanitation. The cultivation of indigenous plants, as well as of European vegetables and plants, the best methods of gathering crops and transporting them to market where there is a demand for them, and the way to treat the native population, from which the labor supply must be drawn, will all be dealt with.

## LIfGe SCHOOL OF FIREARMS

In the city of Liége, Belgium, there is established an industrial school known as the Ecole Professiompelle d'Armurerie, founded in 1896 by the city of Liege, the Government, and the province, where thorough instruction is given in the manufacture of firearms.
The complete course covers a period of three years, and is divided into theoretical and practical. The theoretical covers drawing, lectures on the strength and combination of steel and iron, etc. The practical consists of several departments, such as woodworking, engraving, and polishing, each presided over by a compctent instructor.

Tuition is free, and besides the pupil is paid 25 centimes ( 5 cents) per day, and on completing his course receives a sum equal to 25 per cent of the sales of his finished work.

This school opened with 8 pupils, and at present has 115 in the diferent departments, which is its limit. Arrangements are about completed for materially enlarging the buildings during the coming summer to provide accommodations for more than 200.

Pupils from this school have no difficulty, I am informed, in securing positions at good wages for this country, which is from 4 to 6 franes ( 77 cents to $\$ 1.15$ ) per day, while ordinary workmen receive from 2.50 to 4 franes ( 49 to 77 cents) per day.

The important position occupied by the school will be realized when it is understood that about 30,000 persons in this city and immediate vicinity are employed in the frearms industry. The object of the institution is to qualify workmen for responsible positions in the different factories, since for the past few years nearly all are employed on piecework, which does not fit meu for positions requiring a general knowledge of the business. This put the manufacturers at a great disadvantage, as it was becoming nearly impossible to secure competent foremen and superintendents of departments.

For several centuries the manufacture of firearms has been the leading industry of Liége and vicinity, and the city maintains an extensive muserm of frearms.

It is interesting to note that several thousand of the old flintlock guns are still manufactured here each year for the trade in the interior of Africa, the natives preferring them to the modern guns.

Liége, March 3, 1900.

> Alfred A. Winslow, Consul.

## CABINETMAKING SCHOOL AT MAGDEBURG.

The consular reports of late years contain a vast amount of information on the subject of technical and industrial schools in Europe, and they clearly show that Germany easily takes the lead in this line, by annually appropriating large sums of money for instriction in almost every art and industry. It is generally recognized that commercial progress throughout this country depends largely upon the condition of technical education. Outside of the many schools for agriculture and commerce, the system of special schools for other purposes is wonderfully complete. The tailors, the painters, the shoemakers, the bakers, the smiths, the brewers, the butchers-each trade has its schools for theoretical and practical training.

I recently discovered at Magdeburg a school that roused my interest to an unusual degree. Though somewhat familiar with educational work done in this country, and also with its technical schools, I had never yet seen such an institution. It seemed admirable, so much so that I deem it my duty to call attention to it, as it may interest others. There is no imposing architecture of any kind; no lecture halls, no chapel, no museum, no gymnasium, no campus; there are only half a dozen rooms on the top floor of a four-story building in a narrow side street. It has no
faculty of brilliant scholars, but only a few devoted men. There is no liberal endowment by millionaire philanthropists, but a scant support from the Government, hardly sufficient, I was told, to keep body and soul of the institution together.

The school was founded by a Mr. Kiefhaber, a citizen of Magdeburg, a plain mechanic, a cabinetmaker, but a genuis at his trade. After having been prosperous in business, he wished to aid young men apprenticed to the trade of furniture making and carving in his native town.

Under Prussian laws youths who, after having passed through the public schools intend to learn a trade, are required to continue attending some school for some nights during the week and for two hours on Sunday. Such schools are called "Fortbildungsschulen," a significant but untranslatable term signifying a school where the education is to be continued. Mr. Kiefhaber had, through his own long experience, become convinced that such schools could not accomplish this purpose satisfactorily, because boys at the age of from 14 to 17, after having been hard at work all day long, can not be in a condition, either physically or mentally, to attend school for hours with any benefit to themselves. He therefore conceived the idea of establishing the school above referred to. To accomplish his object, however, he needed the assistance of the Magdeburg union in the line of cabinetmaking, sculpturing, and carving. Their cooperation was granted him to the fullest extent. All the boss mechanics of the cabinetmakers, though most of them are men without any means, and therefore can ill afford to lose even time, agreed to send each of their apprentices to this school for a whole forenoon in every week, and also to take turns in assisting in the work of teaching. As these lessons are given every day from 8 to 12 o'clock, each apprentice in Magdeburg gets four lessons a week, all bearing directly upon his future work.

I believe it is impossible to conceive of anything more practical than the teaching in these classes, of which there are three, as it is a three years' course. No question is put, no fact explained, no definition given, and no drawing made, but has some bearing upon either the materials or the tools or the purposes of the combined trades mentioned above. No step forward is taken until the why and wherefore of the preceding step has been fully understood by everyone in the class. And, as in all schools of like character, great stress is laid upon free-hand drawing. This is to give the young men not only all the technical knowledge needed, but also to train the eye and the mind in designing every part of the various styles of furniture, as well as artistic decorations in wood carving and inlaid woodwork. Such work, when added to talent and diligence, must lead to thoroughness and originality.

The young men in the last year's course were scattered all over the room, each standing before a blackboard, engaged in drawing some part of a piece of furniture or some ornamental carving, while the teacher moved about examining the work. Upon inquiry, I was told that this was a lesson reviewing, in an objective way, the oral instruction given by the teacher at the last recitation. I will add that every student was given a different part of the work, so that no two of them had the same drawing to make.

There are only a few salaried teachers employed, while there are always several boss mechanics present, as already stated, assisting in various ways. This must be an excellent way for these men to get and maintain the confidence and respect of their apprentices; for when young people see that their masters are not only able to show them how to handle tools in the workshop, but are also fully capable of instructing them theoretically, it can not fail to have a beneficial influence upon the relations between the master and the apprentices. Surely such teaching unites theory and practice in a wonderfully complete way.

I have already said that the boss mechanics in the cabinetmakers' trade union contribute their own time to this school without any compensation, and also give each apprentice one full forenoon in every week to attend the school. This is a great
sacrifice for most of them. Mr. Kiefhaber, the founder of the school, for several years not only devoted his own time to this work, but has paid most of the expenses himself. Surely, not the least interesting feature of this institution is its benevolent object of reaching young people from the humblest walks of life, elevating and educating them so as to make of them good mechanics, artisans, and citizens.

The attention of the Government, both municipal and national, is now being called to the importance of this work, and it is hoped that the institution will soon be placed on a sounder financial basis. I have no doubt that this school, if properly supported and wisely conducted, will, in course of time, build up in Magdeburg an industry which will give employment to hundreds of artisans and mechanics, and bring renown to the city for its manufacture of fine and artistic furniture, as Dresclen is noted for its fine china ware, Munich for its works of art, Leipsic for being the great book mart, and so forth.

To an American this school for apprentices at Magdeburg is interesting, chiefly because it again shows to what an extent intellectual and technical training is carried on in this country in order to achieve and maintain the foremost position in the industrial world.

Henry W. Diederich, Consul.
Bremen, April \& 1900.

## COMMERCIAL UNIVERSITY FOR HAMBURG.

The Berlin correspondent of the London Daily Mail, in a dispatch to that paper, says:

A movement is being started at Hamburg which should prove of exceptional interest to British commercial and shipping circles.

The very important and wealthy Association of Hamburg Landowners proposes to found a commercial university at Germany's foremost seaport. The institute will have chairs for all scientific and technical branches in any way connected with general commerce.

Besides purely commercial matters, it will include lectures on history, geography, natural history, modern languages, international and maritime law, tropical diseases, shipbuilding, and harbor constructions.

As the new institute will enjoy all rights of the German universities and higher technical schools, it is expected that a large number of foreign students will be induced to attend the lectures.
This programme speaks for itself. Germany has led, and is still leading, the world in commercial education. For many years its commercial schools have been preparing young men to go out into the world to take up lucrative and important positions. These young men are selling in distant countries products of the Empire, ranging from a locomotive to a clothespin. Opportunities for industrial enterprise are immediately reported. The German commercial traveler always speaks the language of the country in which he attempts to sell goods. This gives him an immense advantage over his English or American competitor, who, as a rule, is lacking in this essential qualification. The efficiency of these commercial travelers is to be attributed directly to their training. If we had similar colleges of commerce in our country, it is safe to say that our export trade could be largely increased.

Ernest L. Harris, Consular Agent.
Eibenstock, March 30, 1900.
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## FOREIGN UNIVERSTTLES AND OTHER INSTITUTIONS OF HIGHER EDUCATION.

I. Apranged according to date of founding.
II. Arranged according to number of siudents.
III. Arpanged alphabetically.
IV. Arranged according to countries.

Y . List of polytechnica.
YI. List of agricuitural, forestry, and mining schools.
VII. List of veterinary schools.

## INTRODUCTION.

The authors of "Minerva, Jahrbuch der Universtiaten der Welt" (K. Trübner and E. Mentz), which is the chief source of information offered in the following lists, say that they have submitted their work at various stages of completion to different professors of the countries mentioned, so that they are assured that their decision as to which of the learned institutions of the world should be regarded as universities is upheld by the most trustworthy authority. They describe their Jahrbuch as a collection of names of teaching bodies, of universities, or similar institutions of the world.
Since this Report of the Bureau of Education contains direct information concerning the higher institutions of learning in the United States, they have been omitted from the following lists, which are devoted exclusively to foreign institutions.
I. Foreign universities arranged according to age.

| Date of foundation. | Locality. | Date of fommdation. | Locality. |
| :---: | :---: | :---: | :---: |
|  | Tenth century. |  | Forrteenth century. |
| 988 | Cairo, Esypt. | 1303 | Rome, Italy. |
|  | Twolfti century. | 1343 | Pisa, Italy. |
|  |  | 1346 | Valladolid, Spain. |
| 1119 | Bologna, Italy. | 1348 | Prague, Eolvemia, Austria. |
| 1181 | Montpellier, France. | 1349 | Florence, Italy. |
| 1200 | Paris, France. | 1351 | Pavia, Italy. |
| 1200 | Oxford, England. | 1364 | Cracow, Galicia, Austria. |
|  | Thirteenth century. | 1367 | Fünflirchen, Hiangary. |
|  |  | 1386 | Heidelberg, Baden, Germany. |
| 1209 | Valencia, Spain. | 1391 | Ferrara, Italy. |
| 1222 | Padua, Italy. |  |  |
| 1233 | Toulouse, France. |  | Fifteenth century. |
| 1243 | Salamanca, Spain. | 1402 | Würzburg, Bararia, Germany. |
| 1257 | Cambridge, England. | 1409 | Leipzig, Saxony, Germany. |
| 1286 | Perugia, Italy, | 1409 | Aix, France. |
| 1288 | Coimbra, Portugal. | 1411 | St. Andrews, Scotland. |

I. Foreign universities arranged according to agi-Continued.

| Date of fourdation. | Localdy. | Date of foundation. | Locality. |
| :---: | :---: | :---: | :---: |
|  | Fificonth century-Continued. |  | Eightenth century-Continued. |
| 1.112 | Turin, Italy. | 1787 | Götingen, Prussia, Germany. |
| 1419 | Iostock, Mecklenburg, Germany. | 1710 | Erlau, Hungazy. |
| 1422 | Parma, italy. | 1743 | Eriangen, Bavaria, Germany. |
| 1423 | Besancon, F'rance. | 1743 | Santiago, Chile. |
| 1426 | Louvain, Belgium. | 1718 | Cadiz, Spain. |
| 1431 | Poitiers, France. | 1755 | Moscow, Russia. |
| 1.137 | Caen, Fralice. | 171 | Münster, Frussia, Germany. |
| 1411 | Bordeaux, France. | 177 | Siena, Italy. |
| 1444 | Catania, Sicily, Italy. | 1779 | Palermo, Sicily, Italy. |
| 1450 | Eareelona, Spain. | 1784 | Lemberg, Galicia, Austria. |
| 1451 | Glasgow, Scotland. | 1785 | Pressburg, Enngary. |
| 1436 | Greiiswald, Prussia, Germany. | 1783 | Grosswardein, Lungary. |
| 1457 | Freiburg, Baden, Germany. |  |  |
| 1460 | Basel, Switzcrland. |  | Nineicenth ccutury. |
| 1463 | Namtes, France. |  |  |
| 1165 | Budapesth, Humgary. | 1804 | Kasan, Ruszia. |
| 1172 | Mumich, Bayaria, Gemany. | 1804 | Kharkov, Russia. |
| 1474 | Saragossa, cpain. | 1805 | Yaroslav, Russia. |
| 1177 | Upsala, Sweden. | 1808 | Clermont, France. |
| 1177 | Tübingcn, Wartemberg, Germany. | 1808 | Lille, France. |
| 1178 | Copeninagen, Demmaria. | 1808 | Lyons, Franee. |
| 1101 | Abordeen, Scouland. | 1808 | Rennes, France. |
|  |  | 1509 | Berlin, Prussia, Germany. |
|  | Sixtecnth century. | 1311 | Christiania, Norway. |
|  |  | 1812 | Genoa, Italy. |
| 1501 | Volencia, Spain. | 1816 | Ghent, Belgium. |
| 1502 | Fialle-Wittenberg, Prussia, Germany. | 1816 | Warsaw, Poland, Fussia. |
| 1502 | Seville, Spain. | 1517 | Liege (Lütitieh), Belgian. |
| 150.1 | Santiago, Spain. | 1518 | Bonn, Prussia, Germany. |
| 1504 | Rreslau, Prussia, Germany (1702) | 1319 | St. Petersburg, Russia. |
| 1503 | Madrid, Spain. | 1821 | Montreal, Canada. |
| 1527 | Marburg, Prussia, Germany. | 1826 | London (University College), England. |
| 1531 | Granada, Spain. | 1827 | Torollto, Canada. |
| 1531 | Earospatak, Hungary. | 1827 | Sheffield (Medieal College), England. |
| 1537 | Lansamne, Switzerland. | 1823 | Lampeter (St. David's College), Wales. |
| 1540 | Macerata, Italy. | 1832 | Durham, England. |
| 10.4 | Königsberg, Prussia, Germany. | 1832 | Zurich, Switzerland. |
| 1518 | Messina, Sicily, Italy. | 1832 | Kiev, Russia. . |
| 1556 | Sassari, Italy. | 1334 | Erussels, Belgium. |
| 1558 | Jena, Thuringia, Germany. | 1531 | Berne, Switzerland. |
| 1559 | Geneva, Switzeriand. | 1836 | London (University), England. |
| 1565 | Olmütz, Moravia, Austria. | 1887 | Athens, Greeee. |
| 1567 | Strasburg, Alsace, Germany. | $18: 38$ | Messina, Italy. |
| 1568 | Braunsberg, Prissia, Cermanjo | 1810 | Kingston, Carada. |
| 1572 | Naney, France. | 1845 | Cork, Ireland. |
| 1575 | Leyden, Holland. | 1855 | Belfast, Ireland. |
| 1580 | Oviedo, Spain. | 1815 | Galyay, Ireland. |
| 1582 | Fome, Italy (Pontif.). | 18:9 | Algiers, Algeria. |
| 1583 | Edinburgh, Scotland. | 18.0 | Sidney, Australia. |
| 1586 | Grätz, Styria, Austria. | 1851 | Manchester (Victoria University), Eng- |
| 1583 | Kiev, Russia. |  | land. |
| 1301 | Dubiin, Ireland. | 1851 | Newcastle, England. |
| 1506 | Cagliari, Italy. | 1853 | Melbourne, Vietoria, Australia. Caleutta, India. |
|  | Serenternith contury, | 1857 | Madras, India. |
|  |  | 1857 | Pombay, Iudia. |
| 1605 | Manila, Philippine Ishnds. | 1860 | Jassy, Roumania. |
| 1607 | Giessen, Hessia, Germany. | 1862 | Keeskemet, Hungary. |
| 1614 | Groningen, Hollund. | 186 | Bueharest, Roumania. |
| 1682 | Salmburg, Austria. | 1865 | Odessa, Russia. |
| 1532 | Amsterdam, Holiand. | 1865 | Neuehâtel, Switzerland. |
| 1632 | Dorpat, Russia. | 1868 | Tokio, Japan. New Tealowd |
| 1636 | Utreent, Holiand. | 1870 | New Zealand, New Zealand. |
| 1640 | Helsingfors, Finland, Russia | 1872 | Aberystwith, Wales. |
| 1657 | Kasehau, Hungary. | 1872 | Adelaide, Australia. |
| 1665 | Kiel, Prussia, Germany. | 1872 | Klausenburg, Hungary. |
| 1666 | Luna, sweder. | 1873 | Cape City, South Airica. |
| 1671 | Urbino, Italy. | 1874 | Agram, Croatia, Hungary. |
| 1673 | Inmspruek, Tyrol, Austria. | 1875 | Angers, France. |
| 1676 | Eperies, Inngary. | 1875 | Lille (Faculté Libre), Franee. |
| 1383 | Modena, Italy. | 1575 | Lyons (F'aeulté Libre), Franee. Czernowitz, Bukowina, Austria. |
|  | Eighteenth century. | 1875 | Birmingham, England. |
|  |  | 1876 | Bristol, England. |
| 1710 |  | 1876 | Montevideo, Uruguay. |
|  | Indies. | 1877 | Lecds, England. |
| 1721 | Murana, Cuba. | 1877 | Liverpool, Ellgland. |
| 1722 | Dijon, Frailce. | 1878 | Stoekholn, Sweden. ${ }^{\text {Shefield (Firth College), England. }}$ |

1. Foreign universities arranged accorifing to age-Continued.

| Date of foundation. | Loeality. | Date of foundation. | Locality |
| :---: | :---: | :---: | :---: |
|  | Nincteenth century-Continued. |  | Ninetecnth contury-Contimued. |
| 1830 | Harana, Cuba. | 1891 | Gothenburg, Sweden. |
| 1880 | Dublin, University of Ireland. | 1893 | Oniro Preto, Brazil. |
| 1880 1880 | Dundee, Scotland. <br> Nottingham, England. |  | Date not Finown. |
| 1882 | Prague (Bohemian University), Austria. |  | Leve nor known. |
| 1882 | Lahore, India. |  | Belgrade, Servia. |
| 1883 | Cardiff, Wales. |  | Allahabad, India. |
| 1884 | Bangor, Wales. |  | Limoges, France. |
| 1885 | Odessa, Russia. |  | Marseilles, Hance. |
| 1888 | Tomsk, Siberia, Russia. |  | Montauban, France. |
| 1888 | Sophia, Bulgaria. |  | Cordoba, Argentina. |
| 1889 | Freiburg, Switzerland. |  | Buenos Ayres, Argentina. |

II. Foreign universities, etc., arranged accordiny to number of students.
[The attendarice stated is that of 1838.]
A. UNIVERSITIES.

| $\begin{aligned} & \mathrm{Or}- \\ & \mathrm{der} \end{aligned}$ | Locality. | Number of students. | $\begin{aligned} & \text { Or- } \\ & \text { der. } \end{aligned}$ | Locality. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { students. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Paris, Franec. | 11,827 | 53 | Christiania, Norway | 1,300 |
| 2 | Berlin, Germany | 10, 827 | 54 | Salamanca, Spain | 1,247 |
| 3 | Cairo, Egypt..... | 8,210 | 55 | Warsaw (Poland), Russia | 1,242 |
| 4 | Vienna, Austri | 5,770 | 56 | Havana, Cuba (in 1894). | 1,226 |
| 5 | Madrid, Spain | 5,575 | 57 | Marburg, Germany. | 1,172 |
| 6 | Naples, Italy. | 5,103 | 58 | Prague (German), Austria | 1,162 |
| 7 | Budapesth, Hungary | 4, 587 | 59 | Amsterdam, Netherlands | 1,161 |
| 8 | Moscowy, Russia. | 4,461 | 60 | Lille, France | 1,158 |
| 9 | Munieh, Germany | 4, 451 | 61 | Manila, Philippines | 1, 144 |
| 10 | Leipzig, Germany | 3,751 | 62 | Strasbury, Germany | 1,139 |
| 11 | St. Petersburg, Russia | 3,700 | 63 | Montreal, Canada | 1,130 |
| 12 | Athens, Greeee | 3,55 | C4 | Dublin, Ireland | 1, 128 |
| 13 | Oxford, England | 3, ${ }^{1} 12$ | 65 | Innsbruck, fastria... | 1,087 |
| 14 | Manchester, England (about) | 3,000 | 66 | Manchestar (Owens Col | 1,087 |
| 15 | Cambridge, England.......... | 2,929 |  | England. | 1,065 |
| 16 | Edinburgh, Scotland | 2,806 | 67 | Pisa, Italy | 1,065 |
| 17 | Prague (Bohemian), A | 2,719 | 68 | Erlangen, Germany | 1,060 |
| 18 | Kiey, Pussia. | 2,565 | 69 | Remnes, France | 1,057 |
| 19 | Turin, Italy. | 2, 551 | 70 | Pivia, Italy | 1,029 |
| 20 | Irons, Franee | 2,405 | 71 | Rome (Universidy Poin |  |
| 21 | Rome (Royal Universits), It | 2,348 |  | Italy | 1,026 |
| 22 | Eueharest, Loumania | 2, 296 | 72 | Genoa, Italy | 1, 020 |
| 23 | Tokio, Japan | 2,239 | 73 | Eantiago, Clile (about) | 1, 000 |
| 21 | Felsingfors (Finland), Russia | 2,238 | 74 | Frlausenbure, Inumary | 992 |
| 25 | Bonn, Germany | 2,233 | 70 | Catania, Itay | 957 |
| 26 | Copenbagen, Denmarix (about) | 2,000 | 76 | Kiel, Germany. | 972 |
| 27 | Bordeaux, France | 1,961 | 77 | Saragosse, Spain. | 963 |
| 23 | Glasgorv, Seoturnd. | 1,953 | 78 | Utrecht, Netherland | 953 |
| 29 | Lemberg (Galicia), Austri | 1,901 | 73 | Nancy, France | 952 |
| 30 | Toulovse, Franee... | 1,897 | 80 | Levden, Netherland | 908 |
| 81 | Lourain, Belgium | 1,890 | 81 | Geneva, Switacrand | 904 |
| 32 | Barcelona, Spain | 1,887 | \& 2 | Berne, Switzerland. | 903 |
| 33 | Halle, Germany | 1,779 | 83 | Zürieh, Switzerland | $8 \times 7$ |
| 3.1 | Gratz, Austria. | 1, 771 | 81 | Kasau, Russia | 859 |
| 35 | Freiburg, Germany | 1,729 | 85 | Aberdeen, Scolland | 8.5 |
| 36 | Bologna, Italy. | 1,500 | 86 | Giessen, Germany | 850 |
| 37 | Tübingen, Germany | 1,560 | 87 | Aix-en Provence, France | 845 |
| 33 | Padua, Italy. | 1,542 | 83 | Jena, Germany. | 801 |
| 89 | Breslau, Germany | 1, 524 | 89 | Greifswald, Germany | 802 |
| 40 | Kharkov, Russia | 1,520 | 90 | Königsberg, Gemmay | 764 |
| 41 | Upsala, Sweden | 1,499 | 91 | Poitiers, franee.... | 736 |
| 42 | Liége, Belgium. | 1,490 | 82 | Valencia, Spain | 726 |
| 43 | Heidelberg, Germany | 1,462 | 93 | Ghent, Be!gium | 101 |
| 44 | Montpellier, Franee. | 1, 446 | 21 | Melbourne, Australia | 686 |
| 45 | Coimbra, Portugal. | 1, 429 | . 95 | Agram, Hungary | 656 |
| 46 | Palcrmo, Italy. | 1,395 | 96 | Lund, Sweden. | 613 |
| 47 | Göttingen, Germany | 1,383 | 97 | Dijon, France | 632 |
| 48 | Würzburg, Germany | 1,343 | 93 | Messina, Italy | 626 |
| 49 | Dorpat (Jurjew), Russia. | 1,334 | 99 | Kingston, Canada | 589 |
| 50 | Craeow (Cralicia), Austria | 1,223 | 100 | Basel, Switzerland. | 586 |
| 51 | Toronto, Canada | 1,322 | 101 | Parma, Italy. | 585 |
| 52 | Brussels, Belgium | 1,316 | 102 | Odessa, Russia | 581 |

II.-Foreign universities, ctc.-Continued.
A. UNIVERSITIES-Continued.

| $\begin{aligned} & \mathrm{Or} \\ & \text { der. } \end{aligned}$ | Locality. | $\left\|\begin{array}{c} \text { Number } \\ \text { of } \\ \text { siudents. } \end{array}\right\|$ | $\begin{aligned} & \text { Or- } \\ & \text { der. } \end{aligned}$ | Locality. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { of } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 103 | Caen, France | 572 | 120 | Clermont, France | 250 |
| 104 | Grenoble, Frane | 523 | 121 | Macerata, Italy. | 25.5 |
| 105 | cyoney, Australia | 500 | 122 | St. Andrews, Scotlan | 254 |
| 106 | Postock, Germany. | 493 | 123 | Durham, England . . .-........... | 250 |
| 107 | Lausanne, Switzerland | 487 | 121 | Toronto (Victoria University), |  |
| 108 | Groningen, Netherlan | 465 |  | Canada. | 250 |
| 110 | Belgrade, Servia. | 463 | 126 | Cagliari, Italy | 13 |
| 111 | Modena, italy | 450 | 127 | Besancon, France | 220 |
| 112 | Jassy, Roumania | 420 | 128 | Siena, Italy. | 219 |
| 113 | Czernowitz, Austria | 377 | 129 | Sassari, Italy | 166 |
| 114 | Sophia, Bulgaria | $35 \pm$ | 130 | Montevicleo, Uruguay | 22 |
| 115 | Frciburg, Switzerlan | 353 | 131 | Urbino, İtaly ................... | 126 |
| 116 | Stockholin, Sweden | 337 | 132 | Amsterdam (Free University), |  |
| 117 | Adelaide, Australia Perugia, italy | 320 <br> 298 | 133 | Netherlands.................... <br> Ferrara, Italy | 103 |
| 119 | Camerino, Italy | 279 |  |  |  |

## B. COLLEGES, INDEPENDENT TACULTIES, AND SCHOOLS FOR ORTENTAL LANGUAGES.

| 1 | Nottingham (England) College . | 1,902 | 35 | London (England) Medical |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Newcastle (England) College. | 1,500 |  | School for Women ........... | 163 |
| 3 | Idinburgh (Scotland) Medical |  | 26 | Kaschau (Hungary) Law Acad- |  |
|  |  | 1,200 |  | emy ……................... | 159 |
| 4 | Leeds (England) College ....... | 1,039 | 37 | Neuchatel (Switzerland) Academy | 15 |
|  | College ....................... | 998 | 38 | Eperics (Hungary) Law Acad- |  |
| 6 | Birmingham (England) College. | 967 |  | emy ........................... | 149 |
| 7 | London (England) St. Bartholo- mew Hospital .................. | 950 | 39 | Santiago (Chile) Institute of Pedagogy | 141 |
| S | Algiers (Algeria) College ........ | 786 | 40 | Florence (Italy) University for |  |
| 9 | St. Petersburg (Russia) Military Nedical School. | 750 | 41 | Fünfkirchen (Hungary) E............. | 127 |
| 10 | Florence (Ttaly) University | 627 | 42 | Lampeter (Wales) College...... | 125 |
| 11 | Münster (Germany) Academy | 609 | 43 | Sorospatak (Hungary) Law..... | 116 |
| 12 | London (England) Guy's Hospital | 600 | 41 | Vienna (Austria) Oriental Languages | 112 |
| 13 | Bristol (England) College | 521 | 45 | Milan (Italy) Academy .......... | 97 |
| 11 | Rome (Italy) College of |  | 46 | Kecskemet (Hungary) Law..... | 97 |
|  | Propaganda.. | 520 | 47 | Erlau (Eungary) Law Academy | 94 |
| 15 | Rome (Italy) Seminary ..... Aberystrith (Wales) Collega | 485 | 48 | Rome (Italy) University for Women |  |
| 17 | Tomsk (Siberia) University. | 463 | 49 | St. Petersburg (Russia) Histori- |  |
| 18 | Sheffield (England) College | 450 |  | cal Institute................... | 76 |
| 19 | Stockholm (Sweden) Medical | 332 | 50 | Montaubar (Erance) Theolog- |  |
| 20 | St. Petcrsburg (Russia) Law ... | 330 |  | ical......................... | 73 |
| 21 | Rome (Italy) College of St. Thomas | 236 | 51 | Braunsberg (Gemany) Theological. |  |
| 22 | Kasan (Russia) Theolorical |  | 52 | Rome (Italy) College of S. Aus.- | 63 |
|  | Academy..... | 230 | 53 | Salaburg (Austria) Theological. | 66 |
| 23 | Jaroslawl (Russia) Lyceum | 269 | 54 | Naples (Italy) Criental Lan- |  |
| 24 | Marcerata (Italy) Law School .- | 255 |  | guages ............................. | 63 |
| 25 | St. Petersburg (Russia) Theological. |  | 55 | Madrid (Spain) Diplomatic School............................... | 56 |
| 26 | Recife (Brazil) Law school | 237 | 50 | Moscov (Russia) Lazarev Insti- |  |
| 27 | Oviedo (Spain) University. | 235 |  | tute ....... | 25 |
| 28 | Dundee (Scotland) College | 220 | 57 | Budapest (Hungary) Theolog- |  |
| 29 | Cork (Ireland) College.. | 212 |  | Vical........................... | §0 |
| 31 | Omutz (Austria) University...- | 209 | 5 S | Vienna (Austria) Theological Faculty |  |
|  |  | 206 | 59 | Vienna (Austria) Orientaitan- |  |
| 32 | Pressburg(Hungary)Law Academy | 189 | 60 | guages...................... | 25 |
| 83 | Grosswardein (Hungary) Law.. | 189 |  | ical | 25 |

C. ExAMmNGG UNIVERSITIES IN HiNDOSTAN.

| 1. | Calcutta. | 7,210 | 45 | Bombay | $\begin{aligned} & \text { 3, } 374 \\ & 1,953 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Madras. | 4,224 |  |  |  |
| 3 | Allahabad | 3,423 |  |  |  |

## 11.-Foreign universilies, ctc.-Continned.

D. TECHNOLOGICAL INSTHTTES.

| Or- | Locality. | $\begin{gathered} \text { Numbor } \\ \text { of } \\ \text { students. } \end{gathered}$ | $\begin{aligned} & \text { Or- } \\ & \text { der. } \end{aligned}$ | Locality. | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { students. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Berlin, Germany | 3,428 | 21 | Aix la Chapelle, Germany | 496 |
| 2 | Munich, Germany | 2,016 |  | Brunswick, Germany. | 492 |
| 3 | Vienna, Austria.... | 1, 1,582 | 23 | Pracue (German) Austri | 489 |
| 4 | Darmstadt, Germany | 1, $45 \frac{1}{1}$ | 25 | London, England (2 schoo | 420 |
| 6 | Hanover, Germany | 1,393 | 26 | Milan, Italy | 89 |
| 7 | Zürich, Switzerland | 1,390 | 27 | Stockholm, Sweden | $\because \mathrm{Cl} 3$ |
| 8 | Riga, Russia | 1,370 | 28 | Brünn, Austria | 357 |
| 9 | Dresden, Germany | 1,121 | 29 | Gratz, Austria | 353 |
| 10 | Carisruhe, Germany | 1,098 | 30 | St. Petersburs, Russia (3i) | 833 |
| 11 | Prague (Bohemian) Austri | 1,022 | 31 | Porto Portugal | 323 |
| 12 | St. Petersburg, Russia (1st) | 1,011 | 32 | Madriả, Spain | 235 |
| 13 | Stuttgart, Germany.. | 967 | 33 | Helsingtors, Russia | 230 |
| 14 | St. Petersburg, Russia (2a) | 900 | 34 | Paris, France (poiytechic) | 220 |
| 15 | Kharkov, Russia.......... | 810 | 35 | Naples, Italy.. | 210 |
| 10 | Shefficld, Englan | 750 | 36 | St. Petersburg, Russia (4th) | 120 |
| 17 | Moscow, Russia. | 718 | 37 | Paris, France (pontset chauss | 118 |
| 18 | Delit, Netherlands | 630 | 38 | Paris, France (architecture) | 105 |
| 19 | Lemberg, Austria. | 560 | 39 | Paris, France (electricity) | 60 |
| 20 | Copenhagen, Denmarls | 500 | 40 | Lyons, France | 50 |

E. AGRICULTURAL, FORESTRY, AND MINING ACADEMIES.

| 1 | Berlin (ngriculture) | 588 | 16 | Pribram, Austria (min | 116 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | St. Petersburg (forestry) | 503 | 17 | Hohenheim, Germany (agricul- |  |
| 3 | St. Petersburg (mining) . | 450 |  | ture) ....................... | 109 |
| 4 | Copenhagen (agriculture) | 370 | 18 | Beaurais, France (agriculture).- | 103 |
| 5 | Vienna (agriculture) ............. | 352 | 19 | Keszthely, Hungary (agriculture) | 103 |
|  | Poppelsdorf, Germany (agriculture) |  | 20 | Eolozsmonostor, Hungary (agri- culture) |  |
| 7 | Freiberg, Germany (mining) | 320 | 21 | Tharandt, Germany (iorestry) | 0 |
| 8 | Nowaja, Alexandria (forestry) .. | 262 | 22 | Debreczin, Hungary (agricul- |  |
| 9 | Clausthal, Germany (mining) | 238 |  | ture) ...................... | 2 |
| 10 | Leoben, Austria (mining) | 228 |  | Eberswadde, Germany (forestry) | , |
| 11 | Moscow (agriculture) | 200 | 24 | Münden, Germany (forestry).... |  |
| 12 | Paris (mining) | 195 | 25 | Douni, France (agriculture) |  |
| 13 | Kaschau, Hungary (agriculture) | 150 | 26 | Namey, France (forestry) | 7 |
| $1 \pm$ | Ungarisch Altenberg, Hungary (agricultore) | 138 | 27 | Eisenach, Germany (forestry) | 7 |
| 15 | Aschaffenburg, Germany (for- |  | 29 | Evois, Russia (forestry) | 20 |
|  | estry) | 118 |  |  |  |

T. YETERINARI SCHOOIS.

| $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 4 \\ & 5 \\ & 6 \\ & 7 \\ & 8 \\ & 9 \end{aligned}$ | Vienna, Austria... <br> Madrid, Spain. <br> Berlin, Germany <br> Kasan, Kussia <br> Budapest, Hungary <br> Munich, Germany.. <br> Alfort, France. <br> Dorpat, Russia .... <br> Naples, Italy | $\begin{aligned} & 635 \\ & 510 \\ & 475 \\ & 436 \\ & 400 \\ & 314 \\ & 281 \\ & 257 \\ & 231 \end{aligned}$ | $\begin{aligned} & 10 \\ & 11 \\ & 12 \\ & 13 \\ & 14 \\ & 15 \\ & 16 \\ & 17 \\ & 18 \end{aligned}$ | Hanover, Germany <br> Dresden, Germany <br> Toulouse, France. <br> Kharkov, Russia <br> Milan, Ittaly <br> Leon, Spain <br> Turin, Italy <br> Stuttgart, Germany <br> Utrecht, Netherlands | 239 173 171 175 183 93 91 90 90 |
| :---: | :---: | :---: | :---: | :---: | :---: |

Note.-The number of students in universities and schools not mentioned has not been ascertained.
III. Foreign universities, etc., arranged alphabetically, with faculties and number of students.

1. Aberdeen, Scotland: University of Aberdeen, 858 students. Philosophical, theological, law, and medical faculties; library.
2. Aberystwith, TTales: University College of Wales, with college at Bangor, 482 students.
3. Adelaide, Australia: University of Adelaide, 320 students. Observatory.
4. Agram, Croatia, Hungary: Königl. Universitait Agram, 856 students. Theological, law, and philosophical faculties; library.
5. Aix-en-Provence, Fronce: Université d'Aix, 845 students. Law and philosophical faculties; library.
6. Lifiers, Algeria, Africa: Académie d'Alger, 783 students. Law, medical, scientifie, and philosophical faculties; library, observatory.
7. Alluthbad, India: University of Allahabad. Examiningboard, 3,423 candidates.
8. Amiens, France: Ecole Prep. de Medicine. Medical school.
9. Amsierdam, Netherlands: Universiteit te Amsterdam, 1,061 students. Law, medical, scientific, philosophical, and theological facuities; library and several institutea.
10. St. Andrew's, Scotland: University of St. Andrew's, $25!4$ students. St. Salvador, St. Leonard's, and St. Mary's College.
11. Angers, France: Facultés Catholique Libres. Law, scientific, theological, and philosophical faculties; library.
12. Angers, F'rance: École Prep. de Medicine. Medical school.
13. Athens, Greece: National University, 2,556 students. Theological, law, medical, and philosophical faculties; public library.
14. Bongor, Wates: University Colliege of North Wales.
15. Burcelona, Spain: Universidad de Barcelona, 1,887 students. Philosophical, law, scientific, medical, and pharmaceutical faculties; library.
16. Basel, Suitzerland: Universität Basel, 586 students. Theological, law, medical, and philosophical faculties; public library.
17. Belfast, Ireland: Queen's College.
18. Beigrade, Servia: Serpska Kraljevska, Veika Skola, 471 students. Philosophical, law, and technological faculties; library.
19. Berlin, Prussia, Germany: Königl. Friedr.-Wilhelms-Universität, 10,827 students. Theological, law, medical, and philosophical faculties; seminary for oriental languages, and 11 other seminaries, library and 85 university institutes and museums.
20. Beme, Suitzerland: Universität Bern, 903 students. Catholic and Protestant theology, law, medical, and philosophical faculties; city libraries.
21. Besconçon, France: Facultés de Besançon, 220 students. Scientific, philosophıcal, and medical faculties; library.
22. Birmingham, England: Mason College, 967 students. Arts and science, medical and dental faculties; library.
23. Bologna, Italy: Regia Università di Bologna, 1,590 students. Philosophical, scientific, law, medical, and pharmaceutical faculties; veterinary and engineers' schools; library.
24. Bombat, India: University of Bombay. Examining board, 3,428 candidates; five preparatory colleges.
25. Bonn, Prussia, Germany: Rheinische Friedr.-Wilhelms-Universität, 2,238 students. Protestant and Catholic theological, law, medical, and philosophical faculties; library and many institutes.
26. Bordecux, France: Facultés de Bordeaux, 1,961 students. Law, medical, scientific, and philosophical faculties; library.
27. Draunsberg, Prussia, Germany: Mönigl. Lyceum Hosianum, 70 students. Theological and philosophical faculties; library.
28. Breslau, Prusia, Germany: Königl. Universität Breslau, 1,524 students. Catholic and Protestant theological, law, medical, and philosophical faculties; Jibrary.
29. Bristol, England: University College, 521 students ( 210 women). College faculty and medical school; library.
30. Brussels, Belgium: Université libre de Bruxelles, 1,316 students. Philosophical, law, scientife, medical, and pharmacentical faculties; also polytechnical school; library.
31. Bucharest, Roumania: Universitatea din Bucuresti, 2,296 students. Scientine, philosophical, law, medical, and theological faculties; library.
32. Budapesi, Fungary: Királyi Magyar Tudomany-Egyetum, 4,587 students. Theological, law, medical, and philosophical faculties; library.
33. Buenos Ayres, Argentina: Universidad Nacional. Law, medical, and general faculties.
34. Cadiz, Spain: Facultad de Medicina (belonging to Seville). Medical faculty; library.
35. Caen, France: Facultés de Caen, 572 students. Law, scientific, and philosophical faculties; library.
36. Cagiari, Sardinia, Italy: Regia Universitio di Cagliari, 243 students. Law, medical, and scientific faculties; library.
37. Cairo, Egypt: Azhar University, about 8,240 students and hearers.
38. Calcuita, India: University of Calcutta, 7,210 candidates, of whom 3,475 paszed. Examining board; library.
39. Cambridge, England: University of Cambridge, 2,929 students. Schools of theology, law, oriental, classical, and modern philology, music, moral science, history and archæology, astronomy, physics, chemistry, mineralogy, biology, geology, and medicine; library.
40. Camerino, Italy: Libera Universita degli Studi di Camerino, 279 students. Law, medical, and pharmaceutical faculties, and veterinary school; communal library.
41. Cape Town, South Africa: University of the Cape of Good Hope.
42. C'ardiff, Wales: University of South Wales, 170 sturlents. Philosophical and scientific faculties and department of engineering; library.
43. Catanic, Sicily, Italy: Regia Universitì degli Skudi di Catania, 987 students. Law, medical, scientific, and philosophical facuities; library.
44. Chrisiania, Norway: Kongelige Frederiks Universitet, 1,300 sudents. Theological, law, medical, philosophical, and scientific faculties; library.
45. Clermont-Ferrand, France: Facultés de Clermont, 256 students. Scientific and philosophical faculties; library.
46. Coimbra, Portugal: Universidade de Coimbra, 1,429 students. Theological, law, and scientific faculties; library.
Copenhagen. (See Kjobenhavn.)
47. Cordoba, Argentine: Universidad Nacional. Law, scientific, and medical faculties; observatory.
48. Cork, Ireland: Queer's College, 212 students.

Cracow. (See Krakau.)
49. Czernowitz, Bukowina, Ausiria: K. k. Franz-Josephs-Universitü̈t, 377 students. Theological, law, and philosophical faculties; library.
50. Dijon, France: Facultés de Dijon, 642 students. Law, scientific, and philosophical faculties; library.
51. Dorpat (Jurjew), Russia: Kaiserliche Universität, 1,331 students. Law, theological, medical, and philosophical faculties.
52. Dublin, Ireland: University of Dublin, 1,128 students,
53. Dublin, Ireland: Royal University of Ireland, about 600 candidates. Examining board.
54. Dundee, Scotland: University College, 220 students.
55. Durham, England: Durham University, 250 students. To this university belong the Codrington College, on the island of Barbados, and the Fourah Bay College, in Sierra Leone; also the College of Science, at Neweastle-on-Tyne, which has an enrollment of 1,500 students.
56. Edinhurgh, Scoiland: University of Edinburgh, 2,898 students. Philosophical, theological, law, and medical faculties; library.
57. Eperies, Tungary: Evangelische Rechtsakademie, 149 students. Law school.
58. Erlangen, Bavaria, Germany: K. Bayerische Friedr.-Alexander-Universität, 1,050 students. Theological, law, medical, and philosophical faculties; library.
59. Erlau, IFungary: Erzhischöfliche Rechtsakademie, S4 students. Law school.
60. Ferrara, Italy: Libera Univexsità di Ferrara, 100 students. Law, scientific, and medical factilties; library.
61. Florence, Italy: R. Instituto di Studi Superiori Practici e di Perezezionamento, 627 students. Philosophical, scientific, medical, and pharmaceutical faculties; library.
62. Florence, Ittly: R. Instituto di Magistero Femminile, 127 students. Woman's university.
63. Freiburg, Buden, Gemany: Badische Albert-Iudwigs-Universität, 1,729 students. Law, theological, medical, and philosophical faculties; library.
64. Freiburg, Suitzerland: Katholische Universität, 353 students. Theological, law, and philosophical faculties; library.
65. Funfkichen, ILungrry: Bischöfliche Rechtsakademie. Law school, 126 students.
66. Galway, Ireland: Queen's College.
67. Geneva, Suitzerland: Université de Genève, 904 students. Theological, law, medical, philosophical, and scientific faculties; five libraries.
68. Genoa, Italy: R. Università degli Studi di Genoa, 1,010 students. Law, medical scientific, and philosophical faculties, and schools of engineering and pharmaceutics; library.
69. Ghent, Belgium: Université de Gand, 701 students. Philosophical, law, scientific, and medical faculties; library.
70. Giessen, Hessia, Germany: Hessische Ludwigs Universität, 850 students. Theological, law, medical, and philosophical faculties; library.
71. Glasgow, Scotland: University of Glasgow, 1,953 students.
72. Golhenbury, Sueden: Göteborge Högskola, 457 hearers.
73. Göttingen, Prussia, Germuny: Georg-Augusts-Universitait, 1,383 stadents. Theological, law, medical, and philosophical faculties; library.
74. Granada, Spain: Universidad de Granada. Philosophical, law, scientific, medical, and pharmaceutical faculties; library.
75. Grütz, Styria, Austria: K. K. Karl-Franzens Universitait, 1,771 students. Theological, law, medical, and philosophical faculties; library.
76. Greifsuald, Prussia, Germany: Universität, 802 students. Theological, law, medical, and philosophical faculties; library.
77. Grenoble, France: Facultés de Gremoble, 523 students. Law, scientific, and philosophical faculties; library.
78. Groningen, Netherlonds: Rijks Universiteit te Groningen, 465 students. Theological, law, medical, scientific, and philosophical faculties; library.
79. Grosswardein, Hungary: Jógakademia, 189 students. Law school.
80. Falle, Prussia, Gemany: Friedr.-Universititit Halle-Wittenberg, 1,779 students. Theological, law, medicaI, and philosophical faculties; library.
81. Hubanc, Cuba: Universidad de la Habana, 671 alumnos and 555 under private tutors. Philosophical, scientific, medical, and law faculties; library.
82. Heideibery, Baden, Germany: Ruprecht-Karls-Universität, 1,462 students. Theological, law, medical, philosophical, and scientific faculties; library.
83. Helsingfors, Fonland, Russia: Kejserliga Alexanders Universitet i Finland, 2,238 students. Theological, law, inedical, and philosophical faculties; public library.
84. Inspruck, Tyrol, Austria: K. k. Leopold-Franzens-Universitit, 1,087 tudents. Theological, law, medical, and philosophical faculties; library.
85. Jarostawl (or Yaroslavl), Russia: Demidovskij juridiceskij Licej, 269 students. Law school.
86. Jassy. Roumania: Universitatea din Jasi, 420 students. Law, philosophical, scientific, and medical faculties; library.
87. Jena, Thuringia, Germany: Sächsische Gesammt-Universitait, $80 \frac{1}{2}$ students. Theological, lair, medical, and philosophical faculties; library.
88. Jerusalem, Pal̈estine: Ecole Pratique d'Etude Bibliques. Theological school. Jurjew. (See Dorpat.)
89. Kusun, Russiu: Imperatorskij Kazanskij Universitet, S59 students. Philosophical, scientific, law, and medical faculties; library.
90. K'aschau, Hungary: Rechts-Akademie, 159 students. Law school.
91. Kecskemet, Hungary: Rechts-Akademie, 97 students. Law school.
92. Khamkov, Russia: Imperatorskij Charkowskij Universitet, 1,520 students. Philosophical, scientific, lam, and medical faculties; library.
93. Kiel, Prussia, Germany: K. Christian-Albrechts-Universität, 972 students. Theological, law, medical, and philosophical faculties; library.
91. Kice, Russia: Imperatorskij Universitet, 2,585 students. Medical, law, and philosoplical faculties; institutes and library.
95. Fingsion, Onturio, Canada: University of Queen's College, 589 students. Theological, arts, law, and medical faculties; museum.
96. Kjö̀ichhaon (Copenhagen), Denmark: Kjöbenhavns Universitet, about 2,000 students. Theological, law, medical, philosophical, and scientific faculties and polytechnic institute; library.
97. Klausendurg, Siebenbürgen, Hungary: K. k. Klausenburger Universität, 992 students. Law, medical, philosophical, and scientific faculkies; library.
98. Königsberg, Prussia, Germany: K. Albertus Universität,764 students. Theological, law, medical, and philosophical faculties; royal and university library.
99. IKrulicu, Galicia, Austria: Jagellonische Universität, 1,323 students. Theological, law, medical, and philosophical faculties; library.
100. Lakore, India: The Punjab University, 1,983 candidates, of whom 863 passed. Oriental languages, arts, law, medicine, science, and engineering departments.
101. Lampeter, Wales: St. David's College, 125 students.
102. Luusame, Switzerland: Université de Lausanne, 487 students. Theological, law, medical, philosophical, and scientific faculties.
103. Leeds (see Manchester), England: Yorkshire College, 1,039 students.
104. Leyden, Netherlands: Rijks-Üniversiteit, 908 students. Medical, scientific, philosophical, theological, and law faculties; library.
105. Leipssic, Scurony, Germeny: Universititt, 3,601 students. Theological, law, medical, and philosophical faculties; library.
105. Lemberg, Gulicia, Austria: K. k. Franzen's Universität in Lemberg, 1,901 students. Theological, law, and philosophical faculties; library.
Liége. (See Lüttich.)
107. Lille, Fronce: Facultés de Lille, 1,158 students. Law, medical, scientific, and philosophical faculties; library.
108. Lille, France: Facultés Libres. Theological, law, medical, scientific, and philosophical faculties; library.
109. Lima, Pcru: Universidad Mayor de Sm Marcos. Theological, law, medical, and philosophical faculties.
110. Limoges, France: Ecole de Médécine et de Pharmacie. Medical and pharmaceutical courses.
111. Lisbon, Portugut: Ecola Medico Cirurgica. Medical college.
112. Liverpool (see Mianchester), England: University College, about 1,000 students.
113. London, England: University of London, about 5,000 candidates. Examining board; library.
To the university belong:
(1) University College, with philosophical, law, scientific, and medical faculties; library; about 998 students.
(2) King's College, with theological, philosophical, and medical faculties; library.
(3) School oi Modern Oriental Languages.
(4) Gresham College.
(5) Royal College of Physicians.
(3) School of Economics and Political Science.
(7) College of Preceptors.
(8) Eight medical schools, connected with hospitals.
114. Louvain, Belgium: Université Catholique de Lourain, 1,890 students. Theological, lav, medical, philosophical, and scientific faculties; library.
115. Lund, Sweden: Kongl. Univergitet i Lund, 643 students. Theological, law, medical, and philosophical faculties; library.
116. Lüttich (or Liége), Belgium: Université de Jiége, 1,490 students. Philosophical, law, scientific, and medical faculties; library.
117. Iyons, France: Facultés Libres, about 1,000 students. Theological, law, scientifie, and philosophical faculties.
118. Lyons, France: Université de Lyon, 2,405 students. Law, medical, scientific, and philosophical faculties; two libraries.
119. Macerata, Italy: Regia Università di Macerata, 255 students. Law facuity.
120. Nifudras, India: University of Madras, about 4,224 candidates. Examining board.
121. Ifudrid, Spain: Universidad Central de España, 5,575 students. Philosophical, law, scientific, medical, and pharmaceutical faculties; libraries.
122. Ifanchester, Liverpool, and Iceds, England: Yictoria University, about 3,000 students. This institution consists of:
(1) Owens College, Manchester, 1,065 students.
(2) University College, Liverpool, about 1,000 students.
(3) Yorkshire College, Leeds, 1,039 students.
123. Manila, Philippine Islands: Real y Pontificia Universidad de Santo Tomás cie Manila, 1,144 students. Theological, law, medical, and pharmaceutical faculties; library.
124. Harourg, Hessia, Gemany: Università̀ Marburg, 1,1解 students. Theological, law, medical, philosophical, and scientific faculties; library.
125. Marseilles, Prance: Belongs to Facultés d'Aix. Scientifc, medical, and law faculties; library.
128. Felbourne, Fictoria, Australia: University of Melboume, 686 students.
127. Hessina, İaly: Regia Università degli itudi di Messina, 623 students. Law, medical, scientific, philosophical, and pharmaceutical faculties; library.
123. Hexico, Mexico: Instituto Médico Nacional. Medical facuity.
129. Milan, Iialy: Academia Scientifico-litteraria, 97 students. Scientific school.
130. Hodent, Italy: Regia Università degli Studi di Modena, 450 students. Lav, medical, scientific, and pharmaceutical faculties; library.
131. Montauban, France: Delongs to Facultés de 'Toulouse, 73 students. Law, medical, scientific, and philosophical faculties; library.
132. Monterideo, Uruguay: University, 132 students. Medical, law, and mathematical faculties; library.
133. Montpellier, France: Facultés de Montpellier, 1,446 s'udents. Law, medical, scientific, and philosophical faculties; library.
134. Mrontreal, Canada: MaGill College and University, 1,130 students.
135. Moscow, Russia: Imperatorskij Moskowskij Universitet, 4,461 students. Philosophical, scientific, law, and medical faculties; library.
136. Moscow, Russia: Duchovnaja Akademija. Theological faculty; library:
137. Munich, Bavaria, Germany: K. Bayerische Ludwig-Maximilians-Universität, 4,451 studente. Theological, law, medieal, and philosophical faculties; library.
128. Münster, Pritssia, Germany: K. Preussische Theologische und Philosophische Akademie, G09 students. Theological and philosophical faculties; library.
139. Nancy, France: Facultés de Nancy, 952 students. Law, medical, scientifie, and philosophical faculties, and pharmaceutical school; library.
140. Nantes, France: E.cole de Médecine de Nantes.
141. Nantes, Frunce: École Libre de Droit.
142. Noples, Italy: Regia Università degli Studi di Napoli, 5,103 students. Philosophical, law, mathematical, scientific, and medical faculties, and pharmaceutical school; library.
143. Neuchatel, Switzerland: Académie de Neuchîtel, 157 students. Philosophical, scientific, theological, and law faculties; library.
14. Newcaslle, England: The colleges belong to Durham University.
(1) College of Medicine, 201 students.
(2) Durham College of Science, 200 students.
145. New Zealand: University, consisting of four colleges.
146. Nottingham, England: University College, 1,902 students. Philology, law, and scientific faculties, and school of engineering; free public libraries.
147. Odessa, Russia: Noworossijskij Universitet, 581 students. Philosophical, scientific, and law faculties; library.
145. Olmüz, Bloraria, Austria: Theologische Facultät, 209 students.
149. Ouro-Preto, Brazil: Facultade de Direito. Law academy.
150. Oriedo, spain: Universidad Literaria, 235 students. Law faculty; library.
151. Oxford, England: University, 3,412 students. Theological, law, medical, scientific, and philosophical faculties; Bodleian library.
152. Pachua, Ialy: Regia Universitì degli Studi di Padua, 1,542 students. Law, medical, scientific, and philosophical faculties, and schools of engineering and pharmacy; library.
153. Palermo, Sicily, Italy: Regia Università degli Studi di Palermo, 1,595 students. Law, medical, scientific and philosophical faculties, and schools of engineering and pharmacy; library.
154. Paris, Irance: (1) Université de Paris, 11,827 students. Protestant theological, law, medical, scientific, and philosophical faculties, and schools of engineering and pharmacy; libraries.
155. Paris, France: (2) Facultés libres. Law and philosophical facnlties; library.
156. Paris, France: (3) Collége de France.
157. Paris, France: (4) Ecole Libre de Sciences Politiques.
158. Paris, France: (5) Ecole pratique des hautes études en Sorbome, 233 students. Philosophical and theological faculties; library.
159. Paris, France: (6) Ecole nationale des beaux-arts.
160. Paris, France: (7) Ficole nationale de chartes.
161. Paris, France: (8) Ecole dil Lourre.
182. Paris, France: (9) Ecole des langues orientales vivantes and other sipecial schools.
163. Parma, Ialy: Regia Universitì degli Stndi di Parma, 585 students. Law, medical, and scientific faculties, and veterinary and pharmaceutical schools.
164. Pavia, Italy: Regia Universita degli Studi Pavia, 1,029 students. Law, medical, scientific, and philosophical faculties; pharmaceutical school and library.
165. Perugia, Italy: Universita Libera degli Studi di Perugia, 298 students. Law and medical faculties, aad pharmaceutical and reterinary schools; library.
106. St. Petersiourg, Russia: Imperatorskij Universitet, 3,700 students. Philosophical, scientific, law, and oriental languages faculties; library.
167. Sl. Petersburg, Russia: Imperatorskij Wozensio-Medicineskaja Akademja, 750 students. Medical faculdy; library.
168. St. Petersburg, Russiu: Theological Academy, 239 students; also a law school, 300 students, independent of the university.
167. St. Petershurg, Russid: Military medical school, 750 students.
170. St. Pctersburg, Russa: Law Academy, 330 students, and several other special schools.
171. St. Petersburg, Russia: Hist. Philological Institute; 76 students.
172. St. Petersburg, Russia: Higher Courses for Women; 900 students.
173. Pisa, Italy: Regia Universitù degli Stud̉i di Pisa, 1,066 students. Law, philosophical, medical, and scientific faculties, and engineering, pharmaceutical, veterinary, and agricultural schools; library.
174. Poiticrs, France: Facultés de Poitiers, 736 students. Law, scientific, and philosophical faculties; library.
175. Prague, Bohemia, Ausiria: K. k. Deutsche Carl-Ferdinands Universitait, 1,162 students. Theological, law, medical, and philosophical faculties; library.
178. Prague, Bohemia, Austria: C. k. česk Universitet Karlo-Ferdinandovij, 2,719 students. Theological, law, medical, and philosophical facuities; library.
177. Pressburg, Itungary: Jógakademia, 196 students. Law and philosophical faculties; library.
178. Quebec, Canada: Université Laval, 231 students. Theologiral, law, mediral, and arts faculties; library and museum.
179. Recife, Brazil: Faculdade de direito, 237 students. Law faculty.
180. Reims, France: Ecole Prep. de Medicine. Medical school.
181. Rennes, France: Facultés de Rennes, 1,057 students. Law, scientific, and philosophical faculties; library.
182. Rome, Italy: Regia Università degli Studi di Roma, 2,348 students. Philosophical, scientific, las, and medical faculties; engineering and pharmaceutical schools; library.
183. Jome, Italy: A number of collages supported by the church, with 939 students; also a woman's university with 94 students.
181. Rome, IAly: Pontificia Universitas Gregoriana in Collegis Romano; 1,026 students. Theological, law, and philosophical faculties.
185. Rostock, Mecklenhurg, Germany:: Grossherzogliche Universitït, 493 students. Theological, law, medical, and philosophical faculties; library.
186. Rouen, France: Ecole Prep. de Medicine. Medical school.
18.7. Salumanca, Spain: Universidad de Salamanca, 1,247 students. Philosophical and law faculties; library.
183. Salzburg, Austria: Theologische Fakultät, 66 students.
189. Suntiago, Chile: University with 4 faculties and 1,000 students.
190. Suntiago, Spain: Universidad de Santiago. Law, medical, and pharmacentical faculties; library.
191. Saragossa, Spain: Universidad de Zaragoza, 966 students. Philosophical, law, medical, and scientific faculties; provincial library.
192. Sarospatak, ITungary: Theologische und Rechtsschule, 116 students.
193. Sassar, Ituly: Regia Universita degli Studi di Sassari, 166 students. Law, medical, and scientific faculties; library.
194. Seville, Spain: Universidad de Sevilla. Philosophical, law, and scientific faculties; library.
195. Sheffield, England: University College (belongs to Oxford University), 450 stivdents; also a medical school.
103. Siena, Itury: Regia Università degli Studi di Siena, 219 students. Law and medical faculties and pharmaceutical school; library.
197. Sophic, Bulgaria: Wische utschilische w Sophia, 354 students.
198. Stockholm, Siweden: Stockholms Högs Kola, 387 students.
199. Stockhom, Sueden: Medical Institute, 332 students.
200. Strasburg, Alsace, Germany: Kaiser Wilhelm's Universitït, 1,159 students. Theological, law, medical, philosophical, and scientific faculties; provincial library.
201. Sydney, New South Wultes, Australia: University of Sydney, 500 students.
202. Tokyo, Japan: Teikoiku, Daigaku, 2,289 students. Law, medical, philosophical, and scientific faculties and school of engineering; library.
203. Tomsk, Siberia: Imperatorskij Tomkij Universitet, 463 studentg. Theological and medical faculties; library.
201. Toronto, Canadu: University of Toronto, 1,322 students. Philosophical, law, and medical faculties; library.
205. Toronto, Canada: Victoria University, 250 students. Ar's and theology; library.
206. Toronto, Canada: Three medical schools.
207. Toulouse, France: Facultés de Toulouse, 1,899 students. Law, philosophical, scientific, and medical faculties; library.
208. Toulouse, France: Facultés Libres Catholiques. Theological and philosophical faculties; library.
209. Tours, France: Ecole Prep. de Medicine. Medical school.
210. Tübingen, Würtemberg, Germany: K. Eberhard Karis Unipersität, 1,560 students. Theological, law, medical, philosophical, and scientific faculties; library.
211. Turin, Italy: Regia Universitì degli Studidi Torino, 2,551 students. Law, medical, philosophical, and scientific faculties and pharmaceutical school; library.
212. Upsala, Sweden: Kongl. Universitet i Upsala, 1,499 students. Theological, law, medical, and philosophical faculties; library.
213. Urbino, Italy: Libera Università degli Studi di Urbino, 126 students. Law and mathematical faculties and pharmaceutical and surgical schools; library.
214. Utrechit, Netherlands: Rijks Universitait te Utrecht, 953 students. Philosophical medical, theological, law, and scientific faculties; library.
215. Valencia, Spain: Universidad de Valencia, 726 students. Law, scientific, and medical faculties; library.
216. Valladolid, Spain: Universidad de Valladolid. Law and medical faculties; library.
217. Fiema, Austria: K. k. Universitit, 5,:70 students. Law, theological, medical, and philosophical faculties; library and numerous university institutes.
218. Fiema, Austric: Protestantische Theologische Fakultät, 26 students.
219. Tiema, Austria: Lehranstalt für Orientalische Sprachen, 112 students.
220. Tienna, Austria: Consular Academy, 2 ă students.
221. Wursur", Poland, Russia: Imperatorvij Warschawskij Universitet, 1,242 strdents. Philosophical, scientific, law, and medical faculties; library.
222. Würzturg, Bavarich, Germany: K. Julius-Maximilians Universität, 1,343 students. Theological, law, medical, and philosophical faculties; library.
223. Zurich, Suitzerland: Schweizerische Hochshule, 887 students. Theological, lav, medical, and philosonhical faculties, cantonal and city libraries.

## IV. Foreign minersities, apranged ucording to countries.

Argentina: Cordoba, Buenos Ayres.
Australia: Adelaide, Melbourne, Sydney.
Austria: Czernowitz, Gràzz, Innspruck, Cracow, Lemberg, Olmütz, Prague (German), Prague (Bohemian), Salzburg, Vienna.
Belfium: Brassels, Glient, Liége, Louvain.
Bolivia: (Universities not mentioned in "Minerva.")
Brazil: Recife, Ouro-Preto.
Bulyuria: Sophia.
Canada: Kingston, Montreal, Queber, Toronto.
Cape Colony: Cape City.
Chile: Santiago.
China: (College of Foreign Knowledge.)
Colombia: (Universities not mentioned in "Minerva.")
Corea: (None.)
Custa Rica: (None.)
Chec: Habana.
Dermark: Copenhagen.
Ecuudor: Quito.
Ergyt: Cairo.
Englund: (See also Ireland, Scotland, and Wales, below.) Birmingham, Bristol Cambridge, Durham, Leeds, Liverpool, London, Manchester, Newcastle, Nottingham, Oxford, Sheffield.
France: Aix, Algiers, Angers, Besançon, Bordeaux, Caen, Ciermont, Dijon, Grenoble, Lille, Limoges, Lyons, Marseilles, Montauban, Montpellier, Nancy, Nantes, Paris, Poitiers, IRennes, Toulouse, and four separate medical schools.
Germany: Berlin, Bonn, Bramsberg, Breslau, Erlangen, Freiburg, Giessen, Göttingen, Greifswald, Halle, Heidelberg, Jena, Kiel, Königsberg, Leipsic, Marburg, Munich, Münster, Rostock, Strasburg, Tübingen, Würzburg.
Greece: Athens.
Guctemala: (None.)
Haiti: (None.)
Hazaii: (None.)
Honduras: (None.)
Fungary: Agram, Budapesth, Eperies, Erlau, Fünfkirchen, Grosswardein, Kaschau, Kecskemet, Klausenburg, Pressburg, Sarospatak.
India: Allahabad, Bombay, Calcutta, Lahore, Madras.
Ireland: Belfast, Cork, Dubin, Galway.
Italy: Bologna, Cagliari, Camerino, Catania, Ferrara, Florence, Genoa, Macerata, Messina, Modena, Naples, Padua, Palermo, Parma, Pavia, Perugia, Pisa, Rome, Sassari, Siena, Turin, Urbino, and several colleges.
Jopun: Tokyo.
Mexico: (Schools of law, medicine, engineering, etc.)
Montenegro: (Theological seminary, not mentioned in "Minerva.")
Morocco: (None.)
Netherlunds: Amsterdam, Groningen, Leyden, Utrecht.
New Realand: One university.
Nicaragua: (None.)
Norway: Christiania.
Orange Free State: (None.)
Paraguay: (National college, not mentioned in "Minerva.")
Persia: (Several colieges, not mentioned in "Ninerva.")
Peru: Lima.
Palestine: Jerusalem.

Phitippine Istands: Manila.
Portugal: Coimbra.
Foumanith: Bucharest, Jassy.
Russia: Kharkov, Dorpat, Kelsingfors, Yaroslay, Kasan, Kier, Moseow, Odessa, it. Petersbure, Warsaw.
Saluddor: (One university, not mentioned in "Tinerva.")
Sunto Domingo: (None.)
Scottend: Aberdeen, St. Andrews, Dundee, Edinburgh, Glasgow:
Servic: Belgrade.
Siam: (None.)
Siberia: Tomsk.
South African Republic: (None.)
Spuin: Barcelona, Cadiz, Granada, Madrid, Ovielo, Salananca, Santiago, Saragossa, Seville, Valencia, Valladolid.
Sweden: Gothenburg, Lund, Stockholm, Upsala.
Suizerland: Basel, Berne, Freiburg, Geneva, Lausanne, Neuchatel, Zurich.
Turkey: (Several colleges, not mentioned in "Minerva.")
Uruguay: Montevideo.
Feneauela: (Universities not mentioned in "Minerva.")
W"ales: Aberystwith, Bangor, Cardiff, Lampeter.

## Y. Technological sechools.

1. Aachen (Aix-la-Chapelle), Ppussia, Germany, founded 1870; 496 students.
2. Berlin, Prussia, Germany, founded 1779; 3, 228 students.
3. Braunschweig, Germany, founded 1745; 492 students.
4. Brürn, Austria, founded 1850; 357 students.
5. Budapesth, Hungary, founded 1856; 1,454 stadents.
6. Copenhagen, Denmark, founded 1829; 500 students.
7. Darmstadl, 'Hessia, Germany, founded 1888; 1,527 students.
8. Delft, Necherlands, founded 1864; 630 students.
9. Dresden, Sazony, Germany, founded 1828; 1,121 students.
10. Grätz, Sityria, Austric, founded 1811; 353 students.
11. Eanover, Prussia, Germany, founded 1879; 1,393 students.
12. Helsingfors, Fintend, Russic, founded 1847; 250 students.
13. Karlsruhe, Baden, Germany, founded 1525; 1,098 stadents.
14. Kharkor, Russia, founded 1884; 810 stulents.
15. Lemberg, Galicia, Austria, founded 1815; 550 students.
16. Lisbon, Poriugal, founded 1837.
17. London, Engicond, 2 institutions, founded 188!; 238 and 185 students.
18. Lyons, France, founded 1857; 50 students.
19. Hadrid, Spain, 2 institutions, founded 1895; a 43 and 150 students.
20. Mitan, Italy, founded 1863; 399 students.
21. Moscow, Russia, founded 1832; 718 students.
22. Nunich, Bucaria, Germany, founded 1827; 2,0t5 students.
23. Nancy, France, founded 1890; 72 students.
24. Naples, Italy, founded 1863; 210 students.
25. Paris, France, founded 1794 ; four schools, with 593 students.
26. Oporto, Portugal, founded 1877; 322 students.
27. Prague, Bohemia, Ausiria, founded 1806 and 1888; 2 schools, with 1,500 students.
28. Riga, Russia, founded 1832; 1,370 students.
29. St. Petersburg, Russia, fornded 1828; 4 schools, with 2,334 students.
30. São Paulo, Brazil, founded 1891; 380 students.
31. Shefficld, England, founded 1885; 750 students.
32. Stochholm, Sweden, founded 1798; 363 students.
33. Stuitgurt, Würtemberg, Germany, founded 1529; 957 stadents.
34. Turin, Itcly, founded -; 489 students.
35. Tienne, Austria, founded 1815; 1,682 stadents.
36. Zurich, Switzerland, founded 1851; 1,390 students.

Note.-Several noted technological schools in Italy and in other countries are cons nected with universities; hence are not mentioned separately in this list.

## VI. Higher agriculural, forestry, and mining schools.

[Figures in brackets signify date of founding.]

1. Altenburg, Hungary [1819], Agricultural Academy; 138 students.
2. Aschafienburg, Bararia, Germany [1844], Forestry Academy; 118 stadents.
3. Beaurais, France [1854], Asricultural Institute; 103 students.
4. Berlin, Prussia, Germany [1806], Agricultural Academy; 588 students.
5. Berlin, Prussia, Germany [1860], Mining Academy.
6. Bordeaux, France [1891], School of Chemistry, Industry, and Agriculture.
7. Campinas Sũo Paulo, Brazil [1887], Agricultural Institution.
8. Cluusthal, Prussia, Germany [1775], Mining Academy; 238 stutents.
9. Coopers Hill, England [1885], Forestry Academy; 1í0 students.
10. Copenhagen, Denmark [1858], Veterinary and Agricultural Academy; 370 students,
11. Débreczin, IIungary [1865], Agricultural Acadeny; 92 students.
12. Douai, France [1888], Agricultural College; 30 students.
13. Eberswalde, Prussia, Germany [1820], Forestry Academy; 62 stadents.
14. Eisenach, Saxe-Weimar, Germany [1859], Forestry Academy; 27 students.
15. Erois, Finland, Russic [1859], Forestry Academy; 20 students.
16. Freiberg, Saxomy, Germany [1765], Mining Academy; 320 students.
17. Gemuloux, Belgium [1860], Agricultural Academy.
18. Grignon, France [1828], Agricultural Academy.
19. Hohenheim, Würtemberg, Germany [1818], Agricultural Academy; 109 stadents.
20. Iraschau, Hungary [?], Agricultural Academy; 150 students.
21. Kesathely, ITungary [1865], Agricultural Academy; 103 students.
22. Kolozsmonostor, Hungary [1869], Agricultural Academy; 100 students.
23. Leoben, Styria, Austrica [1894], Mining Academy; 228 students.
24. Lille, France [1885], Industrial and Agricultural School.
25. Madrid, Spain [?], Schools of Agriculture and Veterinary Science; 510 students.
26. Hilan, Italy [?], Agricultural Academy.
27. Mons, Belyium [?], Mining Academy.
28. Montpellier, France [1872], Agricultural School; 220 students.
29. Moscow, Russia [?], Agricultural and Forestry Academy; 200 students.
30. Nünden, Prussia, Germany [1868], Forestry Academy; 44 students.
31. Nancy, France [1824], Forestry Academy; 27 students.
32. Nowaja-Alexandriu, Poland, Russia [1892], Agricultural and Forestry Academy; 262 students.
33. Paris, France [?], Mining Academy; 195 students.

3:. Paris, France [?], Agricuitural College; 100 students.
35. Popplesdorf, Prussia, Germany [1846], Agricultural Academy; 320 stadents.
36. Portici, Italy, founded 1872, Agricultural College.
37. Pribram, Bohemia, Austria [1849], Mining Academy; 116 students.
33. Schemnitz, Fungary [?], Forestry and Mining Academy; 200 students.
39. St. Etienne, France [1816], Mining Academy; 20 students.
40. Siockholm, Sweden [1823], Forestry School; also Agricultural Academy [1811].
41. St. Petershurg, ITussia [1778], Mining Institute; 450 students.
42. St. Petersturg, Russia [1880], Forestry Institute; 506 students.
43. Tharandt, Saxony, Germani [1811], Forestry Academy; ©6 students.
4.t. Toronto, Canada [1838], Agricultural College.
45. Tienna, Austria [1872], Agricultural Academy; 353 students.

Note.-Other similar higher institutions of learning are connected with universities; hence they are not mentioned in this list of separate institutions.

## VII. Teterinary schools.

1. Alfort, France [1766]; 231 students.
2. Berlin, Germany [1790]; 475 students.
3. Buciapesth, Hungary [1786], 400 students.
4. Cordoba, Spain [1802]; students.
5. Dorpat, Russia [?] ; $2 \overline{2} 7$ students.
6. Dresden, Germany [1774]; 173 students.
7. Hanover, Germamy [?]; 230 students.
8. Kasan, Russia [?]; 4"3 stradents.
9. Kharloo, Fiussia [1804]; 150 students.
10. Leon, S'pain [?]; 99 students.
11. Lyons, Frence [1761]; 120 students.
12. Milan, Italy [1791]; 133 stidents.
13. Mruich, Germany [1750); 311 students.
14. Naplcs, Ilaly [?]; 201 stadents.
15. Santiago, Spain [1520]; - students.
16. Stockholm, Swecien [1821]; - students.
17. Fiuttgart, Gemmany [18:1]; 90 students.
18. Touiouse, France [1825]; 171 students.
19. Therin, Tialy [?];91 students.
20. Utrecht, Netherlands [?]; 69 students.
21. Tienna, Austria [?]; 545 students.

$$
\text { ED } 99-\text { YOL II-- } 93
$$

## CHAPTER XXXV.

## CURRENT QUESTIONS.

Contents. - Teachers' salaries in citios-Teachers' pensions and annuities-The teaciing forco in England and Wales-Foreign students in German universities-Women students in Prussian universities-Canses of mortality ancong teachers-A new history of education.

## TEACHERS' SALARIES IN CIMTES.

The average amount paid to members of the teashing profession in cities of over 8,000 inhabitants shows a marked increase in 1898-23 over 1897-93. The averages for the last nine years have been as follows:

| 1890-91 | \$808.00 | 1895-96 | \$020. 49 |
| :---: | :---: | :---: | :---: |
| 1891-92 | 612.18 | 1893-97 | 624.87 |
| 1802-93 | 607.63 | 188\%-38 | c23.88 |
| 1893-91 | 608.94 | 1898-99 | 633.85 |
| 1894-95 | 624. ${ }^{174}$ |  |  |

The course of the average salary is supposed in a general way to show whether the emoluments of the business of teaching increase or decrease, and what may bo erpected by persons entering the profession. Ordinaxily the item may be so accepted, but the vagaries of averages are well known, and in exceptional cases they may lead to inferences far from correct. Two instances which occurred in the knowledge of the writer will serve to illustrate this. The "average salary" paid to teachers, as disclosed by the statistical return of a prosperous city, showed a semarkable falling of recently, and attracted attention because it was known that there had been no cutting of salaries there. Investigation led to the discovery that a number of teachers in training, who had previously served without pay, had been put on the salary lists at $\$ 150$ a year. A sudden drop in the "average salary" resulted. Another city, during the financial difficilties of a few years ago, to save expenses discharged all principals assistants and many of the lowersalaried teachers. The "average salary" of the teachers who remained consequently chowed a considerable increase.
In one of these cases no teacher received less than before, and the small salary of $\$ 15$ a month was undoubsedly a great boon to a class of young students. The lower "average" that was cansed might have been taken of itself as an indication that the body of teachers as a whole were not as well off as before, while the opposite was true. In the other case, many of the teachers were actually thrown out of employment, and the others were in a much worse condition than before, since they had to do a great deal more for the money they received. The higher "average salary" in that instance meant a misfortune for the grild as a whole.
Even in cases not so extreme as these, finctuations of averages frequently occur Without any change either in the salary schedule or in policy. The employment of more teachers of the lesser grades will lower the average, and the appointment of additional principals or supervisors in the higher grades of pay will raise it. When new positions are to be filled it rarely happens that the relative numbers of high and low salaries are maintained in precisely the same proportion as in the older positions, though in a general way the same relation between them is
observed. Consequently the "average salary" in any city is a continually fluctrating quantity. This meaningless fiuctuation, for such it is in reality, is ordinarily not great, and it tends to disappear when numbers of localities are combined in the same calculation. It is not so evident in State statistics, and is still less so in those of the country at large.

Notwithstanding all the anomalies that might be rocalled, actaal changes of salary sohedules are grickly shown in the averages, and under normal conditions marked changes in the averages may be taken to indicate actual changes in the schecules in tho samo direction. Certanily a series of changes of similar kind is siguifent, and the gradual increase from $\$ 600$ in 1830 to $\$ 033.35$ in $1893-99$ must mean that the teaching body receive more for their serices than as any previous time.

The following table shows the average salaries by States for $182 \%-98$ and for 1808-92:

Whblis 1.-Average anmal salaries of teachers chat supervising officers in cities of over 8,000 inkabitants, summarized by States, etc.


Tabie 1.-Average annual salaries of teachers and supervising ofkeers in cities of over 8,000 inhabitants, summarized by States, etc.-Continnod.

| Cities of- | 1897-93. |  |  | 1895-99. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { teachors } \\ \text { and } \\ \text { superi- } \\ \text { vising } \\ \text { oficers. } \end{gathered}$ | Erpenditure for supervision and teaching. | $\begin{aligned} & \text { Aremase } \\ & \text { ammal } \\ & \text { salary } \end{aligned}$ | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { teachers } \\ \text { and } \\ \text { super- } \\ \text { vising } \\ \text { oficers. } \end{gathered}$ | ```Expendi- turo for su- perrision and teaching.``` | Avorage annual salary. |
| Western Division: Montana | 191 | 106, 213 | 713.17 | 211 | 160,403 |  |
| Wyoming | 20 | 20, 50.2 | 681.73 | 28 | 21,54t | 769.45 |
| Colorado - | $8 \% \%$ | 05\%, 085 | 791.55 | 833 | 69.2 .493 | 795.19 |
| New Nexico | 32 | 20,000 | 685.00 |  | 20,000 |  |
| Utah | 339 | 205, 629 | $5 \%$ \%. 79 | 404 | 213,093 | 527.45 |
| Washingtoil | 445 | 283, 866 | 610.48 | 536 | 274, 582 | 1312. 23 |
| Oregon | 333 | 定3, 975 | 634.50 | 346 | 223,783 | 661. 29 |
| California | 2,571 | $2,147,235$ | 833.30 | 2,503 | 2,080,005 | 831.C0 |

It will be seen that although the average has fallen in a mamber of the States, all the divisions as wholes, except the Western, showimportant increases. ITany of the variations in the State averages would undoubtedly fall wader the description of "meaning"ess fuctuations," to which reference was made in a previons paragraph, but there are plain indications of actual changes of salaries, thoso looking toward increase predominating. For example:

In Niassachusets there ware 237 additional sapervising and teaching positions, and the excess of sa? aries poid in 1898-99 over 189\%-98 amounted to Sju17,994. Fividently thero must have been important improvements in salary sehedules somewhere.

On the other hand, in the Stato of Washington the number of persons employed was increased by 71 , 0 the the agregate of salaries paid was 89,284 less in $1893-09$ than in 189\%- 58 . This could only have come about by wage-cutting. Further examination shows that the sulierers lived in Spokane and Tacoma. The nrmber of teachers was increased in both those cities, but the whole amount paid them was less by 813.713 in Spokane, and less by 824,052 in Tacoma.

Montana furmishes an example in which it was possible for a heavy reduction in the average salary to have occurred without reducing the amount paid to any individual or that assigned to aby position. Fifty more teachers were employed in 1808-93 than in 189\%-98, and $\$ 2,215$ more was paid in salaries. A reduction of 4\%. 53 appears in the average salary, yet the pay of all the old posidions may have remained just as betione and the 50 new teachers may hove received $\$ 484$ each, or salaries areraging that amount.

The great cities would naturally le expected to pay the best salaries. Cost on living is highest, as a rule, fn them, and they are surposed to demand the best talent arailable. The table following shows tho averages for all the cities which had over 100,000 inhaibitants, according to the Eleventh Census. The figures spoak for themselves.

TADLE 2.-Average anmuat salaries of tecichors and supervising oficers in cities of over 100,000 inhabitants.

| City. | Number of teacher's and superirising officers. | Paici for superrising and teaching. | Arerage salary. |
| :---: | :---: | :---: | :---: |
| Son Francisco. Cal | 1,0:0 | \$340, 829 | §8\%9.2\% |
| Denter (Distriot No. 1), Colo | , 293 | -243, 650 | 8834.42 |
| Washington, D. C. | 1,051 | 801,016 | 754.96 |
| Chicago, 111- | 5,535 | 4,937, 36, | 893. 03 |
| Indianapolis. In | 6.7 | 393, 9ะ8 | 637. 34 |
| Louispille, Fy | 394 | 403, 237 | $687.2 \sim$ |
| New Crleans, I | 691 | 319,009 | 481.53 |
| Baltimore, Mc. | 1,85\% | 1,084, 109 | 521.43 |
| Boston, Mass | 1,83\% | 1, 953,483 | 1,055. 71 |
| Detroit, Mich. | 88\% | 571,813 | $63^{* \prime} .27$ |
| Minneapolis, Dimn | 78 | 530,454 | 678.86 |
| St. Panl, Minn | $57 \%$ | $331.46{ }^{\text {a }}$ | 554. 3 |
| Kansas City, M | 503 | 336, 844 | 663.08 |
| St. Lotiis Mo | 1,6\% | 1,013, 835 | 60\%. 09 |
| Omahas, Nebr | 394 | 253, 181 | $65 \% .69$ |
| Jersey City, | 582 | 354, 410 | 603.95 |
| NeTrars, N. | \%48 | 518, 625 | 693. 15 |
| Buftalo, N. Y | 1,234 | \%73. 412 | 642.95 |
| New York, T. | 10,018 | 8,127, 037 | $81 \% .05$ |
| Rochester, N, | 765 | 206,922 | 518.85 |
| Cincinnati, Ohio | 910 | r90. 312 | 858.01 |
| Clisteland, Ohio | 1,234 | 883, 077 | 715.6 |
| Allegheny Pa | 393 | 246.230 | 625. 79 |
| Philadelphia, $P$ | 3,471 | $2,430,820$ | 693.02 |
| Pittsburg, Pa | 912 | 641,782 | \%03. 2 |
| Provicence, R. I | 689 | 451, 833 | 084.43 |
| Nilwarkee, Wis | 862 | 581, 637 | $6 \pi 4.00$ |

## TEACERRS" PENSIONS AND ANNUITIES.

REPORT OF TEACHERS' PENSION COMMITTEE IN CHICAGO, ILL., FOR 1899.
Nembers Teachers and Employees' Pension and Retirement Fund Association Puticic Schools of Chicago:
At the delegate convention of the members of the assaciation held last Jme to consider the practical workings of the law, the condition of the fund, and to suggest changes, if any, to be recommended, two permanent committees were appointed-one on information and publication, the second on investigation of the pension roll and the compiling of financial statistics. The chairman of the general convention was made a member of both committees.

The finance committeo has compiled the following statistical report, and in accordance with a resolution of the conveation, the facts are furnished to the School Weokly for the information of the members.

Contributors to the pension fund are urged to give these statistics careful ensideration. The information committee invites discussion and suggestions suggested by these facts as to what action should be taken, if any, in the near future as to changes that shonld be made in the law or the general working of the present plans adopted by the trustees of the fund.

The School Weekly generously offers its columns for any communications that may be thought by the committee to be of general interest.

Such suggestions may be sent to the undersigned, and they will be given careful consideration by the committee.

Johi Ray, Chaiman.<br>Mary Darrow Olson, Secretary.

STATEMTENT OF COMMITTEE ON STATISTICG.

## To the Teachers of Chicago:

The committee appointed by your delegate convention of last June to compile statistics relating to the pension roll and pension fund herewith submits its report through the columins of the School Weekly.

The statistics here presented are arranged under four heads:
Table 1 contains the roll of pensioners complete to January 1, 1900, with date of entry upon the roll, sum received each month, total amount received to Janu-
ary 1, 1900, yearly assessments, and lastly, total amount contributed by each persioner to the pension fund from the 1 per cent assessment on salary at retiring.
Table 2 shows the number of pensioners on the roll since September, 1806 . by months, and the amount paid out on pensions for each month since then up to Janaary 1, 1000.

Table 3 shows the annual collections or receipts from all sources for the benefit of the pension frond from January 1, 1805, to January 1, 1900 , and also the yearly disbursements for pensions alone for the same period.

Table 4 contains a carefuliy prepared estimate based on Wiggleworth's tables of expectancy of life at $40,45,50$, 55, and 60 years, the calculation being based upon mininum ( $\$_{1} 40$ ), maximum ( $\$ 60$ ), and average ( $\$ 50$ ) monthly payments to pensioner's at the present time. This table shows the total amoumt that would be paid to each pensioner and the total amomet that would be received from each pensioner on the basis of expectancy.
Although great care kas been used in compiling these statistics, the committeo is aware that some inaccuracies will be found, but it is cuite certain that in the main the tables are corvect. A careftuly prepared review of these tables is in conse of proparation by the committeo on information. This review will contain recommendations and suggestions fop increasing and safeguarding the pension fund, and will in due time bo problished in the School Weekly.

Auditor Custer and Secretary Legner state that addtions of the fire or six names to tho pension roll at the last meeting of the pension board necessitated the celling of gomo securties in order to mect obligations now outstanding.

Respectully submitted.
Williah H. Ohamberlin, Chaiman, Mary Darrow Oeson, johi T. Ray,

Committce on Statistic.
[Table 1, contaning names of benoficiaries, is here onicted.]
Table 2.-Pension disbursements from 1895 to 1900 by months.

| Date. |  |
| :--- | :--- | :--- | :--- | :--- |

Table 3.-Pension receipts and disbursements, by years.

| Year. | Whence received. | Receipts. | Disbursoments. |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & 1896 \\ & 1897 \\ & 189.3 \\ & 1899 \end{aligned}$ | From teaching force. | \$38, 569. 28 | 94, 753.08 |
|  | ---- do --..........-.... | $40,553.52$ | 19.411 .83 |
|  | do <br> From all sources | $\begin{aligned} & 45,553.39 \\ & 53,204.32 \end{aligned}$ | 32,703. 66 |
|  | From other pay iolls, 1896 | 16, \%33.37 | 46, 289. 11 |
|  | Total <br> On hana Jan. 1, 1g00, approximatoly | $\begin{array}{r} 195,338.88 \\ 92,177.11 \end{array}$ | 103, $161.7 \%$ |

Tabie 4.-Showing expectancy of life, after retirement at different ages ("Wiggleworth's tables"), the sums that will be drawn by the amnitants before death on pensions of $\$ 400, \$ 500$, and $\$ 600$ per year. Also contributions to the fund and excess of annuity cove the same on salaries of $\$ 800, \$ 1,000$, and $\$ 2,500$ per year.

| $\begin{aligned} & \text { Age } \\ & \text { at re } \\ & \text { tire- } \\ & \text { nent. } \end{aligned}$ | Rrpectancy of life. | Total amount drawn from fund during line on a pension of - |  |  | Contributions ant ing so yearsat 1 per cent of salary. |  |  | Ereess of amulity over contribution to cund on saia rios of - |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 803. | 850. | 8600. | 9800. | 81,000. | 40, 500. | 3800. | \$1,000. | 82, 500. |
| 40 | 23.04 | \$10, 416 | \$13.020 |  | 8160 | S200 | 5500 | \$10, 256 | 812,820 | \$15, 124 |
| 4.5 | 23.93 | 9,503 | 11,900 | 14, 252 | 160 | 200 | 500 | 9.4113 | 11, 760 | 13,85, |
| 50 | 21.15 | 8,461 | 10,580 | 12,003 | 160 | 200 | 500 | 8,304 | 10,230 | 12, 196 |
| 55 | 18.35 | $7,3 \pm 0$ | 9, 1\% | 11,010 | 100 | 200 | 500 | \%,180 | 8,9\% | 10,510 |
| 60 | 15.43 | 6,12\% | 7, 713 | 9,2อ8 | 160 | 200 | 500 | 6,012 | 7,515 | 8,253 |
| 6 | 1.2. 43 | 4,97\% | 6,215 | 7,458 | 160 | 200 | 500 | 4,812 | 6,015 | 6,958 |
| \% | 10.65 | 4,031 | 5,030 | 6,193 | 160 | 200 | 500 | 3,804 | 4, 830 | 5,3303 |

## RETIREMENT FUND IN SOUTH CAROLINA.

By an act of the general assembly of South Carolina, approved on the 29 th of Jantary, 1898, the board of pubic school commissioners for the city of Charleston established "The pubic school teachers' retirement fund."

This fund is administered by $a$ board of trustees composed of the chairman of the city board of school commissioners, two other commissioners chosen by the said board, the superintendent of the city public schools as ex-oteio secretary and treasurer, and a citizen to bo elecied by the teachers of the city public schools every four years.

The fund consists of 10 per cent for the first five years and of 4 per cent erer thereafter of the gross income of the special school tax paid by the tariayers of the city of Charieston.

Every teacher in the public schools of the city of Charleston who is over the ace of 6 y years, and shall have taught in them for twenty-five years nexit preceding the time of retirement, shail have the right voluntarily to retire from such service, and upon the certificate of the city board of school commissioners tiat he or she stands in need of maintenance shall become a beneficiary, and shall be entitled to an annuity for the remainder of his or her life. This ammaty shall in no case exced the sum of $\$ 250$ in any one year.
Every teacher in the pablic schools of the city of Chareston who shall have taught continuously therein for at least twenty years, and has becoine incaracitated mentaliy or physically, may retire and become a beneficiary of the fund, provided that the anurity shall cease when such incapacity ceases.

There is a local toachers' benefit association whose object is to reliere sick teachers by the payment of 75 cents a day for ten school days, and 50 cents a day for the remaining ten days of a school month, should the sickness continue for that period.

THE PENSION LAIV OF CLNCINNATI, OHIO.
From Cincinati comes the report that the law, passed by the Ohio legislature some yoars ago, which enables the teachers to establish and maintain a pension fund, had to be seriously amended in order to prevent a depletion of the fund. Instead of 1 per cent oí the salary, a teacher will now lo taxed $\$$ of the school year, or 300 per amum. No ditiorence is made between teachers and principals. A teacher may retire from service and claim his pension after thirty years' service, and he then draws a pension of \$10 for every year he served; hence his pension will amounit to 8300 after thirty years, $\$ 400$ after forty years, but no pension over $\$ 500$ will be paid. In cases of disability berore the chirtieth year of service is reached, a pension may bs paid, but it can not bo larger than $\$ 10$ for every year of service. One paragraph of the amended law gives satisfaction to the teachore, namely, that hereafter no teacher can be dismissed arbitranily by the superintendent, iut his case must be investigated by a committee of the city sehool board upon wisten coaplaint of the anperintendent.

## THE TRACHING TOROD IN ENGLAND AND WAIES.

The London Schoolmaster, in its issue of May 5, 1900, analyzes the amual returns of the "Edncation deparsment" for 1899, and reveals some interesting facts from which the following, concerning the number, age, and qualifcation of the teaching force, as well as the amounts paid then, are gleaned. It says: "This question (respecting the quality and quantity of teachers) represents an item of first-class importance; and no one who knows the lack of adequate financial support under which the great bulk of the voluntary schools, and practically all the rural schools (both board and voluntary or church schools), suffer, will be surprised to learn that in very many cases the teaching staff is woefully insuffcient and ineficient." Elementary school teachers are of four classes:
(1) Adults who have gone through all the grades of training and are classed as fully certificated.
(2) Teachers who have beon apprenticed as pupil teachers, but have not completed the course for the teacher's certificate. These are styled ex-pupil teachers.
(3) Xowng women over 18 years of age-technically known as "article 68 "s" who have no professional aualification whatever, except that, in the opinion of the inspector, they are presentable young persons and can give evidence that they have been successfully vaccinated.
(4) Juvenile apprentices to the arb of teaching, known as pupil teachers.

Under any efficient system of education, neither the "Article 68's" nor the papil teachers world be looked upon as eficient members of the school staff. But it is too common an experience to fina Siglish schools-especially voluntary schools and rural board schools-staffed almost entirely with these ineficient supernumeraries. The whole teaching force (including these inefficient juveniles) in England and Wales at the present time (the report is for 1899) consists of 150,521 persons, distributed as Table $\mathbb{A}$ shows. Tables $B, C, D$, and $E$ give fruptherdetails in relative and absolute numbers, and the facts as related to Scotland are added. The report does not mention Ireland. The table "Salaries of teachers" has been made serviceable to American readers by stating the ainounts in dollars and cents.

## The teaching force in England and Wales.

A.-NUMBER OF TEACRERS.

| Find of teachers (for explanation see introductory iext). | $\begin{gathered} \text { Men } \\ \text { and } \\ \text { boys. } \end{gathered}$ | $\begin{gathered} \text { Wo- } \\ \text { mend } \\ \text { and } \\ \text { girls. } \end{gathered}$ | $\begin{gathered} \text { Total } \\ \text { in } 1839 . \end{gathered}$ | $\begin{gathered} \text { Total } \\ \text { inisge. } \end{gathered}$ | $\begin{array}{\|c} \text { Total } \\ \text { in } 1897 . \end{array}$ | $\begin{gathered} \text { Total } \\ \text { in 1896. } \end{gathered}$ | $\begin{gathered} \text { Total } \\ \text { in } 1895 . \end{gathered}$ | $\begin{array}{\|l} \text { Total } \\ \text { in } 1894 . \end{array}$ | $\begin{gathered} \text { Total } \\ \text { in } 1883 . \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Certificated | 2t, $2 \times 3$ | 3\% 3 , 82 | 62, 08 | 50, 881 | 58, 814 | 弱, \%12 | 52, 941 | 50,689 | 49.340 |
| Ex-pupil teache | 4,723 | 20, 598 | 30,223 | 26. 236 | 23, 206 | 2\%), 343 | 27,961 | 26.0 | 25.123 |
| Areicle 6\%'s |  | 16, 717 | 16,717 | 15, 136 | 14, 105 | 12, 838 | 11,6\%3 | 10,196 | 8,534 |
| dites .... | 8,415 | 33, $0: 12$ | 41,480 | 42, 283 | 43, 574 | 42, 800 | 41,143 | 39, 694 |  |
| Total | 87, 338 | 113, 131 | 100, 50.1 | 144, 135 | 141,749 | 138,743 | 123.203 | 138,546 | 121, 871 |

B.-SEX OF TEACHERS.

|  | Fear. | Rien and boys. | Per cent. | Fomen and girls. | Per cent. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 169 |  | 37, 293 | 24.8 | 113,181 | 75.2 |
| 1893 |  | 36,442 | 22.8 | 102, 687 | 74.8 |
| $180 \%$ |  | 36,211 | 25.5 | 105, 538 | 74. 5 |
| 1893 |  | 25, 939 | 20.9 | 102, 804 | 74.1 |
| 189, |  | 35,085 | 25. 2 | 98, 6\%3 | 73.8 |
|  |  | 33, 660 | 23.8 | 92, 656 | \%3.2 |
|  |  | 33, 556 | 27.1 | 88, 615 | 72.9 |

C.-BROPORTION OF ADULTS TO JUVENILES.

|  | Year. | Adults. |  | Jureniles. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number. | Per cent. | Number. | Percent. |
| 180 |  | 109, 035 | \%2. $\frac{1}{4}$ | 41, 489 | 27.6 |
| 189 |  | 101, 746 | 70.5 69.2 | 42, 389 | 29.2 |
| $18 \%$ |  | 94,945 | 69.4 | 43, 800 | 31.6 |
| 1895 |  | 32, 550 | 69.2 | 41,143 | 30.3 |
| 1891 |  | 86,902 | 68.7 | 39,594 | 31.3 |
| 1893 |  | 82, 997 | 68.1 | 38,84t | 31.9 |

D.-PROPORTION OF QUALIFIED TO UFQUAIIFIED TEACEERS.

| Year. | Certificated teach. ers. | Per cent. | Uncertincated adults. | Per cent. | Apprear tices. | Percent. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1599 | 62,055 | 41.2 | 46,950 | 81.2 | 41,489 | 27.6 |
| 109 | 59, 814 | 41.5 | 41, 8 \% | 23.1 | 42,389 | 29.2 |
| $129 \%$ | 58, 814 | 41.5 | 39, 361 | 277 | 43,534 | 30.8 |
| 1493 | 56, 712 | 40.8 | 35, 231 | 275 | 43,800 | 31.7 |
| 1805 | 50,911 | 39.6 | 33.639 | 29.6 | 41,143 | 30.8 |
| 1891 | 50, 659 | 40.0 | 36,233 | 28.7 | 39,50x | 81.3 |
| 1893 | 49,340 | 40.5 | 23, 525 | 23.6 | 38,8\%t | 31.9 |
| 1:9\% | 48,7\% | 41.6 | 30,509 | 20.0 | 34,874 | 32.4 |

## E-QUALITY OF TEACHERS EMPLOYED IN VARIOUS CLASSES OF SCROOLS.

| Class of schools in 1899. | Certificated adults. | Ex-pupil teachers. | Article 68 's. | $\begin{gathered} \text { Pupil } \\ \text { teaciers. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: |
| Schools of Chureh of England | Per cent. | Per cent. | Per cent. 15 | Per cent. |
| Westeyan schools -.......... | 30 | 24 | 10 | 39 |
| Roman Catholic schools | 3 m | 22 | 19 | 25 |
| British schools. | 36 | 22 | 12 | 30 |
| Board schools | 47 | 19 | 5 | 29 |
| Scotland ....-.-.- | ${ }_{81}^{56}$ | 12 |  | 32 |
| London board schcols | 81 | 4 | 0 | 15 |

## THE FACTS IN SCOTMAND JN 1523 ．

In 1898 Scotland had 17，838 teachers－9，975 certificated aarits，or fis per cent； 2，193 uncortificated adults，or 12 per cent，and 5，688 juveniles，or 32 per cent．With regard to sox they were divided into 5,485 men or boys（ 20 per cent）and 12,401 Women or girls（ 70 per ceat）．Divided into adults and juveniles we get：Adults， 12，168，or 68 per cent，and juveniles 3,668 ，or 32 per cent．

## GENERAE REMARKS．

The foregoing analysis of the composition of the teachiny force illustrates in the first place the extent to which women are dispossessing men in the work of teacking．To－day in England and Wales，as will be seen by consultiag the tables， roughly speaking，three－fourths of the teachers are women and girls．In the sear 185170 per cent of the teaching force were men and boys and 30 per cent Tromer and girls．In $18 \% 0$ the proportions of the sexes were just about equal，and now they are 24.8 per cent men and boys and 75.2 per cent women and gin＇s．Another consideration is the rapid increase in the number of unqualifed admit teachers， known as＂Article 68＇s．＂In ten years the number of these teachers engaged has risen from 5,210 to $10, \% 1 \%$ ．（See explanatory remaris in the introdaction．）

F．－AVEPAGE GALARIES OF TRACHERS IN ENGEAND AND TALES，

| Class of schools． | Men． |  |  |  | Women． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Principals． |  | Class teachers． | Totai． | Principals． |  | Class teachers | Total． |
|  | Average salaries． | $\left\|\begin{array}{c} \text { Number } \\ \text { provilied } \\ \text { worbse } \\ \text { han zent } \\ \text { free. } \end{array}\right\|$ | Arerage salaries． | Total aver－ age． | Arerage salaries． | Nyumber provided With house and rent ざざヒe。 | Arerage salaries | Total arer－ age． |
| Sohools connected with National So－ ciety or Church of England． <br> Wesleyan schools．．． | $\begin{aligned} & \text { Se.ty. 75 7 } \\ & 913.64 \end{aligned}$ | $\begin{array}{r} 4,45,2 \\ 48 \end{array}$ | $\begin{array}{r} 8407.45 \\ 444.93 \end{array}$ | $\begin{aligned} & 8561.68 \\ & 659.54 \end{aligned}$ | $\begin{array}{r} 8405.20 \\ 473.83 \end{array}$ | $\begin{array}{r} 3,452 \\ 1 \end{array}$ | $\begin{aligned} & \$ 239.60 \\ & 307.41 \end{aligned}$ | $\begin{array}{r} 870.02 \\ 885.95 \end{array}$ |
|  |  |  |  |  |  |  |  |  |
| sch $\qquad$ | 833.83 | $\begin{array}{r} 26 \\ 236 \\ 1,548 \end{array}$ | $\begin{aligned} & 425.10 \\ & 483.39 \\ & 537.45 \end{aligned}$ | $\begin{aligned} & 561.54 \\ & 6 \pi 0.45 \\ & 645.43 \end{aligned}$ | $\begin{aligned} & 371.33 \\ & 4.3 \% .99 \\ & 600.70 \end{aligned}$ | 203 1.40 |  | $\begin{aligned} & 341.83 \\ & 884.02 \end{aligned}$ |
| British and other schools <br> Board schools．．．．．．．．．．．．．．． | $\begin{array}{r} 369.559 .55 \\ 883.30 \end{array}$ |  |  |  |  | 140 405 | $\begin{aligned} & 317.14 \\ & 416 . \% 2 \end{aligned}$ |  |
| Total in－ |  | $\begin{aligned} & 6,008 \\ & 6,006 \\ & 5,973 \\ & 5,947 \\ & 6,902 \\ & 5,091 \\ & 6,017 \\ & 5,931 \\ & 5,951 \\ & 5,332 \end{aligned}$ |  | 638.36 <br> 613．$\uparrow 2$ <br> 610.95 <br> 611.64 <br> 611.83 <br> 603.08 <br> 588.31 <br> 599.60 | $\begin{aligned} & 4 \pi 0.81 \\ & 48.75 \\ & 449.06 \\ & 44.39 \\ & 437.33 \\ & 439.18 \\ & 429.58 \\ & 417.00 \\ & 414.12 \\ & 414.05 \end{aligned}$ | 4,3284,3044,4394,5134.5634,6034,6034,6534,7884,7864,561 |  | $\begin{aligned} & 49.83 \\ & 410.27 \\ & 497.4 \\ & 493.14 \\ & 405.81 \\ & 404.83 \\ & 393.0 \\ & 388.31 \\ & 353.0 \\ & 350.10 \end{aligned}$ |
| 18899 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| 1893 |  |  |  |  |  |  |  |  |
| 1845 |  |  |  |  |  |  |  |  |
| 1893 |  |  |  |  |  |  |  |  |
| 1893 |  |  |  |  |  |  |  |  |
| 1892 |  |  |  |  |  |  |  |  |
| 1891 －．．．－．－．．．．．．． |  |  |  |  |  |  |  |  |
| 1890．．．．．．．．．－． |  |  |  |  |  |  |  |  |

G．－NUMBER OF TEACHERS AT SPECIFIED AMOUNTS．

| Class of schools． | Principals or head teachers：Men． |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | From <br> Su0to $\$ 750$. | $\begin{aligned} & \text { From } \\ & \text { sion to } \\ & 51000 \end{aligned}$ | $\begin{aligned} & \text { From } \\ & \text { wi,00 } \\ & \text { to } \\ & \text { si, }, 20.0 \end{aligned}$ | $$ | $\begin{aligned} & \text { From } \\ & \$ 1,5101 \\ & \text { to } \\ & 02,010 . \end{aligned}$ | From S2， 000 to SR 500. | $\begin{aligned} & \text { q2,500 } \\ & \text { and } \\ & \text { over. } \end{aligned}$ | Total num－ ber． |
| Chureh schools Wesler，an schoois | 8 | 1，8938 | 3,514 165 | 1， 294 | 888 | 102 33 | $\begin{aligned} & 29 \\ & 18 \end{aligned}$ | 2 | 2 | 7， 204 |
| Poman Catholic <br> schools Eritish schools Board schools |  | $\begin{array}{r} 55 \\ 18.8 \\ 189 \\ 7 \end{array}$ | $\begin{array}{r} 143 \\ 3 i 9 \\ 1,424 \end{array}$ | $\begin{array}{r} 61 \\ 21 \\ 8.81 \\ 851 \end{array}$ | $\begin{array}{r} 5 \\ 0 \\ 0.0 \end{array}$ | $\begin{array}{r} 32 \\ 324 \end{array}$ | $\frac{17}{0 \% 3}$ | 5 | $\stackrel{2}{2}$ | $\begin{array}{r} 264 \\ 807 \\ 4,470 \end{array}$ |
| Total in 1390． | 14 | 2,803 | 5，5，${ }^{\text {co }}$ | 2，543 | 1，2日1 | 519 | 434 | 25 | 6 | 13，149 |
| Princinals or head teachers：Women． |  |  |  |  |  |  |  |  |  |  |
| Class ofi selwools． | Under <br> g123． |  |  | $\begin{aligned} & \text { Teom } \\ & \begin{array}{c} 50 t \\ 5509 . \end{array} \end{aligned}$ | $\begin{aligned} & \text { From } \\ & \text { Soe to } \\ & 56: 5 . \end{aligned}$ |  |  | $\begin{aligned} & \text { From } \\ & \$ 1,400 \\ & \text { to } \\ & \$ 1,500 . \end{aligned}$ | $\begin{aligned} & \$ 1, \mathrm{E} 00 \\ & \text { and } \\ & \text { over. } \end{aligned}$ | Total num－ ber． |
| Church schools．．．． <br> Wesleyan schoois | 2 | 183 | $3,31$ | $\begin{gathered} 3,0,3 \\ 100 \end{gathered}$ | 1，20 | $\begin{array}{r} 3 \% 9 \\ \left.\begin{array}{c} 378 \\ 2 \end{array}\right) \end{array}$ | 102 | 14 |  | 8，949 |
| Roman Catholic schools |  |  |  |  |  | 11 | 2 |  |  |  |
| Britirl schools．．．． |  | 11 | 喏 9 | 293 | 118 | 41 | 3 |  | 1 | \％\％${ }^{\text {\％}}$ |
| Boare schcois |  | 10 | 1，006 | 1，402 | 1，147 | \％ 51 | 760 | 945 | 15 | 5，\＆ 49 |
| Total in 1893. | ： | 231 | 6，041 | 5，533 | 2，689 | 1，213 | 900 | 698 | 15 | 17，333 |

Regular class teachers：Men．

| Class of schools． | $\begin{aligned} & \text { Under } \\ & \text { Unise. } \end{aligned}$ | $\begin{aligned} & \text { From } \\ & \text { Sedy to } \\ & 500 . \end{aligned}$ | From <br> 50\％to <br> 8750. | From Sreo to $\$ 1,000$ | From $\$ 1,00$ to ，，．， | $\begin{aligned} & \text { From } \\ & \$ 1,20 \\ & \text { to } \\ & \$ 1,500 \end{aligned}$ | From 31,500 to $\$ 2,0 \times 0$ | From $9 * 000$ $82,500$. | Total num－ ber： |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Charch schools | 12 | 1，450 | 160 | 7 |  |  |  |  | 1，629 |
| Wesleyan chools |  |  | 38 | 1 |  |  |  |  | 174 |
| Roman Catholic schoo Witich sehools | $3$ |  | 17 | 19 | 6 | 1 | 1 |  | 134 |
| Board schoels．． | 14 | 3， 834 | 3， 053 | 1，2\％3 | 7 |  |  |  | 8，164 |
| Total in 1899 | 32 | 5，83 | 3， 25 | 1，230 | 15 | 1 | 1 |  | 10，485 |

Fogular ciass teachers：Women．

| Class of schools． | Under $\$ 125$. |  |  | $\begin{aligned} & \text { From } \\ & 8375 \text { to } \\ & 8000 . \end{aligned}$ | From <br> 4500 to $\$ 685$. | $\begin{aligned} & \text { From } \\ & 8325 \text { to } \\ & \$ 700 . \end{aligned}$ | $\begin{aligned} & \text { From } \\ & \$ 700 \text { to } \\ & \$ 1,600 . \end{aligned}$ | From sitco ＊1，500 | Total <br> nrm－ <br> ber． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cuurch schools | 25 | 675 | 2，899 | $2 \pi$ | 15 | 1 |  |  | 3，885 |
| Weateyan schools． |  | 24 | 235 | 4.3 | ， |  |  |  | 310 |
| Roman Catholic sch | 2 | 89 | 668 | 25 | 3 |  |  |  | 533 |
| Britisin schools ．．．．． |  | 53 | 439 | 93 | 17 | － |  | 1 | 805 |
| Buard schoels．． | 3 | 44 | 5，086 | 4，61： | 2，723 | 1，0\％2 | 10 | 1 | 13，959 |
| Total in 1890 | 30 | 1，293 | 9， 327 | 5， 050 | 2，810 | 1，035 | 10 | 2 | 19，匋 |

## FOREIGN STUDENTS IN GERMIAN UNIVERSITIES.

During the summer semester of 1899 there were 2,284 foreigners matrienated in German miversities. This number does not inchde about 2,000 foreign "hearers" who could not be matriculated, owing to their want of the preparation prescribed by law; nor does the mumber include the foreign students of polytechnica, art academies, music conservatories, agricultural, forestry, and mining academies. The Annual Report of this Bureare for 1898 gives a summary of foreign students in polytechnica, agricultural, forestry, and mining academies which showe a total of $1,2 \pi b$. If the art and music students $\pi$ ere added, the sotal would rise to 2,000 . The following figures have referenco to foreign university students oniy.

Of the 2,284 students, 563 studied philosophy, philology, and history; 480 studied mathematics and natural science; 4\% studied medicine; 299, law; 284, agriculture, forestry, and political economy; 100, theology, and 31 , dentistry, making a total of 2,414, which indicates that some-130-stady in two facalties.
The "hearers" (nonmatricalated stadents) have all the privileges of regular stradents, such as attentance at lectures and exercises, uso 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 acquine degrees or compere in state examinations, the successfral passing of which opers up a career in the service of the State, which is coveted by native Germans and is granted almost exciusively to them.

Foreign students came from nearly all the civilized countries. From Russia 504, Austris-Hungary 48\%, Switzertand 289, England 159, Bulgeria 69, the Netherlands 50, Hrance 41, Servia 30, Italy 37, Turkey 33, Roumania 32, Sweden and NorWay 31, Luxemburg 24, Greece 23, Belgicm 19, Denmarla 8, MTontenegro 3, Spain 3; total from Erope, 1,87\%. From Asia, cholly from Japan, came 101; Hom Africa 21, from Australia 5, and from America 300. The reporit fails to specify from what part of Emerica the last mentioned came.
The following nambers will show which miversities are preferred by foreigners: Berlin Lad ©55 foreign stadents, Leipzig 229 , Heideiberg 205, Munich 19免, Halle 188, F'reiburg 98, Göttingen 93, , Atrassburg 75, dena 71, Marburg 65, Würburg 59, Bonn 50, Königsburg 49, Täbingen 48, Breslau 40, Giesser 35, Erlangen 38, Greifswald 23 , Kiel 2, Rostocir 7 , and MTuster 2.

## WOMEN STUDENTS IN PRUASIAN UNIVERSITIES.

As will be seen from the following tables, statistics of all the $\mathrm{DNO}^{2}$ German wiversitios are not olfered, but only of the 10 Frussian universities. The Leipzig Tageblatt (No. 340, Jaly 19, 1899) makes the compilation, chiofiy because tho Prussian Government has been omposed to the admission of Women stulents. It still debars them from matriculation and only allows them to enter as "hearers." The difierence betweenmatriculated strudens and hearers isexplanedin the preceding article. The following tebles speat for themselves. Whey give the number of women stadents, their nationality, age, religion, their marital relatious, the occupation of their fathers, their purposes of stody, and the branches they select.
1.-Number of women students in Prussian universities.

| Prossian universities. | $\begin{gathered} \text { Winter } \\ \text { of } \\ 1895-90 . \end{gathered}$ | $\begin{gathered} \text { Summer } \\ \text { of } 1890 . \end{gathered}$ | $\begin{gathered} \text { Winter } \\ \text { of } \\ \text { I } 990 \% \end{gathered}$ | Summer of 1897. | $\begin{gathered} \text { Winter } \\ \text { of } \\ 189 \pi-98 . \end{gathered}$ | $\begin{aligned} & \text { Summer } \\ & \text { of } 1888 . \end{aligned}$ | $\begin{gathered} \text { Winter } \\ \text { of } \\ 1898-99 . \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Serion. | 66 | 40 | 95 | 116 | 188 | 109 | 238 |
| Bonn. |  |  | 15 | 14 | 19 |  | 29 |
| Bresiau | 11 | 15 | 35 | 28 | 43 | 21 | $3{ }^{3}$ |
| Göttingen | 32 | 49 | 40 | 35 | 42 | 22 | 20 |
| (dxeltswald | $\stackrel{6}{8}$ | 8 | 5 | 1 | 8 | 7 | 11 |
| Halle | 2 |  | 10 | ${ }_{6}$ | 11 | 6 | 15 |
| Kiel |  |  | 22 | 10 | 23 | 21 | 17 |
| Kinnozsberg |  |  |  | 11 | 13 | 17 | 33 |
| Merbrig. |  |  |  | 9 | 8 | 27 | 10 |
| Whnster .-.... |  |  |  |  |  |  |  |
| Total. | 117 | 105 | 223 | 230 | $3 \pm 7$ | 303 | 414 |

Tho total number of women studying in other German universities is 230 .
2.- Vationality of women students in Prissian mniversities.

| Countries. | $\begin{aligned} & \text { Winter } \\ & \text { of } \\ & 183 \overline{0}-96 . \end{aligned}$ | Summer of 1896. | $\begin{aligned} & \text { Winter } \\ & \text { of } \\ & 1836-37 . \end{aligned}$ | Summer of $188 \%$. | $\begin{gathered} \text { Winter } \\ \text { or } \\ 1837-98 . \end{gathered}$ | Summer of 1538 . | $\begin{aligned} & \text { Winter } \\ & \text { of } \\ & \text { 1898-82. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gemmans | 52 | 59 | 131 | 161 | 231 | 294 |  |
| Denmarir |  |  | 4 |  |  |  | 2 |
| Great britain | 4 | ${ }_{6}^{7}$ | 3 | 4 | 3 | 3 | 8 |
| France.... |  | 2 | 3 |  | 3 | 2 | 4 |
| Italy .-...... |  |  | 1 |  |  |  |  |
| Austria- - - |  |  | 1 | 3 | 5 | 4 |  |
|  | 12 | 6 | 23 | 16 | 促 | 86 | 53 |
| SWeden and Norway-........ | 1 |  |  | 4 | 1 | 3 | 2 |
| Givitzerland --.............. |  | 2 |  | 1 | 4 | 1 | 2 |
| Roumania and Bulgaria--..-- |  |  | 1 | 1 | 1 | 1 | 3 |
| America (chiefiy United | 47 | 28 | 53 | 35 | 49 | 31 |  |
| Africa |  |  |  |  |  |  | 50 |
| Australia |  |  |  |  | 1 | 1 | 3 |
| Total.....-.-. - | 117 | 105 | 298 | 230 | 345 | 808 | 414 |

3.-Age of roomen students in Prussian miversities.

4.-Religion of women siudents in Prussian universities.

5.- Marital relations of women students in Prussian unicersilies.

|  | $\begin{aligned} & \text { Winter } \\ & \text { of } \\ & \text { of } 95.96 . \end{aligned}$ | Summer ori 1896. | $\begin{gathered} \text { Winter } \\ \text { of } \\ 1896-9 \% . \end{gathered}$ | Sunmer of 1897. | $\begin{aligned} & \text { Winter } \\ & \text { of } \\ & 185 \%-93 . \end{aligned}$ | Summer Of 1898. | $\begin{gathered} \text { Winter } \\ \text { of } \\ \text { 1895-95. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unmariced <br> Married <br> Widowed. <br> Divorced. | 103 13 1 | $\begin{gathered} 97 \\ 5 \\ 2 \\ 2 \\ 1 \end{gathered}$ | $\begin{array}{r} 186 \\ 23 \\ 23 \\ 1 \end{array}$ | $\begin{array}{r} 206 \\ 20 \\ 3 \\ 1 \end{array}$ | $\begin{array}{r} 299 \\ 40 \\ 8 \end{array}$ | $\begin{array}{r} 239 \\ 34 \\ 5 \end{array}$ | $3 \% 4$ 38 38 |
| Total. | 117 | 103 | 213 | 230 | $3 \leq 7$ | 303 | 41t |

6.-Occupation of fathers of women students.

|  | Summer of 1895. | $\begin{aligned} & \text { Winter } \\ & \text { of } 1896-97 . \end{aligned}$ | $\begin{aligned} & \text { Summer } \\ & \text { of } 1897 \text {. } \end{aligned}$ | $\begin{gathered} \text { Finter } \\ \text { of } 15968 . \end{gathered}$ | Sammer of 1088. | $\begin{gathered} \text { Tinter } \\ \text { of } 1998-6 \% . \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Learned professions. | 33 | 77 | 77 | 1:3 | 129 | 15 |
| Army officers.-.-.-... | 5 | 12 | 14 | 16 | 13 | 17 |
|  | 2 | 1 | $\stackrel{2}{4}$ | $\stackrel{2}{2}$ |  |  |
| T'eachors | 2 | 3 | $4{ }^{4}$ | 8 | ${ }^{4}$ | 0 |
| Civil officers | 9 | 16 | 13 | 28 | 20 | 20 |
| Fammers. | 13 | 21 | 16 | 22 | 1.3 | \% |
| Mianaiacturers ---.- | 5 | 11 | 13 | 15 | 1.3 | 10 |
| Werchants and bankers .---- | 23 | 56 | 61 | 914 | 90 | 141 |
| Others (including artisans).- | 4 | ${ }^{5}$ | \% | - 14 | 11 | 15 |
| Witlent occupation.........-. |  | 13 | 13 | 15 | 10 | 11 |
| Total | 105 | 205 | 223 | 380 | 303 | $40 \%$ |

?-Branches studied by women in Prussictu universities.

| Studies. | $\begin{gathered} \text { Wincer } \\ \text { of } \\ 1895-80 . \end{gathered}$ | Summer | $\begin{aligned} & \text { Winter } \\ & \text { of } \\ & 1895-9 \% \end{aligned}$ | Summer of $189 \%$. | $\begin{gathered} \text { Winter } \\ \text { of } \\ 1899^{\prime}-88 . \end{gathered}$ | $\begin{gathered} \text { Summer } \\ \text { of } 1898 . \end{gathered}$ | $\begin{gathered} \text { Winter } \\ \text { of } \\ 1898-99 . \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Theology |  | 1 | 3 | 6 | 6 | 5 | 9 |
| Lavi-... | 2 |  | 1 | 2 | 3 | 5 | 6 |
| Medicine. | 2 | 2 | $\delta$ | 13 | 11 | 15 | 10 |
| Dentistry |  | 2 |  |  | 1 | 1 | S |
| Philosophy (ethica, Jogic, etc) | 究 | 15 | 35 | 46 | 93 | 69 | 100 |
| Philology (archæology) ----- | 13 | 15 | 39 | 4.5 | 60 | 43 | 25 |
| Modem philology (literatmie) | 46 | 53 | 91 | 94. | 125 | 107 | 146 |
| Classical philology (iiteresture) | 3 | 5 | 6 | 6 | $\square$ | 0 |  |
| Pedagogy..--------------------- | 3 | 1 | 12 |  | 6 |  |  |
| Histoly | 20 | 14 | 30 | 89 | 66 | 58 | 1 |
| Geography | 2 | 2 | 3 | 1 | 1 | 3 | 13 |
| Miatiematics ------------- | 9 | 6 | 8 | 5 | 11 | 9 | 15 |
| Natural sciences (physics, chemistry, botany, zoology, mineralogy, astron- |  |  |  |  |  |  |  |
| omy) .------------------------ | 10 | 11 | 20 | 22 | 36 | 85 | 45 |
| Political econcmy | 10 | 7 | 11 | 15 | 42 | 20 | 23 |
| Art and history of art....... | 21 | 15 | 40 | 83 | 41 | 54 | CO |
| Totala. | 165 | 150 | 315 | 323 | 515 | 438 | 450 |

a The differences between these totals and preceding ones are caused by duplication; somestucly several of the branches menerioned.

> 8.- Pupposes of women students in attending Prussian universities.

| Purposes stated. | Summer of 1896 . | Winter of 1896-9\%. | Summer of 1897. | $\begin{aligned} & \text { Winter of } \\ & 1897-98 . \end{aligned}$ | $\begin{aligned} & \text { Summer } \\ & \text { of } 1898 . \end{aligned}$ | $\begin{aligned} & \text { Wirster of } \\ & 1898-99 . \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Study (either gereral or of a particular braneh) | 64 | 161 | 135 | 216 | 219 | 308 |
| Preparation for teacher's or principal's examinations. | 31 | 37 | 84 | \%9 | 5.5 | 0 |
| Admission to professional examinations | 4 | 10 | 81 | 5 | 13 | $\Omega 1$ |
| Preparation for academic degrees | 6 | 5 | 9 | $1 \pm$ | $18^{*}$ | 26 |
| Preparation for admissionto university |  | J | 2 | 3 |  |  |
| Total | 105 | 213 | 230 | $34 \%$ | 308 | 41 |

## CAUSES OF MORTALITY AMONG TEACHERS.

Concerning the causes of mortality among teachers, some interesting data are pubhishet by the Deutsche Lehrerzeitung, in Leipzig, from which the following information is taken and pabished here with a view to inciting similar investigations in this country. The facts given concerning teachers refer to German teachers only. In all probability the corresponding figures for the United States will vary from those found in Germany, the tewchers there being mostly men, while here, at least in the cities, they are aimost exclusively women.
The profession of a person has as muchinfuence upon the duration of life as his peouniary circumstancez. Certain occupations and professions are considered inimical to life, as, for instance, those of hotel keepers and hotel servants, glass blowers, masicians, and medical practitioners. Others seen to bo favosed with long life, notaby thoze of clergymen and independent iarmers. Dr. Richardson, in his English statistics of mortality, states that among cach 1,000 Protestant corgymen in the vigorous age botween 25 and 45 years, during $1800-1892$, the number dying was 4.", on an average; of farmers the average per 1,000 was 5.04 ; of meaical practitioners, 10.24 ; of musicions, 12.65; of glass blowers, 14.11; of hotel keopers, 18.81.

Dr. Richarison calculated the mortality of 70 occupations or professions, and fond that the printers occupy the third highest place in the list of mortality. Taking the average mortality of cill the 70 occupations as 100 per cent, the printers average 117 per cont. Almost 80 per cent of the printers and compositors die of consumption at the comparatively early age of 85 .

Generally speaking, the mortality of elementary school-teachers is not very low, but neither is it very high. Taising the average mortality of well-situated strata of the popalation (civil offcers, for instance) as 100 per cent during the vigorous years from 21 to 45 , the two German physicians, Karup and Gollmer, calculate the mortality of university professors to be 64.6 per cent; that of Protestant clergymen, 70.2 per cent; that of teachers of preparatory or high schools, 71.4 per cent; that of elementary teachers, 84.6 per cent; that of medical men, 125.9 per cent.
Very difierent proportions are found if the causes of death are considered. Certain diseases are found among teachers oftener than among persons engaged in other occupations, notably consumption, chronic lung catarrh, and acute diseases of the respiratory organs, such as inflammation of the lungs and pneumonia and bronchitis. To a large extent thoy may be considexed professional diseases of teachers and speakers.
Rual tachers, especially, die young. While generally the mortality in cities is somowhat greater than in the comory, the mumerous inconveniences and the accumulated troablea to which rural teachers are subjected-such as poor dwellings, much school dust, defective warming and ventilation in schoolrooms, overcrowded classes, ungraded schools, small salaries, long hours, additional service in church as organists and choir leaders which necessitates outdoor walking in all kinds of weather, and, above all, the greater responsibility-cause a greater mortality among rural teachers in Central Europe.
Taking as a standard measure the mortality from each disease of tolerably wellsituated civil officers-of administration and justice, for instance-ond of similar social stiata, and calling this the normal rate for stach disease, or 100 per cent, we find the mortality of elementary teachers during the years of vigor (from 46 to 60) to be 110.7 per cent caused by tuberculosis, 103.2 per cent caused by chronic lung catarrh, and 129.4 per cent caused by constitutional diseases, such as disorders of the digestive and kindred organs. These figures show that the normal mortality is far surpassed by that of teachers in every case. The last-named canse is fourd singulary often among city teachers during the age of 25 to 60 years, as is see: from the following figures: Taking the same normal standard mentioned before,
we find that Protestant clergymen do not reach it, only 67.5 per cent dying from that cause, but 111.2 per cent of rural teachers and 130.2 per cent of city teachers. During old age that difference becomes still more pronounced-rural teachers 97.6 per cent, city teachers 189 per cent. This high percentage of mortality is, however, chiefly found in South Germany, where 142.3 per cent of city teachers die of kidney and liver troubles or disturbances of the digestive organs. Also, with regard to diseases of the organs of circulation and fatal accidents, the teachers of southern States show a higher percentage, to wit, north, 69.9 per cent and 88.1 per cent, respectively; south, 105.7 per cent and 110.2 per cent. This is not strange, if the fact be considered that the geareral mortality in southern is greater than in northern Germany; local circumstances, the mode of living, and especially injurious dietary habits may be the causes.
How destructive the so-called professional diseases are to teachers may be seen from the iist prepared by the two physicians before mentioned, Drs. Karup and Gollmer, after investigations and inquiries made during a number of years. The first established a normal rate of mortality as a standard measure, and then ranged the following groups as follows:

|  | 1. Death caused by lung consumption. |  | 2. Death caused by chroniclung catareh and omphysema. |  | 3. Death caused by other diseases of the respiratory organs. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Age, 2660 years. | Age, 6190 years. | Age, 2660 years. | Age, 6190 years. | Age, 2f60 years. | Aqe, 6190 years. |
| Protestant clergymen | Per cent. | Per cent. 57.6 | Per cent. 61.6 | Per cent. | $\begin{gathered} \text { Per cent. } \\ 61.3 \end{gathered}$ | Per cent. 74.2 |
| Secondary-school teachers. | 65.3 | 70.4 | 82.2 | 73.9 | 65.4 | 72.9 |
| Elementary city teachers. | $90 . \%$ | 81.2 | 85.0 | 93.1 | 84.7 | 87.6 |
| Elementary rural teachers | 101.4 | 113.9 | $11 \% .1$ | 112.9 | 102.6 | 105.8 |

However, if all the causes of death are considered without distinction, except as to the period of calculation and age at time of decease, the mortality of teachers can not be said to be very high. The ayerage figures during the age of 26 to co years, ${ }^{1}$ compared with the normal mortality during the same year, are as follows: University professors, 56.7 per cent; Protestant clergymen (counted among the teachers because they teach religion in seconāary schools), 73.6 per cent; elementary teachers in cities, 75.8 per cent; teachers in secondary schools, 7\%.4 per cent; elementary teachers in rural districts, 34.5 per cent; Catholic clergymen, 103.6 per cent; practicing physicians, 116.2 per cent.
Dr. Sigel, a physician of the health office in Leipzig, examined in Oetober, 1895, all the teachers of that city, and found 42.8 per cent of them suffering from nerrousness, chronic catarrh of the throat, lung tromble, and other so-called professional diseases.

## A NEW HISTORY OF EDUCATION.

Among the methods of presenting the history of education there are two distinct, if not antagonistic ones; the one deals exclusively, or chiefly, with the theories and plans of reform which in the course of centuries have been advanced by philosophers, and in turn have agitated the educational world. This mode of presenting and studying the history of education is not unprofitable, but it is not, properly speaking, the history so much as it is the theories of education such books present. The other method is the one which exclusively deals with facts gleaned from

[^19]documentary sources, from governmental decrees, and from school programmes and chronicles, and thus presents, or attempts to present, actual conditions. It is "Quellenstudium," study of original sources, which is emphasized by modern scholars generally. It is the method advocated in particular by modern historians, and is in accordance with the methods applied in teaching and studying natural history and science. This mode of procedure-the study of historical sources-has taken hold of educational as it has of tbeological students.
Prof. Stephan Waetzoldt (see Annual Report of 1894-95, page 460) says:
The science of education has only recently begun to sever itself from speculative theories and turn toward historic development of the momenta that constitute it. There is still too much system and theoretical speculation and construction, while unbiased observation and fixation of facts are not as frequently found as desirable. Rarely are the forms of the education of a cartain era, or of a country, viewed in comection with the entire development of the people. Comparative pedagogy is still in its infancy. The questions: How does a nation, an era, a society arrive at a pa:ticular form of education? and Why is it a historically necessary result? present themselves to the student. He who has accustomed himself to understand historically that shich exists in the education of a nation, and compares it with the work and the results of other nations upon similar lines, will not be apt to believe in the possibility or utility of direct copies and adaptations; he will try to minderstand and explain, bat will refrain from copying, for in the end every nation finds that which is best adapted to its needs, and it finds it in its own way.

This method of comparative study of education has been employed by Dr. Karl Schmidt in his famous work of four volumes, which for thoroughness and philosophic insight is not surpassed by any other on the history of education. But this work is not a presentation of original sources, however sond maybe its foundation.

Recently another German work has made its appearance following independently a line of research in documentary sources, and thus commending itseif to. the student. It is a wow bearing a Latin name-Monmenta Germanio Pceda gogica. Nineteen volumes have appoared up to April, 1900. Its object is to introduce the reader directly to the original historical sources. A statement of its contents will show what it offers. Volumes I and VIII present the Brunswick governmental school regulations and decrees, which are the first important authoritative or lers given for the establishment and regulation of schools by Protestant princes, and are, therefore, of paramount interest in showing how the schools, during the Reformation, began to be severed from the church and how they became state institutions. Volumes II, V, IX, and XVI present the original "Ratio Studiorum"prescribed for the schools of the Jesuits. In view of the fact that for more than a hundred years the schools of that religious order in Europe were the best seats of learning below the universities, this publication is very welcome. It gives an insight into documents not easily available. Volume III contains the. h story of mathematical instruction in Germany during the Nidale Ages. Yol ume IV contains the German catechisms of the Bohemian and Moravian Brethren. Volumes VI and VIII contain the regulations and orders of the Saxoin schools in Siebenburgen (in Hungary). Tolume VII presents a biography based on documentary evidences of Luther's friend, the reformer Philip Melanchthon, whom cotempoary historians called Preceptor Germaniæ. Volume XII contains the Doctrinale of Alexander de Viila Dei. Volume XIV contains the history of eaucation in Bavaria, and Volume XIX that of the Bavarian Palatinate. Volumes X, XI, XV, XVII, and XVIII give an account of the history of military education during the last centuries. This last work reaches up to the year 1896, and is therefore quite comp? ete. Further volumes will appear in time, since the publication of this valuable undertaking has been secured by a subsidy from the imperial exchequer by a vote of the Reichstag, likewise by substantial aid promised by the Prussian Department of Public Education and learned societies, as well as the National Teachers' Association. It is to be regretted that the publication proceeds rather slowiy-about two volumes a year-but in the interest of thorongh scholarship this may, perhaps, be best.

## PARTII。

## CHAPTER XXXVI.

OHTY SCHOOFSYSTEMS.

## Recent Laffs Relating to City School Boards.

In the Report of this Office for 1895-96 was a chapter (Chapter I, p. 3) describing typical laws relating to city school systems as they were then organized. The four years since that paper was written have been preeminently a period of change and experiment. The variations from the normal type then described have been so radical, so numerous, and of such importance that it would be diffcult now to say just what the normal type is. The cities in which the changes have been made that have excited the most attention and aroused the most discussion are San Francisco, Cal.; Washington, D. C.; Atlanta, Ga.; Indianapolis, Ind.; Baltimore, Md.; St. Louis, Mo.; New York, N. Y.; Rochester, N. Y.; Toledo, Ohio, and Milwankee, Wis. In three other large cities-namely, Chicago, Ill.; Boston, Mass., and Detroit, Mich.-laws along lines similar to those of the cities named have been urgently adyocated, but none of them have yet been passed.

The board of education has been preserved in all the new laws, but in the number of members, manner of appointment, and duties and powers marked changes have been made. The principle which formerly prevailed universally, that service on the board was an honor to which no pay should be attached, has not been observed in two of the new laws, and paid boards are now advocated very frequently elsewhere. The San Francisco board as it is now constituted represents probably the widest denarture from traditional policy, for there the board of only four men devote their entire time to the duties of the office and receive each $\$ 3,000$ a year. Not more than two of its members may be of the same political party. The superintendent, an oficer elected by the people, is ex officio a member of the board, but without the right to vote. An elected superintendent is not a new thing in San Francisco, but a paid school board is. That has been a common plan of organizing police and fire boards, but it is a novelty as applied to schools. It is an experiment, to be sure, but the former law did not give satisfaction, and the San Francisco people appear to feel that whatever the outcome, it could be no worse than the condition of affairs under the old régime. In Washington the new board is to be paid, though the salary was avowedly attached to insure attendance at meetings and to secure more attention to school business. It is not sufficient to pay for all the time of the members, nor is it intended to.

In the selection of members of the board the greatest innovation is developed in the Milwaukee law, which provides for the appointment by the mayor of a bipartisan commission, who shall appoint the members of the board of school direct-
ors. The question of "responsibility to the people " is frequently discussed in connection with the selection of public officers, many holding that officials should te chosen directly by, and be responsible to, the people. Others oppose this because of the supposed demoralizing effects of elections and of the constant pandering to popular caprice that are said to result. The Milwarkee device removes the schocls further from "the people" than any which has precededit. The people elect the mayor, the mayor appoints the commission, the commission appoint the board, the board elect the superintendent, the superintendent, in practice, selects the principals, the principals select the teachers, ${ }^{1}$ and the teachers teach the schools. Truly the school system has kept pace with the industrial world in the introduction of machinery: what a difference is this from the primitive plan by which the people in district meeting elected a teacher, and all was done!

The Indianapolis law shows a peculiar feature in subjecting certain acts of the school board to the veto of a subordinate officer, one oil its own appointees, namely, the business director. The idea is plainly copied from the Cleveland system, but the important difference is that in the latter city the director is coordinate with the legislative body and not dependent upon it for his position. It is not to be expected of luman nature that an official will oppose to the point of antagonism the power that made him; yet that would naturally follow the independent use of the veto. In this case the right of veto does not give the director any real power except to necessitate the reconsideration of a measure of which he disapproves, for no greater vote is required to pass a resolution after the disapproval than before; the three votes necessary make a majority simply, there being but five members. It would seem, therefore, that the provision is intended merely to insure careful consideration of questions involving expenditure, but it is a remarkable one nevertheless.
The New York law was designed to make as little change as possiole in the existing local conditions in the several boroughs at the time of their consolidation into the greater city. New boards were brought in to being for the sinaller boroughs of Queens and Richmond. but the composition of the boards of the old city of New York and of the city of Brookiyn was absolutely unchanged when they became respectively the boroughs of Manhattan and the Brons and the borough of Brooklyn. The supervision of the schools remains just as before, the title of the superintendents being changed to borough superintendents. The duties of the present city superintendent are mainly advisory, and he has no right to interfere in the actual conduct of any school in the city. The city board of education is charged with the apportionment of certain funds to the several boroughs, the purchase of sites and erection and repair of buildings, the purchase of school supplies, and, through its board of examiners, ${ }^{2}$ the examination and certification of teachers. The actual management of the schools remains with the local school boards. This system of divided responsibility has not proved satisfactory, and a commission is already at work to revise the city charter in this as in other respects. It is expected that greater centralization of authority will be the outcome. Indeed, this was probably foreseen by the original framers of the charter, but it was felt at the time that wise policy demanded that as much as possible of local control should remain until the peop'e became accustomed to the larger unit of government. Important changes, though not affecting the plan of organization, have already been made in the charter as it originally stood. The "Ahearn law," passed in 1899 , prescribing the minimum salaries of certain teachers, was published in full in the last Education Report. ${ }^{3}$ The "Davis law," passed at the last session of

[^20]the legislature (1900), still further regulates teachers salaries and prescribes a minimum amont to be appropr ated for salaries of the supervising and teaching staff-namely, 4 mills on the dollar of taxable property of the city.

The new laws for Atlanta and Washington were prompted more by the needs of a definite law of some kind than by defects of previous laws, for practically there were no previous laws. The Atlanta board of education was a mere creature of the city council, without any status whatever in the eyes of the State law. It might have been abolished at any time without warning by the city council. In Washington the laws have been for years fragmentary and chaotic, so that no one of the officials knew definitely what anthority he had or did not have.

The most conspicious feature that strikes one as common to a!l the recent laws is the reduction in the size of the boards. This is in accordance with prevailing sentiment. The San Francisco board is the smallest yet organized, and was reduced to 4 from 12. The Baltimore board was cut down from 22 to 9 , St. Lowis from 21 to 12, Indianapolis from 11 to 5 , Milwankee from 30 to 21, Atlanta from 14 to $\%$, etc.

The tendency, strongly marked. is to divorce legislative finctions from the executive, retaining the former in the board and confiding the latter to paid experts. The tendency is equally apparent to separate business affairs from matters which relate to instruction, assigning the one to a business director, and the ocher to the smperintendent of instruction. These distinctions are well developed in the Toledo law, which has been frequently extolled as one of the best yet drawn, but they are just as strongly marked in other laws.

The superintendent enjoys greater powers in most of the new laws in the appointment of teachers, in the preparation of the course of study, and in the selection of text-books. The choce of teachers from those on the eligible list is given to him absolutely in Indianapolis; and in Baltimore, St. Louis, Rochester, and Toledo the superintendent makes appointments subject to the confirmation of the board. In Nillwaukee the superintendent is a member of the committee to make such appointments, and it is stated that in practice the choice really rests with hinn and the principal of the school in which a vacancy occurs. ${ }^{1}$ In Boston, though the bill proposed recently for a reorganization of the board failed to become a law, a number of changes have been made in the powers of the superintendent by rule of the board itself in the line of the now laws applying to other cities.

As a rule, the Western statutes are very minute in their provisions, and are in striking contrast in this respect to some of the Eastern enaciments. The Milwaukee law contains 21 sections, and that of Indianapolis 34 . On the other hand, the charter of the new board of education at Washington contains but forr paragraphs, as follows: .

## PUBLIC SCHOOLS.

The Commissioners of the District of Columbia are hereby authorized to appoint seven persons, bona fide residents and taxpayers of the District of Columbia, and Who have been such for five years immediately preceding their appoinment, who shall constitute a board of ecucation and whose term of office shall be seven years, except that the terms of the persons first appointed shall terminate as follows: One each yeir, to be determined by lot anong the seven members of the board first appointed. The compensation of members of the board shall be $\$ 10$ each for personal attendance at each meeting, but shall not exceed for any member $\$ 500$ per annum. The board shall have complete jurisdiction over all administrative matters connected with the public schools of the District of Columbia, ercept that all expenditures of public funds for such school purposes shall be made and accounted for as now provided by law under the direction and control of the Commissioners of the District of Columbia. The board shall make all needful rules and regulations which may be proper for the government and control of said
schools, and shall make annual report to the Commissioners of the District of Columbia, who shall transmit the same to Congress, of the condition and operations of said schools and the sanitary and structural condition of all buildings in use, as well as those in course of construction, with recommendations as respects needed changes.

The board shall have power to appoint one superintendent for all the public schools of the District of Columbia, two assistant superintendents, one of whom, under the direction of the superintendent, shall havecharge of schools for colored children: a secretary, and three clerks, and to remove said officers at its pleasure, and shall also have power to employ and remove all teashers, officers, and other employees connected with the public schools not already specified: Provided, That the graduates of the normal schools shall have preference in all cases when appointments of teachers for the grade schools are to be made. The superintendent shall annually submit to the board for its approval the course of studies and list of text-books and other apparatus to be used in said schools.

The board shall annually transmit to the Commissioners of the District of Colmbia an estimate in detail of the amount of money required for the public schools for the ensuing year, and said Commissioners shall include the same in thair annual estimate of appropriations for the District of Columbia, with such recommendations as they may deem proper.

The foregoing provisions under the head of "Public schools" shall take effect on the 1st day of July, 1900, and all acts and parts of acts in conflict herewith are hereby repealed. - [From "An act of Congress making appropriations to provide for the expenses of the government of the District of Columbia for the fiscal year ending June 30, 1901, and for other purposes," approved June 3, 1900.]
Summary of laus relating to school boards of certain cities-Part I.

Summary of lans rclating to sehool boardis of certain cities-Part $\bar{I}$-Continned.

Summary of laws relating to the school boards of certain cities-Part II.

|  | City. | Principal source of revenue. | inaximumamount of tax fors schools. | Manner of selecting superintendent, and term, if prescribed. | Authority to examine teachers. | Authority to appoint teachers. | Construction of buildings directed by- |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | San Francisco, | Tar levied by supervisors on demand of board of directors. | \$31.50 per pupil in average attendance. | Elected by the people; 4 years. | Superintendent ara deputy superintendents. | Board of directors .- | Board of public works on requisition of board of directors; plans approved by board of directors. |
| 2 | Washington, D. C. | Appropriations by Congress; one-half from District of Columbia taxation: one-halffrom Federal Treasury. |  | Elected by board of education, |  | Board of education.- | District Commissioners: plans of inspector of buildings of District of Columbia. |
| 3 | Atlanta, Ga -......- | Appropriations by city council from general fund. |  | Elected by board of education. |  | d | Board of education. |
| 4 | Indianapolis, Ind . | Tax levied by board of school cominissioners. | 50 cents on \$100 . | Flected by board of commissioners; 1 year; 4 yoars if reelected. | Determined by loard of commissioners. | Superintende | Business director. |
| 5 | Baltimore, Md.... | Appropriations by city council. |  | Aprointed by board of school commissioners. | Superintendent and assistant superintendents. | Sunerintendent; confirmation by board of school commissioners. | City inspector of buildings; plans approved by board of school commissioners. |
| 6 | St. Louis, Mo. | Tax levied by board of education. | 40 cents on $\$ 100$, or 50 cents on $\$ 100$ by popular vote. | Appointed by board of education; 4 years. | Superintendent ....-. | Superintendent. subject to control of board of education. | Commissioner of school buildings. |
| 7 | New York, N. Y.- | Appropriations by city board of estimate and apportionment. |  | Appointed by board of education; 6 years. | City superintendent and 4 examiners nominated by him. | Borough school boards. | Superintendent of school buildings; plans submitted to borough school board and approved by board of education. |
| 8 | Rochester, N, Y.- | Appropriations by city council. | \&2: per capita of total enrollment. | Appointed by board of education; 4 years. | Superintendent and 2persons nominated by hin. | Superintendent and principals, subject to approval of board of education. | City executive board; plans of board of education approved by board of health. |
| 9 | Toledo, Ohio | (b) | (b) | Employed by board of education; is years. |  | Superintendent, with approval of board of education. | Board of oducation, through business manager. |
| 10 | Milwaukee, Wis.. | Tars Ievied by city council at request or board of directors. | 3.) cents on $\$ 100$ for teachers and current expenses; cents on $\$ 100$ for repairs. $c$ | Elected by board of directors; 3 years. | Committee of super. intendent, president of the board, and 2 members of the board of directors. | Committee of superintendent, president of the board, and is members of the board of directors. | City council, on request or board of directors; plans determined by a committee. |

Statistics of City Schools.
Table 1.—Srmmary of statistics of cities containing orer $\mathcal{S}, 000$ inhabitants, shouing increase from previous year.

|  | 189"-98. | 1898-99. | Increase. | Percent of increase. |
| :---: | :---: | :---: | :---: | :---: |
| Enrollment | 3, 803, 049 | 3,920,46\% | 117,418 | 3.09 |
| Aggregate number of days' | 539,141, 847 | รั00. 909,973 | 11,768.026 | ${ }_{2}{ }^{2} 18$ |
| Average daily attendance-............ | $\begin{array}{r} 2,849,502 \\ 189.2 \end{array}$ | $\begin{array}{r} 2,931,679 \\ 187.9 \end{array}$ | $\begin{gathered} 82,1 \% \\ (a) \end{gathered}$ | 2.88 |
| Enrolment in private and parochial sch | 872, 406 | 913,369 | 40,963 | 4.70 |
| Male supervising of ${ }^{\text {a }}$ cers. | 2,316 | 2,3:0 |  | . 18 |
| Female supervising officer's | 2,113 | 2,270 | $15 \%$ | 7.43 |
| Whole number of supervising | 4,429 | 4,590 | 161 | 3.63 |
| Number of male teachers | 6,005 | 6,302 | 297 | 4.96 |
| Number of female teachers | 72, 355 | 76,348 | 3,993 | 5.52 |
| Whole mumbeis of teacher | \% 8 , 360 | 88,550 | 4,290 | 5.47 |
| Number of buildings | 9.113 | 9,367 | 234 | 2. 79 |
| Number of seats. | 3,500, 970 | 3, 635, 483 | 134,516 | 3.84 |
| Value of school property | Q289, 2 m , 794 | \%12.698, 690 | \$23,372, 896 | 8.08 |
| Expenditure for tuition | ¢52, 034, 649 | ¢53, 689, 787 | \$3,625, 138 | 6.95 |
| Total expenditure. | \$88, 173,641 | ¢93,413,046 | \$4, (ti39, 399 | 5.23 |

a Decrease 1.3 days.
The increases reported above are considerably below the normal increases in neariy every item. The average attendance for i898-99 shows the smallestincrease, both actually and proportionally, that has occurrea since the present method of presenting the city school statistics was inaugurated in 1890-91. In enrollment, ton, the proportional increase is less than in any previous year within the time mentioned. The growth of cities and of school systems does not always prosress with unform steps, and it may be that the next year will witness an increase in school attendance that will more than make good the deficiencies of this year. But whether this occur or not, it is plain that from some cause the accustomed growth of city schools has been retarded.

The history of growth in the past leads to the hope that the retardation is temporary only, but whether temporary or permanent it is a matter of importance, and considerable pains have been taken to ascertain the causes. The following table shows, for all the cities which had over 100,000 inhabitants according to the Sleventh Census, the enrollment for $1897-98$ and for 1898-99, with increase or decrease, and percentage of the sme; also the increase during the ten years from 188\%-88 to 189:-98, with the percentage of increase and the average annual rate:

Table 2.-Statistics of public school enrollment in cities of over 100,000 inhabitants.

|  | $\begin{aligned} & \text { Enroll- } \\ & \text { ment } \\ & \text { 189i-98. } \end{aligned}$ | Enrollment | Increase or decrease. | Per cent of increase or decrease. | $\begin{gathered} \text { Enroll- } \\ \text { ment } \\ \text { 1887-88. } \end{gathered}$ | $\begin{gathered} \text { Increase } \\ \text { from } \\ 188_{i}^{\prime}-88 \\ \text { to } \\ 189 \text { í- } 98 . \end{gathered}$ | $\begin{aligned} & \text { Per } \\ & \text { cent of } \\ & \text { in- } \\ & \text { crease } \\ & \text { in } 10 \\ & \text { years. } \end{aligned}$ | AveragЭ annual rate of iilcrease. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | D. 425 | D. 1.0 | 38,943 | 4,031 | 10.4 | Per. ct. |
| Denver. Colo. (Dis- |  |  |  |  |  |  |  |  |
| trict No.1) --...- | 13. 892 | 13, 260 | D. 132 | D. 1.0 | 7,123 | 6,769 | 95.0 | 6.9 |
| Washington, D.C.-- | 44,698 | 45.560 |  | I. 1.9 | 31,8.0 | 9,848 | 28.2 | 2. |
| Chicago, 111. | 236, 239 | 242,807 | I. 6,568 | I. $\quad 2.8$ | 89,5\%8 | 146, 631 | 163.7 | 10. |
| Indianapolis. Ind | 33, 833 | 33,270 | D. 583 | D. 1.7 | 15,256 | 18,597 | 121.9 | 8. |
| Louisvillo. Ky | 29, 999 | 27, 408 | I. $\quad 479$ | I. 1.8 | 21,330 | 5, 599 | 2.3 | 2. |
| New Orieans, | 29,523 | 30,770 | I. 1,248 | I. 4.2 | 25, 649 | 3,873 | 15.1 | 1. |
| Baltimore. Ma | 78,542 | 79,681 | 1. 1,142 | I. 1.5 | 53, 627 | 24,845 | 46.3 | 3. |
| Boston, Mass. | a 73,501 | a 77, 461 | I. 1,903 | I. 2.5 | 58,471 | 17,090 | 29.2 | 5. |
| Detroit, Mich | 37.131 | 37,497 | I. 366 | I. 1.0 | 22,720 | 14,411 | 63.4 | 5. |
| Minneapolis, Min | 33, 673 | 34, 863 | I. 1.190 | I. 3.5 | 17, 997 | 1ŏ, 676 | 87.1 | 6. |
| St. Paut, Minn | 23, 990 | 21, 344 |  |  | 12,614 | 11, 176 | 88.6 | 6. |
| Kansus City, Mo | 23,204 | 27, 314 | I. $b 4,110$ | I. $b 17.7$ | 16, 950 | 6, ${ }^{634}$ | 36.9 | 3. |
| St. Louis. Mo | 75, 923 | 76,244 | I. ${ }^{\text {I. }}$ I. ${ }^{\text {I }}$ | $\begin{array}{cr}\text { I. } & 0.4 \\ \text { I. } & 2.0 \\ \text { I }\end{array}$ | 10,664 | 18,848 | 33.0 71.4 | 5. |
| Omaha, Nebr | 18,271 | 18,640 82,506 | $\begin{array}{ll}\text { I. } & 359 \\ \text { I. } & 4,245\end{array}$ | $\begin{array}{lr}\text { I. } & \text { I } \\ \text { I. } \\ \text { I }\end{array}$ | 10.661 $23.8 i 3$ | \%,610 | 19.4 | 5. |

$a$ Number belonging January 31.
b1,823 pupils added by annexation of new teritory.

Table 2.-Statistics of public school enrollment in cities of over 100,000 inhabit-anis-Continued.

|  | $\begin{aligned} & \text { Enroll- } \\ & \text { ment } \\ & 189{ }^{2}-98 . \end{aligned}$ | Enroll-1:98-99. | Increase or decrease. | Per cent of increase or decrease. | $\begin{gathered} \text { Enroll- } \\ \text { mont } \\ \text { 188\%-88. } \end{gathered}$ | $\begin{gathered} \text { Increase } \\ \text { from } \\ 1887-88 \\ \text { to } \\ 1897-98 . \end{gathered}$ | Per cent oí in- crease in 10 years. | Average annual rate of in1crease. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nowark, | 31, 929 | 30, 711 | I. a 1,782 | I. a 5. 1 | 23,214 | 11. 715 | 50.5 | Per ct. |
| Bufialo, N. Y | 50, 718 | 54,735 | I. 1,017 |  | 30,351 | 26,367 | 86.9 | 5 |
| New York, N. Y: <br> Manhattan and the Bronx .-... | 2\%0, 711 | 281,841 | I. 11,130 | I. 4.1 | 196,589 | 74, 12, | 37. ${ }^{\text {\% }}$ | 3.3 |
| Brooklyn ---.... | 164, 871 | 173.631 | I. $\quad$ ¢, 760 | I. $\quad 5.3$ | 102,249 | 62, 62 m | 61.2 | 9 |
| Rochester, N. Y--.... | 23, 134 | 29, 94.4 | D. 190 | D. 0.8 | 15, 723 | 7,411 | 47.1 | 4.0 |
| Cleveland, Ohio-...... | 46, 53,238 | ${ }^{46}$ 5, 650 | I. $1,12{ }^{\text {I }}$ | I. $\quad 2.4$ | 32,099 | 10,146 | 7\%. ${ }^{2}$ | 5 |
| Allegheny, Pa | 20,029 | 20, 121 | I. 92 | I. 0.5 | 14, 815 | 5,214 | 35.2 |  |
| Philadelphia, Pa | b143, 381 | b 145, 302 | I. 1,921 | I. 1.3 | 110,001 | 33,380 | 30.3 |  |
| Pittsburg, Pa | 44, 974 | 45, 2\% 6 | I. 302 | I. 0.7 | 29, 866 | 15, 108 | 50.6 | 4.2 |
| Providence, R. I | 29,464 | 30, 479 | I. 1,015 | I. 3.4 | 18, 103 | 11,359 | 6.7 | 5.0 |
| Milwaukee, Wis . | 40,210 | 40,816 | I. 606 | 1. 1.5 | 24,620 | 15,584 | 63.3 | 5.0 |

a Increase in schools other than kindergartens, 486; per cent of increase, 1.3. b Number belonging January 31.
The whole of New Yorla City as it is now organized is not given in the above, since it is impossible to give the statistics of the entire period desired for the boroughs of Queens and Richmond. Of the 28 cities in the list there has been in the past year an actual decrease in school enrollment in four, namely, in San Francisco, Denter (District No. 1), Indianapolis, and Pochester. In five-Detroit, Sti. Louis, Cincinnati, Allegheny, and Pittsburg-the schools have remained practically stationary in regard to numbers. In all the others excepting New Orleans, Kansas City, Jersey City, Newark, and New York, the per cent of increase is decidedly below the average for the previous 10 years.

Of the five cities last named special reasons have conduced to larger attendance in at least 4. Jersey City has greatly extended her school facilities recently; 7 large buildings, long needed, have been opened, making possible the enrollment of a greatiy increased number of children. The corporato limits of Kansas City have been extended, bringing 1,823 additional pupils into the school system; even without these, however, the increase was large. The New York City schools are still in the process of reformation following the legislation of 1898 and 1898. Large sums have been spent for new buildings, and salaries have been greatly increased; natarally the enrollment has taken a sharp upward turn. In Newark the kindergarten system has been greatly extended during the year; 2,720 children were enrolled in the schools of that class in 1897-98, and 4,076 in 1898-99; the increase, therefore, in schools other than kindergartens was but 420-a very small number. No information is at hand concerning the conditions that produced an increase larger than the average in New Orleans, but that average has been so small-1.4 per cent-that the excess this year has little general significance. It is plain that the condition of affairs which has affected the growth of the schools has been not local, but general.

The printed reports which have been received throw very little light on the subject. Supt. E. P. Seaver, of Boston, remarks that "the increase in pupils, 1,003 , is surprisingly small, being but little more than one-half of that reported last year, 3,612 , and considerably less than that reported year before last, 2,684," ${ }^{1}$ but ho offers no explanation.

Supt. F. Louis Soldan, of St. Louis, states that "the slower rate of increase is in part accounted for by the fact that the growth in the population of the city during the past two years has been at a slower rate, or has receded in a small degree. Another possible reason is that during times of commercial prosperity,
when there is an increased demand for labor, many young persons leave school to take uplucrative employment who without this chance would have continued in school for a longer period." ${ }^{1}$
Supt. C. G. Pearse, of Omaha, refers to the decrease of 213 in the number of persons of school age in the city, and suggests carelessness on the part of the enumerators as a possible cause. In regard to the falling off in attendance he thinks the cause was " the visitation oí smallpox, which for months kept hundreds of children from school through fear of the disease or from unwillingness to submis to vaccination," Similarly Supt. G. F. T. Cook, of the colored schools of Washington, thinks that the decrease of 181 in his enrollment "was due to the appearance of smallpox and to the rigid enforcement of the rule requiring vaccination or other protection against the diseass as a condition for securing or retaining membership." ${ }^{3}$ The white schools of the city were, however, exposed to the same dangers and subject to the same rules, yet they showed an increase in enrollment, not a decrease.
Supt. A. J. Smith, of St. Paul, assigns reasons which seem to have extended through a number of years, and are not applicable to the last year only. He says:
"It has probably excited some surprise that in a city whose population has increased as rapidy as in St. Paul that there is not a larger increase in the school admissions. When, however, we consider that for several years there has been no increase in the number of sittings; that in many districts the schools are overcrowded; that many children can attend but one-half day; that the financial resources have been inadequate for years, we are enabled to account easily for the very heavy enrollment in the parochial schools. Aside from this, however, children are often withdrawn from school for no good reason whatever. The law of cumpulsory attendance keeps children under a certain age out of employment, but it does not keep them in school." 4
In none of the other reports at hand from the cities in the above list is there any comment or explanation touching the matter under consideration. It is plain, therefore, that it is impossible to find a single eincient cause by the process of combining reasons given from many sources. It is necessary to recur to the statisticy and seek for probabilities.
The following hypotheses might suggest themselves as possible explanations:

1. Loss of favor on the part of the public for the common schoois. Combined with increased prosperity this would result in the withdrawal of pupils from the public schools for the purpose of going to private institutions.
2. Unusal prevalence of contagions disease. The natural result of this, of course, would be to lessen all school attendance.
3. General withdrawal of pupils to go to work. The return of "good times" has brought increased opportunity for employment, without doubt. If numbers of children are withheid from school for the purpose of adding to the family earnings the effect on the enrollment would soon be apparent.
4. A check in the growth of the cities themselves. If the tide of migration were turned from the cities and if the chientage of the schools cease to increase, the schools themselves must perforce remain stationary.
No one familiar with the attitude of the people toward the public-school system would admit for a moment the correctness of the first hypothesis. There is no evidence whatever that the schoo's have suffered in the eyes of the people or that there is less disposition now than at any previous time to patronize them. The statistics of private schools show a slight gain, it is true, as compared with public schools, butthe difierence is insignificant, amounting to only one-fifth of 1 per cent

[^21](i. e. from 18.7 to 18.9 per cent of the whole enrollment), and the rate of growth of the private institutions was, like the public schoo's, considerably less than in previous years. The first hypothesis may be dismisseit at once as unreasonable.

As to contagious and infectious diseases, these prevail to some extent in all parts of the country every year, butso far from increasing, it is more likely that the constant tendency is toward improvement. Any disease that is communicable is preventable, and the means of prevention are constantly becoming better and more generally known. Methods of treatment also show steady improvement, and a reasonable presumption based upon the general progress of medical science is that the average duration of illness from any disease, in case of recovery, becomes less and less. This does not imply that the necessary course of a disease is shortened, but that its virulence is lessened and that in a growing proportion of cases serious sequelae are prevented. The effect of contagion upon school enrollment and attendance in the country as a wholo may be assumed to be of less importance from year to year. There has been no general epidemic of any sort during the past twelve months and the supposition that disease is responsible for any general lack of school enrollment is plainly without foundation in fact.

The next hypothesis seems to be based on more reasonable grounds, and it is probable that many children and youths are now at work who would be in school in less prosperous times. Whether the number is proportionally considerable is the question. The value of education receives ever increasing recognition, and parents are more and more reluctant to take their children from school before they have finished the course. The steady growth of high schoois has proved that to be true. The tendency is increasing to keep the children in school as long as possible, and if any are taken out to go to work the oldest are natarally the first taken. The compulsory attendance laws operate to the same effect; in large proportion of the cities children are required to attend school till they are 14 years old. Losses on account of employment, therefore, would be most noticeable in the higher grades, and if such losses reach considerable proportions the high school would suffer conspicuuously. But this has occurred in very few places. In all the cities named below, excepting seven, high schools have grown at a greater rate than the elementary schools. Actual losses in high-school enrollment are reported in seven cities only; except in St. Louis and Minneapolis those losses were small and in the latter city, certain changes in the high schools themselves presamably caused the falling off.
The following table shows the differences in high-school enrollment in 1897-98 and 1898-99:

Table 3.-Statistics of high school enrollment in cities of over 100,000 inhabitants.


Table 3.-Statistics of high school enrollment in cities of over 100,000 inhabit-ants-Continted.

|  | High school enroll189 -7 98. | High school enrollmont, 1898-99. | Increase or decrease. | Percent of increase or decrease. |
| :---: | :---: | :---: | :---: | :---: |
| New York, N. Y.: |  |  |  |  |
| Manhatian and the Bronz | 2,591 | a 4, 898 | ${ }_{\text {a }} \mathrm{I} .2,307$ | I. a 89.0 |
| Brookiyn- | 7,068 | 7,782 | I. 71.4 | I. 10.1 |
| Rochester, N. Cincinnatj Ohio | 1,474 | 1,45\% | D. ${ }_{2}$ | D. 1.5 |
| Cleveland, Ohio | 3,244 | 3,378 | I. $13 \pm$ | I. 4.1 |
| Allegheny, Pa | 518 | $55 \%$ | I. 34 | I. 6.6 |
| Philadelphia, Pa | 4,194 | 4,823 | I. 629 | I. $\quad 15.0$ |
| Pittsburg, Pa | 1,862 | 1,904 | I. 42 | I. $\quad 2.3$ |
| Providence, R. I | 1, 705 | 1,934 | I. 228 | I. 13.4 |
| Milwarkee, Wis | 1,633 | 1, 741 | I. 108 | I. 6.6 |

a High schools rocently established.
In places in which the growth of high schools has been disproportionately large, like Washington, Detroit, Kansas City, and Philadelphia, it is reasonabie to infer that the schools have not suffered seriously from extensive withdrawals for the purpose of employment. In regard to other places like San Francisco, St. Louis, and Omaha, the opposite was probably true, though other circumstances may have been infinential to bring about the same result.

In regard to the growth of cities in the last year, the only evidence we have is the annual school census and the city directories. But the school census is not taken every jear in a great many cities, and the directories are not official and at the best merely furnish the basis for estimates of doubtful value.

The following table shows the result of school censuses which appear to have been made by actual count and which do not show discrepancies on their face:

Table 4.-Statistics relating to growth of cities of over 100,000 inhabitants.

|  | $\begin{gathered} \text { School- } \\ \text { census } \\ \text { age. } \end{gathered}$ | Children of schoolcensus axe in 1897-98. | Children of schoolcensus age in 1898-99. | Inciease or decrease. | Per cent of increase or decrease. | Averago anmual l'ate of increaso of population from 1880 to 1890. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| San Francisco, Ca | 5-17 | \%4, $1: 2$ | 76,236 | I. 2,114 | I. 2.9 | Per cent. |
| Denver, Colo. |  |  |  |  |  | 11.3 |
| Washingtom, D. C |  |  |  |  |  | 2.6 |
| Chicago, 111. |  |  |  |  |  | 8.1 |
| Indianapolis, I | 6-21 | 36,805 | 37,831 | I. 1,026 | 1. 2.8 | 3.5 |
| Louisrille, Ky | 6-20 | 55,919 | 56,230 |  |  | 2.7 |
| New Orleans, L |  |  |  |  |  | 1. 1 |
| Baston, Mass | 5-15 | a83, 097 | \%83,909 | T-3-9 | I. $c 4.1$ | 2.7 |
| Detroit, Mich | 5-20 | \% 7,563 | 77,118 | İ. 1,549 | I. 2.1 | 5.9 |
| Mimneapolis, Mip |  |  |  |  |  | 13.4 |
| St. Paul, Minn |  |  |  |  |  | 12.4 |
| ISarsas City, Mio | 6-20 | 48,286 | 48,806 | I. 52 | I. 1.1 | 9.1 |
| St. Louis, Mo. |  |  |  |  |  | 2.6 |
| Orana, Nebr | 5-21 | 32, 898 | 32, 673 | D. 219 | D. 0.7 | 16.5 |
| Jersey City, | 5-18 | 61,6\% | 60,5,51 | D. 1,093 | D. 1.6 | 3.0 |
| Newarlk, N. ${ }^{2}$ | 5-18 | 60,453 | 60, 786 | 1. 333 | I. 0.6 | 2.9 |
| Buffalo, N. Y |  |  |  |  |  | 5.1 |
| Now York, N. Y.: |  |  |  |  |  |  |
| Mianhattan and Brookivn |  |  |  |  | 1. 2.7 | 2.3 3.6 |
|  | 5-18 | 276,662 | 284,244 | 1. 7,58\% | 1. 2.7 | 3.6 |
| Cincinnati, Ohio | 6-21 | 104, 73 | 100, 24 | โ. 4,519 | I. 4.3 | 1.5 |
| Clereland, Onio | 6-21 | 97, 720 | 99, 890 | I. 2,1\%0 | I. 2.2 | 5.0 |
| Allegheny Pa |  |  |  |  |  | 3.0 |
| Philadelphia, Pa | 5-20 | 268, 110 | 267, 412 | D. 698 | D. 0.3 | 2.1 |
| Proridence, | $5-15$ | 28,768 | 30,487 | I. 1.719 | I. 6.0 | $\stackrel{4.3}{2.3}$ |
| Milwaukee, Wis | 4-20 | 92,174 | 93, 633 | 1. 1, $46 \pm$ | I. 1.6 | 5.9 |

In explanation of the blanks in this table，it may be said that some of the cities a⿱土土卜 no school census，others report the same figures for both years，and in still thers the differences in numbers are so great as to show palpable error．
If the school census be correct，the proportion of increase or decrease in the num－ ber of children may be justly taken to represent approximately the proportion of change in total population．Three of these cities therefore appear to have lost ground－namely，Omaha，Jersey City，and Philadelphia．＇St．Louris may be placed in the same category on the evidence already presented．Louisville，Kansas City， Newark，and Milwaukee remain practically unchanged from the previous year， though with slight gains．The growth of Indianapolis，Detroit，Brooklyn，and Cleveland was far below the normal for those cities，respectively．Only San Fran－ cisco，Boston，Cincinnati，and Providence－4 cities out of 15 －show the accustomed increase，according to the figures reported．

The conclusion is plain．The cities themselves have not grown，and conse－ quently the schools have not．A number of interesting questions arise in this connection，economic as well as educational．To discuss them would lead far beyond the limits possible here．

In matters depending repon the action of school authorities there have been increases considerably greater than in attendance and enrollment．The authori－ ties have done their part better than the patrons，in other words，and provision
 134,516 more seats were provided，and 4，280 more teachers were employed．

The amount spent for supervision and teaching increased nearly＇ 7 per cent，and the average amount paid to each person of the teaching force，\＄838．35，was greater than in any previous year；it exceeded the average of $1897-98$ by $\$ 9.47 .^{2}$ This increase in the wages of teachers has run up the average cost of instruction to 10.11 cents a day per pupil．In Cheyenne，Wyo．，the cost is over 15 cents a day， and in Washington，D．C．，and in the cities of California the average is nearly as high．Oklahoma City and the South Carolina cities，with an average of 4.26 cents， are the lowest in the list．

Female teachers continue to supplant men；their increase in numbers this jear amomated to 5.52 per cent，while the male teachers increased 4.96 per cent．Of 82，650 teachers in city schools，only 6,302 are men，and the high schools have the greater part of them．Women are also rapidly gaining ground in the supervising positions，and now hold nearly as many of them as men do．Of 161 new piaces of this kind during the last year， $15 \%$ were given to women．There are not many women superintendents yet，but they are in the decided majority as supervisors of special branches and of primary schools．

In buildings the tendency is toward larger，more durable，and more expensive structures．The average size has varied butlittle in the last eight years．Though a great many very large buildings have been erected，the number of small ones necessary has been sufficient to keep the average of capacity below 400 ．It has always been a serious problem how to provide for the pupils that have become too numerous for the existing building in a certain locality，yet not numerons enong to justify a new house of the standard size．It has ordinarily been necessary to submit to overcrowding for a time，or else to＂build for the future＂and have a new building only partly filled for two or three years．Milwaukee and St．Loutis have dealt with the problem in a satisfactory manner by the use of temporary wooden structures that are said to serve their purpose admirably．They are described in another chapter of this Report．

The greater cost of modern construction and the advancing values of city real

[^22]estate is shown by the heavy increase in the value of school property，the greatest increase in the entire list．The average value per capita of pupils in average attendance is now $\$ 106.65$ ，the highest figure yet reached．

Table 5．－Summary，by States，etc．，of enrollment，attendance，supervising officers， and teachers in cities containing over 8，000 inhabitants．

| Cities of－ | 8 <br> 0 <br> 3 <br> 3 <br> 0 <br> 0 | $\begin{aligned} & \text { Enrollment in public } \\ & \text { day schools. } \end{aligned}$ |  |  <br> 言芭 <br> 8 8 8 0 0 0 8 4 | Number of supervising officers． |  |  | Number of teachers． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | $\stackrel{\dot{9}}{\stackrel{\text { Ingux }}{~}}$ |  | $\begin{aligned} & \text { تin } \\ & \text { Hi } \\ & \text { E } \end{aligned}$ | $\frac{\stackrel{0}{5}}{\stackrel{5}{5}}$ |  |  |  |
| 是 | 9 | 3 | 4 | 5 | 6 | ＇ | 4 | 9 | 8， | 11 | S |
| United Síates | 63 | 900， 400 | \％0，909， 973 | 3，931， 679 | 3 | 250 | 4， 580 | ， 302 | 6，348 | 2，651） | 913，369 |
| North Atlantic Division | 2491 | 1，877，305 | 236，549， 1111 | $1,403,875$ | ， 042 | ， 119 | 2,161 | 2， 35 | 37， 031 | 39.763 | 333，696 |
| South Atlantic Division | 46 | 273， 245 | 35，208，601 | 192，029 | 138 | 15. | ， 20 |  | 5，02\％ | 5，601 | 46，， 112 |
| South Central Division－ | 55 | 210，848 | 吹，504，63 | 150，907 | 143 | 61 | 501 |  | 3，663 | 4，152 | 46， 995 |
| North Central Division－－ | 24.1 | 1，345．932 | 192，380，357 | 1，026，36t | 830 | 78. | 1，616 | 2,107 | 26.11 c | 25，525 | 360， 310 |
| Western Division | 38 | 213，138 | 29，265，215 | 158，504 | $16 \%$ | $1 \pm 7$ | 314 | 400 | 4，209 | 4，609 | 25，455 |
| North Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |
|  | 10 | 21， 110 | 3，308，19\％ | 18， 858 | 20 | $\because 1$ | 41 | 56 | 614 | $6 \%$ | 6，515 |
| New Hampshi | 2 | 19， 75 | 2， $478,40 \%$ | 13，768 | 23 | 15 | 40 | 38 | 432 | 470 | 8，1034 |
| Vermont．．．． | $8{ }_{9}^{8}$ | 5，699 | 54，070， 490 | 281．893 | 183 | 1429 | 105 | 669 | － 138 | 8． 1424 | （2， 134 |
| Einode Istand | 10 | 53，580 | 6．713，265 | 35，514 | 29 | 29 | 49 | 108 |  | 1，286 | 11，191 |
| Connecticut | 22 | 87.375 | 12，978，154 | 67， 387 | （6） | 59 | 121 | 160 | 1，968 | $2,1: 8$ | 21，884 |
| New York | 55 | 739， 746 | 194，614，616 | 541，463 | 899 | 590 | 959 |  | 14，280 | 15，173 | 158，813 |
| New Jersey | 23 | 161，650 | 21，586，303 | 112． $88{ }^{\circ} \mathrm{f}$ | 132 | 83 | 217 | 126 | 3,031 | 3，15\％ | 155，153 |
| Pennsylvania | 59 | 430， $63 ?$ | co， $0: 0,173$ | 323， 901 | 194 | 175 | 355 | 688 | 7，853 | 8，533 | 131， 739 |
| South Atlantic Division： <br> Delaware | 1 | 11，003 | 1，575， 990 | 8,082 |  |  | 5 |  | 237 | 224 |  |
| Maryland | 5 | 86， 665 | 11，313，546 | 58，053 |  |  |  | 177 | 1.747 | 1．924 |  |
| District of Columbia | 2 | 45，560 | 5，548， 91.9 | 31.230 | 25 | 45 | 71 | 133 | 938 | 1，091 |  |
| Virginia | 10 | 34， 178 | 4， 716.363 | 25.712 | 41 | 5 | 46 | 88 | 053 | 641 | 6，939 |
| West Vipginia | ${ }_{\sim}^{4}$ | 13，074 | 1，551，911 | 8，50̂ | 11 | 6 | 17 | 45 | 245 | 280 | 1，975 |
| South Carclina． | 4 | 14，160 | 2－017，${ }^{\text {a }}$ | 11.420 | 11 | 8 | 19 | 18 | 168 | 18.5 | 2,440 |
| Georgia | 9 | 43， 829 | 5，657， 191 | 32， 024 | 22 | 21 | 43 | 71 | $\%$ | $7 \% 6$ | 3，225 |
| Florida | 4 | 10，085 | 998， 7 \％ 4 | 6，875 |  |  | 12 | $\because 0$ | 167 | $18 \%$ | 4， 380 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 12 | 51， 391 | 7，037， 249 | 37．976 |  |  |  | 89 |  | 1，043 | 14，977 |
| Tennessee | ${ }_{6}^{6}$ | 31,996 <br> 17 <br> 202 | 4，149，472 | 22，945 | 35 16 | 3 <br> 2 | 38 18 | 69 41 | 495 336 | ${ }^{535}$ | 5， 5 500 |
| Mississing | 5 | 7，7：8 | 1， $023,6 \leqslant 1$ | 5，831 |  |  |  | 14 | 158 | 172 | 1， 880 |
| Louisiana | 3 | 33，482 | 4，043， 852 | 23，856 | 4 | 7 | 11 | 31 | 711 | 742 | 7，618 |
| Texas | 18 | 55， 334 | 6，679，585 | 33，408 | 24 |  | 28 | 216 | 820 | 1，036 | 10，850 |
| Arkansas | 4 | 12， 114 | 1，503， 310 | 8，600 | 7 | 1 |  | 35 | 185 | ${ }_{2} 200$ | 800 |
| Oklahoma | 1 | 1，5\％1 | 155， 578 | 878 | 3 | 1. | 4 | 3 |  | 27 | 100 |
| Indian Territoly－．．．．－ |  |  |  |  |  |  |  |  |  |  |  |
| North Central Division： Ohio | 44 | 254,024 | 37，633，920 | 200， 961 | 179 | 140 | 319 | 441 | 4，985 | 5．426 | 79，034 |
| Indiana | 32 | 116， 360 | 15，619，051 | 85， 678 | 63 | 60 | 123 | 324 | 2，18i | 2，510 | 21.087 |
| Illinois | 4：2 | 348， 351 | 53， $5: 21,228$ | 273，08？ | $21 \%$ | 198 | 415 | 491 | 7，115 | 7，605 | 114， 191 |
| Michigan | 29 | 130， 33 | 19，051， 209 | 100，012 | 66 | 105 | 171 | 167 | 2，607 | 2，774 | 33，505 |
| Wisconsin | 23 | 100， 595 | 15，190， 74 \％ | 80，827 | 86 | $4!$ | 127 | 197 | 2，059 | 2，256 | 34， 594 |
| Minnesot | 10 | 81， 871 | 13，104， 742 | 64， 612 | 42 | 83 | 125 | 64 | 1， 759 | 1，823 | 21，573 |
| Iowa | 3 | 73，534 | 10，172， $7 \div 0$ | 56， 174 | 60 | 57 | 117 | 93 | 1.584 | 1，677 | 10，630 |
| Missouri | 15 | 139，875 | 18，607，174 | 99，524 | 86 | 63 | 149 | 1 T | 2，545 | 2,722 | 34,530 |
| North Dakota | ， | 3，286 | $457,3 \times 2$ | 2.460 | 2 | 4 | 6 | $\stackrel{2}{2}$ |  | 69 |  |
| South Dakota | － 1 | 2，054 | 282．240 | 1，568 | ， | 1 | \％ | 3 | 45 | 48 | 200 |
| Nebraska | 10 | 40，958 | 5，246．526 | 29，346 | 13 | 30 | 43 | 45 | 778 | 823 | 5，615 |
| Kansas | 13 | 42，190 | 5，490， 398 | 32，096 | 15 | 4 | 19 | 103 | 688 | 791 | 4， 471 |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |
| Wroming | 1 | 1，148 | 141， 436 | ， 831 | 1 | 0 | ， | 1 | 26 | 27 | 200 |
| Colorado | 10 | 39， 954 | 5， 049,838 | 27，948 | 25 | 16 | 41 | 71 | \％ 2 | 792 | 2，891 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Washingt | 4 | 24， 149 | 3，125， 142 | 17，489 | 24 | 11 | 35 | 36 | 465 | 501 | 2，004 |
| Oregon | ， | 14， 118 | 2，013，83： | 11，275 | 16 | 5 | 21 | $2 i$ |  | 325 | 1，700 |
| Californ |  | 103，593 | 14，863，69 | 77，866 | 72 |  |  |  | 2，139 | 2，330 | 16，098 |

Thble 6. -Summary.by States, etc., of sehool property and expenditures in citics containing over 8,000 inhabitants.

| Cities of- | Number ot school buildings. | Number of seats or sittings for study. | Value of all public property uned for school purposes. | Expendi- <br> ture for super vision and teaching. | Expenditure for sll purposes (loans and bonds excepted). |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | ${ }^{9}$ | : | 1 | 5 | 6 |
| United States | 9,367 | 3,635,486 | \$312, 698, 600 | 955, 689, 787 | \$93, 413,046 |
| North Atlantic Division | 4,496 | 1,719,183 | 162, 833, 646 | 27, 5\%1, 736 | 49, 275,675 |
| South Atlantic Division. | 637 | 233, 015 | 13,342,025 | 3,278, 909 | 4,550,947 |
| South Central Division | 594 | 187,277 | 10,720,065 | 2,341, 240 | 3,159. $\% 91$ |
| North Central Division | 3,088 | 1,281,562 | 105, 44:3, 258 | 18, 837,066 | 30, 513, 048 |
| Western Division .-.... | ${ }^{5} 55$ | 191,449 | 20,353, 696 | 3, 660,836 | 5,613,585 |
| North Atlantic Division: |  |  |  |  |  |
| Maine | 189 | 28,458 | 1,996, 850 | 314,655 | 478, 041 |
| New Hampshire | 119 | 18,238 | 1,916,233 | 257,089 | 370,036 |
| Vermont | 27 | 5,760 | 478, 760 | -70, 950 | 134, 219 |
| Massachusetis | 1,340 | 342, 694 | 41, 64, 603 | 6, 857,999 | $10,710,315$ |
| Rhode lsland | 254 | 49,773 | 4, 789,469 | 790, 974 | 1,366, 530 |
| Connecticut | 319 | 85, 871 | 8,141,869 | 1,287,934 | 2,293,565 |
| New York | 994 | 649, 872 | 63, 771,177 | 11,543,680 | 21,162, 854 |
| New Jersey | 273 | 139,417 | 8,817,040 | 1,904, 只4 | 3, 714, 337 |
| Pennsylvania | 931 | 399, 100 | 81,249, 205 |  | 9,341,578 |
| South Atlantic Division: <br> Delaware | 29 | 11,086 | 685, 503 | 121,311 | 191,617 |
| Maryland | 155 |  |  | 1,13e, 798 | 1,444, 635 |
| District of Columbi | 195 | 42,347 | 5, 000, 000 | 801,016 | 1, 148,850 |
| Virginia | 7 | 32, 308 | 1,113,500 | 320,664 | 608,324 |
| West Virginia | 39 | 12, 67 \% | 786, 810 | 133, 083 | 193,507 |
| Sorth Carolin | \% | \%-988 |  | -5-896 |  |
| Georgia | 12 | 38,0̄0 | 1,474,350 | 437, 034 | 512,603 |
| Fiorida | 43 | 10,6\%9 | 152,330 | 101, 816 | 136, 4.92 |
| South Central Division: |  |  |  |  |  |
| Kentucky | 121 | 52,525 | 2,27\%, 629 | 690, 583 | 980, 881 |
| Tennessee | 50 | 25,742 | 1,687,713 | 332, 484 | 469,780 |
| Alabama- | 114 | 14, 900 | 690,000 | 145, 803 | 179.87\% |
| Mississippi | 21 | 7,175 | 297.100 | 64, 086 | 82, 774 |
| Touisiana. | 17 | 26,170 | 1,666, 060 | 349, 010 | 472,020 |
| Texas | 165 | 48,2\%1 | 3,095, 856 | 627, 353 | 783, 011 |
| Arkansas | 86 | 11,193 | 935, 757 | 129,282 | 168, 715 |
| Onlahoma -i..... | 4 | 1,200 | 75, 0¢0 | 6,632 | 15,808 |
| Indian Territory----: | 0 | 0 | 0 |  |  |
| North Central Division: Ohio | 548 | 250, 993 | 20, 423,513 | 3, 502,192 | ธ, อ\%2, 513 |
| Indiana | 306 | 105,383 | 8,284,952 | 1,440,010 | 2,305, 865 |
| Illinois | 637 | 333, 580 | 30, 476, 403 | 6,293, 133 | 10, 153, 317 |
| Michigau | 346 | 120,663 | 10, 256, 345 | 1,560,540 | 2,580, 715 |
| Wisconsin | 301 | 99,964 | 6, 730, 374 | 1,298,579 | 2,186,878 |
| Minnesota | 181 | 80,020 | 8,088, 718 | 1,168,650 | 1,716, 749 |
| Mowa -..- | $22 \%$ | 67, 880 | 5, 879,775 | 891,473 | 1,473,724 |
| Missouri North Dakota | 273 | 131, $40 \pm$ | 9,410, 42 | 1,669,869 | 2,977, 931 |
| North Dakota | 8 | 32,000 | 250,000 | 43,831 | 97,455 |
| South Dakota | 9 | 2,000 | 230,000 | 27,931 | 34,219 |
| Nebraska | 118 | 35, 481 | 3, 190, 320 | 490, 383 | 789, 014 |
| Kansas | 134 | 41,189 | 2,249, 436 | 390,475 | 644,638 |
| Western Dirision: | 37 | 10,564 | 1,142, 170 | 160,428 | 301,680 |
| Wyoming | 5 | 1,000 | 1,134, 753 | 21,545 | 27,613 |
| Colorado | 93 | 33,253 | 4, 163,728 | 662, 398 | 1,110,288 |
| New Mexico Alizona | 15 |  | 150,000 | 20,000 |  |
| Utah ... | 49 | 17, \%33 | 1,497,205 | 213,093 | 384, 60 |
| Nevada | 0 | 170 | 1,10, | -18,0 | 0 |
| Idaho | 0 | 0 | 0 | 0 | 0 |
| Washington | 58 | 21,020 | 2,368,453 | 2\%4,582 | 649,437 |
| Oregon | 40 | 15,607 | 1,203, 000 | 228,785 | 350,935 |
| California | 255 | 95, 98\% | 9,634,387 | 2,080,005 | 2,758,283 |

Table 7. -Comparative statistics of eizies containing over $\mathcal{S}, 000$ inhabitanis, summarized Uly States, eter.

| 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 torm. | Average number of pupils in attendance to each teacher. | Average number of teachers to each supervising officer. | Average number of seats for each 100 papils in attendance. | Average number of seats to a building. | Value of school property per capita of pupils in average attendance. | Cost of teacking and sizper vision per capita of pupils in averageattendance. | Total cost of schools per capita of pupils in average attendance. | Average costper day of tuition for one pupil. | Averago daily expenditure pe: pupil for all purposes. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\mathfrak{3}$ | 3 | 4 | 5 | 13 | 17 | 8 | 9 | 10 | 1 1 | 面 ${ }^{\text {P }}$ | 1:8 | 14 |
| United States | Per cent. 18.9 | $\begin{array}{r} \text { Per cent. } \\ 74.8 \end{array}$ | Days. 140.5 | Days. 187.9 | 35.5 | 18.0 | 123.0 | 388 | \$109.65 | \$1S.99 | \$31.86 | Cents. 10.11 | Cents. 10.96 |
| North Atlantic Division | 18.8 | 74.8 | 14.9 | 189.9 | 35.3 | 18.4 | 122.5 | 388 | 116.00 | 19.64 | 3\%. 31 | 10.35 | 18. (1) |
| South Atlantic Division | 14.4 | \%0.3 | 123.9 | 183. $\frac{1}{4}$ | 34.3 | 19.0 | 131.8 | 397 | 69.50 | ]. 08 | 23.70 | 9.31 | 12.93 |
| South Central Division | 18.2 | r1.6 | 125.8 | 175.6 | 26.4 | 80.4 | 121. 1 | 315 | 71.03 | 15.51 | 20.94 | 8.83 | 11.92 |
| North Central Division | 21.1 | 76.2 | 14\%.7 | 188.5 | 36.1 | 17.6 | 124.9 | 415 | 102.75 | 18.35 | 29.73 | 9.74 | 15. 78 |
| Western Division | 11.0 | 74.4 | 137.3 | 184.7 | 34.4 | 14.7 | 120.7 | $35 \%$ | 12 t .40 | 83. 10 | $33^{3} .43$ | 1:3.51 | 19.19 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine --... | 21.3 | 78. 2 | $13 \% .1$ | 175.4 | 28.1 | 16.3 | 150.9 | 151 | 105. 88 | 16.68 | 23). 24 | 9.51 | 14.39 |
| New Hampsh | 29.0 | 69.8 | 12.50 | 180.1 | 29.3 | 11.8 | 13.2 .5 | 153 | 141.87 | 1.8. 68 | : 26.88 | 10.37 | 14.9\% |
| Vermont. | 27.3 | 74.0 | 136.5 | 184.8 | 29.7 | 14.2 | 336.6 | 213 | 113.50 | 16.88 | 31.84 | 9.10 | 17.23 |
| Massachusetts | 14.6 | \%9.9 | 153.6 | 19\%. 1 | 34.4 | \% 2.0 | 131.6 | 20.6 | $14 \%$ \% 0 | 21.60 | 37.99 | 11. ${ }^{2} 1$ | 19.77 |
| Rhode Island | 16.8 | 65.7 | 120.8 | 183.9 | 28.8 | 26.8 | 136.3 | 196 | 131.17 | 21.66 | 37.43 | 11. $\% 9$ | \%0.3i3 |
| Connecticut | 20.0 | $7 \% .1$ | 148.5 | 19:3.6 | 81.7 | 17.6 | 1.7.5 | 29 | 120.83 | 19.1.2 | 34.13 | 9.93 | 17.73 |
| New York | 17.1 | 73.6 | 141.4 | 192.1 | 85.9 | 15.3 | 119.4 | 65 | 117.10 | 21.20 | 33.86 | 11.04 | 20.93 |
| New Jersey | 17.9 | 69.8 | 133.5 | 191.8 | 35.7 | 14.5 | 123.6 | 511 | 78.14 | 1\%.41 | 3).92: | (1. 10 | 17.21 |
| Pennsylvania | $\stackrel{23}{ } 8$ | 75.2 | 139.4 | 185.3 | 38.0 | 23.1 | 1:3.2 | 407 | 96.50 | 16.92 | \%8.81 | 8. \% | 13.96 |
| South Atlantic Division: <br> Delaware |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Delaware Maryland |  | 73.4 | 143. 2 | 195.0 | 33. 4 | 48.4 | $13 \% .1$ | $38 \%$ | 83.58 | 15.01 | 23. 70 | 7.70 | 12. 15 |
| Maryland --.----- |  | 68.0 | 130.6 | 191.9 | 30.2 | 15.1 |  | 339 | 160.13 | 19.59 | 24.89 | 10.05 | 12. 77 |
| Virginia -.-.-. | 16.9 | 75.8 | 13.9 | 183.4 | 40.1 | 18.9 | 189. 7 | 431 | 130.13 43.31 | 19.63 | 36. 69 | 14.40 (i. 80 | 20.60 |
| West Virginia | 13.1 | 65.5 | 118.9 | 181.5 | 30.6 | 16.5 | 147.9 | $3: 5$ | $91.8{ }^{\circ}$ | 16.11 | 23.15 | 8.88 | 12. 76 |
| South Carolin | 14.7 | 80.7 | 14\%.4 | 176.6 | 61.4 | 9.8 | 113.7 | 630 | 2\%. 85 | 7.5: | 8.94 | 4.96 | 5.06 |
| Georgia | 6.9 | 79.0 | 199.7 | $17 \% .6$ | 41.3 | 18.0 | 118.9 | 313 | 46.04 | 13.65 | 16.95 | \%. 69 | 9.3 3 |
| Florida. | 32.6 | 68.2 | 99.0 | 145.2 | 36.8 | 15. 6 | 155.3 | 248 | 22.16 | 15. | 19.85 | 10.5!) | 13.6\% |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 20.6 | 73.9 | 137.0 | 185.3 | 36.4 | 13.7 | 138.3 | 434 | 59.84 | 18.34 | 9.5. 56 | 9.90 | 13. 79 |
| Tennessee | 14.5 | 71.7 | 129.7 | 180.9 | 41.3 | 14.6 | 112.8 | 460 | 73.57 | 14.06 | :0. 18 | \%. 87 | 11.33 |
| Alabama | \%2.9 | 7.2. 1 | 111.1 | 154.2 | 33.9 | 20.9 | $1 \% 0.0$ | 131 | 59.58 | 11. 75 | 14.48 | \%.68 | 9.40 |
| Mississippi | 19.6 | 75.5 | 132.4 | $17 \% .5$ | 33.9 |  | 123.0 | 34 | 50.96 | 10.99 | 14.19 | $(530$ | 8.09 |
| Louisiana | 18.5 | 71.3 | 120.8 | 189.5 | 32.2 | 67.5 | 109.7 | 310 | 69.85 | 14.63 | 19.82 | 8.63 | 11. $\% 0$ |
| Texas | 16.1 | 69.4 | 120.7 | 174.0 | 37.0 | 37.0 | 125.6 | $24:$ | 80.62 | 16.33 | 20.51 | 9.39 | 11.80 |


Table 8.-Summarized statisties of sehools in cities of over $\mathcal{S}, 000$ inhabitants from 1890-91 to 1898-99, inclusive.

| Cities of- | Number of city school systems. | Enrollment in pubiic day schools. | Agriregate number of days'attendance of all pupils. | Aver:age daily attendance. | Number of supervising ofincers. | Number of teachers. |  |  | Number of school buildings. | Number of seats or sittings for study. | Value of public property used for school purposes. | Expenditrure for supervision and teaching. | Expenditure for all purposes. | Enroll- <br> ment in <br> private <br> and <br> arochial <br> schools <br> (largely <br> esti- <br> mated). |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Male. | Female. | Total. |  |  |  |  |  |  |
| 1 | ${ }^{2}$ | is | 4 | 5 | 6 | 7 | 8 | 9 | 1 10 | 11 | $1 \%$ | 1:3 | $1{ }^{1}$ | 15 |
| United States: |  |  |  |  |  |  |  |  | 6,478 |  |  |  |  | 23,990 |
| 1890-91-92 | $4{ }^{4} 9$ | 2, $2,46,430$ | 378, 389,408 | 1,88\% | 2, | 3,864 | 51, 113 | 55, 0.5 | 6, 757 | \%,512, 77 | 193, 60\%, 787 | 35, 3\%), 48\% | 60, 555,120 | 753, 178 |
| 1892-93 | 473 | 2,876,806 | $394,01_{6}^{\text {², }} 038$ | $2,066,850$ | $\stackrel{2}{2}, 894$ | 4,293 | 54, 224 | 58,529 | 6,95\% | 2, 693, 2 | 205,335, 077 | 37, 317, 838 | (5.), 981,388 | 775, 910 |
| 1893-94 | 524 | $3,106,659$ | 436, 806,735 | $\because 2$, $81.20 \sim$ | 3,374 | 4,753 | 58,946 | 6:2,999 | ${ }^{7}, 743$ | 2,898,295 | 238, 439, 384 | 40, 417,650 | 69, 886,418 | 820, 250 |
| 1894-95 | 501 | 3,302,841 | 462, 450,0:8 | 2,431,96\% | 3, 685 | 5,003 | \{ 31,970 | 66, 993 | 8,106 | 3,119, $2 \%$ | 236, 631,394 | 44, 155,706 | 74, 721, 383 | $8.12,555$ |
| 1895-96 | 602 | 3,480,619 | 489, 786, 705 | $\because, 560,293$ | 3,938 | 5,059 | 65, 266 | 70,305 | 8, 436 | 3, 369,08: | 255, 586,583 | 46, 747,865 | 80, 04: 118 | 848, 760 |
| 1896-97 | 602 | $3,594,675$ | $507,693,259$ | $2,693,299$ | 3,998 | 5,783 | 68,344 | \% 4,117 | 8,604 | 3,383, 405 | 267, 425, 289 | 48, 7\% ${ }^{\text {a }}$, 485 | 84, 866, 093 | 3\%4, 669 |
| 1897\%-98 | 6i:6 | 3, 803,049 | $539,141,947$ | \% $2,819,50 \%$ | 4, 489 | 6,005 | ${ }^{7} 6,355$ | 78, 360 | 9, 118 | $3,500,970$ | \%89, 3\%i, 794 | 52,064, 649 | 88, 71, 646 | 572,400 |
| 1898-99 | $63:$ | 3,920,467 | 550,909, 97.3 | :2,931, 6\%9 | 4,590 | 6,30: | 76,348 | $8: 8,650$ | 9,36\% | 3, 635, 486 | 312, 698, 690 | 55, 689, 787 | 93, 413,046 | 913,369 |
| North Atlantic Div |  |  |  |  |  |  |  |  |  | 1,170,477 | 93,319,620 | 16,580,417 | 27.952, 437 | 345, 019 |
| 1890-91-92 | 189 | 1, $1,333,698$ | 181,981,649 | 914,24, | 1.179 | 1,68\% | 20, 23.38 | 20, 26 | 3, 3,219 | 1, $1,31,86 \%$ | $98,319,620$ | 17, $230,4 \% 6$ | \%0, 065, 63.3 | 3i4, 355 |
| 1899-93 | 195 | 1,37\%,808 | 190,04 $\because, 037$ | 981,290 | 1,385 | 1,931 | ?6,549 | 28, 480 | 3,3\%3 | 1,287, 123 | 103, 17\%, 001 | 18, 104, 963 | 31,678,701 | 358,6\%4 |
| 1893-94 | 219 | 1,492,594 | 209,650, 14* | 1.075.938 | 1,516 | 1,984 | 27, $78 \%$ | 29,766 | 3. 683 | 1,376,385 | 111,843, 0, 6 | 19, 342,607 | 33, 306, 973 | 379,40 |
| 1894-95 | 221 | 1,561,959 | $2 \geqslant 1,016,405$ | 1,134.394 | 1,586 | 2,048 | 29, 253 | 31,601 | 3,769 | $1,438,671$ | $116,128,291$ | $20,919,163$ | 36,495, 063 | $3 \times 5,003$ |
| 1895-96 | 233 | 1,639,681 | 232, 118, 588 | 1,186, 738 | 1.769 | 2, $0: 6$ | 30, 744 | 32, 760 | 3, 9.9 | 1,515,887 | 125,616,050 | 22,291,477 | 40, 754,876 | 373, 689 |
| 1896-97 | 233 | 1,697,615 | : $20,131,138$ | 1,209,044 | 1,8:9 | 2, 351 | 32, 370 | 34, 221 | 4,017 | 1,595, 308 | 135, 970,151 | 23,244,845 | 44, 418, 713 | 360, 379 |
| 1897-98 | 236 | 1,785, \%88 | :250, 708, 172 | 1,309,602 | 2.066 | 2,386 | 24,341 | 36, $70 \%$ | 4,268 | 1,6:8, 891 | 149,5:29, 234 | $25,180,9 \%$ | $48,088,195$ | 401, 635 |
| 1898-99 | 219 | 1,8\%\%,305 | $266,549,111$ | 1,403, 375 | $\stackrel{\sim}{2}, 161$ | 8,70 | 37,031 | 39, 763 | 4,496 | 1,719,183 | 16:2, 833,646 | 27,571,736 | 49,565,655 | 433,696 |
| South Atlantic Divi |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1890-91 | $3{ }^{2}$ | 192,820 | $27,756,177$ | 148,831 | 110 | 4.11 | 3, 46? | 3,873 | 460 | 180, 278 | 8,577,207 | 2, 147, 475 | 3, 278,948 | 50,001 45,968 |
| 1891-92 | 38 | 212,952 | 29,238,310 | 153,325 | 142 | 450 | 3, 660 | 4,110 | 459 | 186,980 | 8,908,588 | $\stackrel{2}{2}, 248,220$ | $3,537,554$ | $45,968$ |
| 1892-93 | 38 | 218,87\% | 28,840, 197 | 154, 889 | 166 | 440 | 3,328 | 4,368 | 451 | 205, 001 | 10,048, 440 | 2, 497, 697 | 3, 475, 077 | 49, 901 |
| 1893-94 | 40 | 2\% 2,400 | 30,078, 691 | 160,561 | 190 | 489 | 3,980 | 4, 459 | 491 | 209,365 | 11,055, 115 | 2,5\%4, 4) ${ }^{2}$ | 3, 640, 457 | 52, 069 |
| 1894-95 | 43 | 239,274 | 31,973,1\%1 | 173, 593 | 183 | 5\%) | 4,335 | 4,9:5 | 594 | 221, 787 | 10, $4699,46 \frac{1}{4}$ | $2,756,147$ | 3, 790,529 | 51,946 |
| 1895-96 | 43 | 251,49\% | 33,684, 196 | 178.269 | 203 | 530 | 4,517 | 5,016 | $67 \%$ | 228,579 | 10, $960,2.3 \%$ | 2,932, 71 | 4, 119,513 | 51,949 |
| 1896-97 | 43 | 254,737 | 34, 36\%,949 | 184, 8\%9 | $2: 9$ | 560 | 4,744 | 5,304 | 662 | 246,612 | 11,063, 166 | 3,015,502 | 4, $02 \%, 826$ | 47,39\% |
| 1897-98 | 47 | $27 \% 108$ | 36, 535, 809 | 197, 166 | 278 | 59 | 4,968 | 5, 565 | 643 | 250,248 | 11,235,220 | 3,109, 026 | 4,390,345 | 48,168 |
| 1898-99 | 46 | $2 \% 3,245$ | 35, 208,601 | 19:2,09 | 895 | $5 \% 4$ | 5, 127 | 5,601 | 637 | 253, 015 | 13,342,025 | 3,2\%8,909 | 4,550,947 | 46, 11: |
| South Central Divisio $1890-91$ | 37 | 148,798 | 18,951, 848 | 106, 014 | 179 | 299 | 2,287 | 2,586 | 359 | 122,353 | 7,803,089 | 1.523, 393 | 2,210,881 | 48,309 |
| 1891-9; | 83 | 153,625 | 19,857, 396 | 107,023 | 160 | $28: 3$ | 2, 493 | 2,776 | 370 | 120, 118 | $7,705,290$ | 1,63\%,110 | 2,300, 369 | 48,908 |
| 1892-93 | 41 | 164,057 | 21,967, 115 | 119, 29 | 138 | 361 | 2,72\% | 3,088 | 397 | 150,270 | 7,946, 424 | 1,884, 401 | 2,579,273 | 47,631 |
| 1893-94. | 48 | 171,386 | 23,016,276 | 127,585 | 173 | 385 | 3,030 | 3,416 | 436 | 149,876 | 9,144, $3 ; 9$ | 1,900,857 | 2,866,737 | 48,730 |


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|  |  |  <br>  |

Table 9．－Comparative statistics of city school systems from 1891－92 to 1893－99， inclusire．

| Cities of－ |  |  |  |  |  |  |  |  |  |  |  |  | Average daily expenditure per pupil for all purposes． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | S | 4 | 5 | 6 | $g$ | 8 | （1） | 10 | 18 | \％ | 13 | ［4 |
| United |  | P．ct． |  |  |  |  |  |  |  |  |  |  |  |
| 1891－9\％ | 21. |  |  |  | 35． 9 | ， | 126． 5 |  | \＄9\％． 02 | 18 | 5\％8．80 |  |  |
| 1892－93． | 21. | 71.9 | 137.0 | 190.6 | $3{ }^{36.3}$ | 18． 7 | 127.1 | 374 | 100.15 | 17.85 | 31．92 | ${ }_{9} 92$ |  |
| 1894 | 20.3 | 73.6 | 140.0 | 190.1 | 36.3 | 18.2 | 128.3 | 385 | 97.30 | 18.16 | 30.72 | 9.5 | 16．16 |
| 1895 | 19.6 | 73.5 | 140.7 | 191.4 | 36.1 | 17.9 | 181.6 | $39 \%$ | 99.84 | 18.26 | 31.26 | 9.54 | 16．34 |
| 1896－9 | 18． 7 | 74.9 | 141.2 | 188.5 | 36.3 | 18.5 | 125.7 | 395 | 99.30 | 18.11 | 31.51 | 9.61 | 16．7\％ |
| 1897 | 18.7 | $7 \pm .9$ | 141.8 | 189.2 | 35.4 | 17． 5 | 129．9 |  | 101．55 | $18.2 \pi$ | 31.16 | 9.6 | 16． 47 |
| 1898 | 18.9 | 74.8 | 140.5 | 187.9 | 35.5 | 18.0 | 124.0 | 388 | 106． 65 | 18.99 | 31.86 | 10.11 | 16.96 |
| N．Atlantic Division： 1891－92 | 21.0 | 71.1 | 138.5 | 194.7 | 85.0 | 81.5 | 128.5 |  | 102.25 | 18． 23 | 31． 63 | 9.37 |  |
| 1893－93 | 20.7 | 71.2 | 138.0 | 193.7 | 34.5 | 20.6 | 131.2 |  | 105.15 | 18．45 |  | 9.52 |  |
| 1893－94 | 20.3 | 72.1 | 140.4 | 194.8 | 36.1 | 18.8 | $12 \pi .9$ | 374 | 103．95 | 17.93 | 30.95 | 9.20 | 15.89 |
| 1894－95 | 19.8 | \％2． 6 | 141.5 | 194.8 | 35.9 | 19.9 | 126.8 |  | 102．34 | 18.44 | 32.17 | 9.46 | 16.51 |
| 1895－95 | 18.5 | \％． 4 | 141.5 | 195.6 | 36.2 | 18.5 | 127.7 | 384 | 105.85 | 17.93 | 34.34 | 9.60 | 17.56 |
| 1896－97 | 17.5 | 74．2 | 141.5 | 190.7 | 32.3 | 19.0 | 127.8 | 401 | 107.98 | 18.49 | 35.28 | 9． 69 | 18． 50 |
| 1897－98 | 18.4 | 74．5 | 143.8 | 193.0 | 36.2 | 17.8 | 12.24 | 381 | 112.45 | 18.90 | 38．17 | 9．79 | 18． ¢ $^{\text {f }}$ |
| 1898－99 | 18.8 | 74.8 | 141.9 | 189.9 | 35.3 | 18.4 | 120.5 | $38 \cdot$ | 116.00 | 19.64 | 35.31 | 10.35 | 18． 61 |
| S．Atlantic Division： |  |  |  |  |  |  |  |  |  | 14.59 | 23.08 | 7． 75 |  |
| 189\％－93 | 18.6 | 70.5 | 131． 7 | 188.3 | 35.4 | 26.3 | 138.1 | $45 \%$ | 64.90 | 16.14 | 29.45 | 8.66 | 12． 05 |
| 1893－9t | 18.8 | \％1．6 | 134.0 | 187.3 | 36.0 | 23.5 | 130.4 | 425 | 68.85 | 16.03 | 2.69 | 8.56 | 12.12 |
| 1894－95 | 17.8 | 72.5 | 133.6 | 184．2 | 35.2 | 26.9 | 12\％．8 | 378 | 60.31 | 15． 88 | 21.84 | 8.62 | 11.86 |
| 1895－96 | 17.1 | 70.9 | 133.9 | 189.6 | 35.3 | 22.6 | 128.8 | 340 | ${ }^{61.49}$ | 16． 4.5 | 23． 10 | 8． 71 | 12.23 |
| 1896－97 | 15．$\%$ | \％2． 6 | 134． 9 | 185.9 | 31.8 | 23.1 | 133.4 | 373 | 59.86 | 16.31 | 弶． 74 | 8． 77 | 12． 23 |
| 1897－98 | 15.0 | 72.5 | 134．8 | 185.3 | 3.4 | 20.0 | 126.8 | 389 | 57.48 | 15．$\%$ | \％ 26 | 8.1 | 12.02 |
| $\begin{gathered} \text { 1898-99 } \\ \text { S. Central } \end{gathered}$ | 14.4 | 60.3 | 188.9 | 183.4 |  | 19.0 |  | 397 | 69.50 | 17.08 | 2． 5.5 | 9.31 | 12.93 |
| 1891－92． | $2+.4$ | 70． 7 | 131.2 | 185． 5 | 38.5 | 16.4 | 11.2 | 324 | 72.01 | 15． 30 | 21.50 | 8． 25 | 11． 58 |
| 1892－93 | 2.25 | 72. | 133.9 | 184.2 | 38.6 | 29.4 | 126.0 | 379 | 65. | 15.81 | 21.62 | 8． 58 | 11． 74 |
| 1893－94 | 21.1 | 74.4 | 134.9 | 180.4 | 37.3 | 19．${ }^{\text {r }}$ | 117.6 | 344 | 71.65 | 15．65 |  | 8.48 | 12． 46 |
| 1894－9 | 18.8 | 69． 6 | 185.6 | 180.6 | 36．0 | 14.1 | 130.0 | 349 | 73.24 | 16．7 7 | 23.42 | 9.26 | 13.00 |
| 1895－9 | 20.1 | \％．${ }^{2}$ | 123.2 | 177.8 | $3 \% .8$ | 18.7 | 138.6 | 412 | 66． 60 | 15．79 | $28.8 \%$ | 8.88 | 12.87 |
| 1896－9 | 19.6 | 73.6 | 131.0 | 178.2 | 38． 1 | 18.3 | 128.3 | 391 | 63.17 | 14.96 | 19.47 | 8.40 | 10．93 |
| 1897－98 | 19.7 | 73.2 | 1：3．6 | 174.4 | 37.0 | 17.5 | 123.9 | 320 | ${ }^{63} .46$ | 15.10 | 20.10 | 8． 66 | 11.53 |
| N. Central D | 18.2 | 71.6 | 125.8 | 175． 6 | 36.4 | 20.4 | 124.1 | 315 | 71.03 | 15.51 | 20.91 | 8.83 | 11.92 |
| 1891－92．．． | 23.8 | 71.0 | 138.5 | $18 \% .2$ | 33.4 | 19.3 | 127.4 | 368 | 36.50 | 17．63 | 30.21 | 9.40 | 16.14 |
| 1893－93 | 23.6 | 73.2 | 137.8 | 188.4 | 35.9 | 19.8 | 130.4 | 388 | 95． 54 | 17． 95 | 32． 73 | 9.53 | 17.37 |
| 1893－9t | 22.8 | 74．6 | 141.4 | 189.6 | 36.3 | 17.3 | 127.6 | 385 | 93.05 | 17．56 | 21.93 | 9． | 16.85 |
| 189，－95 | 22.7 | 76.0 | 142.2 | 187.2 | 37.0 | 16.4 | 130.8 | 408 | 96.01 | 17． 78 | 30.83 | 9.45 | 16.47 |
| 1893－96 | 23.5 | 76.0 | 143.4 | 188.6 | 36． 6 | 17.6 | 136.8 | 437 | ${ }^{98} 90$ | 17． 62 | 29.55 | 9.34 | 15． 67 |
| 1896－97 | 21.8 20.9 | 76．8 | 144.6 144.2 | 188． 18.8 | 36.6 | 17.8 | 12.3 122.6 | 403 | 97.06 97.23 | 17.71 17.59 | 29．62 | 9.41 9.37 | 15．${ }^{14.45}$ |
| 1898－99 | 21.1 | 76.2 | 143.7 | 188.5 | 36.1 | 17．6 | 124.9 | 415 | 102． 75 | 18.35 | 29． 23 | 9.7 | 15． 78 |
| Western Division： |  | \％． |  | 194.1 | 36.9 |  |  | \％1． | 154.6 | 23.81 | 44.52 | 12.30 | 22． 95 |
| 1892－93 | 13.3 | 69.9 | 133.5 | 191.1 | 35.8 | 13.8 | 123.4 | 318 | 156.23 | 24.05 | 48.16 | 12． 59 | 25.21 |
| 1893－94 | 12.8 | 71.1 | 135.6 | 190.8 | 35.5 | 15.1 | 121.3 | 297 | 151.07 | 24.07 | 38.26 | 12.61 | 20.05 |
| 1894－92 | 14.2 | 73.2 | 136.4 | 156.3 | 37.4 | 14.8 | 12\％． 7 | 335 | 183.40 | 2．3． 83 | 36． 14 | 12． 26 | 19.40 |
| 1895－96 | 11.3 | 72.6 | 136.9 | 188.4 | 36.9 | 13． 6 | 1：7．2 | 334 | 136.96 | 22．7 7 | 35.02 | 12.66 | 18．58 |
| 1896－97 | 9.3 | 73.8 | 135． 0 | 184.2 | 35.6 | 15.5 | 125．2 | 339 | 121.83 | 22． 73 | 34.26 | 12． 34 | 18.60 |
| 1897－98 | 9.2 | ：2．3 | 133.4 | 184.6 | 34.1 | 14.8 | 121． 2 | 329 | 123.70 | 23．59 | 35． 14 | 12． 74 | 19．00 |
| 1893－99 | 11.0 | 74.4 | 137.3 | 184.7 | 34.4 | 14.7 | 122． 7 |  | 124.40 | 23.10 | 35.43 | 12.51 | 19.19 |

TAble 10.-Statistics of population and sohool enpollment and attendance in cities of over s,000 inhabitants, 1898-99.


Thble 10.-Statistics of population and school enrollment and attendance in cities of over S,090 inhabitants, 1899-99-Continued.


Table 10.-Statistics of population and school enrollment and attendance in cities of over $\mathcal{S , 0 0 0}$ inhabitants, 1898-99-Contirued.


Taple 10.-Statistics of population and school enrollment and attendance in cities of orer s.000 inhabitants, 1898-99-Continued.

|  | Cits. |  | School population. |  | Pupils in private and parochial | Different pupils enrolled in public day schools. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 0.0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|  | INDIANA-concinued. |  |  |  |  |  |  |  |  |  |  |
| 136 | IVew Alloan | 25, 000 | 6-21 | 5, 666 | 700 | 1, 719 | 1, 815 | 3,53t | 160 | 455, 348 | 2, 845 |
| 137 | Peru .-.. | 10, 000 | 6-21 | 2,300 | * 500 | , 875 | , 955 | 1, 830 | 180 | a 237,240 | a 1,318 |
| 138 | Richmond | $\therefore 0,000$ | 6-21 | 5,01\% | 500 | 1,631 | 1,572 | 3,203 | 185 | $46 \%, 870$ | 2,502 |
| 139 | Slelbyville: | 8, 200 | 6-21 | 2,009 | 100 | 720 | 738 | 1, 463 | 15 | 197, 359 | 1,131 |
| 140 | South Bend. |  |  |  |  |  |  |  |  |  |  |
| 1.11 | Tosre Hante | 3?, 0v0 | 6-21 | 9, 682 | 900 | 3, 289 | 3, 470 | 6, 759 | 183 | 945, 378 | 5, 160 |
| 14: | Valparaiso * | 8,000 | 6-21 | 1,5:29 | 225 | 761 | 543 | 1,304 | $17 \%$ | 202, 729 | 1,149 |
| 14.3 | Vincennes | 12,000 | (6-21 | 3, 4\%0 | 700 | 908 | 834 | 1,742 | 190 | 320, 150 | 1,685 |
| 111 | Wabash. | 10,000 | 6-21 | 2,463 | *0 | 89 ) | 1,03: | 1,9\%6 | * 190 | c 290,590 | 1,561 |
| 115 | Washinston | 12,000 | $6-1$ | 2,548 | \%00 | 8.51 | 815 | 1,666 | 176 | :217,908 | 1,238 |
| 146 | Boone | 11, 000 | 21 | 9.5 |  | 420 |  |  |  |  |  |
| $14 \%$ | Burlin | 27,000 | 5-21 | 8,150 | * 1,000 | 2,204 | 2. 274 | 4,498 | 186 | 671, 832 | 3.612 |
| 143 | Cedar Rap | 2R,000 | 5-21 |  | * 600 | 2, 802 | $\stackrel{\sim}{2}, 858$ | 5, 680 | 180 | 781, 440 | 4,358 |
| 149 | Clinton | 18, 000 | 5-21 | 5, 848 | 400 | 1, 112 | 1,906 | 3,618 | 182 | 516,880 | 2,840 |
| 150 | Commeil Bluffs | -5, 000 | 5 -21 | 6,199 | 786 | 8,505 | 2, 564 | 5,069 | 184 | 670,229 | 3,642 |
| 131 | Oreston | 9,000 | $5-21$ | 2,483 | 170 | 901 | 9416 | 1,850 | 116 | 244, 018 | 1,385 |
| 159 | Davenport. <br> Ces Moines: | 36, 000 | 5-21 | 10,816 | 1,000 | 3,086 | 3, $0 \sim \pi$ | 6, 163 | 192 | 948, $8 \frac{3}{4} 1$ | 4.957 |
| 153 | Capjtal Padk | 4,009 | 5-21 | 680 | 40 | 220 | 310 | 5 50 | 175 | 75, 230 | 430 |
| 15. | East side. | 1\%,000 | 5-21 | 5, 453 | 300 | 2,053 | 2, 159 | 4.212 | $1 \%$ | 544,329 | 3,117 |
| 150 | North side |  | $5-21$ | 1,841 |  | 710 | 796 | 1,566 | 174 | 192, 815 | 1,134 |
| 1506 | West sid |  | 5-21 | 8,351 |  |  |  | 4,814 | - 16 | 638, 95 2 | 3,629 |
| $15 \%$ | Dubuque | 42, 009 | 5-21 | 11,897 | 2,500 | 2, 680 | $\therefore 281$ | 5,210 | 186 | \%32, 840 | 3,340 |
| 153 | Fort Dodge | 12, 100 | [)-21 | $\therefore 2.430$ | 200 | 8,4 | 888 | 1,731 | 180 | 238, 680 | 1,395 |
| 159 | Fort Madison | 10,000 | $5-21$ | $3,(0) 4$ | 550 | 689 | 723 | 1,41: | $1 \% 4$ | 200, 533 | 1, 15: |
| 160 | Iowa, City | 12,000 | 5-21 | 2,150 | 275 | 88.9 | 795 | 1,5\%0 | 186 | 199, 281 | 1,103 |
| 161 | Kaokuk: |  | $5-21$ | 4,846 |  |  |  | 2, 683 | 180 | 48\%, 940 | 2. 192 |
| 16:3 | Marshalitov | 13.000 | $5-21$ | 3,201 | 200 | 1, 127 | 1,134 | 2,261 | 175 | 33\%', 804 | 1,930 |
| 163 | Miuscatine | 13, 500 | 5-21 | 4,08\% | 2001 | 1,292 | 1,218 | $2,5 \sim 0$ | 180 | 338, 355 | 1,880 |
| 164 | Oskaloosa |  | 5-21 | 2,959 |  |  |  | 2, 421 | 180 | 291,060 | 1, 617 |
| 163 | Ottumwa | 20,009 | $5-21$ | 4,800 | 150 | 1,948 | 2,285 | 4, 173 | $17 \%$ | 596,045 | 3,358 |
| 166 | Sioux City. | 40,000 | $5-21$ | 11,396 | 800 | 8, 075 | 3, 112 | 6,186 | 168 | $8 \% 3.84$ | $\pm, 916$ |
| 167 | Waterloo: <br> East Side \% |  | 5-21 | 2, 002 |  |  |  | 1,429 | 180 | $19 \%, 100$ | 1,095 |
| 168 | Westside. |  | 5-21 | 1,196 | * 21 |  |  | 943 | 180 | 118, 620 | 6.9 |
|  | KANSAS. |  |  |  |  |  |  |  |  |  |  |
| 169 | Arkansas City-.....- | 7.500 |  |  | 2 | $81 \%$ | 88.4 | 1,701 | 160 | 208, 480 | 1,308 |
| 170) | Atchison. .-.-.-.-..... | 16,000 | 5-21 | 5, 123 | 500 | 1,011 | 1,165 | 2,176 | $1 \%$ | 204 | 1,606 |
| 171 | Emporia | 8,500 | 5-21 | 3, 000 | 300 |  |  | 2, 057 | 176 | 215,299 | 1, 564 |
| $3 \%$ | FortScott | 11,200 | 5-21 | 3,865 | 100 | 1,184 | 1,3\%9 | 2,513 | 160 | 20\%, $40 \%$ | 1, 859 |
| $1 \% 3$ | Hutchinson | 10,000 | 5-21 | 2,650 |  | 1,0:5 | 1, 160 | 2,185 | 180 | 315,000 | 1.750 |
| 174 | Kanses City | 50, 040 | 5-21 | 14,275 | *915 | 3, 905 | 4,365 | 8,2r0 | 165 | 990, 160 | 6, 1001 |
| 175 | Lawrence | 11.131 | 5-21 | 3, 603 |  | 1, 155 | 1,498 | 2,653 | 164 | 358, 504 | $\cdots \cdot 186$ |
| 176 | Leavenworth | 19,547 | 5-21 | \%,075 | 300 |  |  | 3, 459 | 126 | 45\%, 455 | $\cdots, 501$ |
| 177 | Ottawa | 8,000 | 6-21 | 2,590 | * 300 | 798 | 947 | 1, 745 | 170 | 23:2, 390 | 1,367 |
| 178 | Parsons | 9, 700 | $5-21$ |  | 100 | 828 | 921 | 1,749 | 160 | 214, 3\% 0 | 1.339 |
| 179 | Pittsburs | 13, 462 | 5-21 | 3, 805 | 200 | 1,133 | 1,301 | 2,434 | 176 | 285,879 | 1,666 |
| 180 | Topeka | 40,000 | $5-21$ | 10,7\% | 1,000 | 3, 187 | 3, 541 | 6, 728 | 180 | 945, 360 | 5,252 |
| 181 | Wichita | 25,000 | $5-21$ | 7,025 | 400 | 2,174 | $\stackrel{2}{2}, 346$ | 4,520 | 175 | 637,416 | 3, 63? |
|  | KEXTUCKY. |  |  |  |  |  |  |  |  |  |  |
| 182 | Bowling Green | 10,006 | 6-20 | 2,394 |  | 615 | 661 | 1,2\%6 | $18 \%$ | 188, 5.52 | 1,036 |
| 183 | Covington .-. | 65,000 | 6-20 | 16,675 | 3,627 | 2, 128 | 2,200 | 4,336 | 194 | 639, 4 : 4 | 3,296 |
|  | * Statisties | 189\%-98. |  |  |  |  |  | $a \mathrm{Esti}$ | mated |  |  |

Table 10.-Statistics of poputation and sohool enrollment and attendance in citics of over 8,000 inhabitants, 1898-90-Continued.


Tambe 10.-Statistics of popalation and school enrollment and attendance in cities of over $\mathcal{E}, 000$ inhabitants, 1898-99-Continued.

| City. |  |  | School population. |  |  | Different pupilsenrolled in pub. lic day schools. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | $\begin{gathered} \text { تin } \\ \stackrel{y}{*} \end{gathered}$ |  |  |  |
|  | 1 |  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|  | MASSACHUSETTScontinued. |  |  |  |  |  |  |  |  |  |  |
| 23.3 | Gardner | 10,000 | 5-15 | 1,861 |  | 944 | 986 | 1,930 | 176 | 283, 201 | 609 |
| 931 | Gloucester | 39, 6000 | 8-14 |  | 32.5 | 2, 305 | 2,374 |  | 190 | 760,570 | 4,003 |
| 233 | Haverhill | 36,000 | 5-15 |  |  | 84 |  | ${ }_{5}^{1,529}$ | 187 | 808, 401 | ${ }_{4}^{1,2,23}$ |
| 234 | Holyoke | 44,982 | 5-15 | 9,232 | 3,551 |  |  | 5,400 | 210 | a 864, 000 |  |
| 233 | Hydepari | 14, (\%ip) | $5-15$ | 2,190 | 675 | 193 | \%89 | 1,582 | 188 | 280, 496 | 1,492 |
| ${ }_{2}^{236}$ | Lawrence | 58,000 | 5-15 | 10,085 |  |  |  | 8,6491 | 195 | 1,255, 020 | ${ }^{6,436} 1$ |
| 233 | Lowell | 90.000 |  | 12,989 | , 3.5 | -04t | 6,74 | 13,787 | 184 | 1,851, 786 | 10,064 |
| ? | Lrmm | 66, 000 | 5-15 | 10,543 | 1, 1,004 | 5.203 | 5. 353 | 10, 56 | 189 | 1,615,761 | 8,549 |
| 2 | Malden | 32,000 | 8-14 | 3, 2331 | 964 | 3,071 | 3, 103 | - $6,2,24$ | 191 | $937,27 \%$ <br> 14 <br> 1200 | 4,894 |
| 24. | M1arltoro | 15,000 | 5-1.5 | 3,285 | 613 | 1,38i | 1,473 | 2,862 | 180 | 441, 360 | 2,453 |
| 243 | Medf | 15,167 | 8-14 | 1,882 | 25 | 1,903 | 1,931 | 3,830 | 197 | 537, 416 | 2,728 |
| 245 | Milford | (9, 5 (i) | 5-75 | 1,281 | 250 | 1,80, |  | 1,515 | ) | 251, 113 | 1,320 |
|  | Natick | 10,000 | 8 8-14 |  |  | 95 | 1.150 | 2,002 |  |  | 1,641 |
|  | New Ber | 60,000 14,550 | - 5 | 11,109 | 2,519 613 | 4,672 | 4,712 | - | ${ }_{200}^{190}$ | 1,343,490 | 6,965 <br> 1,464 |
| 219 | Newton | 28, 1000 | 5-15 | 5,259 | 76 | 2.873 | 2-9\% | 5.838 | 190 | 871,150 | 4,585 |
| 250 | North Adams | 22, 000 | 5-15 | 4,134 | 1,365 | 1,883 | 2,186 | 3,969 | 187 | 547,5 |  |
| 28 | Northampt | 18, 1000 | 5-15 | 2,9920 | ${ }^{309} 4$ | 1,328 | 1.3541 | 2, 1,895 | +195 | -393, | 2, 1201 |
| $2{ }^{2.3}$ | Pittsfiela | 22, 151 | 5-15 | 4, 118 | 171 | 2,295 | 2,336 | 4,631 | 189 | 660, | ${ }_{3,519}^{1,31}$ |
| 234 | Plymouth | \% 7 , 977 | 5-15 | ${ }^{1,374} 4$ | 25 | ${ }^{876}$ | ${ }_{2} 851$ | 5 | 192 | 254, 860 | ${ }_{4}^{1,3 ; 18}$ |
| 256 | Rerere | 10,000 | - | 1,9\% | 0 | 1,047 | 1,234 | 2,281 | 178 | 362, 728 | 1, |
| 25 | Salem | 36,000 | 5-15 | 6,805 | 2, 140 | 2,620 | $2,2 \%$ | 4, 817 | 505 |  |  |
| $\stackrel{258}{259}$ | Somervi | 57,500 8,250 | 8-14 | 5,943 | 1,485 | 5,5884 | 5,893 | 11,571 | ) | 1,576,070 | ${ }^{8,636}{ }_{918}$ |
| 220 | Spencer | 8 8, 100 | 5-15 | 1,74 | 350 | 672 | 732 | 1,40: | 1880 | 242, 269 |  |
| 1 | Springfie | 55, 000 | 5-15 | 9,202 | 1,408 | 5,634 | 5 5,2,5 | 10,889 | 190 | 1,660, 980 | 8,742 |
| 263 | Traunton | 28,000 9 9000 | 8-14 |  | 569 | 2,421 | 2,234 | +1,958 | $\begin{array}{r}198 \\ 188 \\ \hline 1\end{array}$ | - 2883,190 |  |
|  | Waltham | 23,000 | 8 8-14 | 2,110 | 1,240 | 1,493 | 1,575 | 3. 06 | 181 | 469,341 | ,599 |
| 5 | Watertow | 8,000 | 5-15 | 1,360 | 400 | 115 | ${ }^{6} 11$ | 1,333 | 188 | 184, |  |
|  | ${ }_{\text {Westrield }}$ | 11,000 | 7-14 | 1,089 | - | 1,156 | 1, 898 | 1, $2 \times 294$ | -1938 | $\stackrel{3}{324,6}$ | 1,683 |
| 268 | Weymouth | 11, 650 | 5-15 | 1,913 | 0 | 1,170 | 1,245 | 2,415 | 190 | 366, 700 | 1,930 |
| $\stackrel{269}{29}$ | Woburn | 14,176 | 5-15 | 3, 198 | 321 |  | 1,354 |  |  |  |  |
| 270 | Worcester ..... michigan. | 105,000 | 5-15 | 19,256 | 2,886 | 10,897 | 10,487 | 21,38 | * 182 | 2, 928, 400 | 16,200 |
| 271 | Adrian. | 9,541 | 5-20 |  | 355 |  | 849 | 1,756 | 191 | 248, 296 |  |
| 2 | Alpenar | 12,500 | 5-20 | 4,489 | 1,504 | 987 |  | 1,976 | 194 | 291,576 | 1, 1,031 |
| 274 | Ann Arbor | 20, ${ }_{200}$ | 5-20 | 3,063 | 230 | 1,425 | 1,600 | 3, 2,25 | 193 | 465, 516 | 2,412 |
| 5 | Bay City - | 33, 000 | 5-20 | 9,653 | 2,500 | 2,509 | 2, 72 |  | 197 | ${ }^{748,561}$ | 3,800 |
| 7 | Detroit .-....... | 32,5000 | 5-20 |  |  | 19,462 | 18,035 | 37, 497 | 191 | 5,544, 798 |  |
| 278 | Escanaba | 8,510 | 5-20 | 2,500 | O | 706 |  | 1,444 | 191 | 191,191 | 001 |
| ${ }_{280}^{279}$ | Flint | 14,000 | 5-20 | 2.944 |  |  | 11,5073 | 2, ${ }_{2}^{2,847}$ | ${ }_{194}^{188}$ | 2,369,516 | 12,914 |
| 281 | Holland | 1,0,000 | 5-20 | 2 2,458 |  |  | 1,501 | 1,96 |  | 254,374 |  |
| 282 | Iron Mountain ...... | 10, 003 | 5-20 | 2,732 | 0 | 1,172 | 1,086 | 2,258 | 18 | 324,663 | 1,836 |

* Statistics of 1897-98.
( Estimated.
$b$ The high school was in session 195 days.
c The high school was in session 200 days.
d The high school was in session 194 days.

Tabis 10.-Statistics of population and school enrollment and ditendance in cities of over $\mathcal{S}, 000$ inhabitants, 1898-99-Continued.


Table 10. -Statistics of population and school enrollment and attendance in cities of over S,000 inhabitants, 1898-99-Continued.

|  | City. |  | School population. |  |  | Different pupilsenrolled in pubenrolaed in public day schools. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 总 | $\begin{gathered} \text { ád } \\ \text { ád } \\ \text { an } \end{gathered}$ |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| $\begin{aligned} & 331 \\ & 33 \\ & 33 \\ & 33 \end{aligned}$ | montana. |  |  |  |  |  |  |  |  |  |  |
|  | B |  | 6-21 | 8,4t7 | 1,324 | 3, 036 | 3,182 |  |  |  |  |
|  | Helena. | 15,000 | 6-21 | 12,981 | * 130 | ${ }_{1,010}^{81}$ | 1,185 | 1, 2.278 | ${ }_{163}^{180}$ |  | 仿 |
|  | nderasiat |  |  |  |  |  |  |  |  |  |  |
| 3333333333333 | Beatri | 13,000 | 5-21 | 2,575 | \% 50 | 1,210 | 1,219 | 2,429 | 115 | 256, 309 | 1,693 |
|  | Grand I | 9.000 | 5 5-21 | 2.504 | 225 | 908 | 97 | 1,855 | 118 | $25 \%$ '64t | 1,448 |
|  | Hastings | 13,500 | 5-21 | 2, 568 | 150 | 824 | 970 | 1,79 | 115 | 227, | 1,341 |
|  | Kearney | 8,000 50,000 | 5-21 | 11, 111 | *1, ${ }^{40}$ | 8,251 | 3, ${ }^{8565}$ | $\frac{1,591}{6,5 \% 8}$ | $\underset{1}{1104}$ | 185, 593 | 1, 4,811 |
|  | Nebraska City | 12,000 | 6-21 | 2, 525 | +100 | ${ }^{\text {c, }} 693$ | ${ }^{8,851}$ | 1,547 | 172 | 193, 503 | 1,055 |
|  | Omaha -...-. | 140,000 | ${ }_{5}^{5-21}$ | 32, 673 | $\cdots 3,500$ | 9,212 | 9,428 | 18, 610 | 184 | 2, 50, 108 | 13, 5.97 |
|  | Plattsmouth- ${ }^{\text {South Omala }}$-....-- | - 14.000 | 5-21 | 4,06t | 150 | 1,558 | ${ }_{1}^{1,698}$ | 1,1\%5 | 180 | ${ }^{1639} \times 16$ | 2,0\%7 |
|  | New hampshire. |  |  |  |  |  |  |  |  |  |  |
| 34 <br> 34 <br> 34 <br> 31 <br> 34 <br> 34 <br> 34 <br> 34 <br> 34 <br> 35 | Concord (Union school district) | 18, 000 |  |  | *315 |  |  |  |  |  |  |
|  | Dover-...-..........- | 12.779 |  | 2040 | *660 | 1, 1,181 | ${ }^{1,381}$ | 1,942 | 179 | - 342.40 | 1, 2,025 |
|  | Keene. | 9,000 | 5-16 | 1,518 | 125 | 768 | 786 | 1,551 | 180 | \%16,000 | 1,200 |
|  | Laconia | 12,000 | 5-16 | 1,282 | 5 | ${ }^{631}$ | - 618 | 1, ${ }^{1,82}$ | 160 | a $\begin{gathered}183,760 \\ 657\end{gathered}$ | ${ }^{\text {a }}$ a 961 |
|  | Nastine | 25.0000 | 5-16 | $5 \cdot 085$ | 1,390 | 1,872 | - $1,8,8$ |  |  | 667, 413 |  |
|  | Portsmouti | 10, 000 | 6-16 | 1,146 | 300 |  |  | 1,569 | 190 | 215 | 1,135 |
|  | Rochester | 8,000 |  |  | 350 | 631 | 639 | 1,270 | 180 | 175, | -974 |
| 351 |  |  |  |  |  |  |  |  |  |  |  |
| 8.31 | Atlantic City" | 38, 000 | \%-18 | 4, 4580 | $\bigcirc$ | 1,294 | 1, 667 | 3, 391 | 177 | 415,599 | $\stackrel{\text { 2, }}{3}$ 355 |
| 8 | Bridgeto | 2,000 | 5-18 | 8,801 | 2, 100 | 1,274 | 1,366 | $\stackrel{4}{2,540}$ | 200 | 341, 758 |  |
| 354 | Camden* | 65,500 | 5-18 | 15,514 | 1,031 | 5,886 | 6,055 | 11,941 | 201 | 1,418, 879 | \%,131 |
| $3{ }^{3} 5$ | Elizabeth | 50, 000 | 5-20 | 12,060 | 3, 2000 | 3,000 | 3,400 | 6, 400 | 190 | 1,121,010 | 5,909 |
| 356 3 3 | Hackensa | 8,500 | 5-18 | 1,860 | 1 | 923 | 909 | 1,863 | 190 |  | 1, |
| 835 | Hoboken | 54, 000 | 5-18 | 19,556 | 1,938 | 4,350 | 4.386 | 8,i16 | 198 | 1,288, 655 | 6,4\% |
| 339 | Jersey Ci | 200,000 | 5-18 | 60, 55 |  | 16,401 | 16, 105 | 22, 806 | 191 | 4, 1215,55 | 21, 013 |
|  | Longbran |  |  |  |  | 1,326 | 1,273 | 2.599 | 188 | 335. 771 | 1,93: |
| 361 | Miflville | 11,000 | 5-18 | 2,845 | 99 | 1,000 | 1,137 | 2,134 | 210 | 281, 480 | 1,358 |
| 3 | Morristo | 11,000 |  |  |  | 617 | 788 | 1,895 | 191 | 206, 280 | 1,079 |
| ${ }_{3}^{36,3}$ | Newark. | 250,000 | 5-18 | 60, 453 | 3,965 | 18,041 | 18, 610 | 36, 711 | 193 | 4,819,57 | 2t, 972 |
| 364 | New Brunsw |  |  |  |  | 1,463 | 1,110 | 2,875 | 182 | ${ }^{387}$, 61 | 2,189 |
| 366 | Prassaic | 2, 200 | 5-1 | \%,98i | $\sim$ | *1,783 | *1,8 | *3, 615 | 191 | ${ }_{473}$ | 7 |
| 367 | Paterson | 1110,000 | 5-18 | 8, 783 | 4,000 | , ,cos | \%,64 | 15, | 199 | ,265 |  |
| 36 | Perth Am | 15,501) | 5-20 | 3,550 | 250 | 1,367 | 1,3 | 2,696 | $18 \tau$ | 308 |  |
| 369 | Phillipsk | 10,500 | 5-18 | 2,558 | 250 | 871 | 936 | 1,80 | 200 |  |  |
| 370 | Plainfield | 13, 000 | 5 5-1s | 3,500 | 700 | 1,234 | 1,219 | 2,453 | 189 | 333, 807 | 1,784 |
| 31 | Rahway | 9,000 | 5-20 | 1,900 | * 200 | 738 | T19 | 1,45\% | 187 | 188, 505 | 1,006 |
| 3:3 | Town of Union | 15,000 | 5-18 | 4,356 | 500 | 1,56\% | 1,533 | 3,100 | 192 | 431, 286 | 2, 249 |
|  |  |  |  |  |  | 4,6:8 |  | 2,124 | 188 | 1,294, 053 | 6,831 |
| $3 \%$ | Albuquerque | 12,009 | 5-21 | 1,800 | 900 | 650 | 5 | 1,403 | 167 | 6171, 6\%6 | 61, 023 |
|  | Statistics of |  |  |  |  |  |  |  | Estim | ate |  |

TABLE 10. -Statistics of population and seliool enrolment and attenatance in citics of over S,000 inhubitants, 1SD8-90-Continued.


Tambr 10.--Statistics of population and school enrollment and attendance in citics of over 8,000 inhabitants, 1898-99-Continued.

|  | City. |  | School population. |  |  | Different pupils enrolled in public day schools. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \dot{8} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  | $\stackrel{\dot{\oplus}}{\stackrel{\text { g }}{\vec{~}}}$ |  | $\begin{aligned} & \text { Tin } \\ & \text { مٌ } \end{aligned}$ |  |  |  |
|  | 1 | : | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|  | NORTH CAROLINA. <br> Asheville | 15, 000 | 6-21 | 8.700 | 408 | 1,050 | 1,150 |  | 171 | 255,500 |  |
| 431 | Charlotte *-...... |  |  |  |  |  |  | 2,251 |  | a ${ }_{0} 12900$ | $1,4 \%$ |
| 438 | Durnam* | 12,000 | 6-21 |  | 30 | $5 \% 0$ | 6:0 | 1,240 | 188 | 169,200 | 000 |
| 433 | Newber'n |  |  |  |  |  |  |  |  |  |  |
| 434 | Raleigh ---- |  |  |  |  |  |  |  |  |  |  |
| 435 | Wilmington |  |  |  |  |  |  |  |  |  |  |
| 435 | Winston $\qquad$ NORTI DAKOTA. |  |  |  |  |  |  |  |  |  |  |
| 4338 | Fargo* <br> Grand F | 10,000 | 6-20 |  |  | 780 |  | 1,618 |  | 215, 23.8 | 1. 189 |
| 439 | Akron \% | 30,000 |  | 10, 11. |  |  |  | 8,92S | 200 | 988, 200 |  |
| 440 | Alliance | 9,400 | 6-91 | 2, ${ }_{2} 174$ | 111 | 793 | 880 | 1, 675 | 186 | 245, 900 | 1,322 |
| 411 | Ashtabula <br> Bellaire | 9,000 10,000 | 6-21 | 2,24t | 150 $* 343$ | 783 861 81 | 767 $89+$ | 1,550 | 186 | 233, 290 | 1,365 |
| 443 | Cambridg | 9,000 | 6-21 | :, 041 |  | 819 | 844 | 1,663 | 172 | 233, 771 | 1, 259 |
| 414 | Canton. | 43,001 | 6-21 | 8,663 | *500 | 2,822 | 2,876 | 5,698 | 184. | 923, 496 | 5,019 |
| 415 | Chillicotre | 17,000 | 6-21 | 3,86 |  | 1,100 | 1,090 | 2,190 | * 190 | a 332, 880 | a 1,752 |
| 446 | Cincinatati | 415,000 | 6-21 | 109,242 | 23,810 | 足, 878 | 21, 914 | 44, 792 | 200 | 7,198,400 | $3 \mathrm{3}, 992$ |
| 447 448 | Circleville | 9,000 | 6-21 | 2,200 09 090 | 180 | \% ${ }^{79} 9$ | -788, 78 | 1, 5\%0 | - 200 | a $\ddagger$ | 1,182 |
| 449 | Columbus | 130.532 | 6-21 | 32, 635 | 3,897 | 8,627 | 8,85:2 | 17,479 | 180 | 2,569, 410 | 11,2\%4 |
| 450 | Dayton | 20,000 | 6-21 | 22, 163 |  | 6,318 | 6,521 | 12, 889 | 174 | 1,885, 286 | 10,815 |
| 451 | Defiance- | 9,000 |  |  | 450 | 590 |  | 1,240 | 173 | 165,734 | 1958 |
| $45 \%$ | Delaware..... | 10,000 | 6-21 | $\stackrel{2}{2}$ | 244 | 770 | 789 | 1,559 | 185 | 219, 240 | 1,186 |
| 433 454 | East Lirerpod | 18,000 | 6-21 | 4, $9: 20$ | 480 380 | 1,414 | 1,405 | 1,468 | 180 | a 350,820 $\sim 11,051$ | * 1, 949 |
| 455 | Findlay | 20,000 |  | 5, 149 |  |  |  | 3,645 | 180 | 514, 440 | 2, 858 |
| 453 | Fostoria | 9,500 | 6-21 | 2, 604 | 250 | \%isi | 790 | 1,541 | *180 | a 210, 240 | 1,168 |
| $45 \%$ | Fremont | 9,000 | 6-21 | 2, 241 | 450 | 731 | 770 | 1,504 | 175 | 206,675 | 1,181 |
| 458 | Hamilton | 25,000 | 6-21 | 6,971 | 1,200 | 1,758 | 1,766 | 3,524 | 170 | 492, 252 | 2,890 |
| 459 | Ironton -- | 13,000 | 6-21 | 3,969 | * 300 | 1,153 | 1,181 | 2, 331 | 173 | 338,873 | 1,901 |
| 480 | Lancaster | 9,009 | 6-21 |  | 250 | 613 | 634 | 1,247 | 185 | 205, 720 | 1,112 |
| 461 | Lima* | 18,000 | 6-21 | 5.86 | 368 | 1,116 | 1,186 | 3, 639 2,302 | 190 | $\stackrel{568,100}{323,510}$ | 1.990 |
| 463 | Mansfielc | 18,000 | 6-21 | $\stackrel{4}{4}, 185$ | 275 | 1,634 | 1, 797 | 3,431 | 176 | 475, 200 | 2,700 |
| 454 | Marietta | 14, 000 | 6-21 | 3,082 | 130 | 1,102 | 1,189 | 2,291 | 186 | 336,244 | 1,754 |
| 435 | Marion* | 10,000 |  | 3,056 |  |  |  | 2,143 | 180 | 312,300 | 1,785 |
| 466 | Martins Ferry | 8,000 | 6-21 | 2, 397 | 160 | 12 | 79 | 1,524 | 180 | 221, 400 | 1,230 |
| 467 | Massillon .-. | 15,000 | 6-21 | 3, 798 | 57 | 1,011 | 1,034 | 2,045 | 194 | 317,190 | 1,635 |
| 468 | Middetown \% | 10,000 | 6-21 | - 2,605 | 398 | 1,4 1 | 1,611 | 1,579 | 200 | 4488, 4600 | $\stackrel{1,240}{2,411}$ |
| 470 | Piqua .- | 14,000 | 6-21 | 3, 700 | 500 | 1,938 | 1950 | 1,888 | 180 | 285, 920 | 1,6:8 |
| 471 | Portsmonth | 14,000 |  | 4,431 |  |  |  | 2,634 | 190 | 361, 000 | 1,900 |
| 472 | Salem | 9,000 | 6-21 | 1,255 |  |  | 791 | 1,549 | 180 | 234,900 | 1,305 |
| 473 | Sandusky- | 25, 000 | 6-21 | 5,8i6 | 1,400 | 1,410 | 1,461 | 2, 871 | 196 | 490, 980 | 2, 505 |
| 474 | Springfield | 36,000 | 6-21 | 9,206 4,506 | 1,345 600 | 1,071 | 3,222 1,030 | $\stackrel{6}{2,293}$ | 191 | 942,203 $3: 23,372$ | 4,933 $1,6.1$ |
| 476 | Tiffin | 15, 000 | 6-21 | 3,293 | 600 | 1805 | ${ }^{1} 808$ | 1,613 | 183 | 140, 279 | 1,313 |
| ${ }^{177}$ | Toledo | 151,000 | 6-21 | 34, 669 | 4,681 | 9,757 | 9, 783 | 19,540 | 194 | 3, 084,6000 | 15,900 |
| 478 | Warren | 12, 000 | 6-21 | 2, 709 |  | 830 | 779 | 1,709 | 185 | 260, 295 | 1,407 |
| 479 | Wellstor | 9,000 | 6-21 | $\stackrel{2}{2} 545$ |  | ${ }_{7}^{971}$ | 1,022 | 1,999 | 160 | 214,240 | 1,339 |
| 489 | Xenia | 10,000 | 6-21 | $\begin{array}{r} 1,959 \\ 11,59 \end{array}$ | $\begin{array}{ll} 150 \\ 0 & 0 \end{array}$ | $\begin{array}{r}718 \\ 3 \\ \hline 199\end{array}$ | $\begin{array}{r} 747 \\ 345 \end{array}$ | 1, 465 | 181 | $\begin{array}{r}206,352 \\ 1 \\ \hline 043 \\ \hline 100\end{array}$ | 1, 140 |
| 481 | Youngstoy Zanesville | 2\%,000 | 6-21 | 11,538 6,000 | $\stackrel{2}{2}, 000$ | 3,499 1,928 | 3,454 | 6,953 | 185 | 1,043,400 | 5,640 3,227 |
|  | $a$ Estimated. | * Statist | ics | 189\%-98. |  | $\checkmark$ Do | not | lude | in | garten. |  |

Table 10.-Statistics of population and school enrollment and attendance in cities of over s,000 inhabitants, 1898-93-Continued.


Tande 10.-Statistics of population and school enrollment and attendance in cities of over s,000 inhabitants, 1898-99-Continued.


Table 10.-Statistics of pomilation and school enrollment and attendance in cities of over 8,000 inhabríants, 1898-99-Continued.


Table 10.--Statistics of population and school enrollment and attendance in cities of over 8,000 inhabitants, 1898-99—Continued.

*Statistics of 1897-98.
TAble 11.-Statistics of supervising officers, teachers, moperty, etc., in mublic schools of cities of over $\mathcal{S}, 000$ inhabitants, 1898-99.


Table 11.-Statistics of supervising oficers, teachers, property, elc., in public schools of cities of over s,000 inhabitants, 1898-99--Continued.


Table 11.-Statistics of supervising offcers, teachers, property, ctc., in public schools of cities of over 8,000 inhabitants, 1898-99-Continued.


[^23]Table 11.-Stalistics of supervising offcers teachers, property, etc., in pubric schools of cities of over 8,000 inhabitants, 1898-99-Continued.


Table 11.-Statistics of supervising officers, teachers, property, etc., in public schools of cities of over S,000 inhabitants, 1898-99-Continued.

|  | City. | Supervising officers. |  |  | $\begin{gathered} \text { Regular teach- } \\ \text { ers. } \end{gathered}$ |  |  | Grades in which manual training is given, if any. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $1$ | $\begin{gathered} \dot{9} \\ \text { 閏 } \end{gathered}$ |  |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|  | Kansas. |  |  |  |  |  |  |  |  |  |  |  |  |
| 169 | Arkansas City .. | 1 | 0 | 1 | 0 | 32 | 32 |  |  |  | ${ }^{6}$ | 1,900 | \$100,000 |
| 170 | Atchison..... | 1 | 0 | 1 | 2 | 40 | 42 |  |  |  | 8 | 2,347 | 155,000 |
| 111 | Emporia | 2 | 0 | 2 | 7 | 37 | 44 | None. |  |  | 9 | 2,250 | 115,000 |
| 17.2 | Fort Scott. | 1 | 0 | 1 | 7 | 40 | 47 | None. |  |  | 11 | $\stackrel{2}{2}, 400$ | *112, 000 |
| 173 | Hutchinson, | , | 0 | 1 | 5 | 35 | 40 | None. |  |  | 7 | 2,300 | 115,000 |
| 174 | Kansas City | 2 | 1 | 3 | 29 | 120 | 149 | None. | 0 | 0 | 23 |  | 450,009 |
| 175 | Lawrence.- | 1 | 1 |  | 9 | 42 | 51 |  |  |  | 8 | 2,511 | 175, 000 |
| 176 | Leavenworth | 0 | 1 | 1 | 4 | 61 | 65 | None. |  |  | 10 | 2,841 | 112, 436 |
| $17 \%$ | Ottawa -. | 1 | 0 | 1 | 5 | 25 | 30 | None. |  |  | 4 | 1,750 | 45, 000 |
| 178 | Parsons. | 1 | 0 | 1 | 3 | 30 | 33 | None. |  |  | 5 | 1,700 | 125,000 |
| 179 | Pittsburg | 1 | 0 | 1 | 5 | 35 | 40 |  |  |  | 5 | 2,340 | 95, 000 |
| 180 | Topeka. | 1 | 0 | 1 | 19 | 112 | 131 | Nonc. | 0 | 0 | 21 | 6,500 | 450,000 |
| 181 | Wichita.. | 2 | 1 | 3 | 8 | 79 | 87 |  |  |  | 17 | 4,850 | 200,000 |
|  | Kentucky. |  |  |  |  |  |  |  |  |  |  |  |  |
| $18 \%$ | Bowling Gree | 1 | 0 | 1 | 4 | 22 | 23 | None. | 0 | 0 | 3 | 1,2\%8 | 35, 000 |
| 183 | Covington -........ | 5 | 1 | 6 | 5 | 88 | 93 | None. | 5 | 2 | 7 | 4,044 | 215,659 |
| 184 | Frankfort: <br> White schools .- | 1 | 0 | 1 | 1 | 22 | 23 | Highs school | 1 | 0 | 1 | 1,250 | 44,800 |
| 185 | Colored schools* | 1 | 0 | 1 | 1 | 11 | 12 | andrands. | 1 | 1 | 1 | 600 | 12,000 |
| 186 | Henderson .-...... | 1 | 0 | 1 | 5 | 41 | 46 | None. |  |  | 7 | 1,800 | 81, 000 |
| $18 \%$ | Hopkinsville | , | 0 | 1 | 0 | 19 | 19 | None. |  |  |  | 760 | 28, 000 |
| 188 | Lexington | 9 | 6 | 15 | 3 | 75 | 78 | Primary. | 5 |  | 8 | 3,400 | 120, 285 |
| 189 | Louisville | 21 | 20 | 41 | 40 | 513 | 533 | High school | 0 | 10 | 63 | 30,181 | 1,130, 085 |
| 190 | Maysville |  |  |  |  |  |  |  |  |  |  |  |  |
| 191 | Newport. |  |  |  |  |  |  |  |  |  |  |  |  |
| 192 | Owensboro | 1 | 2 | 3 | 11 | 30 | 41 | None. |  |  | 6 | 2,100 | 110,000 |
| 193 | Paducah | 1 | 2 | 3 | 10 | 42 | 52 | None. | 0 | 0 | 9 | 2,675 | 150,000 |
|  | loutsiana. |  |  |  |  |  |  |  |  |  |  |  |  |
| 19. | Baton Rouge |  |  |  |  |  |  |  |  |  |  |  |  |
| 195 | New Orleans | 1 |  | 8 | 23 | 660 | 683 | None. | 13 | 0 | *66 | *23, 383 | 1,500,000 |
| 196 | Shreveport.. | 2 | 0 | 2 | 7 | 23 | 30 | None. |  |  | 8 | 1,750 | 100, 000 |
|  | maine. |  |  |  |  |  |  |  |  |  |  |  |  |
| 197 | Auburn. | 3 | 2 | 5 | 8 | 65 | 73 |  |  | 1 | 33 | 2, 820 | 200,000 |
| 198 | Augusta | 2 | 1 | 3 | 4. | 39 | 43 |  |  |  | 23 | 3,104 | 100, 750 |
| 199 | Bangor | , | 4 | 4 | 9 | 99 | 108 | None. | 4 | 0 | 24 | 4, 200 | 509,000 |
| 203 | Bath |  | 1 | 2 |  | 38 | 42 | None. |  |  | 15 | 1,700 | 1013, 000 |
| 201 | Biddeford | 2 | 1 |  | 4 | 39 | 43 | None. | 1. | 1 | 22 | 1,707 | 160, 000 |
| $20 \sim$ | Calais |  | 2 | 3 | 5 | 37 | 42 | None. | 1 |  | 13 | 1,758 | 48,000 |
| 203 | Lewiston | 3 | 3 | ${ }^{6}$ | 3 | 71 | ${ }^{7} 4$ | $\sim 6$ to 10 | 1 | 2 | 22 | 4,000 | 236,200 |
| 204 | Portland* | 6 | 4 | 10 | 13 | 150 | 163 | \%,8, and 9 | 6 | 1 | 18 | 6,169 | 510,000 |
| 205 | Rockland* | 1 | 1 | 2 | 4 | 33 | 37 |  |  |  |  | 1,500 | 80, 100 |
| 206 | Waterville | 1 | 2 | 3 | 2 | 43 | 45 | None. |  | 2 | 8 | 1.500 | r1, 500 |
|  | maryland. |  |  |  |  |  |  |  |  |  |  |  |  |
| 207 | Annapolis* |  |  |  | 7 | 13 | 20 |  |  |  |  |  |  |
| 203 | Baltimore- | 6 | 55 | 61 | 153 | 1,641 | 1,794 | 6 to 11 | 0 | 16 | 135 | 74,031 | 3,000,000 |
| 210 | Cumberlan | 1 | 0 | 1 | 6 <br> 7 | 24 | 38 31 | None. |  |  | 10 | 1,550 | 30,000 |
| 211 | Hagerstown .. |  |  |  |  |  |  |  |  |  |  |  |  |
|  | massachusetts. |  |  |  |  |  |  |  |  |  |  |  |  |
| 212 | Adams .- | 2 | 2 | 4 | 4 | 43 | 47 |  |  |  | 9 | 2,226 | 150,000 |
| 213 | Amesbury | 0 | 0 | 0 | $\stackrel{4}{2}$ | 34 | 35 |  |  |  | 17 | 1,200 | 75, 000 |
| 214 | Arlington. | 1 | 3 | 1 | $\stackrel{2}{2}$ | 34 | 36 | 7 to 10 |  |  | ${ }^{5}$ | 2,056 1,950 | 209,505 |
| 215 | Actle boro - | 1 | 3 | 4 | 4 | 48 | 52 | None |  | $\begin{aligned} & 3 \\ & 1 \end{aligned}$ | 17 | 1,950 |  |
| 216 | Beverly* | $\stackrel{2}{18}$ | 0 10 | ${ }_{28}^{2}$ | -3 | 1,590 | 55 1,804 | -...... 4 to 9 | 69 | 18 | 1216 | 80,060 | 15,000,000 |
| ${ }_{218} 18$ | Brockton | 13 | 2 | 5 | 15 | 164 | 1,879 | High school. |  | - | 27 | 6,980 | -436, 450 |
|  |  |  |  |  |  | tisti | es of 18 | 697-98. |  |  |  |  |  |

Table 11.-Siatistics of supervising offcers, teachers, moperty, etc. in public schools of cities of over $\mathcal{S , 0 0 0}$ inhabitants, 1898-99-Continued.


Thble 11.-Statistics of supervising officers, tcachers, property, ctc. in miblie schools of cities of over 8,000 inhabitants, 1898-99-Continued.


Table 11．－Statistics of supervising offcers．teachers，property，etc．．in public schools of cities of over $\mathcal{S}, 000$ inhabitants，1898－99－Continued．

|  | City． | Supervis－ ing officers． |  |  | Regular teach－ ers． |  |  | Grades in which man－ ual training is given，if any． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { 感 } \\ \text { g } \\ \text { B } \end{gathered}$ | $\begin{aligned} & \text { تू } \\ & 0 \\ & \text { E } \end{aligned}$ | $\begin{aligned} & \text { 㡙 } \\ & \text { 品 } \end{aligned}$ |  | $\begin{aligned} & \text { تin } \\ & \stackrel{0}{0} \end{aligned}$ |  |  |  |  |  |  |
|  | 1 | 5 | 3 | 4 | 5 | 6 | g | 8 | ¢ | ［14） | 12 1 | 88 | 18 |
| $\begin{aligned} & 330 \\ & 331 \\ & 332 \end{aligned}$ | montana． <br> Butte | 71 |  | $\begin{aligned} & 9 \\ & 3 \\ & 5 \end{aligned}$ | $\begin{aligned} & 1 \\ & 5 \\ & 2 \\ & 2 \end{aligned}$ | $\begin{array}{r} 139 \\ 36 \\ 41 \end{array}$ | $\begin{gathered} 140 \\ 41 \\ 43 \end{gathered}$ |  | 0 | 0 | $\begin{aligned} & 1 \tilde{1} \\ & 10 \\ & 10 \end{aligned}$ | $\begin{aligned} & 6,640 \\ & 1,655 \\ & 2,249 \end{aligned}$ | $\begin{array}{r} 1+6 \%, 1 \tau 0 \\ 2.2 \%, 000 \\ 400,000 \end{array}$ |
|  | Butte |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Helena．．． |  |  |  |  |  |  |  |  |  |  |  |  |
|  | nebraska． |  |  |  |  |  |  |  |  |  |  |  |  |
| 333 | Beatrice | 111111222111 | $\begin{array}{r} 8 \\ 8 \\ 2 \\ 2 \\ 0 \\ 0 \\ 0 \\ 16 \\ 0 \\ 2 \\ 2 \end{array}$ | $\begin{array}{r} 1 \\ 9 \\ 3 \\ 3 \\ 1 \\ 2 \\ 2 \\ 2 \\ 18 \\ 1 \\ 3 \end{array}$ |  | $\begin{array}{r} 33 \\ 40 \\ 34 \\ 32 \\ 25 \\ 122 \\ 28 \\ 273 \\ 25 \\ 25 \end{array}$ | $\begin{array}{r} 42 \\ 41 \\ 38 \\ 34 \\ 27 \\ 149 \\ 31 \\ 376 \\ 96 \\ 29 \end{array}$ | None．None．None None． |  |  | $\begin{array}{r} 9 \\ 8 \\ 5 \\ 6 \\ 7 \\ 18 \\ 7 \end{array}$ | 1， 700 |  |
| 334 | Fremont |  |  |  |  |  |  |  |  |  |  | 1，905 |  |
| 335 | Grand Isla |  |  |  |  |  |  |  |  |  |  | 1，805 | 129,500 100,000 |
| 336 | Hastings． |  |  |  |  |  |  |  | －－－ | －－－ |  | 1， 450 | 110，000 |
| 337 | Kearney |  |  |  |  |  |  |  | 0 | 0 |  | 1，200 | 200， 000 |
| 88 | Lincoln． |  |  |  |  |  |  |  |  | ， |  | 5，800 | 433，9：20 |
| 9 | Nebraska City |  |  |  |  |  |  |  |  | ${ }^{6}$ |  |  | 1958，200 |
| 340 | Omaha－－．． |  |  |  |  |  |  |  | 27 | 0 | 9 | 16，201 |  |
| 312 | South Omal |  |  |  |  |  |  |  |  |  | 9 | 2，700 | $\begin{array}{r} 80,000 \\ 21 \sim, 000 \end{array}$ |
|  | NEW HANIPSEIRE． |  |  |  |  |  |  |  |  |  |  |  |  |
| 343 | Concord | 1 | 0 | 1 | 5 | 61 | 66 | 7 to 9 and high school． None． Nolle． None． | 5 | 0 | 16 | 2，550 | 325,000 |
| 344 | Dover | 1 | 0 | 1 | 6 | 36 | 42 |  |  |  | 13 | 1，589 | 137，300 |
| 345 | Keene | 1 | 2 | 3 | 3 | 34 | 37 |  |  | 1 | 13 |  | 1．59，500 |
| 346 | Laconia | 1. | 0 | 1 | 2 | 35 | 37 |  |  |  | 10 | 1，3\％5 | 80， 000 |
| 347 | Manches |  |  |  | 14 | 108 | 1\％ |  |  |  | 21 |  | 745， 000 |
| 348 | Nashua | 4 | 6 | 10 | ， | $8{ }^{2}$ | 89 | 1 to 6 | 2 |  | 21 | 3，500 | 308， 433 |
| 349 | Portsmouth | 6 | 1 | 10 | 5 | 37 | 4.3 | 4 to 5 | 4 | 0 | 9 | 1，600 | 100， 000 |
| 350 | Rochester | 1 | 1 | $\stackrel{\sim}{2}$ | 1. | 34 | 35 |  |  |  | 13 |  | 91，000 |
|  | NEW JERSmy． |  |  |  |  |  |  |  |  |  |  |  |  |
| 351 | Atlantic City＊ |  | $\stackrel{2}{2}$ |  | 3 | 64 | 67 | 9 to 12 |  |  | 6 | 3,0003,840 | 200,000310,000 |
| 30\％ | Bayonae． | 2 |  | $\stackrel{+}{9}$ |  | 117 | 117 |  |  | 1 |  |  |  |
| 333 | Bridgeton |  |  |  | ${ }^{6}$ | 47 | 211 |  |  |  |  | 9，791． | 120，000 |
| 354 | vamden＊ | 4 | 0 | 4 |  | 235 |  | Highschool． | 0 | 0 | 21 |  | ＊ 517 ， 869 |
| 355 | Elizabeth | 7 | 0 | 15 | 20 | 194 | 144 |  | 1 | －－ |  | ＊5，489 | $* 312,000$94,000 |
| 356 | Hackensack | 1. |  |  | 6 | 37 |  | Grammar． |  |  | 2 | 1，648 |  |
| 357 | Harrison＊ | 0 | 0 | 0 | 2 <br> 1 | 15 |  | 6 to 9 | ${ }_{7}$ |  |  |  | 40，000 |
| 358 | Hoboken． | 18 | 4 | 12 |  | 181 |  |  |  | 1 | 12 | 7，945 | －3\％1，500 |
| 359 | Jersey City |  | 28 | $\begin{array}{rrr}46 & 2 \\ 4 & 4\end{array}$ |  | 534 | $\begin{array}{r}535 \\ 49 \\ \hline\end{array}$ | None． | － |  | 30 | 23，6：27 | 1，575， 044 |
| 360 | Longbranc | 18111 |  |  |  | 45 |  |  |  | 00 | 10 | 2，673 | $$ |
| 361 | Millville |  | 0 | 1 | 4 | 44 | 48 | None． |  |  |  | 2，593 |  |
| 362 | Niorristow | 1 | 13 | 47 |  | 22 | 33 | 5 to 8 and | ${ }^{-7}$ | 11 |  |  |  |
| 363 | Newark． | 34 |  |  | 21 | 680 | 701 |  |  |  | 57 | 83， 337 | 2， $26.2,8 \%$ |
| 364 | New Bru | 1 | 1 | 2 | 3 | 58 | 61 | high school． None． |  | 1 |  | ＊2，895 |  |
| 365 | Orange．．． | 7 | 5 | 12 | 4 | 49 | 53 | All grades． | 5 |  | 5 | 2，695 | 260，000 |
| 366 | Passaic． | 2 | $\underset{\sim}{2}$ | 4 |  | 77 | 81 |  |  | 1 | 8 | 3，600 | 225，009 |
| 367 | Paterson | 21 | 5 | 26 | 20 | 296 | 316 | 7， 8 ，and high schoul． None | 18 | 5 | 23 | 13，189 | ＊692， 500 |
| 368 | Perth Amboy |  | $\left.\begin{aligned} & 0 \\ & 0 \\ & 4 \\ & 0 \\ & 1 \end{aligned} \right\rvert\,$ | $\begin{array}{l\|} 1 \\ 1 \\ 6 \\ 1 \\ 6 \end{array}$ |  | $\begin{gathered} 42 \\ 35 \\ 39 \\ 28 \\ 45 \\ 187 \end{gathered}$ |  |  | 0 | 0 |  | ＊ 1,781 |  |
| 369 | Phillipsburg | 11215 |  |  | $\begin{array}{l\|l} 3 \\ 5 \\ 0 \\ 4 \\ 4 \\ 7 & \end{array}$ |  | $\begin{array}{r} 45 \\ 40 \\ 59 \\ 32 \\ 49 \\ 194 \end{array}$ | $2 \text { to } 6$ | \％ | 0 | 6 | 1，722 | 100，000 |
| 370 | Plainfield |  |  |  |  |  |  | None． | 5 | 0 | 8 | 2，750 | ＊ 233,000 |
| 371 | Rahway |  |  |  |  |  |  | None． 3 to 10 | －－－ |  | 4. | 1，746 | 115， 000 |
| 372 | Town of Union |  |  |  |  |  |  |  |  | $\cdots$ | $\begin{array}{r} 3 \\ 34 \\ 24 \end{array}$ | $\begin{aligned} & 1,840 \\ & \stackrel{\rightharpoonup}{7}, 444 \\ & \hline, 905 \end{aligned}$ | $\begin{aligned} & 14,000 \\ & 505,950 \\ & 505 \end{aligned}$ |
| 373 | Trenton＊ |  |  |  |  |  |  |  |  |  |  |  |  |
|  | NEW mexico． |  |  |  |  |  |  |  |  |  |  |  |  |
| 374 | Albuquerque＊ |  |  |  | 3 | 27 | 30 |  |  |  | 15 |  | 150，000 |
| 375 | Albany | $\begin{array}{\|c} 15 \\ 2 \\ 2 \\ 2 \\ 1 \\ 2 \end{array}$ | $\left.\begin{aligned} & 7 \\ & 0 \\ & 5 \\ & 0 \\ & 2 \end{aligned} \right\rvert\,$ | $\left.\begin{array}{r} 22 \\ 2 \\ 7 \\ 1 \\ 4 \end{array} \right\rvert\,$ | $\begin{array}{r} 11 \\ 9 \\ 4 \\ 0 \\ 13 \end{array}$ | $\begin{gathered} 2 \pi \\ 51 \\ 107 \\ 107 \\ 184 \end{gathered}$ | $\begin{array}{r} 288 \\ 60 \\ 111 \\ 55 \\ 197 \end{array}$ | High school None． None． 9 to 12 | $\begin{array}{r} 20 \\ 0 \\ \hdashline 0 \\ 13 \end{array}$ | $\begin{gathered} 3 \\ 0 \\ -1 \\ \hline 0 \end{gathered}$ | $\begin{gathered} 21 \\ 10 \\ 15 \\ 7 \\ 17 \end{gathered}$ | $\begin{array}{r} 13,003 \\ 2,993 \\ 4,237 \\ 1,600 \\ 7,659 \end{array}$ | $\begin{array}{r} 1,18 \pi, 000 \\ 12,000 \\ 400,000 \\ 200,060 \\ 421,915 \end{array}$ |
| 376 | Amsterdam |  |  |  |  |  |  |  |  |  |  |  |  |
| 377 | Auburn |  |  |  |  |  |  |  |  |  |  |  |  |
| 378 | Batavia． |  |  |  |  |  |  |  |  |  |  |  |  |
| 379 | Binghamton． |  |  |  |  |  |  |  |  |  |  |  |  |

＊Statistics of 189＂－98．

Table 11．－Statistics of supervising officers，teachers，property，etc．，in public schools of cities of over 3，000 inhabitants，1898－99－Continued．

|  | City． | Supervis－ ing officers |  |  | Regular teach- |  |  | Grades in which man is given，if any． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\mid \underset{\text { 畄 }}{ }$ |  | $\begin{array}{\|c} \stackrel{\text { In }}{0} \\ \text { H } \end{array}$ |  |  | $\begin{aligned} & \text { ज⿹⿺⿻⿻一㇂㇒丶廾口 } \\ & \text { H } \end{aligned}$ |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 381381382383381380386357388398390391392392391 | NEW rork－cont＇d <br> Bufffalo $\qquad$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Buffalo.............$- ~$ Cohoes：－．．．．．．． | 60 | 27 | 87 | ${ }_{7}^{17}$ | ${ }_{\text {1，}}^{13} \mathbf{7 4}$ | ${ }_{1}^{1,147}$ | 8 and 9 |  | 13 | ${ }_{11} 8$ | $\begin{array}{r}54,616 \\ 2,560 \\ \hline\end{array}$ | $33,462,899$ 129,000 |
|  | Corning | 2 | 0 | 2 | 0 | ${ }_{26}^{26}$ | \％ 8 | Primary． | 0 | 0 | ， | 1,399 | 125， 000 |
|  | Dunkirl | 1 | 1 |  | 3 | 52 | 5 | None． | 0 | 0 | 10 | 2，153 | $\begin{array}{r}180,000 \\ \hline 1000\end{array}$ |
|  | Elmira | 7 | 5 | 12 | 0 | 144 | 144 | None． | 0 | 0 | 13 | 6，789 | 600,000 |
|  | Cenera | 1 | $\stackrel{1}{2}$ | $\stackrel{2}{3}$ | － | $\stackrel{47}{37}$ | 50 <br> 37 | None． | $\stackrel{4}{2}$ | 0 | 5 | 1，304． | 121,500 <br> 110,000 |
|  | Gloversvil | 1 | 0 | 1 | 1 | ${ }_{6}^{63}$ | 64 | None． | 5 | 0 | 9 | ${ }_{3}$ | 151,843 |
|  | Hornellsvill | 1 | 5 | 7 | 0 | 48 30 | 48 30 | None． | 1 | 0 | ${ }_{3}^{5}$ | － 2,150 | 125,000 80,000 |
|  | Ithaca | 3 | 1 | 4 | 5 | 46 | 51 | 5 to 8 | 0 | 0 | 7 | 2，130 | 172，000 |
|  | Jamestown |  | 1 | $\stackrel{3}{2}$ | ${ }_{4}^{4}$ | 111 | ${ }_{89}^{115}$ | All grades． | 9 | 0 | 12 | ${ }_{4}^{4,012}$ | － 324,326 |
|  | Johnstown | 1 | 0 | 1 | 2 | 37 | 39 | None． |  |  |  | 2，300 | ＊131， 126 |
|  |  trict． | 1 | 2 | 3 | \％ | 36 | 43 | None． |  |  | 6 | 2，201 | 208，500 |
| 9 | District No． |  |  |  |  |  |  |  |  |  |  |  |  |
| 399 397 | District No． |  |  |  |  | 8 |  | None． |  | 0 |  | 375 | 18，${ }_{18}^{27} 150$ |
| 309 | lansingburg | 1 | 0 | 1 | 1 | 66 <br> 88 <br> 8 | $\stackrel{67}{37}$ | None． | 5 | 0 | $\stackrel{5}{4}$ | 2．225 | 138， 800 |
| ${ }_{400} 3$ | Littlefalls |  |  |  | 4 | \％ | 3 |  |  |  | 4 | 1，385 | 105，000 |
| 401 | Middletown | 1 |  |  | 4 | 46 | 50 | None． | 0 |  |  | 1，987 | 15， 15000 |
| 10\％ | Mount Vernon－ | 5 | 1 | ${ }_{6}^{6}$ | ${ }_{8}^{1}$ | ${ }^{75}$ | ${ }^{76}$ | None： | 3 | 1 | 8 | 3，718 | ${ }^{415.009}$ |
| $40 \pm$ | Newburg New Rocheile |  | ${ }_{8}^{0}$ | $1{ }_{10}^{1}$ | ${ }_{3}^{8}$ | ${ }_{70}^{96}$ | ${ }_{73}^{10+}$ | 8 8 to 11 |  |  | ${ }_{7}^{6}$ | $\xrightarrow{3,642}$ |  |
| 40.5 | New York ．．． | 30 | 473 | 703 | $67 \pm$ | 8， $6: 31$ | 9，305 |  | 101 | （il | 423 | 4，07， 223 | ＋45，421， 276 |
|  |  |  |  |  |  |  |  | and higi： |  |  |  |  | ＋0，421，60 |
|  | Niagara Falls． | 4 | $\stackrel{2}{1}$ | ${ }^{6}$ | 3 | 77 | 80 | None． | 5 | 1 |  | 3，079 | 197， 293 |
| $\begin{aligned} & 407 \\ & 408 \\ & 408 \end{aligned}$ | North Tonawanda |  |  | t | ${ }_{4}^{4}$ | 47 50 | 51 | None． | 4 | 0 | ¢ | 1，750 | 20， 000 |
| 409 | Olean＊． |  | 1 | 3 | 1 | 45 | 46 |  | 6 | 0 |  | 2.490 | 185，000 |
| 410 | Oswego | 1 | 0 | 1 | 3 | 84 | 87 |  |  |  | 15 | 4，600 | 205， 800 |
| 411 | District No． | 1 | 1 | 2 | 0 | 17 | 17 | on | 1 | 0 | 3 | Tto | 43， 501 |
|  | （Drum Hill） | 1 | 0 | 1 | 1 | $1 t$ | 15 | None | 0 | 0 | 1 | \％00 | 0 O |
|  | （Oak Side）． |  |  |  |  |  |  |  |  |  |  |  |  |
| 413 | Plattsburg－ | 1 | $\stackrel{2}{1}$ |  | ${ }_{0}^{1}$ | $\begin{aligned} & 40 \\ & 30 \end{aligned}$ | ${ }_{30}^{41}$ | None． | $\begin{aligned} & 9 \\ & 3 \end{aligned}$ | 0 |  | 1,700 <br> 1,100 | 7,300 80,000 |
| 415 | Port Jervis | 1 | $\stackrel{1}{2}$ | 3 | 2 | 40 | 42 |  |  |  | 5 | 1， 875 | 100，000 |
| 416 | Poughkeensic | $\stackrel{2}{2}$ | 2 | ${ }_{4}^{4}$ |  | 76 | 79 | None． |  |  | 14 | 3，300 | 100， 000 |
| 418 | Rensselaer | 1 | 5 | 6 | $2 t$ | 730 | \％9 | ${ }_{4} \mathrm{None}^{7}$ | 2．） | $\stackrel{1}{2}$ | 46 | 21，507 | 1， 69,85000 |
| 419 | Rome＊ |  |  |  | 1 | 43 | 44 |  |  |  |  | 2，500 | ，255，000 |
| 420 | Saratoga Sp | 1 | 0 | 1 | 5 | 55 | 60 | INone． | 5 | 1 | ${ }^{6}$ | 3，025 | 2\％0，000 |
| 42 | scnenecta | 1 | ${ }_{0}$ | 1 | ${ }_{0}$ | ${ }_{8}^{69}$ | ${ }_{28} 8$ | No | 2 |  | 3 | 1.031 | 175， 000 |
| 4， | Syracuse | 5 | 3 | $\stackrel{1}{8}$ | 18 | 411 | 429 | 7 and 8 | 15 | 4 | 35 | 18，605 | 1，25t， 500 |
| 42. | Tonawand | ， | 2 | 3 | 1 | 36 | 37 |  |  |  | 5 | 1，509 | 110，000 |
| 4．） | Troy | 5 | 2 | 7 | 14 | 183 | 199 |  | 3 |  | 21 | 8，521 | 563， 671 |
| 426 | Utica | 3 | 4 | 7 | 12 | 20 | 214 | 5 to | $1:$ |  | 23 | 8，018 | 629 ， |
| 424 | Watertow | 2 | 1 | 3 | 4 | 97 | 101 |  |  | 2 | 10 | 4，0 | 2 |
| 4 | Water | 1 |  |  |  |  |  |  |  |  |  |  | 100， H 0 |
|  | Yonker | 2 | 5 | 7 | 5 | 141 | 146 | 6 |  | 3 | 15 | 5，81 | 727， 939 |
|  |  |  |  |  |  |  |  | high schl． |  |  |  |  |  |
| 433 | Asheville | 1 | 1 | 2 | 3 | 29 | 32 | None． |  |  | 4 | 1，500 | \％0，090 |
| 431 | Charlotte＊ |  |  |  |  |  | 40 |  |  |  |  |  |  |
| 433 | Durham＊＊ | 2 | 1 | 3 | 3 | 21 | 24 | 6 to 10 |  |  | 2 |  | 50， 000 |
| 434 | Raleigh |  |  |  |  |  |  |  |  |  |  |  |  |
| 435 | Wilmingto |  |  |  |  |  |  |  |  |  |  |  |  |
| 436 | Winston．．． |  |  |  |  |  |  |  |  |  |  |  |  |

TAbLE 11.-Statistics of supervising oficers, teachers, property, etc., im public schools of cities of over 8,000 inhabitants, 1898-99-Continued.


Taible 11．－Statistics of supervising officers，teachers，property，etc．，in public schools of cities of over 8,000 inhabitants，1898－99－Continued．

|  | City． | Supervis－ ing officers． |  |  | Regular teach－ ers． |  |  | Grades in which man－ ual training is given，if any． |  | $\left\lvert\, \begin{gathered} 4 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 9 \end{gathered}\right.$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { 㡙 } \\ & \text { 伯 } \end{aligned}$ |  | $\begin{aligned} & \text { تin } \\ & \stackrel{\text { In }}{0} \end{aligned}$ | $\begin{aligned} & \text { 寻 } \\ & \text { 岂 } \end{aligned}$ |  |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 3 | 10 | 11 | 12 | 13 |
|  | PENNSYLYANIA－ continued． |  |  |  |  |  |  |  |  |  |  |  |  |
| 49：3 | Bradfor | 1 | 0 | 1 | 8 | 54 | 62 | None． None． | 0 | 0 | 8 | 2，900 | \＄250，000 |
| 493 | Butler | 2 | 3 |  | 2 | 43 | 45 |  | －． | －－－ |  | 2，200 | 160， 000 |
| 494 | Carbonda | 1 | 0 | 1 | 7 | 46 | 53 |  |  |  |  |  | 178，000 |
| 495 | Carlislo | 1 | 0 | 1 | 12 | 23 |  | －．．－．．．．．．．．．． | －－－ |  | $\stackrel{8}{2}$ |  |  |
| 496 | Chambersburg | 1 | 0 | 1 | 7 | 28 | 35 | None． None． None． | 0 | 0 | ${ }_{21}^{7}$ | 1，860 | T5，000 |
| 497 | Chester | 1 | 0 | 1 | 8 | 118 | 123 |  |  | 0 |  | 5，26\％ | 36100070,300 |
| 498 | Columbia | 1 | 0 | 1 | 41 | 3 | $\begin{array}{r}126 \\ 44 \\ \hline 20\end{array}$ |  |  | 0 | ${ }_{6}^{6}$ | 2，280 |  |
| 499 | Connellsvi | 1 | 0 | 1 | 3 | 23 |  | －－－－．－．－．－．．．－－ |  | －．－ |  |  | 45.000 |
| 500 | Danville | 1 | 0 | 1 | 4 | 23 | $2{ }_{27}^{27}$ |  |  |  | 3 5 | 1，380 | 100,00080,060 |
| 501 | Dubois． | 1 | 0 | 1 | 5 | 28 | 27 |  | － | －－－ | $\stackrel{5}{5}$ |  |  |
| 502 | Dunmore | 1 | 0 | 1 | 6 | 38 | 33 | None． | 0 | －4 | 91218 | 2， $2 \times 0$ | 80,060150000 |
| 503 | Easton． | 1 | 0 | 1 | 17 | 53 | $\% 3$ |  |  |  |  | 3，350 |  |
| 504 | Erie．．． | 3 | 15 | 18 | 6 | 182 |  | None． | 0 0 | 4 | $\begin{aligned} & 12 \\ & 1 \pi \end{aligned}$ | 7,465 | $42 \%, 200$ 869.300 |
| 505 | Greensburg | 2 | 1 | 3 | 3 | 24 | 188 27 18 | None． |  |  | 4 | 1，488 | 325，000 |
| 504 | Harrisburg | 4 | 1 | 5 | 28 | 158 | 18658 | 4 to high school，inc． | 0 | 0 | 25 |  |  |
| 507 | Hazleton | 1 | 0 |  | $\stackrel{9}{2}$ | 43 |  |  |  |  | 8 | 2，816 | 200，000 |
| 533 | Homestea |  |  |  | 41 | 43 |  |  | $\cdots$ | 4 | 1，800 | －．．．．．－ |  |
| 599 | Johnstown | ＊1 | ＊ | ＊3 |  | 1618 |  |  |  | 99 | 115 |  | 5，650 | 400， 000 |
| 510 | Lancaster |  |  |  | $10 \pi$ |  | 11961 | None． | － |  | 6，000$\stackrel{2}{2}, 600$ |  | $\begin{array}{r} 403,200 \\ \times 200,000 \end{array}$ |
| 511 | Lebanon． | ＊ 1 | ＊${ }_{0}$ | $\begin{gathered} * \\ 1 \\ 1 \end{gathered}$ | ${ }^{6}$ | 5 |  | None． |  | －．－－ |  | 11 |  |
| $51:$ | Lockhaven |  |  |  |  | 24101 | － 30 | None． | 0 | 0 | $\begin{array}{r} 4 \\ 11 \end{array}$ | 2,600 1,600 | 118， |
| 513 | McKeesport | 11 | 0 | 11 | $\begin{array}{r} 6 \\ 19 \end{array}$ |  | 120 | （ None． |  |  |  | 5，265 | $424,000$ |
| 514 | Mahanoy City | 1 | $\stackrel{9}{3}$ | 144 | 5 | 3748 |  |  |  | 5 | 1 | $2,250$ |  |
| 515 | Meadville |  |  |  |  |  | 42 49 49 | 1 to 7 |  |  | 4 | 2，300 | $\begin{aligned} & 113,000 \\ & 175,000 \end{aligned}$ |
| 516 | RIount Carmel | ＊ 1 |  | ＊${ }_{1}^{1}$ |  | 31 | 38 | None． | 0 | 4 | ${ }_{7}^{6}$ | 2，216 | 100，000 |
| 517 | Nanticoke |  |  |  |  | 34 | 44 |  |  | 6 | 7 | 1，930 |  |
| 518 | New brighton | 1 | 0 |  | － | 34 | 34 |  |  |  | 4 | ${ }_{4}^{1,600}$ | 130，000 |
| 519 | Newcastle |  |  |  | 1：3 | 84 | 96 |  |  |  |  | 4， 200 |  |
| $5: 2$ | Norristown | 1 | 0 | 1 | 8 | 67 | 75 | $\begin{aligned} & 3 \text { to } \begin{array}{c} \text { and high } \\ \text { school. } \end{array} \end{aligned}$ |  |  | 9 | 3，500 | 245， 000 |
| 591 | Oil City |  |  |  | ${ }^{4}$ | ${ }_{3,181}^{47}$ | ${ }_{3}^{51}$ |  |  |  | －929 | 1，800 |  |
| 5： | Philadelphia | 60 | 9. | 154 | 133 | 3，184 | 3，317 | ${ }_{2},{ }_{2} \mathrm{high}$ | 142 | 96 | 329 |  | $12.007,516$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Phœenixvil | ${ }^{1}$. | ${ }_{2}^{0}$ | 56 | 1 | ${ }_{8}^{2304}$ | 888 | None． | $\begin{array}{r} 0 \\ 20 \end{array}$ | 0 0 | \％ 7 | 1，400 | $\begin{array}{r} 60,000 \\ 300000 \end{array}$ |
| 52. | Pittsburg | 32 | 24 | 56 | 0 | 850 | 856 | Grammai | $\therefore 0$ | 0 | $\%$ | 35， 000 | 3，500，000 |
| 525 | Pittston | 2 | 1 | 3 | 0 | 33 | 33 | None | 0 |  | 6 | 1，800 | 85，000 |
| 5 | Plymouth | 1 | 0 | 1 | 6 | 25 | 31 | None． | ， | 7 | ， | 2，100 | （00， 010 |
| 527 | Pottstown | 1 | 0 | 1 | 13 | 48 | 61 | None． | 0 | 0 | 21 | 3，200 | 178，842 |
| 528 | Pottsvill |  |  |  | 7 | 53 | 60 |  |  |  | 10 | 3，000 |  |
| 529 | Reading | 2 | 5 | 7 | 8 | 260 | 268 | None． | 0 | 5 | 41 | 13， 600 | 846，500 |
| 530 | Scranton |  |  |  | 28 | 275 | 303 |  |  |  | 37 | 14，3：8 | 160,009 |
| 531 | Shamokin | 1 | 1 | 2 | 15 | 61 | $\%$ |  |  |  | 8 | 3， 300 | 300， 000 |
|  |  |  |  |  |  |  |  | mentary schools． |  |  |  |  |  |
| 53：3 | Sharon． | 1 | 0 | 1 | 3 | 32 | 35 |  | 0 |  | ， | 1，750 | 65， 000 |
| 533 | Shenandoah－．．． | 1 | 2 | 3 | 9 | 49 | 33 |  |  | 12 | 10 | 3，340 | 130，000 |
| 534 | South Bethlehem． | 1 | 2 | 3 | 10 | 36 | 45 |  |  |  | $\stackrel{6}{\sim}$ | 1，948 | 192，000 |
| 533 | Steelton． | 1 | 0 | 1 | 16 | 品 | 39 | None． |  |  | \％ | 2，090 | 151．000 |
| 536 | Sunbury | 1 | 0 | 1 | 10 | 30 | 40 | None． | 1 | 0 | \％ | 2，460 | 85， 000 |
| 537 | Tamaqua | 1 | 0 | 1. | $\stackrel{2}{2}$ | 2\％ | 24 |  |  |  | 4 | 1，200 | 125，000 |
| 533 | Titusville | 1 | 0 | 1 | 2 | 40 | 42 | None． | 0 | 0 | 5 | 1，750 | 97， 867 |
| 539 | Uniontown | 1 | 1 | 2 | 0 | 26 | 26 | None． |  |  | 3 | 1，400 | 110，000 |
| 510 | Warren－ | ， | 2 | 3 | ${ }_{5}^{6}$ | 34 | 40 |  |  |  | 3 | 1， 1,400 | 215， 181 |
| 541 | West Chester | 2 | 1 | 3 | $3{ }^{5}$ | $\begin{array}{r}31 \\ 142 \\ \hline\end{array}$ | $\begin{array}{r}36 \\ 172 \\ \hline\end{array}$ | High school |  |  | 20 | 10，234 | 150， 5000 |
| 543 | Wilkinsburg | 1 | 0 | 1 | 2 | 42 | 44 |  |  |  | 3 | 2， 2,00 | 250，（ic0 |
| 544 | Williamsport | 1 | 1 | 2 | 18 | 94. | 112 | None． | 0 | 0 | 15 | 5，846 | $3: 90,000$ |
| 545 | York．．．． | － | 0 | 1 | 19 | 80 | 99 | None． |  |  | 14 | 4， 250 | 436， 550 |
|  | RHODE ISLAND． |  |  |  |  |  |  |  |  |  |  |  |  |
| 54.6 | Central Falls | 1 |  |  | 2 | 48 | 50 | None． | 0 | 0 | 9 | 2，145 | 169，000 |
| 547 | Cranston ． | 1 | $\stackrel{2}{1}$ | 3 | 8 | 50 | 58 | None． | 4. | 0 | 16 | 2，000 | 175，000 |
| 548 | Cumberland． | 1 | 1 | 2 | 5 | 33 | 37 | None． | 0 | 4 | 14 | 1，374 | 63， 000 |

Table 11.-Statistics of supervising offcers, teachers, property, etc., in public schools of cities of over S,000 inhabitants, 1898-99-Continued.


[^24]TAble 11．－Statistics of supervising officers，teachers，property，etc．，in public schools of cities of over 8,000 inhabitants，1S9S－90－Continued．

|  | City． | Supervis－ ing officers． |  |  | Regular teach－ ers． |  |  | Grades in which man－ ual training is given，if any． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { 恖 } \\ & \text { 品 } \end{aligned}$ | 急 | $\begin{aligned} & \text { Tin } \\ & \stackrel{\rightharpoonup}{0} \\ & \text { E- } \end{aligned}$ |  | $\begin{aligned} & \dot{9} \\ & \text { 荡 } \\ & 0 \\ & \boldsymbol{y} \end{aligned}$ | Fỉ̉ E |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 1 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|  | virginla． |  |  |  |  |  |  |  |  |  |  |  |  |
| 591 | Alexandria |  | 0 | 1 | 9 | 24 | 33 | None． |  |  | 5 | 1，150 | \＄37，000 |
| 592 | Danville． | 2 | 0 | 2 | 7 | 45 | 52 | None． | 0 | 0 | 5 |  | 47，000 |
| 593 | Lynchburg－ |  | 2 | 6 | 9 | 53 | 61 |  |  |  | 8 |  | 100， 000 |
| 594 | Manchester＊ | 4 1 1 | 0 | 1 | 5 | 18 | ${ }_{2}^{23}$ |  |  |  |  |  |  |
| 595 | Newport News | 1 | 0 | 1 | 3 | 24 | 27 | None． | 0 | 1 | 3 | 1，000 | 100，000 |
| 596 | Norfolk | ${ }_{1}^{2}$ | 3 | 5 | 7 | 58 | 65 | None． |  |  | 11 | 3， 500 | 200，000 |
| 597 | Petersbur |  | 0 | 1 | 28 | 24 | 52 | None． | 0 | 0 | 9 | 3，150 | 75， 000 |
| 698 | Portsmouth | 19 | 0 | 1 | 4 | 33 | 37 | None． | 0 | 0 | 4 | 1，771 | 47， 000 |
| 599 | Richmond |  | 0 | 19 | 8 | 230 | 238 | None． | 0 | 0 | 19 | 11，487 | 442， 500 |
| 609 | Roanoke | 19 | 0 | 0 | 8 | 45 | 53 | None． | 0 | 0 | 8 | 3，600 | 35， 000 |
|  | WAShingtox． |  |  |  |  |  |  |  |  |  |  |  |  |
| 601 | Seattlo |  | 2 | 14 | 15 | 186 | 201 | High school． | 1 | 0 | 20 | 8，200 | 725，000 |
| 602 | Spokane |  | ） | 2 | 10 | 114 | 124 | 9 to 12 | 4 | 0 | 17 | 5，170 | 656，530 |
| 603 | Tacoma |  |  | 15 | 8 | 145 | 153 | None． | 0 | 0 | 17 | 6，250 | 811，923 |
| 604 | Walla Walla | $1:$19$\stackrel{\sim}{2}$ | ： | 4 | 3 | 20 | 23 | None． | 0 | 2 | 4 | 1，400 | 175，000 |
|  | West virginit |  |  |  |  |  |  |  |  |  |  |  |  |
| 60.5 | Huntington． | $\begin{aligned} & 1 \\ & 1 \\ & 3 \\ & 6 \end{aligned}$ | 8 | 3 | 3 | 49 | 52 | None． | 0 | 0 | $\stackrel{6}{\sim}$ | 2，025 | 175， 000 |
| 603 | Martinsburg |  | 0 | 1 | 11 | 18 | 29 | None． | 0 | 0 | 7 | 1，497 | ＊ 40,940 |
| 607 | Parkersburg |  | 0 | 3 | 13 | 48 | 61 | None． | 0 | 0 | 14 | ＊2，850 | 196，900 |
| 608 | Wheeling |  | 4 | 10 | 8 | 130 | 138 | None． | 0 | 0 | 12 | 6，300 | 374，000 |
|  | W1sconsin． |  |  |  |  |  |  |  |  |  |  |  |  |
| 609 | Appleton | $\begin{aligned} & 4 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | $\begin{aligned} & 2 \\ & 1 \\ & 2 \\ & 2 \\ & 1 \\ & 1 \end{aligned}$ | 6 <br> 2 <br> 3 <br> 3 <br> 2 <br> 2 | ｜r $\begin{array}{r}\text { \％} \\ 3 \\ 3 \\ 5 \\ 11\end{array}$ | 6.3 | 70 | High school | 4 | 0 | 10 | 3，700 | 981， 690 |
| 610 | Ashland |  |  |  |  | 39 | 42 | None． | 0 | 0 | 10 | 1，800 | 130， 000 |
| 611 | Beloit |  |  |  |  | 44 | 47 | None． | 3 |  | 8 | 1，800 | 110，000 |
| 61.2 | Chippewa |  |  |  |  | 29 | 34 | None． | 0 | 0 | 8 | 1，328 | 98，000 |
| 613 | Eau Clair |  |  |  |  | 83 | 94 | 7，8，and high | 0 | 0 | 14 | 4，000 | 160，780 |
| 614 | Fond du Lac． | 3 | 211 | 4 | $\delta$ | 50 | 55 | schoor． |  |  | 10 | 2，300 | 103，700 |
| 615 | Green Pay |  |  | 2 | 3 | 69 | 72 | None． | 9 | 0 | 12 | 3，500 | 183， 334 |
| 616 | Janesville |  | 1 | 1 | 6 | 49 | 55 | High school | ， | 0 | ～ | 2，246 | 202， 500 |
| 617 | Kenosha | 2 | 1 | 3 | 4 | 30 | 34 | None． | 0 | 0 |  | 1，500 | 102，000 |
| 618 | La Cross |  | 2 |  | 9 | 113 | 132 | High school |  |  | 21 | 5，071 | 217，750 |
| 619 | Madison |  | 2 | ， | 2 | 51 | 53 | None． | $\stackrel{3}{2}$ | 0 | 9 | 2，717 | 220,000 |
| 620 | Manitowoc | $\stackrel{2}{3}$ | 0 | 3 | 4 | 36 | 40 | None． | 2 | 0 | 5 | ＊1，961 | 123， 000 |
| 621 | Marinette． | 3 1 | 0 | 1 | 7 | 54 | 61 | None． | 5 | 0 | 6 | ＊2， 530 | 136， 730 |
| 629 | Merrill | 1 |  | 1 | 7 | 28757 | 835 |  | 0 | 0 | a78 | 2，000 | 50，060 |
| 623 | Milwanke | 41 | 11 | 52 | 53 |  |  | In 2 high schools． All grades． | 43 | 0 |  | 38，748 | 2，942，890 |
| 624 | Oshkosh | 1 | 2 | 9 | 15 | 119 | 134 |  | 9 | ， | 12 | 3，500 | 250，000 |
| 625 | Racine． | 1 | 0 | 7 | 13 | 93 | 106 |  | 8 | 0 | 13 | 4， 767 | 3555，000 |
| 626 | Sheboygan | 6 | 1 | 7 | 14 | 88 | 102 | None． | c |  | 14 | 4，000 | 185， 000 |
| 627 | Stevens Poin | 1 | 2 | 3 | 4 | 43 | 47 | None． | 4 | 0 | 12 | 1，896 | 108，000 |
| 628 | Superior | 4 | 8 | 12 | 9 | 121 | 130 | None． | ， | 0 | 17 | 5，600 | 375， 000 |
| $6: 9$ | Watertown | 1 | 0 | 1 | 3 | 25 | 28 | None． | 0 | 0 | 5 | 1，200 | 75，000 |
| 630 | Waukesha | 1 | ${ }_{0}^{0}$ | 1 | 4 | 27 | 31 | None． | 0 | 0 | ${ }^{6}$ | 1， 500 | 100，000 |
| 631 | Wausau． | 1 | 2 | 3 | － | 48 | 54 | None． | 5 | 0 | 10 | ＊2， 300 | 190，0c0 |
|  | wyoming． |  |  |  |  |  |  |  |  |  |  |  |  |
| 63： | Cheyenne． | 1 | 0 | 1 | 1 | 26 | 27 | None． |  |  | 5 | 1，000 | 124， 753 |

＊Statistics of 1897－98．
a Includes barracks（or temporary buildings），annexes，and rented buildings．

Table 12.-Statistics of receipts of public schools of cilies of over 8,000 inhabitants in 189S-99.


[^25]bSpecial local tax.
$c$ District tax.
dTown taxes.
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Table 1き. - Statistics of receipts of public schools of cities of over $\mathcal{S}, 000$ inhabitants in 1898-99-Continued.


Talle 12.-Statistics of reccipts of public schools of cities of over $\mathcal{S}, 000$ inhabitants in 1898-99-Contimued.


[^26]Table 12.-Statistics of receipts of public schonls of cities of over 8,000 inhabitants in 1893-90-Continued.

|  | City. | Receipts for the school jear 1898-80. |  |  |  |  | Amountarailablefor useduringtheyear. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | From <br> State ap- <br> portion- <br> ment or <br> taxes. | From city appro- priations or taxes. | From county and other taxes. | From ail other sources. | Total. |  |
|  | I | 2 | 3 | 4 | 5 | 6 | 7 |
|  | KANSAS. |  |  |  |  |  |  |
| 170 | Atchison...-- | 83,957 |  | 92, 993 | \$1,190 | 828,140 | \$40,621 |
| 171 | Emporia | 2,5\%1 | \$30, 00 ² |  | ${ }^{791}$ | 33, 417 | 35, 831 |
| ${ }_{173}^{172}$ | Fort Scott. | 4,000 2,100 | 18,944 19,000 | 885 | 1,229 | 25,058 21,425 | 29,611 2.425 |
| 174 | Kansas City | 11,000 | 103, 292 |  |  | 114, 292 | 191, 054 |
| 175 | Lawrence.- | 3,649 |  | 26,003 | 1,307 | 30, 965 | 31,080 |
| 176 | Leavenworth | 6,179 | 52, 762 |  | 1,885 | 60, 826 | 62, 82\% |
| 177 | Ottawa | 1,104 | 6,203 | 2,200 | 8,214 | 17,721 | 32,921 |
| 178 | Parsons.- | 2,169 | 16,541 |  | 31 | 18,741 | 18,742 |
| 179 | Pittsburg | 3,324 <br> 9,045 | $\stackrel{23,541}{96,147}$ | 3,000 | 7,072 | 112, 26.81 | 139, 2965 |
| 181 | Wichita. | 6,365 | 58,363 |  |  | 164, 725 | 6¢, 195 |
|  | KENTUCRY. |  |  |  |  |  |  |
| ${ }_{183}^{18 \%}$ | Bowling Green | 5,322 89 | 10,07\% |  | 221 | 10, 615 | 15,942 |
|  | Frankfort:- |  | 61,913 |  |  |  |  |
| 1818 | White schools . Colored schools: | 5,767 2,180 0,60 | 5, 2,000 |  | 633 | 17,987 4,823 | 19,786 4,823 |
| 186 | Hendersor.... | 6,689 | 28,724 |  | 47 | 35, 460 | 40, $2=5$ |
| 187 | Hopkinsville. |  |  |  |  |  |  |
| 188 | Lexington | 20,929 129,343 | 41,011 494,257 |  | 9, 585 | 63,846 633,195 | 86,111 685,063 |
| 190 | Maysville |  |  |  |  |  |  |
| 191 | Newport. |  |  |  |  | 52,269 |  |
| 192 | Owensboro | 7, 593 | 34, 354 | 320 | 7,515 | 50,382 | 50,382 |
| 193 | Padncah | 11, 762 | 23,868 |  | 236 | 44,866 | 57, 147 |
|  | Loutsiava. |  |  |  |  |  |  |
| 194 | Saton Ronge |  |  |  |  |  |  |
| 195 | New Orleans | 43,000 | 110,000 | 15,000 | 230,000 | 288, 100 | 398, 000 |
| 196 | Shreveport |  |  |  |  |  | 16,000 |
|  | MAINE. |  |  |  |  |  |  |
| 197 | Auburn - | 10,300 | 28,500 |  | $3: 8$ | 39,128 | 39,128 |
| 198 | Augusta * | 7,699 | 8,422 |  | 10,544 | 20,665 | 32, 169 |
| 109 | Bangor | 15,012 | 49,655 | 250 | 493 | 66, 413 | 65, 413 |
| 291 | Bath -- | -6,453 | 21,059 |  | 2000 | 31,311 | 27, 205 |
| 202 | Calais -- | 7,358 | 11,200 |  |  |  | 18,558 |
| 203 | Lewiston | 19,524 | 28,000 |  | 235 | 47,779 | 47,779 |
| 204 | Portland* | 27, 427 | 127, 772 |  |  | 150, 199 | 165, 199 |
| 205 | Rockland* | 6,168 | 15,300 |  | 21 | 21,488 | 22,017 |
| 200 | Waterville | 6,912 | 15,376 |  | 169 | 22, 427 | 22,900 |
|  | marytand. |  |  |  |  |  |  |
| 207 |  |  |  |  |  |  |  |
| 208 | Baltimore. Cumberland | 251,764 | 1,117,085 |  | 5,80! | 1,384, 653 |  |
| 209 | Crimberianc Frederich |  |  |  |  |  |  |
| 211 | Frederiction |  |  |  |  |  |  |
|  | massachusetts. |  |  |  |  |  |  |
| 21.2 | Adams. |  | 37,382 |  |  | 37,362 | 37, 598 |
| 213 | Amesbury |  | 22, 000 |  | 85 | 22, 085 | 22,085 |
| 214 | Arlington- |  |  |  |  |  |  |
| 216 | Attheboro. |  | 23, 500 |  | 1,395 | 26, 895 |  |
| 217 | Beston.. |  | 40,000 |  |  |  | 2, 362, 487 |
| 218 | Brockton | 122, 000 |  |  | 1,740 | 123, 740 |  |
| 219 | Brookline. |  | 160, 138 |  |  | 162,553 | 162, 553 |
| 220 | Cambridge |  | 524, 61 |  | 2,284 | 508, 945 | 526,945 |
| 221 | Chelsea |  | 130,075 |  | 5,720 | 185, 795 | 135.810 |
| $\stackrel{\sim}{2}$ | Clintopee.-. |  | 52,952 |  |  | 5?, 5.5 | 64,953 51,306 |

[^27]Tamle 12.-Statistics of receipis of mublic schools of cities of over $\mathcal{S}, 000$ inhabitants in 1898-92-Continued.

|  | City. | Receipts for tire school year 1898-99. |  |  |  |  | Amountavailablefor useduringtheyear. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | From State ap- portion- ment or tazes. | $\begin{gathered} \text { From } \\ \text { city appro- } \\ \text { priations } \\ \text { or taxes. } \end{gathered}$ | From county and otlier taxes. | $\begin{gathered} \text { From } \\ \text { all other } \\ \text { sources. } \end{gathered}$ | Total. |  |
|  | 1 | 2 | 3 | 4 | ¢ | 6 | 7 |
|  | massachusetts-continued. |  |  |  |  |  |  |
| 224 | Danvers |  | \$35, 650 |  | \$1,393 | \$37,048 | \$43, 575 |
| 2235 | Dedham |  |  |  | 27 |  |  |
| 2238 | Fall River |  | 215,737 |  | 2 | 11, 10 | 227, 3740 |
| 223 | Fitchburg |  | 138, 170 |  | 286 | 133, 396 | 133,396 |
| 229 | Framingham |  | 53, 027 | \$1,205 | 268 | 54,501 43,920 | 54,501 61,093 |
| 231 | Gloucester- |  | 83,693 |  |  |  |  |
| 232 | Greenfield |  | 40,381 | 0 | 1,303 | 41,67 | 41, 674 |
| 233 | Haverhill |  |  |  |  |  | 121,448 |
| 234 | Holyoke |  |  |  |  |  | 196,488 |
| 235 | Lawdepari |  | 160,928 |  | 220 | 167,148 |  |
| 237 | Leominste1 |  | 80,750 |  | 839 | 81,579 | 82, 681 |
| 238 | Lowell |  | $355080 \pm$ |  | 5, 131 | 360, 963 | ${ }^{398} 5871$ |
| 240 | Maden |  | 199,01\% |  | 378 | 199,395 | 258,950 |
| 211 | Marblehead |  | 18,857 |  |  |  |  |
| 242 | Marlboro |  | 55, 200 |  | 1,204 | 56, 124 | 92, 924 |
| 243 | Melrose |  | 95,065 |  |  |  | 76, 570 |
| 245 | Milford |  | 39,100 |  | \% | 29,170 | 29, 170 |
| 245 | Natick |  | 36, 4 T5 |  | 339 | 36, 814 |  |
| ${ }_{2}^{218}$ | New Bedford |  | 249,203 |  | 1,340 | $\cdots 50,543$ | 23, 321 |
| 248 | Newburyporb |  | 31,000 159,129 |  | 2,199 | 31,949 161,323 | 31,949 161,328 |
| 250 | North Adams |  | \%0, 000 | 100 |  | 80,700 | 139, 706 |
| 251 | Northampton |  | 54, 253 | 98. | \% | 55, 989 | 55,989 |
| ${ }_{203}$ | Pittsfield |  | 128,890 |  |  | 128,850 | 123,800 |
| 254 | Plymouth |  | 42,092 |  | $2 \overline{0}$ | 42,118 | 42,159 |
| 235 | Quincy |  | 95,000 |  | 40 |  | 95, 040 |
| 250 | Severe |  | $\begin{array}{r}\text { 75, } \\ \text { 12\% } \\ \hline 048\end{array}$ | 1,603 | 1,251 | 129,902 | $\begin{array}{r}75,077 \\ 129 \\ \hline 008\end{array}$ |
| 258 | Somervilio |  | 301, \%22 |  |  | 304,720 | 304,720 |
| 259 | Southbridge |  |  |  |  |  | 43,897 |
| 200 | Spencer ${ }^{\text {Springie }}$ |  | 28,788 | 453 |  | 29, 211 | 29,241 |
| 208 | Taunton. |  | 133,133 |  | 2,172 | 185, 305 | 135,305 |
| 263 | Wakefield |  |  |  |  | 35,750 |  |
| 264 | Waltham |  | 84, 051 |  |  | 85, 022 | 85, 027 |
| 20.6 | Westfiold |  |  |  |  | 66,166 |  |
| 267 | West Springfiel |  | 29, 800 |  | 2,829 | 32, 620 | 32,620 |
| 268 | Weymoatil.... |  | 39,000 |  | 1,2\% | 40,275 | 50, 721 |
| 2\%9 | Woburn |  | 58,975 |  |  | 58,975 | 55, 975 |
| $2 \% 0$ | Worceste |  | 515,13\% | 1,731 |  | 510, 865 | 510, 8 ¢6 |
|  | michigats. |  |  |  |  |  |  |
| 272 | Alpena. | S3, | 22,361 | 653 | 1,346 | 28, 151 | 30, 202 |
| 273 | Ann Arbor | 4,033 | 42, 189 | 1,14i | 6,5\% | 24, 5886 | ${ }_{77}^{28,107}$ |
| 274 | Battlecreek |  | 55,185 | 5,781 | 1,072 | 62, 038 | 71,289 |
| 275 | Bay City | 13,707 | 81,363 |  | 867 | 95, 839 | 100,027 |
| 277 | Detroit. | 113,570 | 750,620 |  | 12,094 | 876, 236 | 985,033 |
| 2 28 | Escanaba | 3,478 | 12,069 | 8,347 | - | 23, 903 | 26,364 |
| 279 | Flint --- | 4,168 | 47,359 | 6,747 |  | 58,263 | 74,859 |
| 281 | Holland.-- | 3, 3 ,675 | 20,500 |  |  | 315,335 24,241 | 390,446 |
| 283 | Iron Mountailı | 3,874 | 33,789 |  | 326 | 37, 989 | 48,479 |
| 283 | Ironwood-- | 4,314 | 37, 294 | 1,893 |  | 43,496 | 76,258 |
| 285 | Ishpeming | 15,6\% |  |  | 877 |  | 92, 159 |
| 288 | Kalamazoo | 8,363 | 69,652 |  | 1,596 | 79, 611 | 84, 312 |
| 287 | Lansing | 7,469 | 38,200 | 6,420 | 1,206 | 53, 295 | 82, 03? |
| 288 | Lưdington | \%, 70.7 | 23, 26.9 |  | 427 | 27,243 | 29,535 |
| 290 | Marquette- | 4,337 | $\stackrel{49}{29} 412$ | 10 | 9 | -34,231 | 33,971 |
| 291 | Menominee | 8,237 | 38,644 |  | 223 | 47, 101 | 51,074 |

TABLE 12.-Statistics of receipts of public schools of cities of over s,000 i:habitants in 1898-99-Continued.

|  | City. | Receipts for the school year 1998-99. |  |  |  |  | Amountarailablefor useduringtheyear. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { From } \\ \text { city appro- } \\ \text { priations } \\ \text { ori taxes. } \end{gathered}$ |  | $\begin{gathered} \text { From } \\ \text { all other } \\ \text { sources. } \end{gathered}$ | Total. |  |
|  | 1 | 2 | 3 | 4 | 3 | 6 | \% |
|  | momigax-continued. |  |  |  |  |  |  |
| $\begin{aligned} & 292 \\ & 293 \\ & 293 \\ & 29 \end{aligned}$ |  | $\begin{gathered} 59,791 \\ 3,468 \\ 8,680 \end{gathered}$ |  | \$\%29 | $\begin{array}{r} 819,979 \\ 1,932 \\ 1,569 \end{array}$ | $\begin{aligned} & 52,592 \\ & 31,52, \\ & 45,423 \\ & 4520 \end{aligned}$ |  |
| 293 296 297 293 299 |  |  |  | 116 271 | $\begin{gathered} 3,849 \\ 1,986 \\ -1,000 \end{gathered}$ |  | $\begin{aligned} & 110,935 \\ & 68,631 \\ & 59,606 \\ & 43,669 \\ & 47,378 \end{aligned}$ |
|  | minnesota. |  |  |  |  |  |  |
| $\begin{gathered} 340 \\ 3010 \\ 301 \end{gathered}$ | Brainerd. Duluth. |  |  | - $\begin{array}{r}14,423 \\ 217693 \\ 0\end{array}$ | 783 5,597 5,368 |  | $\begin{array}{r}41,452 \\ 430,728 \\ \hline 8.288\end{array}$ |
| 302 303 | Faribault |  | 20, 533 | 2,345 |  | 27,541 |  |
| 304 | Minneapolis | $95.93{ }^{\circ}$ | $543,07{ }^{\text {a }}$ |  | 15, ${ }^{\text {a }}$ \% 0 | 63429 | $1,007,369$ |
| $\begin{aligned} & 305 \\ & 306 \end{aligned}$ | Red Wing-... | 5,144 4,032 | $\begin{aligned} & 2,123 \\ & 2, \\ & 2,803 \end{aligned}$ | 1,876 | 1,231 | 30,474 28,835 | (30,511 |
| ${ }_{307}^{307}$ | St. Paul. |  |  |  |  | 420, 0100 | 420,000 |
| 309 309 | Winona | 13,0041 | 51,182 | 6,5i4 | 606 | 49,151 71,429 | ${ }_{93,813}^{50,211}$ |
|  | mississippr. |  |  |  |  |  |  |
| 310 | Greenvill |  |  |  |  |  |  |
| 312 | dieridian | 5,996 | 14, 100 | $2{ }^{3}$ | 225 | 2i,0ヶ6 |  |
| 313 314 | Natchez- |  |  |  |  |  |  |
|  | missouri. |  |  |  |  |  |  |
|  | Carthage |  |  |  |  |  |  |
| $\begin{aligned} & 316 \\ & 317 \\ & 317 \end{aligned}$ | Chillicothe Hannibal. | $\xrightarrow{5,117}$ | 8,890 | ${ }_{\text {41, }}^{4,653}$ | 1,091 | 19,161 <br> 39857 | 32,650 40,202 |
| 318 319 | Independence | 5, | 14,94t | 693 | \%97 | 21,393 1509 1509 | 49, 023 |
| 3.20 | Joplin-.--- | \%,960 | 34,147 |  | $3{ }^{3}$ | 42, 417 | 51,188 |
| ${ }^{322}$ | Kansas City | 72,581 |  | 450,279 | 13, 910 | 536, 800 | 545,988 |
| 323 | Moberly | 4,495 3,14 | 14, 18.23 | 5,359 |  |  | 28, 28.451 |
| 324 | St. Charles* |  |  |  |  |  | 18,372 |
| $\begin{aligned} & 325 \\ & 326 \\ & \end{aligned}$ | lit. Josepl | ${ }_{17 \%}^{173,886}$ | 1,378,960 | ${ }^{1185,683}$ | - 90,849 | 1, $\begin{array}{r}149,198 \\ 1,80280\end{array}$ | 2,118, ${ }^{198,42}$ |
| 327 | Sedalia- | 5,701 | 1,00, 00 | 109, 9 | 5, 534 | 1, 60,964 | 2, ${ }_{97,666}$ |
| $\begin{gathered} 328 \\ 8.29 \\ \hline 2.9 \end{gathered}$ | Springfield |  |  |  | 3,866 | $\begin{aligned} & 54,125 \\ & 16,5 \approx 1 \end{aligned}$ | $\begin{gathered} 89,889 \\ 20,863 \\ 20 \end{gathered}$ |
| : | montana. |  |  |  |  |  |  |
| 330 | Butto* | 7.089 |  |  | \%,430 | 215, 138 | 25S,426 |
| 332 | Greattails |  | 40,878 | $\begin{aligned} & 15,800 \\ & 54,463 \end{aligned}$ | 1,104 |  |  |
|  | miebraska. |  |  |  |  |  |  |
| 233 | Beatrice |  | 15,925 | a 9,541 | 6,836 | 32, 302 | 35,001 |
| 335 | Grand Isian | ${ }_{3}^{10,505}$ | 15,9:9 | 2,848 | $9,316^{\circ}$ | 31, 597 | ${ }_{3}^{2}$ 2, 399 |
| ${ }_{237}^{336}$ | Hastings | 3,412 |  | 11,507 | 22, 373 | 37, ${ }^{392}$ | 37,293 |
| ${ }_{838}^{331}$ | Kearney |  | 43,513 | 14, 61200 |  | 120, 291 | 120,391 |
| 339 | Nebraska City | 12,00 | 40, 310 |  |  |  | 1.20,3\%1 |
| 340 | Omaha | 51,090 | 108, 116 |  | 259, 630 | 418,836 | 418,836 |
| 342 | South Omaha\% | ${ }_{6,810}$ |  |  | 39,467 | ${ }_{76,5 \times 2}^{16}$ |  |
| \% | nhw hampshires. |  |  |  |  |  |  |
| 343 | Concord | 30,385 | ${ }_{3}^{12,615}$ | 14 |  | - 49,803 | 51,195 85,390 |

$a$ Includes State apportionment.

TABLE 12.-Statistics of receipts of public schoots of cities of over 8,000 inhabitants in 189S-99-Continued.


Tablim 12.-Statistices of receipts of public schools of cities of over 8,000 inhabitants in 1898-90-Continued.

|  | City. | Feceipts for the school year 1898-99. |  |  |  |  | Amountavailablefor useduringtheyear. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | From Stato ap portion ment or taxes. | From city appro priations or taxes. | From county and other tazes. | From all other sources. | Total |  |
|  | 1 | $\mathfrak{L}$ | \% | 4 | 5 | 6 | 7 |
|  | NEW YORK-continued. |  |  |  |  |  |  |
| 458 | Niagara Falls .---------------- | \$8,977 |  |  | \$1,149 | \$71,226 | \$81, 634 |
| 4978 | North Tonawanda --.---.-........ | \%',985 | 830,779 13,007 |  | 105 48,079 | 37,570 69,072 | 42, 688 |
| 409 | Olean *-...- | 6,991 | 39,250 |  | 1,844 | 48, 085 | 59,863 |
| 410 | Oswego: | 11,962 | ธัù,000 | 0 | 1,108 | 68,070 | 68, 070 |
| 411 | Peekskill District No. 7 (Drum Hinl) | 2,363 | 16,311 |  | 564 | 19, 273 | 19,479 |
| 412 | District INo. 8 (Oakside)-- | 1,700 | 12,000 |  |  | 13,700 |  |
| 413 | Plattsburg-..---- |  |  |  |  | 29,638 | 31,680 |
| 414 | Port Chester | 4, 6 | 31,210 |  | 305 | 36,148 | 39,341 |
| 45 | Por't Jervis | 7,765 | 24,689 |  | 301 | 32,755 | 59,928 |
| 415 | Poughkeepsio | 12,761 | 56, 440 |  | 1,475 | 70,675 | 100,803 |
| 417 | Rensselaer.. | 4,503 | 24, 939 |  | 1,800 | 30,996 | 30,996 |
| 418 | Rochester | 87,209 | 598, 300 |  | 1,889 | 687, 398 | 974, 933 |
| 419 | Rome*--- | 6,836 | 24,766 |  | 2,295 | 33,898 | 33, 898 |
| 429 | Saratoga Spring | 9,063 10000 | 44, 744 | \$447 | 1,670 | 54, 259 | 82,391 |
| 422 | Schenectady | 4,390 | 23,758 |  | 1,509 | 28,663 | - 33,920 |
| 423 | Syracuse | 51,390 | 283, $60{ }^{\circ}$ |  | 10,857 | 345,853 | 623, 748 |
| 428 | Tonawanda | 6,355 | 29,301 |  | ] 90 | 35, 746 | 76,395 |
| 425 | Troy | 29, 400 | 132, 138 |  | 1,482 | 163, 030 | 167,240 |
| 426 | Utica | 2i, 893 | 125,000 |  | 10,248 | 162, 141 | 299, 780 |
| 427 | Watertown | 6,148 | 17,379 | 1,406 | 74 | 25, 007 | 79, 076 |
| 428 | Watervliet <br> Yonkers.. | 5,451 17,680 | rer, 1898 |  | 1,875 | 25,649 207,483 | 84,247 $2 \% 9,047$ |
|  | north carohina. |  |  |  |  |  | 27,017 |
| 420 | Ashevilie |  | 13,250 | 6,330 |  | 19,580 | 19,580 |
| 431 | Charlotte |  |  |  |  |  |  |
| 43. | Durham.. |  |  |  |  |  |  |
| 433 | Newbern |  |  |  |  |  |  |
| 434 | Traleigh |  |  |  |  |  |  |
| 435 | Wilmington |  |  |  |  |  |  |
| 436 | Winston .-.- |  |  |  |  |  |  |
|  | NORTH DAKOTA. |  |  |  |  |  |  |
| 437 | Fargo |  |  |  |  |  |  |
| 438 | Grand Forks. |  |  |  |  |  |  |
|  | onio. |  |  |  |  |  |  |
| 439 | Akron* |  |  |  |  |  | 240, 712 |
| 440 | Alliance |  |  |  |  |  | * 39,692 |
| 441 | Ashtabula | 3, 421 |  | 23,992 | 515 | 27,928 | 40,65\% |
| 412 | Bellaire | 4,576 | 5.424 | 15,750 | 2,438 | 28,188 | 39, 375 |
| 443 | Canbridge | $\begin{array}{r}3,132 \\ 12997 \\ \hline\end{array}$ | 12,383 91,427 |  | $\stackrel{3,225}{2,096}$ | 110,939 | $\begin{array}{r}34,182 \\ 180 \\ \hline\end{array}$ |
| 445 | Canton-.. | 12,997 |  |  |  | 1107, 891 | 180, $55,3 \mathrm{3}$ |
| 446 | Cincinnati | 151,271 | 824,365 |  | 29,135 | 1,004, 771 | 1,071,132 |
| 447 | Circleville | 3,322 14983 |  | 20, 389 | $\begin{array}{r} 908 \\ a 27,203 \end{array}$ | $1,26,619$ $1,352,206$ | \%2,366 |
| 448 | Cleveland | 149, 835 | 1,159,456 | 15,732 | a 27, 203 | 1, 352, 226 | a2,283, 386 |
| 449 | Columbris* | 49,010 | (421, | 905) | 3, 474 | 474, 389 | 710,710 |
| 450 | Dayton - | 34, 989 | 317,420 |  | 4,389 | 356, 798 | 672,040 |
| 451 | Defianco* | 3,465 3,449 | 18,102 |  | 664 | 22,092 27,113 | 44,469 33,920 |
| 453 | East Livorpool | 7,406 | 36,395 |  | 2,699 | 46,569 | 66, 469 |
| 454 | Elyria* --. | 3,288 | 28,374 |  | 831 | 32, 493 | 44,951 |
| 455 | Findlay*-- |  |  |  |  |  | 96, 137 |
| 456 | Fostoria | 4,433 | 25,359 |  | 109 | 29,901 | 47,114 |
| 457 | Fremont | 3,512 | 23,677 | 281 | 61 | 27, 531 | 27,665 |
| 458 | Hamilton | 13,016 | 64,651 |  |  | 79, 419 | 100,912 |
| 459 | Lronton -- | 6,244 | 25,712 | 362 | 155 | 12,831 | 44, 319 |
| 461 | Lancaster | 1,576 | 10,883 | 362 |  | 12,831 | 24,564 116,109 |
| $456^{\circ}$ | Lorain | 4,370 | 28,555 |  | 243 | 23,168 | 65,332 |
| 403 | Mansfield | 6,278 | 60,266 |  | 1,331 | 67, 875 | 117,820 |
| 434 | Marietta* | 5,023 | 34, 285 |  | 374 | 39,682 | 39,682 |
| 465 | Marion* | 3,412 |  |  |  | 20,040 | 54,612 33,259 |

TABLE 12.-Statistics of receipts of public schools of cities of over $\mathcal{S}, 000$ inhabitants in 1898-99-Continued.

|  | City. | Receipts for the school year 1898-99. |  |  |  |  | Amount available for use durilig the year. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Flom State ap portionment or taxes. | $\begin{aligned} & \text { From } \\ & \text { city appro } \\ & \text { priations } \\ & \text { or taxes. } \end{aligned}$ | From county and taxes. | From all other somrces. | Total. |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  | опIO-continued. |  |  |  |  |  |  |
| 467 | Massillon | \$3, 637 | \$32,264 |  | \$370 | \$38, 331 | 859,299 |
| 468 469 | Niddletown | 6,8831 | 42,670 |  | 1,272 | 50,773 | 56,465 |
| 474 | Piqua | 6,081 | 37,090 |  | 1, 69 | 43,240 | 65, 119 |
| 471 | Portsmouth* |  |  |  |  |  | 69,233 |
| $4 \%$ | Salem. | 2,934 | 25,923 |  |  | 31,327 | 47, 789 |
| 473 474 | Sandusky | 13,836 | 103, 819 | צ309 |  | 118, 421 | * 64,102 |
| 475 | Sterbenville | 6,899 | 30,009 |  | $28 \%$ | 37, 288 | 59, 053 |
| 478 | Tiffin |  |  | 33,992 | ${ }_{0}^{676}$ | 39, 688 | 51,637 |
| 477 | Toledo | 51,8\% | 352, 514 |  | 2,092 | 405, 511 | 543,060 |
| 478 | Warren | 4, 350 | 20,807 |  | 350 | 31,507 | ${ }_{71,373}$ |
| 479 | Wellston | 3,845 | 14,938 |  |  | 18, 780 | 18,786 |
| $\begin{aligned} & 480 \\ & 481 \end{aligned}$ | Xenia -- | - $\begin{array}{r}3,155 \\ 17,307\end{array}$ | 27,306 136,854 | 753 | 12,343 | - 12.804 | 54,510 245,250 |
| 482 | Zanesville | 10,034 | 54, 110 |  | 2,003 |  | 92, 707 |
|  | omlahona. |  |  |  |  |  |  |
| 483 | Oklahoma City | 2,358 |  | 17, 185 | 6,000 | 2J, 483 | 25,483 |
| 484 |  | 3,853 | 14,838 | 10,628 |  | 29, 23.4 |  |
| 485 | Portland* | 23,473 | 50, 183 | 133, 065 | 939 | 207,650 | 402,037 |
| 486 | Salem .- |  |  |  |  |  |  |
|  | pennsylvania. |  |  |  |  |  |  |
| 457 | Allegheny | 94, 86.4 | 330,983 |  | 6,146 | 431,993 | 700,785 |
| $\begin{aligned} & 483 \\ & 489 \end{aligned}$ | Allentown | 26,391 30,930 | -90,710 | 1,2\%1 | 1,511 | 118,612 | 131,065 |
| 490 | Beaverfalls | 8,891 | 21,41\% | 1,998 | 1,468 | 31, 78 | 31,7\% |
| 4.91 | Braddock | 10,856 | 34,127 |  | 1,350 | 46,333 | 130, 194 |
| 492 | Bradford | 12, 721 | 45, 565 |  |  | 58,286 | 107,428 |
| 493 | Butler | 9,843 | 18,937 | \% 3 | 216 | 29,019 | 32,276 |
| 491 | Carbond | 11,666 | 35, 367 |  |  |  | 47, 032 |
| 496 | Chambersburg | 7, 714 | 14,030 |  | 2, | 2,012 | 21,614 |
| 497 | Chester. | 26,472 | 92,970 |  | 866 | 120,308 | 183, 83.2 |
| 498 | Columbia | 10,319 | 17,309 | -------- | 313 | 28,001 | 57, 201 |
| 499 | Conuellsville | 5,649 | 19,36 |  |  |  | 53,758 |
| 500 | Danville | 6,775 | 12, 231 |  |  |  | 22,419 |
| 501 | Dubois | 1,013 | 17,33: |  |  |  | 24, 343 |
| 503 | Easton | 14,867 | 62, 638 |  |  | \%1428 |  |
| 504 | Erie.. | 30,921 | 145, 667 | 1, 133 | 7,786 | 195, 110 | 244,573 |
| 505 | Greensburg | 5,35:3 | 123,848 |  |  |  | 32,524 |
| 500 | Harrisburg | 89,325 | 140,024 |  | 1, 889 | 131,238 | 187, 718 |
| 507 | Hazleton. | 11, 733 | 27,931 |  | 1,05! | 40, 773 | 45,555 |
| 508 509 | Homestead | 9,324 | 35. 103 |  |  | 77, 863 | 77, 853 |
| 510 | Lancaster | 30, 310 | 65,350 | 2,630 | 650 | 99,435 | 114,435 |
| 511 | Lebanon | 14, 193 | 85, 694 |  |  |  | 58,550 |
| 512 | Lockhaven | 6,822 | 13,760 |  | 228 | 20, 810 | 21,418 |
| 513 | McKeesport | 25,283 | 82,503 |  | 3,343 | 152, 900 | 253,275 |
| 514 | Mahanoy City | 10,481 | 17,543 |  | 2,141 | 30, 165 | 51, 8 ¢ ${ }^{\text {d }}$ |
| ${ }_{516}$ | Mount Carmel | 9,231 0,483 | 18,725 | 13 | 1,828 | 26,609 | 41, 185 |
| 517 | Nanticoke | 10,658 | 25,601 | 281 | 6,239 | 42, 772 |  |
| 518 | New Brizhton | 6,009 | 18,936 |  |  |  | 85, 434 |
| 519 | Newcastle | 18,184 | [8,689 |  |  |  | 142,853 |
| 520 521 | Norristown | 15,997 | 37,355 |  | 1,075 | 54,427 | 72, 45, |
| 522 | Philadelphia | 850,000 | 4,612, 131 |  |  | $4,614,131$ | 4, 1000,158 |
| 523 | Phrenix villo | 6, \%05 | 9,134 |  | 383 | 16, 226 | 21,200 |
| 524 | Pittsburg | 220,863 | 1,018,23:2 |  | 33,887 | 1,2\%5, 987 | 1,663,003 |
| 525 | Pittston. | 9,842 | 18,548 |  |  | 28,390 | 33,399 |
| 526 | Plymouth | 8,931 | 10, 500 |  | 12 | 19,446 | 21,246 |
| 5 | Pottsiown | 12,118 | 28,543 |  | 825 | 41,489 | 44,701 |
| 59 | Pottsrille | 14,910 | 31, 7.1 |  |  |  | 71,483 |

[^28]Thble 12.-Statistics of receipts of public schools of cities of over S,000 inhabitants in 1898-93-Continued.


Table 12.-Statistics of receipts of public schools of cities of over 8.000 inhabitants in 1898-99-Continued.


Table 13.-Statistics of expenditures of public schools of cities of over s,000 inhabitants in 1898-99.

|  | City. | Expenditures for the school year 1898-99. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perma- <br> nent in- <br> vestments <br> and <br> lasting <br> improve- <br> ments. <br> ner | Teaching and supervision. | Current <br> and incidental expenses. | Erening schools. | Total. |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
|  | ALABAMA. <br> Anniston |  |  |  |  |  |
| 8 | Eirminglam | ---------- | \%30,449 | 87,889 | ------ | \$38,311 |
| 3 | Funtsville . |  | 4,579 | 742 |  | 5,321 |
| 4 | 1robile* |  | 59,567 | 14,003 | ------....- | 77,101 |
| 5 | Montsomery |  | 27,210 | 2,869 | -...--.-.-- | 30, 079 |
| 6 | Sclma* ...... |  | 13,000 | 2,500 | -....-...... | 15,500 |
|  | ARKANSAS. |  |  |  |  |  |
| $\cdots$ | Fort Smith. | \$12,238 | 46,145 | 4,87\% |  | 63, 260 |
| 8 | Hot Springs |  | 16,000 | 2,200 |  | 18,200 |
| 9 | Little Rock |  | 50,614 | 17,521 | \$25: | 68,387 |
| 10 | Pine Bluff |  | 16,593 | 2,345 |  |  |
|  | CAliforinia. |  |  |  |  |  |
| 11 | Alameda | 3,050 | 6\%,419 | 12, 785 | 1,202 | 84,456 |
| 12 | Eerkeley | 14,310 | 57, 412 | 14,487 | ...... | - 86,209 |
| 13 | Eresno * | 1,603 | 36, 437 | 12,0\%8 | ----------- | - 50, 120 |
| 14 | Los Angeles | 4,882 | 352, 015 | $90,85 \%$ |  | 447,754 |
| 15 | Oakland.- | 4,688 | 232, 950 | 41,526 | 3,754 | 282, 934 |
| 16 | Pasadona - | 7,711 | 44, 256 | 12,223 |  | 64,190 |
| 17 | Sacramento | 3,988 | 90, 164 | 19,418 | 3,290 | 116,860 |
| 18 | San Bernardino |  | 30, 237 | 7, 420 |  | 37, 663 |
| 19 | San Diego | 1,900 | 58,974 | 14,036 |  | 74,910 |
| 20 | San Francisco | 130,939 | 940, 820 | 203, 388 | (a) | 1,275, 147 |
| $\because 1$ | San Jose. | $44{ }^{7}$ | 82, 849 | 20,650 | 733 | 104,6\%8 |
| 2 | Santa Cruz. |  | 30,075 |  |  | 38, 972 |
| $\because 3$ | Stockton. | 17,316 | 56,391 | 20, 146 | 538 | 94, 391 |
|  | colorado. |  |  |  |  |  |
| 2 | Colorado Springs | 22, 830 | 76, 2306 | 31,400 |  | 130,487 |
| 25 | Cripplo Creek...- | 2,000 | 30,000 | 8,000 | -..... | 40,000 |
| 26 | Denver: | 84, 554 | 243,650 | 102,905 |  |  |
| 2 | District No. 2 | 4,453 | 103,440 | 44,727 |  | 152, 620 |
| 88 | District No. 7 |  | 17,240 | 4,555 | 240 | 22,035 |
| 29 | District No. 1\%' |  | 69, 464 | 32, 5\%6 |  | 105,892 |
| 33 | Leadville. | 10,763 | 25, 631 | 8,251 |  | 44,645 |
| 31 | Pueblo: District No. 1 | 10,540 |  | 32,285 |  |  |
| 3 | District No. ${ }^{\text {a }}$ | 6,700 | 37, 207 | 20,813 |  | 70,720 |
| 33 | Trimidad ---.---.. |  | 17,557 | 10,445 | ---------- | 28,002 |
|  | CONNECTICUT. |  |  |  |  |  |
| 34 | Ansonia | 4,148 | 27, 275 | 3, $5_{1}^{* \%}$ |  | 35, 000 |
| 35 | Sridgeporit | 11,386 | 117,302 | 28,624 | 439 | 157,751 |
| 36 | Bristol...- | 2,215 | 27, 696 | 9,289 | --- -------- | 39, 200 |
| 37 | Danbury* | 10,995 | 36,431 | 8,574 | 500 | 56, 500 |
| 38 | Greenwich |  | 23, 911 | 2,775 |  | 26, 686 |
| 39 | Hartford...- | 358,456 | 203, 024 | 132,233 | 3,785 | 697, 498 |
| 40 | Manchester: |  | 10, 10 | 3,075 |  |  |
| 41 | District No. 0. |  | 16,205 | $4,7 \pm 5$ |  | 20,980 |
| 42 | Meriden-...-.-. |  | 60,035 | 16, 66 |  | 76,811 |
| 43 | Middletown | 595 | 18,254 | 14, 407 |  | 33, 256 |
| 44 | Naugatuck. |  | 28,606 |  |  | 28,606 |
| 45 | New Britain | 14,967 | 56,380 | 16,893 | 1,116 | 89,356 |
| 46 | New Haven | 5,000 | 279,670 | 95,512 | 6,789 | 386, 971 |
| 47 | New London. |  | 39,391 | 13, 990 |  | 44, 381 |
| 48 | Norwalk. | 11,281. | 42,965 | 13, 366 | 1,105 | 68, 717 |
| 49 | Nerwich. | 17,381 | 55, 253 | 20,351 |  | 92,985 |
| 50 | Stamiford. | 42,500 | 57,712 | 16, 667 | 558 | 117, 497 |
| 51 | Torrington. | 12,000 | 25, 000 | 9,000 | - | 46, 000 |
| 52 | Verncn* ----- |  | 17,732 | 6,345 |  | 24, 077 |
| 53 | Walingford* |  | 20, 060 |  |  | 37, 459 |
| $5 \pm$ | Waterbury | 27,849 | 103, 490 | 38, 488 | 1,557 | 171,384 |
| 55 | Windham. | 2,090 | 20, 832 | 11,833 |  | 34, 665 |

Table 13.-Statistics of expenditures of public seraols of citics of over 8,000 inhabitants in 1898-99-Continued.


* Statistics of 1897-98.

Table 13. -Statistics of expenditures of public schools of cities of over 8,000 inhabitants in 1898-99—Continued.


* Statistics of 1897-98.

TAbie 13.-Statistics of expenditures of public shhools of cities of over s,000 inhabitants in 1898-99-Continued.


* Statistics of 189 - -88 .

Table 13. -Statistics of expenditures of public schools of exiles of over 8,000 inhabitants in 189S-99-Continued.

|  |  | Expenditures for the school year 100s-99. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | City. | Perma- nent in- vestments and lasting inprove- nents. | Teaching and supervision. | Current and incidental expenses. | Evening schools. | Total. |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
|  | massachusetts-continued. |  |  |  |  |  |
| 220 | Chicopee | \$11,102 | \$30, 659 | \$15, 004 | \$2, 289 | \$59, 0 54 |
| 203 | Clinton.. | 10,303 | 27, 12\% | 13,299 | 573 | 51,303 |
| ¢2. | Danvers.- | 6,527 | 19,723 | 11,056 |  | 37, 306 |
| 223 | Everett | 33,381 | 73,813 | 35.688 | 991 | 40,674 143,883 |
| 29 | Fall River | 10:, 215 | 192, 149 | 68,101 | 11, 805 | 374, 270 |
| 228 | Fitchburg | 22,437 | 81, 407 | 25, 032 | 4, 520 | 133, 296 |
| 229 | Framirgham | 6,4.6 | 31, 660 | 15,082 | 870 | 53, 988 |
| 231 | Gardner-- | 23,249 | 22, 58.743 | 10,321 | 55. | 55, 912 |
| 23. | Greenfield | 6,6\%1 | 23,073 | 11,517 | 365 | 41, 627 |
| 23 | Haverhill |  | 99,690 | 21.710 |  | 121, 400 |
| 231 | Holyoke | 26,944 | 128, 608 | 35,157 | 4,527 | 196, 324 |
| ${ }_{23}^{3}$ | Lawrence |  | 127, \%\% | 40,888 | 6,331 | 174,997 |
| 237 | Leominster* | 45,000 | 24, 06\% | 13, 611 |  | 82, 678 |
| 233 | Lowell | 61,140 | 198,981 | 104, 520 | 18,588 | 383,229 |
| 23 | Lynn -- | 100 | 178, 219 | 57,443 | 1,315 | 237,077 |
| $\stackrel{\sim}{2} 41$ | Marden----- | 44,552 | 111,620 | 5i,012 | 3,380 | 216,564 $* 22,500$ |
| 243 | Marlboro | 30,500 | 39,65\% | 16,065 | \%10 | 92, 992 |
| 243 | Medford | 12, 200 | 65, 759 | 15, 540 | 1,130 | 94, 935 |
| 24 | Meirose |  | 45, 707 |  |  | 71, 547 |
| 245 | Milford |  | 20,100 | 9,070 |  | 29, 170 |
| 247 | New Bedford | 50, 083 | 135,028 | 5¢, 033 | 6, 814 | 36,812 247,633 |
| 248 | Newburyport |  | 21,500 |  |  | 31, 704 |
| $2 \pm 9$ | Newton | 8.107 | 133,489 | 37, 499 | 860 | 18t, 947 |
| 250 | North Adams | 63,000 | 51,103 | 18,000 | 1,600 | 139,706 |
| 231 | Northampton |  | 29,680 | 15. 002 | 607 | 55, 989 |
| $\stackrel{25}{2.2}$ | Peabody |  | 26,315 | 10,506 |  | 35, 889 |
| 20.3 | Pittsfield | 41,495 | 52, 3 | 24.884 9.563 | 746 | 118, 890 |
| 255 | Quincy . - |  | -3,049 | 20,689 | 1,302 | 93, 040 |
| 856 | Revere | 25,344 | 37, 2:8 | 12.45\% |  | 75,077 |
| $25 \%$ | Salem | 8,738 | $8 \%, 501$ | 29, 663 | 4,000 | 129, 902 |
| 25 | Somerville | 71,257 | 188, 413 | 43,433 | 3,619 | 304, 722 |
| 259 | Sorathbridge | 19,323 | 15, 112 | 6,336 | 645 | 41, 476 |
| ${ }_{261}{ }_{2}^{60}$ | Spencer | 389,420 | 18,491 189209 | 10, 50\% | 9, 248 | 29, 246 |
| 262 | Taunton | -33, 150 | 75, 334 | 2\%,079 | 1,742 | 125, 305 |
| 203 | Wakefield |  | 30,405 | 4,446 |  | 34, 851 |
| 264 | Waltham. | 971 | 58, 130 | 24,018 | 1,803 | 84,92\% |
| ${ }_{268}^{265}$ | Watertown | 22,981 | 24,036 | 16,304 | 199 | 35.620 <br> 77 <br> 12.3 |
| 267 | West Springieid |  | 21,639 | 9,416 |  | 31,055 |
| 268 | Weymouth.. | 600 | 31,411 | 11,895 |  | 43, 906 |
| 269 | Woburn | 5,496 | 42,151 | 10, 282 | 596 | 58, 975 |
| 270 | Worcester | 158,793 | 346,943 | 143,327 | 13,649 | 652, 715 |
|  | NimCHigan. |  |  |  |  |  |
| 211 | Adrian | 2,381 | 18.155 | 6, ${ }^{\prime \prime} 60$ |  | 27, 276 |
| 27 | Alpena |  | 14,5\%2 | 9,327 |  | 23,899 |
| 273 | Ann Arbor | 20,025 | 37, 376 | 15,800 | -------- | 75, 207 |
| $2{ }^{2} 5$ | Bay City . | 10,000 | 51,146 | 18,277 |  | 79, 423 |
| 276 | Cinboygan. |  | 11, $2: 2$ |  |  | 32,680 |
| 277 | Detroit. | 173,240 | 511.813 | 167, 909 | 8,979 | 921,991 |
| 278 | Escanaba | 100 | 14, 037 | 5, 63 |  | 19,7\%1 |
| 279 | Flint | 16,125 | 28,303 | 22,396 |  | 67, 424 |
| 280 | Grand Rapids | 21,051 | $\begin{array}{r}195,739 \\ 13,477 \\ \hline\end{array}$ | - 9 9,798 |  | 296,582 $22,5 i 5$ |
| 28.2 | Iron Mountain | 5,293 | 21,655 | 12, 512 |  | 49,450 |
| 283 | Ironwood | 9,246 | 23, 5 \% 6 | 11,477 |  | 44, 299 |
| 28 | Ishperning *- | 29.8 | 30,025 |  |  | -44,504 |
| $\stackrel{3}{2}$ | Jackson-- | 14,000 | 43,316 | 17,028 |  | 74, 390 |
| 285 | Lansin | 1,092 | 34,767 | 16,310 |  | 52,159 |

* Statistics of 189\%-98.

TABLE 13.-Statistics of expenditures of public schools of cities of over $\mathcal{S}, 000$ inhabitants in 1898-99—Continued.


* Statistics of 1897-98.
a The accounts of evening schools are not kept separate.
$b$ One new school building was erected. The providing of school buildings does not come under the jurisdiction of the school board, but belongs to the board of aldermen and councilmen.

$$
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$$

Tapee 13.-Statistics of expenditures of public schools of cities of over 8,000 inhabitants in 1598-99-Continued.

*Statistics of 1897-98.
$a$ Included in other items reported.

Table 13.-Statistics of expenditures of mulic schools of cities of over 8,000 inhabitants in 1898-99-Continued.

|  | City. | Expenditures for the school year 1898-99. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perma- <br> nent in- <br> vestments <br> and <br> lasting <br> improve <br> ments. | Teaching and super vision. | Current and incidental expenses. | Evening schools. | Total. |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| $\begin{aligned} & 394 \\ & 395 \end{aligned}$ | NEW YORK-Continued. <br> Kingston: <br> Kingston School district District No. 2 .-....... | \$1,4\% ${ }^{4 \%}$ | \$27, 775 | \$12, 833 |  | \$12, 088 |
| 396 | , District No. 3 -------- |  | 7,9\% | 535 |  | 8, 490 |
| $\begin{aligned} & 397 \\ & 398 \end{aligned}$ | Lansingburs Distric. ${ }^{\text {No. }} 4$ | 3,584 | 4.825 30.020 | 13,370 |  | 11.4031 46.912 |
| 399 | Little Falls... | 56,231 | 18,175 | 7,753 |  | 80, 158 |
| 400 | Lockport* | 15,998 | 36,215 | 26,600 |  | 73, 81 |
| 401 | Midaletown | 6,121 | 27,596 | 8,5393 |  | 42,299 |
| $40 \%$ | Mount Vernon | 5 | 60, 201 | 33, 247 | $5 \frac{145}{4}$ | 146, 714. |
| 403 | Newburg- | 21, 31.026 | 58,689 | 30,034 <br> 88,64 <br> 1 |  | 118, 749 |
| 405 | New Yoik | 3, 160, $22 \pm$ | 8, 12\%, ${ }^{4067}$ | 3, 770,642 | 2วงิ, 20 | 15,316.865 |
| 406 | Niagara Falls | 20, 816 | 29, 2140 | 20,699 | -347 | - 81,138 |
| 407 | North Tonawanda |  | $22,60 \pm$ |  |  | 36, 79 |
| 408 | Ogdensburg* | 42, 721 | 19,504 87880 | $\begin{aligned} & 10,442 \\ & 15,000 \end{aligned}$ | 0 | \%2, $72 \%$ |
| 410 | Oswego* | 14,908 | 36,134 | 16,819 |  | 67, ${ }^{4} 651$ |
|  | Peekskiil: |  |  |  |  |  |
| $\begin{aligned} & 411 \\ & 412 \end{aligned}$ | District No 7 (Drum Hill) <br> District No. 8 (Oakside). | $\begin{aligned} & 2,506 \\ & 200 \end{aligned}$ | $\begin{gathered} 10,204 \\ 7,000 \\ \hline, 04 \end{gathered}$ | $\begin{aligned} & 6,48 \pi \\ & 4,000 \end{aligned}$ |  | $\begin{aligned} & 19,207 \\ & 11.009 \end{aligned}$ |
| 413 | Plattsburg | 2,056 | 22, 141 | \%,990 |  | $32,15{ }^{\prime \prime}$ |
| 414 | Port Chester | 1,510 | 22,080 | 7,037 |  | 30, 62\% |
| 415 | Port Jervis | 21,978 | 22, 748 | 8,378 |  | 53, 104 |
| 416 | Poughkeepsie | 7, 2.27 | 42,033 | 20,484 |  | 70, 044 |
| 418 | Rensselaer | 2, 230 | 17,645 | 8,209 |  | 28, 224 |
| 419 | Rochester | 100, 337 | 396, 3204 | 110, 143 | 1,123 | 613,527 |
| 420 | Saratoga Springs | 10, 838 | 36, 358 | 8,826 | 425 | 56, 4+7 |
| 421 | Schenectady * | 2,508 | 32,213 | 8,948 |  | 43, 600 |
| 422 | Sing sing |  | 17, 448 | 9,613 |  | 29, 64 |
| 424 | Tonawanda | 20,293 | 19,107 |  |  | 59,285 |
| 425 | Troy-- | 4,023 | 125,39\% | 29,375 |  | 138, 790 |
| 425 | Ufica | 90,630 | 112, 614 | 35, 337 | 851 | 239,835 |
| 423 | Waterrliet | 44, 48 c | 16,860 | 16, 130 |  | 59, ${ }_{6}$ |
| 42.3 | Yonkers... | 61, 654 | 1, 19,817 | \% 2,397 | 4,507 | 261,350 |
|  | north carolina. |  |  |  |  |  |
| 430 | Asheville | 1,300 | 14,000 | 2,380 |  | 18,080 |
| 431 | Charlotte* |  |  |  | ------- | 15, $3 \pm 0$ |
| 433 | Newbern |  | 12,000 |  |  | 14, 810 |
| 434 | Raleigh. |  |  |  |  |  |
| 435 | Wilmington |  |  |  |  |  |
| 436 | Winston.-- |  |  |  |  |  |
|  | NORTH DAKOta. |  |  |  |  |  |
| 437 | Fargo* |  | 21,169 |  |  | 37, 189 |
| 438 | Grand Forks |  | 22, 56\% | ---------- |  | C0, 26 \% |
|  | оHio. |  |  |  |  |  |
| 439 | Akron* | 40,000 | 81, 253 |  |  | 1:3,901 |
| 440 | Alliance* |  | 17, 525 |  |  | 26,059 |
| 4412 | Ashtabula | $\begin{aligned} & 1,430 \\ & 2,392 \end{aligned}$ | 19,214 | 5,850 4,422 |  | 26,494 28,335 |
| 443 | Cambridge |  | 14,340 | 4,716 |  | 19, 15 |
| 444 | Canton | 13,357 | 62, 781 | 40, 120 |  | 116,258 |
| 445 | Chillicothe |  | 32,312 | 12, 410 |  | 45, 722 |
| 446 | Cincinnati. | 22,240 | 790,342 | 143, 686 | 5,518 | 961, 286 |
| 447 | Circleville. |  | 20,132 | 6,145 |  | 26,27\% |
| 448 | Cleveland | 175, 930 | 883, 077 | 249, 897 |  | 1, 303.951 |
| 449 | Columbus* |  | 285, 936 | 108, 114 |  | 559, 873 |
| 450 | Dayton- | 111, 635 | 218, 479 | 89,530 | 1, 281 | 421,431 |
| $45 \%$ | Delaware. |  | 19,410 | 7,568 |  | 26,978 |
| 453 | East Liverpool |  | 22, 403 | 24,791 |  | 47, 893 |
| 454 | Elyria* | 1,000 | 17,320 |  |  | 30, 342 |
| 455 | Findlay**... |  | 31,389 |  |  | 74, 495 |

[^29]Table 13.-Statistics of expenditures of public schools of cities of over 8,000 inhabitants in 1S9S-99-Continued.

|  | City. | Expenditures for the school year 1898-99. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { Perma- } \\ & \text { nent in- } \\ & \text { vestments } \\ & \text { and } \\ & \text { lasting } \\ & \text { improve- } \\ & \text { ments. } \end{aligned}$ | Teaching and super. rision. | Current and incidental expenses. | Evening schools. | Total. |
|  | 1 | $\mathfrak{2}$ | 3 | 4 | 5 | 6 |
|  | onio-continued. |  |  |  |  |  |
| 456 | Fostoria |  | \$17,3\%2 | \$9,976 |  | \$27,348 |
| 457 | Fremont |  | 16,613 | 10,398 |  | 27,012 |
| 458 | Hamiliton. | \$5,302 | 46,172 21,939 | 14,538 6,304 |  | 66,012 |
| 460 | Lancaster | 3, $\overline{3}$ | 19,495 | 1,432 |  | 24,299 |
| 461 | Lima* |  | 36,600 |  |  | 85, 012 |
| 463 | Lorain | 12,968 | 19,754 | 6,503 |  | 39,225 |
| 463 | Mansfield. | 21,664 | 38,801 | 12,859 | \$95 | 73, 414 |
| 464 | Marietta: | 4,633 | 23,868 | 6,976 |  | 35.477 |
| 484 | Marion* |  | 19,911 |  |  | 35, 773 |
| 467 | Massillon...- | 483 | 23, 540 | 18,659 |  | 29,682 |
| 468 | Middletown* |  | 24,197 |  |  | 36,523 |
| 469 | Newark | 11,849 | 33,163 | 10,551 |  | 55,563 |
| 478 | Piqua...-.-. | 11,325 | $\stackrel{22,974}{28,016}$ | 9,083 | .-. | 43, 388 |
| $47 \%$ | Salem .-.... |  | 16,345 | 7,800 |  | 24, 145 |
| 473 | Sandusky |  | 33,430 |  |  | 52,363 |
| 474 | Springfield |  | 83, 25\% | 25,050 |  | 108,302 |
| 475 | Steubenville |  | 27,645 | 10,195 | 325 | 38,165 |
| 486 | Toledo. | 57,287 | 242,560 | 67,993 | 343 | 36,596 368,184 |
| 478 | Warren | 2,217 | 20,537 | 7,185 |  | 29,939 |
| 479 | Wellston |  | 10,464. | 4,559 |  | 15, 016 |
| 480 | Xenia---...- |  | 24,767 | 13,610 |  | 38,377 |
| 481 | Youngstown | 27,991 | 84,588 44,530 | - 41,258 |  | 156,840 66,122 |
|  | OйLAHOMA. |  |  |  |  |  |
| 483 | Oklahoma City .-..... oregon | 6,000 | 6,632 | 4,176 |  | 15,808 |
| 484 | Astoria | 255 | 22, 126 | 6,443 |  | 28,824 |
| 485 | Portland*--- | 47,408 | 189, $78 \pm$ | 56,171 |  | 293,363 |
| 486 | Salem - ------------........ pennsylyania. |  |  |  |  |  |
| 487 | Allegheny | 175, 873 | 246,330 | 86,230 | 2,600 | 511,039 |
| 488 | Allentown | 22,441 | 55,218 | 41, 140 | 450 | 119, 249 |
| 489 | Altoona | 5,817 | 65,169 | 32,752 |  | 103,738 |
| 490 | Beaverfalls | ${ }^{7} 15$ | 19,085 | 9,140 |  | 28,940 |
| 491 | Braddock | 33, 897 | 22,146 | 14,946 |  | 70,989 |
| 493 | Bradiford | 50,000 4,300 | 32,000 22,360 | 5,009 11,375 |  | 70,000 38035 |
| 494 | Carbondale | 4,300 | 21, 792 | 11,36 |  | - 42,393 |
| 495 | Carlisle.. | 9,385 | 16,591 | 8,538 |  | 34,534 |
| 496 | Chambersburg |  | 14,705 | 6,299 | --7. | 21,004 |
| 497 | Chester-----.- | 13,136 | 61, 333 | 30,165 | , | 104, 634 |
| 498 | Columbils |  | 17,532 | 9,659 |  | 27, 191 |
| 500 | Danville |  | 11,596 |  |  | 41,594 |
| 501 | Dubois |  | 12, 641 |  |  | 23, 818 |
| 50: | Dunmore |  | 22,850 |  |  | 49,875 |
| 503 | Easton. |  | 44, 606 | 25, 367 |  | 70, 945 |
| 504 | Erie | 41,777 | 86,687 | 73, 718 | 495 | 202,677 |
| 505 | Greensburg |  | 17, 209 |  |  | 25, 855 |
| 506 | Harrisburg | 2,897 | 97, 111 | 64,049 |  | 164,056 |
| 507 | Hazleton | 1,210 | ${ }_{20}^{24,584}$ | 16,063 |  | 41, 857 |
| 508 519 | Homestead |  | 20,704 53,671 |  |  | 51,053 162,700 |
| 510 | Lancaster | 7,534 | 64,231 | 36,827 | (a) | 108,592 |
| 511 | Lebanon |  | 23,036 |  |  | 52,298 |
| 512 | Lockhaven | ${ }^{310}$ | 12, 731 | 8,377 |  | 21,418 |
| 513 514 | Mckeesport | 39,161 19,727 | 63,161 20,679 | 31,244 10,534 |  | $\begin{array}{r}136,567 \\ 51,340 \\ \hline\end{array}$ |
| 515 | Maduanoy City | 19,787 2,793 | 26,665 | 10,534 9,037 | 400 | -31,340 |
| 516 | Mount Carmel |  | 13,847 | 8,343 | 348 | 22, 538 |
| 517 | Nanticoke | 8,819 | 17,615 | 10,259 |  | 36,723 35,249 |
| 518 | New Brighton |  | 11,178 |  |  | 35,249 |

[^30]Table 13.-Statistics of expenditures of public schools of cities of over 8,000 inhabitants in 1898-99-Continued.


Table 13.-Statistics of expenditures of mublic schools of cities of over s,000 inhabitants in 1S9ீ-99-Continued.


* Statistics of 1897-93.


## CHAPTER XXXVII.

## INSTITUTIONS FOR HIGHER EDUCATION.

During the year 1898-99 the following-named institutions were reported as having suspended operations: Bailey Springs University, Bailey Springs, Ala.; Villa Ridge College for Young Ladies, Pewee Valley, Ky.; Stone College for Young Ladies, Meriaian, Miss.; Kansas City Ladies' College, Independence, Mo.; Fairfeld College, Fairfeld, Nebr.; Granville Female College, Granville, Ohio; and Duquesne College, Pittsburg, Pa. Six institutions were transferred to the list of secondary schools, one to the list of normal schools, and one to the list of commercial schools.

## CHANGES IN COURSES OF STUDY.

Arkadelphia (Ark.) Hethodist College.-Course of study has been raised one year.

Throop Polytechnic Institute, Pasadena, Cal.- Established department for training teachers of domestic science.
Seminary West of the Suncanee River, Tallahassee, Fla.-Standard has been raised two years; Greek and Latin required for A. B. degree; B. S. course added; requirements for entrance to college raised.

Georgia School of Technology, Atlanta, Ga.-Established a textile department for instruction in the manufacture of cotton goods.
Bowdon (Ga.) College.-Added a school of pedagogy.
Le Grange (Gc.) Female College.-A new course of stady leading to the B. I. degree.
Emory College, Oxford, Ga.-Established a department of pedagogy.
Armour Institute of Technology, Chicago, Ill.-A new course in civil engineering.
University of Notre Dame (Ind.).-Courses in history and economics, architecture, and journalism added.
Rose Polytechnic Institute, Terre Haute, Ind.-Organized a course in architectural engineering.
College of Emporia (Kinns.).-Ad̄ded a scientific course and a department of pedagogy.

University of Kansas, Lawrence. - A new four years' course in mining engineering.
Bethany College, Lindsborg, Kans.-College and normal courses accredited by State board of education.
Hope College, Holland, Mich.-Established a chair of́ pedagogy and will give a full course in this branch which will entitle students to a State certificate.
Newark (N. J.) Technical School.-Established a course in electroplating.
Irving Female College, Mechanicsburg, Pu.-A new course in sociology and economics.

Central High School, Philadelphia, Pa.-Established a department of commerce in September, 1898.

College of Charleston (S.C.)-Added department of history and economics
Irederichsburg (Va.) College.-Courses in history and English enlarged.

| Institutions. | Purpose. | Cost. |
| :---: | :---: | :---: |
| Spring Fill (Ala.) College | Gymnasium |  |
| Pomona College, Claremont, | Science | \$27,500 |
| College of Notre Dame, San Jose, Ca | Musi | 15, 000 |
| Leland Stanford Junior University |  | 150,000 |
| Columbian University, Washington, | La | 40,000 |
|  | Hospi | 10,000 |
| Atlanta (Ga.) Baptist College | Class rooms. | 7,500 |
| Atlanta (Ga.) University | Domestic economy | 8,009 |
| Georgia School of Technology, Atlanta | Textile. | 18,090 |
| North Georgia Agricultural College, Da | Dormitory | $\stackrel{2}{2}, 000$ |
| Do | Science and library | \%, ט, 0 |
| Mercer University, Macon, | Gymnasium ---- | ?, 000 |
| Emory College, Oxford, | Library | 25, 030 |
| University of Chicago | Dormito | 75,091 |
|  | Academy |  |
| Inlinois Female College, Jacksonville | General | 10,000 |
| St. Francis Solants College, Quincy, Il | -do | 25, 000 |
| Westfield (Ill.) College | do | 12,000 |
| Moores Hill (Ind.) College | Gymnasiam | 800 |
| University of Notre Dame |  |  |
|  | Two dormitories |  |
|  | Electrical engineering |  |
| Iowa College, Ctrinnell | Gymnasium | 16,000 |
| Morningside College, Sioux | Recitation hall and chapel. | 50, 000 |
| St. Mary's (Kans.) College | Dormitory and gymna- | 20,000 |
| Berea (Ky.) College | Biology | 4,500 |
| Central University, Richmond | Gymnasium | 5, 000 |
| Colby College, Waterville, Me | Chemistry | 30,000 |
| St. John's College, Annapolis. M | Library, et |  |
| Loyola, College, Baltimore, Md | General | 100,000 |
| Western Maryland College, Westm | Alumni hal | 30,000 |
| French American College, | Academy | 7,000 |
| University of Michisan | Dorminor | 32,600 |
| Unversity of mich | Library (adition) | 70, 000 |
| Mississippi College, Clinto | Cottage | 800 |
| Central College, Fayette, Mo | Dormitory | 30,000 |
| William Jewell College, Liberty, M | Power hous |  |
| Miorrisville (Mo.) College | General | 18,000 |
| Cottey College for Young Ladies, Ne |  | 4,500 |
| University of Montana |  | 100,000 |
| Dartmouth Coilege, Hanov | Heating | 50,000 |
|  | Physics | 70,000 |
| St. Bonaventure's College, Allegany, N. Y | General | 60,000 |
| Niagaia University (N. |  | 6ii, 0100 |
| Syracuse (N, Y.) University | Plysics | 50,000 |
| Davidson (N. C.) Colleg | Chemistry | 8,000 |
| University of North | Heating plant | 13, 000 |
| Do | Dormitory | 20,000 |
| University of | Biology and physics | (in), 000 |
|  | Library | 60,000 |
| Western Reserye University | Biology | 40, 000 |
| Do | Library (wings) | 25,000 |
| Muskingum College, New Co | General | 14,500 |
| Do | Gymnasi | 4,500 |
| Miami University, Oxfo | General | 35,000 |
| University of Oregon Philomath | Science | 20,000 |
| Philomath (Oreg.) College -....-... | Normal | 500 |
| Lebanoil Valley College, Annville, | Music |  |
| Geneva College, Beaver Falls, Pa | Scienco | 8,500 |
| Wilson College, Chambersburg, | Laboratory | 15,000 |
| Haverford College (Pa.) | Library (addition) | 20,000 |
| Ershine College, Due West. S. | Dormitory | 7,500 |
| Clafin University, Orangeburg, | Library | 8,000 |
|  | Industrial | 500 |
| Do | General | 10,000 |
| Converse College, Spartanburg is. |  | 15, 000 |
| Southwestern Presbyterian University, Cl |  | 11,000 |
| Knoxvilie (Tenn.) College | Barn | 600 |
| Maryville (Tenn.) College | Scienc | 11,168 |
| Southwestern University, Galveston. Tex | General | 60,000 |
| San Antonio (Tex.) Female College |  | 14, 046 |
| Washington and Lee University, Lexingt | Law | 25,000 |
| Marion (Va.) Female College | Dormito | 1.000 |
| Richmond (Va.) College |  | 20,600 |
| University of Wash | Laboratory | 25, 000 |
| Whitman College, Walla W | Two dormito |  |
| Do | Dormitory | 28.009 |
| Lawrenco University, Appleton, | Science | 42, 000 |

THE DEGREE OF ASSOCIATE.
During the year 1898-99 the trustees of the University of Chicago voted to confer the title or degree of Associate upon those students who finish the work of the junior colleges (freshmen and sophomore years). The reasons which led to this action are stated as follows in the president's report for 1898-99:

From the point of view of the student, the following considerations have had influence in determining this action: (1) The fact, very generally recognized, that no important step is taken at the end of the preparatory course. The work of the freshman and sophomore years in most colleges differs little in content and in method from that of the last year of the academy or high school. except that it is somewhat more advanced; but, on the other hand, (2) at the end of the sophomore year a most important change occurs according to the organization of the larger number of institutions, for it is at this point that the student is given larger liberty of choice, and at the same time higher methods of instruction are employed. For the last two years of college work the university spirit and the miversity method prevail. A new era in the work of the student has berun. (3) It is evident that many students continue work in the junior and senior years of college life whose best interests would have been served by withdrawal from college. Many continue to the end, not from choice, Dut rather from compulsion, because of the disgrace which may attend an unfinished course. If it were regarded as respectable to stop at the close of the sophomore year, many would avail themselves of the opportunity. (4) Many students who might be courageons enough to undertake a two years college course are not able, for lack of funds or for other reasons, to see their way clear to enter upon a four years' course. Many, still further, feel that if a professional course is to be taken, there is not time for a four years' college course. It is for this reason that, in part, our professional schools are made up so largely of noncollege students. If a situdent who had in view ultimately the medical or legal or pedagogical profession could make provisions to finish a course of study at the end of civo years, he would be much more likely to undertake such a course than the longer four years' course. (5) On the other hand, many students who are thus led to take a two years' course would be induced at the end of that time to continue to the end of the fourth year, and in this way many students of the very highest character, at all events, would bo enabled to take the entire college course by whom, undtr the present arrangements, such a course would be regarded as impracticable.

From the point of view of the student the following points have been considered: (1) Many academies are able to do, at least in part, the work of the freshman and sophomore years. The high schools in some States are ready to do such work, and in at least one State the university of the State recognizes the work of the freshman year when performed in approyed high schools. (2) It can not be denied that, until young men or young women have shown some maturity of character it is wise that they should not be sent very far dway from home. If, now, the academies and high schools could so perfect their work that freshman and sophomore courses might be offered. many young people would be enabled to pursue their edncation at least to this higher point. (3) A large number of so-called colleges, which have not sufficient endowment to enable them properly to do the work of the junior and senior years, should limit their work to that of the fieshman and sonhomore years. In many cases the offcers of these colleges recognize most keenly that they are not doing justice to tho students in the higher classes. In reality they are defrauding the students who pay their fees in lower classes in order to obtain a meager sum of money with which to provide an entirely inade uate course of instruction for the higher class of men. These institutions, in many cases, would be disposed to limit their work to the lower field if it were made possible for them to do so. They find it necessary, however, to give a degree. lif they could follow the example of a large institution and give an appropriate recognition of the work of the lower years, they would be ready to adopt such an arrangement. (4) It is a general law of educational work that in seeking a college students rarely go farther away from home than 100 miles. Ninety per cent of all the students in American colleges are to be found in colleges which are within 100 miles of bome. If a fair proportion of these institutions were to limit themselves to the work of the freshman and sophomore years, at the end of this time the students who had finished this work and desired to continue would be compelled to go away from home to some distant institution, perhaps a large university, in which library and laboratory facilities might be found, which would make possible the doing of good work. If, on the one hand, the academies and high schools were elevated, and if, on the other hand, the scope of work done by many
colleges were limited and, as a result, institutions dereloped which would do that work thoroughly, there would come to be a recognized distinction between college and university which does not now exist.

In order, therefore, to encourage a movement in the direction thus mentioned, the proposed degree has been established. It is believed that the results will be fivefold: (1) Many students will find it convenient to give up college work at the end of tho sophomore year; (2) many students who would not otherwise do so will undertake at least two years of college work; (3) the professional schools will be able to raise their standards for admission, and in any case many who desire a professional education will take the first two years of the college work; (4) many academies and high schools will be encouraged to develop higher work; (5) many colleges which have not the means to do the work of the junior and senior years will be satisfied under this arrangement to do the lower work.

## RATIO OF STUDENTS TO POPULATION, 18\%2-1859.

The following tabular statement, giving the number of students in higher education to each 1,000,000 persons in the United States from 1872 to 1890 , shows a very substantial increase for each class of students represented. As would naturally be expected, by far the greatest increase is shown in the column devoted to graduate students, the ratio having increased from 5 students in 18.2 to 74 in 1809. The first column of students inciudes all undergraduate, collegiaie, and technical students in universities and colleges for men and for both sexes, in colleges for women, Division A, and in schoo's of technology:

Nimber of students in higher education to each 1,000,000 persons from 1872 to 1895-99 (based on the mumber of students in the colleges of the United States).

| Year. | Under-graduate collegiate and technical stu dents. | Graduate stidents. | Law students. | Medical students. | Theological students. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18:2 | $5 \% 3$ | 5 | 49 | 142 | 83 | 85 |
| $18 \% 3$ | 739 | 5 | 52 | 176 | 93 | 1,065 |
| 1874 | 749 | $\tau$ | 61 | 182 | 102 | 1,101 |
| $18 \% 5$ | 736 | 8 | 61 | 196 | 120 | 1,121 |
| 1876 | 700 | 9 | 59 | 194 | 93 | 1,063 |
| 1877 | 701 | 8 | 61 | 209 | 86 | 1,065 |
| 1878 | 781 | 9 | 64 | 210 | 91 | 1,155 |
| $18 \%$ | 775 | 10 | $6{ }^{2}$ | 231 | 97 | 1,175 |
| 1880 | 770 | 8 | 62 | 238 | 105 | 1,183 |
| 1881 -- | 765 | 9 | 63 | 242 | 93 | 1,162 |
| 1882-83 | 51 | 10 | 57 | 237 | 92 | 1,127 |
| 1883-84 | 741 | 14 | 49 | 230 | 93 | 1,130 |
| 1884-85 | 742 | 15 | 49 | 197 | 103 | 1,108 |
| 1883-86 | 687 | 16 | 53 | 221 | 110 | 1,087 |
| 18858\% | 690 | 21. | 54 | 208 | 107 | 1,080 |
| 188\%-88 | 688 | 22 | 61 | 231 | 109 | 1,111 |
| 1838-89 | 729 | 22 | 64 | 245 | 114 | 1,174 |
| 1889-90 | 850 | 27 | \% | 206 | 112 | 1,327 |
| 1899-91 | 901 | 33 | 82 | 284 | 115 | 1,415 |
| 1891-92 | 980 | 39 | 94 | 281 | 115 | 1,51\% |
| 1892-93 | 1,035 | 43 | 105 | 238 | 118 | 1,601 |
| 1893-04 | 1,087 | 51 | 107 | 320 | 113 | 1,6\%8 |
| 1891-95 | 1,128 | 58 | 130 | 331 | 116 | 1,763 |
| 1895-93 | 1,158 | 62 | 139 | 346 | 114 | 1,819 |
| 1896-9\% | 1,142 | 69 | 146 | 342 | 115 | 1,814 |
| 1897~9 | 1.193 | \% | 163 | 328 | $11 \%$ | 1,875 |
| 1898-99 | 1,136 | 4 | 163 | 327 | 114 | 1,8\%4 |

STATISTICAL REVIEW, 1898-99.
Students.--The total number of stadents reported in collegiate, graduate, and professional departments of institutions for higher education and in professional schools for the year 1898-99 was $14 \pi, 164$, of which number 43,913 were enrolled as profess:onal students in law, medicine, and theology, leaving 103,251 students reported as pursuing studies in the liveral arts and applied science. The classifi-
cation of students according to the courses of study pursued is not given by all of the institutions reporting to this office. The number of undergraduates pursuing various courses, so far as reported, is as follows:
Classical courses ..... 35, 595
Other general culture courses ..... 21, 860
General science courses ..... 9, 858
Agriculture ..... 2,593
Mechanical engineering ..... 4, 376
Civil engineering ..... 2,550
Electrical engineering ..... 2,320
Mining engineering: ..... 1,032
Architecture ..... $62 \%$
Pedagogy ..... 9, 501
Business ..... 6, 698

Degrees. - The number of degrees conferred during the year was as follows:
Degrees conferved for work done.

| Degrees. | $\begin{gathered} \text { On } \\ \text { men. } \end{gathered}$ | $\left\lvert\, \begin{gathered} \text { On } \\ \text { women } \end{gathered}\right.$ | Degrees. | On men. | $\begin{gathered} \text { On } \\ \text { women } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A. B. | 4,910 | 1,950 | E. E | 58 | 0 |
| ${ }^{\text {B }}$, ${ }^{\text {S }}$ | 2, 410 | 500 | Mis. | 16 | 19 |
| ${ }^{\mathrm{Ph}} . \mathrm{B}$ | 857 <br> 808 | 445 | Min. ${ }_{\text {M }}$ | 57 | ${ }_{8}$ |
| B. C. ${ }^{\text {E }}$ | 20 | 0 | Ph. M | 16 | 10 |
| B. N. E. | 39 | 0 | Mus. M. | 1 | 3 |
| B. E. E- | 11 | 0 | Met. E . | 1 | 0 |
| B. E | 26 | 0 | MI. C. E- | 2 | 0 |
| B. Arch | 8 | 0 | M.M.E. | 7 |  |
| B. Agr | 49 | 5 | A. C | 10 | 0 |
| Mus. B | 10 | 174 | Ped. D | 4 | 1 |
| B. Ped | 30 | 45 | Ph. ${ }^{\text {d }}$ | 299 | 26 |
| B. 0 | 6 | 1 | Sc. D | 6 |  |
| B.F. A. | 2 | 0 | B. L. S | 0 |  |
| B. Paint | 1 | 23 | B. H. ${ }^{\text {S }}$ | 0 | 17 |
| B. E. M | 1 | 10 | L. A | 0 | 1 |
| A. M | 1,046 | 197 | L.S. | 0 | 1 |
| M. | 178 | 30 | Mus. D | 0 | 1 |
| $\mathrm{C} . \mathrm{E}$ | 1810 | 0 | Total | 10,794 | 4,293 |

Honorary degrees conferred.

| Degrees. | Number. | Degrees. | Number. |
| :---: | :---: | :---: | :---: |
| D. D. | 308 | A. B. | 7 |
| LL. D | 169 | B. $\mathrm{S}_{-}$ |  |
| S. T. ${ }^{\text {P }}$ | 14 | M. M. ${ }^{\text {S }}$ |  |
| D. C. L. | 4 | LL. ${ }^{\text {B }}$------ |  |
| L. H. D-- | 10 | B. $1 .-\ldots$ |  |
| Litt. D. | 10 | M. D ...... | 2 |
| Sc. D | 7 | E. E. | ${ }_{2}$ |
| A. M. | 157 | M. E. Agr. | 1 |
| M. S | 15 |  |  |
| M. L | 1 | Total | 735 |
| Phar. D. | 2 |  |  |

Property. -The total value of property possessed by institutions for higher education amounts to $\$ 342,888,361$, a gain of about $\$ 31,000,000$ over the amount for 1897-98. The ondowment funds amount to $\$ 154,120,590$, and the remainder represents the value of grounds, buildings, machinery, apparatus, libraries, etc., used for instruction and research.

Income. -The total income for the year, excluding benefactions. amounted to $\$ 2 \pi, 739,154$, derived from the following sources:
Tuition and other fees. $\$ 10,924,415$

Endowment funds..................................................................................... 6,673,389
State and municipal appropriations .................................................... 4, 287,102
United States Government ....................................................................... 3, 276,781

Total income....................................................................... $27,739,154$
Benefactions.-The value of gifts and bequests reported as having been received during the year amounts to $\$ 21,925,436$. The amounts reported by some of the institutions are as follows:

| niversity of California | \$75\%,000 |
| :---: | :---: |
| Leland Stanford Junior University | 11,000,000 |
| University of Chicago | 786, 624 |
| Harvard University | 1,544, 330 |
| Columbia University | 518, 667 |
| University of Pennsylvania. | 510, 658 |
| Armour Institute of Technology | 750, 000 |

## REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PAILOSOPHY.

According to the reports for the scholastic year $1898-99$ received from the universities and colleges of the United States, the degree of doctor of philosophy was conferred during the year on 336 persons. Of this number 325 persons were granted the degree for work done under the direction of the several institutions, and the honorary degree was conferred on 11 persons. The institutions that conferred the Ph. D. degree during the year, together with the number of men and women upon whom the degree was conferred, as reported to this office, are as follows:

Ph. D. degree conferred in 1598-99 on examination.

| Institutions. | $\begin{gathered} \text { On } \\ \text { men. } \end{gathered}$ | On women. |
| :---: | :---: | :---: |
| Univergity of California | 2 | 1 |
| University of Colorado.. | 2 | 0 |
| Tale Uuiversity .-. .-. - | 28 | 2 |
| Georgetown University, Washington, D. C | 5 | 0 |
| Illinois Westeyan University -----------. -- | 11 | 0 |
| University of Chicago | $\because 3$ | 8 |
| Northwestern University, Evanston, Ill | 1 | 0 |
| Nickendree College, Lebanon, Ill ........ | 4 | 0 |
| Wheaton (Ill.) College | 1 | 0 |
| Taylor University, Upland, Ind | 14 | 0 |
| Highland (Kans.) University ... | 1 | 0 |
| University of Kansas ---.-. - | 1 | 0 |
| Kansas Wesleyan University, Ealina, Kans | 3 | 0 |
| Johns Hopkius University --..---.-.-.----- | 42 | 0 |
| Loyola College, Baltimore, Md | 1 | 0 |
| New Windsor (Ma.) College... | 1 | 0 |
| Boston University | 7 | 0 |
| Harvard University | 23 | 0 |
| Clark University | 4 | 0 |
| University of Firichigan. | 3 | 1 |
| University of Mmnesota | 1 | 2 |
| University of tho State of Missomri | 1 | 0 |
| Westminster College (Mo.) | 1 | 0 |
| Washington University ... | 2 | 0 |
| Univel'sity of Omaha - | 1 | 0 |
| University of Nebraska .-. - | 1 | 0 |
| St. Peter`s College, Jersey City, N. | 1 | 0 |
| Princeton University ------ -- -- | 2 | 0 |
| Cornoil University - | 5 | 2 |
| Columbia University | 32 | 2 |
| New York University | \% | 1 |
| Syracuse University.. | 1 | 0 |

Ph. D. degree conferred in 1898-93 on examination-Continued.


Honorary Pl. D. degree conferred in 1898-92.
Hanover (Ind.) College....... .......................................................................... 1

Kansas Wesleyan Universify, Salina, Kans ...........................................-. .-. 1




The 325 degrees conferred for work done were granted by 48 different institutions in 21 States. A number of the institutions included in the foregoing list and conferring the Ph. D. degree do not provide instruction leading to that degree, but allow students to pursue the prescribed courses in absentia and to pass examinations at their homes under the supervision of a sentinel. With the exception of the institations offering nonresident courses of stady the general requirements for the Ph. D. degree may be stated as follows:

1. The candidate must have a bachelor's degree from a reputable college or uni. versity or must show that he has pursued a course of study equivalent to that for which the bache?or's degree is conferred. Each institution determines for itself as to the fitness of the candidate to become an applicant for the degree.
2. A knowledge of Erench and German sufficient for purposes of investigation. A reading knowledge of these language is generally deemed to meet the requirements.
3. The pursuit of advanced study and research at some acceptable institution for not less than two years (in most cases not less than three years), the last of which must be spent in residence at the institution by which the degree is to be conferred.
4. The stradies pursued must consist of one major or principal subject and, as a rule, two minor or subsidiary subjects.
5. A thesis upon some approved subject connected with the major or principal subject, which must give evidence of the candidates ability to do original work, must be a contribution to human knowledge and must be accepted by the faculty. Some of the institutions require the thesis to be printed (or its printing guaranteed) before the degree can be conferred.
6. Examinations in all the studies nursued by the candidate.
\%. The degree is given not for the mere reason of faithful study for a prescribed time or in fulfilment of a determinate programme, nor for miscellaneous studies,
but on the ground of long study and high attainment in a special branch of learning.

While the foregoing may be stated as the general requirements for the Ph. D. degree, there are, of course, some exceptions thereto. In the following pages are given the requirements (omitting minor details) for the degree as shown by the całalogues of re institutions. The requirements are not given in as detailed form as they appear in the catalogues, but have been condensed as much as possibie.

Thiversity of California, Berkeley, Cal.-A candidate for the degree of doctor of philosopliy must hold a bachelor's degree from one of the colleges of general culture of this university, or must have pursued successfully a course of study equivalent to that represented by such a degree. A knowledge of Latin equal to that admitting to the college of letters of this university, and a reading knowledge of Frencle and German will be insisted on in all cases. A course of study must be selected by the applicant and approved by the graduate council, embracing one principal and two subsidiary subjects, and extending over a period of at least three years, one of which ordinarily must be spent in continuous residence at this unirersity; but in cases where continuous residence is impossible, the course of study must be extended to four years, and the separate periods of residence must together amount to three academic half years. A thesis bearing on the principal subject of the course, and of such a character as to show power to prosecute indenendent investigation, must be presented to the graduate council for approval at least three months previous to the final examination for the degree. Special emphasis will be laid upon this last requirement, and the degree will in no case be given merely for the faithful completion of a course of study however extensive.

The division of time, study, and research among the principal and subsidiary subjects must be approved by the subcommittee in charge of the student; but, ordinarily, at least a fourth of the candidate's work should be given to each one of the subsidiary subjects.

Erery candidate must present a detailed written report, signed by the instructors, of the studies actually pursued during the year, and mast furnish evidence that the woris has been of proper quality and scope.

The degree will not be conferred until the candidate has passed before the subcommittee in charge a special examination, public and oral, upon the studies pursued, and thereby shown distinguished attainments in the principal subject.

One hundred and fifty copies of each accepted thesis must be deposited in the university library. (Register, 1898-99.)

Leland Stanford Junior University, Stanford University, Cal.-The degree of doctor of philosophy is conferred upon graduates of this university, and upon others who have had an equivalent training elsewhere, on the satisfactory completion of at least three jears of graduate work beyond the baccalaureate requirements of the department in which the degree is sought, under the following conditions:

The degree is given only on the ground of advanced scholarship and the ability to do indenendent work in some special line, and not for merely faithful study for a prescribed time or course, nor for miscellaneous study. Three years represent the minimum time in which the degree can be obtained, and often a longer period of study will be necessary.

Graduato work done elsewhere may be accepted in place of resident study in this university; but in no case will private study without sufficient guidance, or pursued at a distance from libraries or laboratories or other necessary facilities, be accepted as an equivalent, and no degree will be granted to any person who has not spent at least the last year of such study in residence at this university.

The course of study shall cmbrace one major subject and one or two minors in related departments. The minorsubject or subjects shall represent approximately one-third of the course of study, except that such minor subjects may be waived on the recommendation of the department in which the major subject is taken and with the approval of the iaculty, whenever the general preparation or special needs of the candidate make such a course seem desirable.

The candidate must present a thesis of such a character as shall display power of original andindependent investigation and constitute an actual contribution to Fnowledge. He must guarantee the printing of the thesis within one year after the degree is conferred, and must deposit 100 copies in the university library.

The candidate must sustain such final examinations in major and minor subjects as may be prescribed by the departments in which studies are taken, and also shall
submit to such test or examinations as may be required by the special committeo of the faculty.

In addition to the foregoing conditions, the special committee of the faculty will, in general, insist upon the following conditions: (a) That all candidates be required to show a reading knowledge of French and German; (b) that, whenever practicable, the departmental examinaticns, in both major and minor subjects, be written, the papers of candidates to be submitted to the special committee prior to the day fixed for the final test before that committee; (c) that examinations in minors be held not earlier than the second semester before the time named for conferring the degree. (Register, 1898-99.)

University of Colorado, Boulder, Colo.-For the degree of doctor of philosophy the work assigned shall be estimated at the rate of at least 12 full courses of university work or the equivalent, of which 5 full courses or the equivalent shall be devoted to the major subject, and the remaining 6 courses shall be divided equally between the 2 minor subjects. Additional work may le assigned when lack of previous preparation in any selected subject is indicated.

Tho criterion of merit is the thesis, which must embody the results of original investigation. The degree is not conferred for mere faithfulness in the acquisition of knowledge; there must also be the power of scientific production. Hence the doctor's dissertation is to be a new contribution to some field of knowledge, and in general will require about one year in the preparation. The thesis must be approved before the final examination is taken. If the candidate shall have sustained himself in his examinations, the dissertation shall le printed by the candidate, and 150 copies shall be delivered to the university library.

The minimum time of resident study for the doctor's degree is three years. Candidates must give evidezce oî a readng knowledge of French and German. (Catalogue, 1898-99.)

University of Denver, Úniversity Park, Colo. - At least one year's actual attendance at the university will be required of candidates for the degree of doctor of philosophy. The rest of the work may be done in absentia. A satisfactory thesis is required from each candidate. (Yearbook, 189\%-98.)

Yale University, New Haven, Comn.-Graduates of this and other colleges and universities and (in exceptional cases by special permission) other persons of liberal education, who are at least 18 years old, are received as students. The degree of doctor of philosophy is conferred upon those students who show the results of resident graduate work by a thesis giving evidence of high attainment and power of investigation, and by an examination on studies whose grade and amount meet the approval of the faculty. Under ordinary circumstances two or more years' work in residence will be required, but in exceptional cases work of equal grade at another university may take the place of a year's residence here. The thesis must be deposited at the library for public inspection not later than May 1. A good knowledge of Latin, German, and French is required in all cases, unless, for some very exceptional reasons, the candidate be excused by the fiaculty. (Catalogue, 1899-1900.)

Catholic University of America, Washington, D.C.-Candidates must-

1. Spend at least three years in resident study subsequent to taking the baccalaureate degree.
2. Fulfill the requirements in a major subject and in two subordinate subjects.
3. Present a dissertation embodying the results of an original investigation.
4. Pass written and oral examinations in his major and minor subjects.
5. Make formal application for the degree at least one academic year in advance of the date at which they expect to present themselves for examination and must, at the time of making such application, prove their ability to read French and German. (Year'book, 1899-1900.)

Colzmbian University, Washington, D. C.-Persons holding the degree of MI.S., M. A., or their equivalent from institutions of repute are qualifed to offer themselves as candidates for the degree of doctor of philosophy. Candidates shall offer themselves in three topics for adyanced study-one major and two collateral minor subjects. Before being admitted as candidates they shall pass satisfactory examinations in French and German.

To be eligible for the degree candidates who hold masters degrees shall pass two years in the study at this aniversity of their major topic and one year in the study of each minor topic; they shall sustain satisfactory examinations upon the three subjects which they may have elected and they shall present theses, accompanied with an exhaustive bibliography, embodying the results of original
research in their major subject, which theses they shall bo prepared to defend before a board of experts. (Catalogne, 1898-99.)

Georgetown University, Washington, D.C.-For the degree of doctor of philosophy two years of residence and application to selected and duly authorized graduate courses are required. The candidate must pass a final examination, present a thesis bearing upon his special department of study, and convince the committee appointed by the faculty of his distinguished merit to receive this degree. (Catalogue, 1898-99.)

Hedding College, Abingdon, Ill.-No one wiil be admitted to the Ph. D. course who has not received the degree of A. B., B. L., B.S., or Ph. B. from Hedding College or some institution requiring equal work for the bachelors dogree. A candidate may pursue 6 units from one course, or lie may select, subject to approval, 3 units from each of two courses, or 3 units from one course, 2 from a second, and 1 from a third course. The thesis must be based on the subject from which at least 3 units are selected. One year's residence is required. The rest of the time may be spent in study in absentia. To meet the requirement of residence the candidate must arrange to visit the college at least one day of each week for class work under the personal supervision of the head of the department in which 1 unit of his work lies, and he must complete during the year the work of that unit. Candidates for the master's and doctor's degrees will present a thesis of 5,000 words for each degree. The candidate for the dostor's degree who does not take the master"s degree must present the first thesis on completion of his third unit. Examinations may be taken in absentia under the supervision of a sentinel nominated by the candidate. No person will be permitted to receive the degree until at least three years after matriculation, unless liaving credits for work done in residence here or elsewhere, and at each examination occurring during this period (twice a year) a portion of the studies must be taken. (Announcement of the graduate and nonresident courses, December, 1898.)

Illinois Wesleyan University, Bloomington, Ill.-Offers nonresident courses leading to the Ph. D. degree. Candidates must have received the degree of A. B., B. L., B. S., or Ph. B. from this university or some institution requiring equal work for the bachelors degree. Applications of persons with other degrees will be specially considered. The candidate may select 6 units from one course, or, with the approval of the head of the department, 4 units from one coarse and 2 from another. The course from which the 4 units have been chosen shall constitute his major study, and his thesismust be prepared on a subject connected with this. The thesis must contain notless than 5,000 words and must show originality, careful research, and good literary taste in composition and arrangement. Examinations are held twice a year under the supervision of sentinels nominated by the candidates. The final examinations are held at the university, the oral in the presence of the faculty. The degree will not be conferred until at least three years after matriculation, unless having credits for graduate work done in residence liere or elsewhere, and at each examination occurring during this period a portion of the studies must be taken. (Announcement of the Graduate and Nonresident Department, 1898.)

University of Illinois, Champaign, Ill. -The degree of doctor of philosophy, or doctor of science, may be conferred upon any member of the gracuate school of not less than three years'standing who shall have reached high attainments in scholarship, including a sufficient knowledge of the Latin, French, and German languages to serve the purposes of research in his principal specialty, who shall have shown marked ability in some line of literary or scientific investigation, and shall have presented a thesis giving clear indications of such seholarship and of such power of research. At least the first two, or the last one, of the three years of study must be in residence at the university, and the entire course of study must be in accordance with the regulations of the graduate school.

The time and study required for a master's degree may be included in the three years required, but approval of a course of study for a doctor's degree must be upon the condition that the candidate is prepared, through his baccalaureate work or other wise, to enter at once upon advanced studies in the line of this major subject, and that worik on this major subject be continued through the three years.

The final examination covers the subjects of the course approved for the degree, but is specially searching upon that on which the major work has been done. If the thesis is approved, the candidate must have it printed and must deposit not less than 100 copies with the librarian of the university. (Catalogue, 1838-99.)

University of Chicago, Chicago, Ill.-Any member of the graduate schools who has been in attendance one quarter or more, whose undergraduate course is equivalent
to that required for a bachelor's degree in the University of Chicago, whose thesis subject has been accepted by the principal deparment, and who has a reading knowledge of French and German (which must be certified by the heads of those departments), may, on recommendation by the principal department in which he wishes to work, be enrolled, by vote of the faculties of the graduate schools, as a candidate for the doctors degree.
Students thus accepted as candidates will be given the doctor's degree on the fulfillment of the following requirements: (a) At least three years of resident study at the university in pursuance of an accepted course of study; (b) a satisfactory final examination upon the work done in preparation for the degree; (c) the presentation of a satisfactory printed thesis upon a subject which has been approved by the head of the department in which the principal part of the candidate's work has been done; (d) a good command of literary expression and such knowledge of stibjects considered fundamental as may be prescribed by the several departments; (e) candidates for the degree of doctor of philosophy may not take more than two-thirds of their work in one department, and may not take work which is to comet toward the degree in more than three departments.

Graduate work done in another university will be accepted as resident work in the University of Chicago, provided that (a) the institution in which the worl was done is of high standing, and (b) sufficient evidence is furnished that the particular work was satisfactorily performed. Work done in other universities will not ordinarily count for more than one and one-half years of resident work in the miversity; but the degree of doctor of philosophy may in exceptional cases be granted after one year of residence.
From candidates for a doctor's degree the university accepts substitutes to a limited extent for the specified work required for the bachelor's degree in the university.
In the graduate schools of the university nonresident work may be substituted for resident work under the following conditions: (a) The nonresident student is expected to matriculate at the university and to spend the first year of the time required for the degree in residence, unless he is able to satisfy the head of the department in which his principal work is to be done that he can do the introductory work in a satisfactory manner when not in attendance; (b) the nonresident work shall be performed under the general direction of the head of the department: (c) the final examination in all work leading to the degree shall be passed at the university; (d) nonresident work will be accepted for only one-third of the work required for a degree; (e) a much longer period of time is usually required to accomplish a given amount of work when a student is not in residence than when in residence. (Register, 1898-99.)
Northwestern University, Evanston, Tll.-Whe degree of doctor of philosophy will be conferred under the following conditions:

1. The candidate must have received the bachelor"s degree from this institution or from some other of accepted standing.
2. The degree may be conferred on successiful candidates after three years of graduate study, of which at least two must be in residence. The last year or the first two years of the three required mast be spent in residence at this university. The period of three years may, however, be shortened in the case of students who, as undergraduates, have pursued special stadies beyond the requirement for major work in the direction of their proposed graduate work. Study for any speci色ed time will not be regarded as sufficient ground for conferring the degree. High attainments in scholarship and evidence of original investigation will be expected.
3. Two thirds of the candidate's time must be given to advanced work in some one department which shall constitute his primary subject. The remaining time must be given to either one or two secondary subjects. The requirement, "advanced work," will imply an amount of preliminary study in the given subject equivalent to at least the undergraduate "major work" of the department concerned.
A reading knowledge of French and German, as a preliminary qualification, will be required of all candidates. In exceptional cases an equivalent in Latin, Greek, or Hebrew may be accepted instead of French.
4. Every candidate must present a thesis upon an approved topic pertaining to his primary subject. The thesis must give evidence of original investigation. If the thesis is approved, the candidate must, within such time as shall be designated, present 25 printed copies of the thesis to the university library. The final examination will be both written and oral and will cover the entire primary subject, including the topic of the thesis.

Each branch of the secondary subject may be completed whenever the candidate shall pass a satisfactory written examination upon it.

The iollowing joint requirements have been made by the College of Liberal Arts and Garrett Biblical Institute for the attainment of the degree of doctor of philosophy by students in theology:

1. The candidate for the degree of Ph. D. must have completed a bachelor"s course, the sufficiency of which has been accepted by a joint committee of the faculty of the institute and the faculty of liberal arts.
2. He must have completed two full years of theological study, either in the Garrett Biblical Institute or in another theological school of recognized high standing.
3. He must be accepted as a candidate for the degree of Ph. D. by a vote of the faculty of the institute and be registered as a candidate for such degree with the registrar of the College of Lileial Arta, after which he must continue in residence at least two years and complete the work of two full years. Of this work two-thirds must be taken in one department of the institute-the department in which the candidate does his primary work. The remaining third may be taken in not more than two departments of the institate or of the graduate school of the College of Liberal Arts. The whole course of study selected will be subject to the approval of the faculty of liberal arts, through its committee on gradwate study. During the two years of his residence the candidate will be subject to the direction of the head of the department in which his nrimary work is taken.

Of the four years required as a minimum for the degree of Ph. D., three at least must be spent in residence at a theological school of high standing and the Iast two at Garrett Biblical Institute.
4. A reading knowledge of French and German, as a preliminary qualification, will be required of all candidates. In exceptional cases a reading mowledge of Latin, Hebrew, or Greek may be accepted in lieu of French, at the option of the faculty of liberal arts.
5. Each candidate must present a thesis prepared by him upon some topic related to his primary subject. The thesis must give evidence of original investigation. A year prior to the final examination the subject of the thesis must je approved by the professor under whom the primary work is performed and thiee months before the final examination it must be submitted to him for criticism. If the thesis is approved, the candidate must, within a time designated, present 25 printed copies to the university library.
6. The final examination will be both written and oral, and will cover the entire primary sabject, including the topic of the thesis. Fach branch of the secondary subject may bo completed whenever the candidate shall pass a satisfactory written examination upou it.
\%. The College of Libaral Arts shall always be represented on the committees for examining theses and candidates.
8. Graduate students in the College of Liberal Aris wili be admitted to the graduate courses in Garrett Biblical Institute free of charge for trition or incidentals. (Catalogne, 1893-99.)

Norithern Illinois College, Fulton, Ill.-Nonresident graduate courses leading to the degree of doctor of philosophy are offered to persons who can furnish satisfactory evidence of having completed a regular college course or its equivalent in some approved institution of learning. Unpon the successful completion of the course, a thesis upon some subject bearing upon some branch of the work and approved by the facuity, containing at least 5,000 words, will be required, and upon proving satisfactory the degree will be duly granted. The examinations may take place where the student resides or he may come to the college. If taken at home the examination is taken in the presence of an examiner chosen by the student. The papers are examined at the college. No time is set for the completion of the course. (Catalogue, 189\%-98.)

Lake Forest University, Lake Forest, Ill. -The degree of dontor of philosophy is open to graduates of colleges of good standing, and also to those who can give proof that their attainments are equal to those of graduates of Lake Forest College. A reading knowledge of French and German is also required. Every candidate should choose a principal subject, and also, in conference with the protessor in charge of the chosen subject, two subordinate subjects. The work mustextend over at least three years, which must be spent at the university. Graduate work done in other universities may be accepted as meating the requirements in part; and, provided the faculty be satisfied that the candidate possesses the necessary facilities for independent research, a course of nonresident study extending over a period of not less than two years may be substituted for one year in residence. Yet in all cases two years at least must bo spent in this university. The place of examinations will in all cases be Lake Forest; their number and mode will be determined by the professor in charge. The final examination, which is designed to cover the main topics of the whole course of study, will be conducted in pres-
ence of the faculty by a committee of the same. Before the final examination the candidate must present a thesis, either type written or printed, to be approved by a committee of the faculty, and before the diploma is granted 50 printed copies of the thesis shall be put at the disposal of the faculty. As the object of the whole course is the higher intellectrual development, no candidate can be success?ul who does not show power of original investigation. (Catalograe, 1838-99.)

Mckendree College, Lebanon, Ill.-Students doing graduate work leading to the master's degree, as also that of doctor of philosophy, musi hold bachelor's degrees from this institution or some other whose courses of study are equivalent to thoso of McKendree Coilege. A master's degree, corresponding to the bachelor"s degros held by any candidate, will be conferred upon the sutudent who successfally pursues the required course of study for one year, and presents a छatisfactory thesis of not less than 4,000 words upon some fibting and accepted theme.

Those pursuing the course an additional year, upon passing the required examinations and presenting theses which must give evidence of independent research in like manner as required for first year, if they show a sufficiently high degree of scholarly attainment, may receive the degree of doctor of philosophy. It is to be understood that the degree is not given for the mere reason of faithful study for a preacriked ine, or on completion of any given course of study, but on the ground of loog study and high attainments in a special branch of learning. All candidates for degres must stand personal examination at the seat of the institution, where they shall spend not less than three months of the year prior to graduation in resident study. (Catalogue, 1898-99.)

Indiana University, Bloomington, Ind.-The degree of doctor of philosophy may be conferred upon graduates of this university, or of any institution of similar character and rank, upon the completion of an advanced course of study of not less than three years, at least one of which must be spent in residence at this university. If the candidate has talen his bachelor's degree in another institution, he must spend at least two years in graduate work at this university. In eithero case the remaining time may be spent in craduate work at any other university or universities acceptable to the committee on advanced degrees.

The course of study must be pursued under the direction of the committee on advanced degrees, and its value shall be determined by a final examination and by the presentation of a satisfactory thesis embodying original work upon some prescribed or accepted subject. In each case a detailed statement of the work done by the candidate is required. (Catalogue, 1893-99.)

Wabash College, Craufordsvitle, Ind.-The degree of doctor of philosophy may be conferred three years after graduation upon the aluman of any college who has previously taken the degree of A. B. or Ph. B., and who shall have devoted two of the years to study in this college under the care of the faculty, pursuing' at least two graduate courses of study, taking a prescribed comrse of special reading, and who shall present in print a thesis giving evidence of original research and high attainments. (Catalogrue, 1898-93.)

Hanover College, Hanover, Ind.-The degree or doctor of philosophy will be conferred upon teachers of known attainments and persons engwed in special scientific pursuits upon ascertained merits. At the same time, persons desiring to make application for the degree may do so, and if it is thoaght expedient, courses of study or theses leading to the degee will be assigned. (Catalogtie, 1898-93.)

Taylor University, Upland, Ind.-Offers nonresident courses of study leading to the Ph. D. degree. The degree is conferred at the end of the third year of study. Printed lists of examination papers are furnished, and the examinations must be conducted in the presence of some minister, teacher, or other person nominated by the strudent and approved by the faculty. The thesis required for the degree must contain not less than 5,000 words. (Special circular, 1899-1900.)

State University of Iowa, Inwa City, Iowa.--The degree of doctor of philosophy will be granted under the following conditions:

The candidate must have received the bacheloris degree either from this institution or from some other of equal rank; he must present evidence of having completed a satisfactory amount of undergraduato work in the subjects proposed for investigation for this degree; he must possess a knowledge of French and German at least sufficient for purposes of research.

At least three years of graduate study will ordinarily be required, of which two must be in residence and the last year prior to receiving the degree must be spent at this university. In making formal application for the degree the candidate shall select one major study and one or two minors; the minor study or studies
shall be closely aliied to the major and shall be such as with it to constitute but one single field of research. The application of the candidate, setting forth the line of research proposed, shall be approved and indorsed by the professor or professors under whose direction it is proposed to prosecute the work.

On completion of his work the candidate shall submit to the faculty a formal dissertation which shall not only exhibit evidence of original research but shall in itself be a contribution to the sum of human knowledge. The dissertation must be in acceptable literary form, although for acceptance it will depend chiefly upon its subject-matter. In case the dissertation ofrered is accepted and the candidate passes satisfactorily the examiuations he shall, prior to recoiving his degree, deposit with the librarian of the university 2.5 printed copies of the dissertation. The candidate must pass an examination in form both oral and written. (Catalogue, 1897-98.)

College of Emporia, Emporia, Kans.-Courses of graduate worls leading to the degree of Ph. D. are ofiered in the following departments: Philosophy, Greek, Latin, English, and German. Candidates must present diplomas from this or other institutions of similar grade covering the usual college requirements in the studies to be pursued. In cases where residence at the college is precluded, the work may be done in absentia. Examinations other than final may be taken in absentia under the supervision of a third party acceptable to the professor conducting the test. Candidates must complete a major and a minor course amounting to three years' work. A thesis, approved by the faculty, must be subinitted at least one month before the final examination, 100 copies of which shall ke printed at the candidate's expense and become the property of the colloge. (Reg. ister, 1893-93.)

University of Fansas, Lawrence, Kans.--The degree of doctor of philosophy will be granted on the ground of advanced scholarship and the performance of independent work in some special line, under the following conditions:

1. The candianate must be a baccalaureate graduate of this university or of a college or university whose degrees are accepted as equivalent to its own, or he must give satisfactory evidence that he possesses an equivalent preparation for graduate work.
2. He must make application before the 1st day of October preceding the commencement at which he intends to present himself for the degree, and must then give satisfactory evidence of his ability to read such German and French as may be necessary for the proper prosecation of his studies.
3. He must have spent at least three full years in resident graduate work at this or some other approved university; the last year must be spent as a resident student of this university.
4. He must present a thesis showing the results of original research of a high character, and must pass acceptable examinations, both written and oral, in one chief or major study and two allied subsidiary or minor studies, not more than two of which may be in the same department. If the thesis is finally approved, not less than 100 printed copies must be delivered to the librarian of the university before graduation, or proper security be give」 for the printing of that number; provided, that if the thesis has aiready been printed, 10 copies only shall be deposited with the librarian. (Catalogae, 1893-99.)

Tulane University, New Orleans, La.-Graduates of our own college and other accepted candidates who shall pursue for two years an approved classical, literary, or scientific course of study in the university in three branches, one major and two minors, and who sha! pass a satisfactory examination and present a written thesis acceptable to the faculty will receive the degree of A. M. Graduate work already done elsewhere, whether in private study or at some seat of learning, may be recognized and accepted, but the scholastic year immediately preceding the attainment of an advanced degree must be spent in residence and study at this university.
The degree of Ph. D. will be bestowed for a further prescribed or approved course of study in Trlane University, pursued for two years under like conditions, upon such persons as in ezamination, and more especially by an original dissertation, shall exhibit such range of knowledge and power of thought as seem to warrant such bestowal. The following rules have been adopted with respect to applications for the Ph. D. degree:

1. The application for an examination for the degree shall be made at least two years before the date of the examination.
2. The candidate shall be a graduate with the master's degree from Tulane University or from some other institution in good standing.
3. Unless the application is made within three years after graduation from col-
lege he shall, by examination or otherwise, satisfy the faculty of his proficiency in the studies of the undergraduate course.
4. No ono shall be admitted to candidacy for the degree unless he be able to translate into Tinglish, at sight, ordinary French and German prose and poetry.
5. A suitable time before the candidate's examination a thesis shall be submitted, based upon his principal subject, and the faculty's approval of this shall be a necessary condition to admission to examination. (Catalogrue, 1898-99.)

Johns Hoplins University, Baltimore, HIc.-The degree of Plı. D. is ofered to students who have followed advanced courses of university study for a period of not less than three years, under suitable guidance and favorable conditions, and who have submitted an acceptable dissertation and passed the prescribed examinations. In order to be accepted as a candidate the student must give evidence that he has completed such a liberal undergraduate course of academic study antecedent to the baccalaureate degree as is offered by colleges of good standing. He must then follow advanced studies in the deparments of knowledge which he may have chosen, and these studies must be pursued under qualified teachers for a period of at least three years. Private study, or study pursued at a distance from libraries and laboratories and other facilities, will not be considered as equivalent to university study. At leastone academic year must be passed in this university, and in every case the year immediately preceding the final examinations.

Every candidate must select one principal and two subordinate subjects. He must prepare a satisfactory dissertation and must pass with credit certain written and oral examinations in his chosen departments of strdy. He must be abie to translate French and German at sight. Examinations are held in these languages at the middle and end of each academic year, at one of which times the candidate must present himself.

The dissertation must be written upon a theme approved by the adviser of the candidate. If finally approved, the candidate shall print it in full or in part within one year of the time when the degree is conferred, and shall present 150 copies to the university. A deposit of $\$ 50$ is required to insure the printing of the thesis if the same is not printed at the time the degree is conferred.

The candidate shall be given written examinations in the principal subject, and, wherever practicable, in both subordinate subjects, and an oral examination in the principal and in the first subordinate subject. (Register, 1898-99.)

Amherst College, Amherst, ITass.-The degree of Ph. D. for which only college graduates may be candidates, is recommended on compliance with the following conditions: (1) A two years' course of stady in two subjects of science or literature, or one subject of each, at this college, under the direction of the professors in the departments to which these subjects belong; (2) An examination upon these subjects, and a thesis apon one or them satisfactory to these professors. (Catalogue, 1898-99.)

Boston University, Boston, Mass.-The degree of Ph. D. is conferred upon candidates otherwise properly qualifed, who, after admission to the A. B. degree, pursue in the School of Arts and Sciences for two years approved studies in philosophy, or in philosophy and one or more of the following departments: Fhilology, history, literature, mathematics, natural science, political sciences, or the fine arts, and pass satisfactory examinations thereon. (Year Book, 1898-99.)

Irassachusetts Institute of Technology, Boston, Mrass.-The Ph. D. degree is awarded for proficiency in graduate courses of study of at least two years" duration approved by the faculty. (Catalogue, 1898-99.)

Farvard University, Cambridge, Hass.-For the Ph. D. degree not less than two years, at least one of which must be spent in residence at this university, devoted to approved advanced studies are required of students already qualined for candidacy for the degree. Advanced work done in the graduate department of another university will be given weight in estimating the amount oif study. The degree is given, not for the mere reason of faithful study for a prescribed time, or in fulfillment of a determinate programme, and never for miscellaneous studies, but on the ground of long study and high attainment in a special branch of learning manifested not only by examinations but by a thesis, which must show an original treatment of a fitting subject or give evidence of independent research. The candidate is liable to minute examination on the whole of his special field of study and is also required to prove acquaintance with the subject-matter of his division in general. (Catalogue, 1898-39.)

Smith College, Northampton, Mass.-The Ph. D. degree is conferred only in recognition of high scholarly attaimment and of ability to carry on original research. Candidates must have pursued since graduation advanced courses of nonprofes-
sional study under suitable academic direction and conditions for at least three years. A dissertation shall be presented embodying the restults of original investigation, and the candidate must submit to examinations in two branches of learning, of which that represented by the dissertation shall be the principal one. On the satisfactory fulniment of the requirements and before the conferring of the degree, a printed and bound copy of the dissertation shall be placed in the college library. (Catalogue, 1897-98.)

Tufts College, Mícssachusett..-The Ph. D. degree will be conferred upon bachelors of arts, philosophy, or science who shail have pursued at least three years of graduate study, two years of which inust be in residence. The whole course of study must be devoted to one subject. and a thesis must bo presented giving evidence of original research. Each candidate must pass a satisfactory examination before a board of three examiners. (Catalogue, 1899-1900.)

Clark University, TVorcester, Mrass.- In most cases three or at least two years of graduate work will be necessary for the Ph. D. degree. The first requirement is a dissertation upon an approved subject, to which it must be an original contribution of value, and at least 100 copies must be given to the tiniversity, except in case of unusual length or very expensive plates the number may be reduced to 50 copies. Such formal or informal tests as the faculty shall determine shall mark the acceptance of each candjdate. One object of this preliminary test shall be to insure a good reading knowledge of French and German. No candidate shall receive the degree withoutat least one year's previous residence. The examinations for the degree may be held at any time during the academic year, provided that one academic year has elapsed since the completion of the pretiminaries of candidature. (Register, 1898-99.)

University of ITichigh. Ann Arbor, Hich.-The Ph. D. degree is open to all persons who have received a bachelor"s degree; but no person will be accepted as a candidate who has not a knowledge of French and German sufficient for purposes of research. It is not intended that the degree shali be won merely by faithful and industrious work for a prescribed time in some assigned course of study, and no definite terin of required residence can bo specified. As a rule, three years of graduate study will be necessary, the last two semesters of which must be spent at this university. A candidate for a doctor's degree muse take a major study that is substantially coextensive with some one department of instruction in the university. Fe must also take two minor studies, one of which may be in the same department as the major, but intolving a more thorough treatment of the same. Both minors must be cognate to the major. The thesis must exhibit creditable literary workmanship and a good command of tine resources of expression; but it must depend for acceptance more upon its subject-matter than upon its formal or rhetorical qualities, and must bo an original contribution to scholarship or scientifc knowledge. It must be read and defended in public, and if finally accepted the candidate musi cause it to be printed and present 25 copies thereof to the unirersity library. The final examination for a degree is conducted under the direction of the committee in charge of the stradent's work. (Calendar', 1893-99.)

Unirersity of Minnesota, Minneapolis, Mim.-The Ph. D. degree will be conferred on bachelors of this or any other repatable college or university within not less than three years after graduation therefrom under the following conditions:
The candidate shall elect work in three distince departments, a major subject in one department and two minor subjects in other departments. Within the major subject the candidate shall choose a special field. The work included in a minor shall be equivalent to at least one year's work in one subject.
The candidate shall evince on his final examination an exhaustive lnowledge of the special field selected, and shall show such acquaintance with the other studies of the major subject and with the minor subjects as the faculty may require.

A committee, consisting of the heads of departments in which tine candidates subjects fall, shall have the direction of his work.
The candidate shall present a thesis on some subject connected with his special field of work, which thesis shall be the result of original investigation by the candidate and shall be a contribution to knowledge.

Candidates shall ordinarily be required to devote three full years of graduate study to preparation for the final examination. They shall be in actual residence at the university and shall pursue their studies therein at least two years; they may, however, offer in lien of one of these two years an equivalent term of resident graduate work in some other institution, it being always required that they be in residence at the university the year next preceding the final ezamination.

At the beginning of the year next preceding his final examination the candidate shall pass a preliminary examination on the work for his degree that he has done up to that time.
If the thesis is finally accepted and the degree conferred, 100 printed copies of the thesis shall be deposited with the president of the university on or before the 1st day of Jantury following. In addition to passing the final examination the candidate must make a public defense of his thesis. Candidates must have a reading knowledge of French and German. (Cataiogue, 1898-99.)

Carleton College, Northfield, Minn.-A course of three or four years of resident study leading to the degree of doctor of philosophy is offered by the department of mathematics and astronomy, and that degree will be conferred upon those who satisfactorily complete the course. (Catalogue, 1898-99.)

University of Mississippi, University, Miss.-In order to become a candidate for the Ph. D. degree the stindent must first obtain a baccalaureate degree from this or some other institution of equal grade. In his application he must set forth his choice of the three schools of the miversity in which he desires to work, designating one of these three as his major and the other two as his minor studies. In the three schools thus selected not more than two of which shall be under the charge of any one professor'; the candidate must purstie a course of post-graduate study for at least three years, not less than two which shall be spent in actual residence at this university. No student will be allowed to select, as one of the three schools in which to do his post-graduate work, any school in which he has not already completed the entire undergraduate course of study. A reading knowledge of French and German is necessary and if such knowledge is deficient the candidate will be required to make up such deficiency during the first eighteen months of his course. The candidate must prepare and present a dissertation showing original investigation in the line of his major study. If the dissertation be accepted, the candidate, before he is admitted to examination must deposit a fee or $\$ 500$, which amount, or so much of it as may be necessary, shall be used in printing the dissertation, 50 copies of which must be presented to the University. The final examination shall be limited to three hours and shall take place before the faculty. (Catalogue, 1898-99.)

University of the State of IIIssouri, Columbia, Mo.-The candidate for the Ph. D. dogree will be expected to spend at least three years in graduate study under university direction; but with the consent of the faculty one of these years may bo spent in absentia. The candidate must have a bachelor's degree in arts, letters, science, or philosophy, tron some reputable university or college, and must astain in graduate study at this university a high proficiency in one branch of learning, and a respectable proficiency in at least one other, He must submit a dissertation embodying the results of original investigation, and must pass examinations in his major and minor subjects. (Catalogre, 1893-99.)

Westminster College, Fultorn, Mo,-Candidates for the Ph. D. degree will be required to complete a course of study covering not less than two years' work in some one of the following departments : (1) Metaphysics; (2) political and social science; (3) mathematics and natural sciences; (4) langrages and their literatures. At least two examinations will be held, one at the close of each yoas'; and the final examination will be held at the college. A thesis upon some subject connected with the course of study inust be presented and must embody the restult of original and advasced research. Students who select the department of natural sciences as their major or minor strdy will be required to do all their work in that department at the college, The degree can be conferred only upon those who have previously obtained the $\mathbb{A}$. B. degree from some approved institution. (Catalogue, 1898-99.)

Washington University, St́. Louis, Mo.-The Ph. D. degree is conferred on graduates of this or of other institutions who shall have satisfied the committee on advanced degrees of their fitness after two years of residence and study. Every candidate must have a reading knowledge of French and German and shall present an acceptable thesis which shall be the result of original investigation. Every candidate must furnish the committee on advanced degrees with 200 copies of his thesis, after its accentance, before he can be recommended for the degree. (Catalogne, 1898-99.)

University of Nebrasta, Iincoln, Nebr.-A candidate for the Ph. D. degree must satisfy the committee on graduate work that he has done the full equivalent for a bachelor's degree in this university; that he is able to use French and German for his work and also Latin when his major subject is not in one of the sciences. He
must pass at least three years in resident work in the studies chosen for his degree, two of which may have been done in resident graduate work at other institutions, but the last year before graduabion must be spent at this university. The examination shall be in one major course and either one first minor course or two second minor courses. The major and minors must be taken in separate departments. The thesis shall embody a scholarly research covering exclusively or largely some topic of the candidate's chief study, and shall be publicly defended before the facuity, if required. If approved, the candidate shall, bafore graduation, deposit 1 CO conies of the thesis in the chancellors onite for gratuitous distribution, or give proper security for the printing of this number. (Calendar, 1893-99.)

Dartmouth College, Hanover, N. H.-The Ph. D. degree is at present offered in the departments of biology, geology, and sociology only. A candidate must have receivel a bachelors degree from this college or from a college whose degrees are accepted as equivalent to its own. He mast pursue graduate studies for at least three years after taking his bachelor's degree, two of which must ke in residence at this college. The other year may be spent in graduate study at an approved institution. Candidates are required to present themselres for examination in three related subjects, a major and two minors. The requirements in each minor subject shall not be less than all the required and elective undergraduate courses in that subject, or their equivalent. The graduate work in the major subject will consist largely of original in vestigation of a definite problem, the results of which are to be embodied in a thesis that shall contain some original contribution to knowledge, together with an historical and critical summary of the pertinent literature. (Catalogue, 1898-39.)
Rutgers College, New Brunswich, N. J.-The Ph. D. degree may be conferred upon resident graduates of the college who shall pursme for two years prescribed courses of study under the direction of the faculty. (Catalogue, 1898-99.)
Princeton University, Princeton, N. J.-The Ph. D. degree may be conferred upon any A. B. of Princeton, or of any approved institution whose academic course is equivalent to that purstied in Princeton, provided he has spent at least two years in exclusive stady for the degree. One of the years must be spent at Princeton, and the other either at Princeton or some other approved university. Applications from those who hold some other bachelor's degrea than that in arts, or for permission to count two or more years spent at another university as the residence necessary for the degree, will be considered in excentional cases.

All applicants for enrollment are examined on their ability to read ordinary French and German and in the group of subjects connected with the general department of their proposed studies.

Every candidate must select a chief subject and two suitable subsidiary subjects, Which should be cognate to the chief subject, but not included under it. He shall present a thesis on some special topic in the department which constitates his chief sizbject, not to exceed ordinarily 20,000 words in length, and must show evidence of thorough sholarship and ability to pursue original research, and, if accepted, it must be published by the candidate before the degree can be conferred.

The examination in the chief and subsidiary sabjects is to be conducted orally in the presence of the faculty and can not be divided. In the chief subiect, however, there may be a written examination in addition to the oral. (Catalogne, 1890-1900.)

Comell University, Ithaca, N. Y.-The Ph. D. degree is conferred on graduates of this university and of other universities and colleges whose requirements for the baccalaureate degree are equal to those of this university on the following conditions:

1. The applicant must have pursued a course of study substantially equivalent to that required for graduation in this university in the academic department.
2. The candidate is expected to spend at least three years at the university, pursuing a course of study marked out by the university faculty. In cases of exceptional proficiency a candidate may be recommended at the expiration of a shorter period. A year of graduate work in a miversity elsewhere may be accepted in place of a year's work in this university.
3. He must present a thesis of such a character as shall display power of original and independent investigation, and must pass the requisite special final examinations. Successful candidates must print their theses and deposit 50 copies in the university library. (Register, 1898-99.)

Columbia University, New York, N. Y.-Candidates for the Ph. D. degree must hold a baccalaureate degree in arts, letters, philosophy, or science, or an engineering degree, or an equivalent of one of these from a fore gninstitution of learning.

They must pursue their studies in residence for a minimum period of two years; residence at other universities may be credited, but at least one year must be spent at Columbia University. Each candidate must designate one principai or major subject and two subordinate or minor subjects. The major subject is expected to occupy one-hali of the time of the student throughour the course and each minor subject about one-fourth of the time. The examinations for the degree are held mader the authority and direction of the dean of the faculty under which the student is working. Each candidate shall present a dissertation embodying the result of original investigation and research on some topic of his major subject, and, if accepted, he shall print the same, and $1 j 0$ copies shall be delivered to the faculty. Every candidate must be able to read French and German at sight, and must defend his dissertation in the presence of the faculty. No student shall contiaue to be a candidate for the Fh. D. degree for a longer period than three years from the time he ceases to be in residence. (Catalogue, 1899-1900.)

New Yorld University, New York, N. Y.-The Ph. D. degree will be given to none save bachelors of at least three years' standing. No one will be admitted to examination for the degree who has not been enrolled for two entire academic years, including enrollment at another university counted to his credic here. One year must be spent at the university. The thesis required must slow original treatment or give evidence oĩ independent research and must be not less than 5,000 words. The candidate must pass written examinations in his mafor and minor subjects, as well as an oral examination on his major subject. A satisfactory knowledge of French and German is highly desirable for every student, and a reading knowledge of one or both of these langrages will be required for admission to many of the courses. (Catalogre, 1893-99.)

Syracuse University, Sypacuse, N. Y.-Candidates must have receired from this university, or one of equal rank, the bachelor's degree in arts, philosophy, or science. They must pursue an advanced course of study in residence for at least two years. The course must include two or more correlated lines of strdy under the supervision of at least two professors, which shall be known as major and minor subjects. He must pass satisfactory examinations upon the entire work. Before the examination the candidate must have submitted a thesis upon some phase of his major subject, which shall show unquestioned ability in investigation. If accepted, at least 25 printed copies of the thesis unst be deposited with the librarian for preservation and ezchange. (Catalogue, 1898-99.)

University of North Carolina, Chapelhill, N. C.-Any stadent having the baccalaureate degree in arts, philosophy, or science from this university or from any university or college having equivalent undergraduate courses may become a candidate for the Ph. D. degree. He must select three branches of study-a major and two minors-and is required to pursue in residence at the university a prescribed course of advanced study and research. In general, a term of three years is required, but the degree may be secured in two years in cases of exceptional preliminary training in the major subject. The degree is conferred not simply for faithful study in a determinate field of worlz for a prescribed period, but because of a high attainment in a special branch of learning, which the candidate must have manifested not only by examination, but by a thesis which gives evilence of independent research and contributes to knowledge. To receive the degree a knowledge of French and German will be found indispensable in most instances. The examinations are both oral and written. (Catalogue, 1898-99.)

Western Reserve University, Cleveland, Ohio.-The Ph. D. degree will be conferred only on persons who have previonsly received a bachelor's degree, either from this or from some other university or college of good standing. He must have pursued courses of advanced study, mainly of university as distinguished from college grade. He must have shown special ability in one branch of study (major) and high attainments in two other branches (minors), as determined by written or oral examinations or both. He must have submitted a thesis which shall be accepted as evincing powers of research and independent investigation. After its acceptance he must deposit at least 50 copies of his thesis, printed either in full or in abstract, as may be required, with the dean of the graduate faculsy. The degree will be granted to no one who does not possess a good reading knowledge of French and German and, unless specially excused, of Latin. Ordinarily at least two years of residence are necessary, and often a longer time is advisable. Part of this time may be spent at some other institution of high standing, but the last year, at least, must be spent in residence here. (Catalogue, 1893-90.)

Orio State University, Columbus, Ohio.-The Ph. D. degree will be conferred unon holders of the appromiate baccalaureate degree from this university or from other institutions making equivalent requirements for the first degree upon the satisfactory completion of three years of resident graduate work in the arts, philosophy, and science college, including thesis and examinations. On approval of the faculty, the work of the first year or of the first two years of the three may be cone at another unirersity which offers equiraient graduate work. (Catalogne, 1808-99.)

Denison University, Granville, Ofio. -The course for the Ph. D. degree shall include three full years of graduate work. It shall ie at the discretion of the faculty to accept an equiva? ent kind of work at other unirersities for a period not to exceed one jear, but the last year must be spentin residence. Examination in each subject may be held at its completion, but after the acceptance of the thesis, which shall be printed, a final public examination shall be held. The degree will not be given after the expiration of the period of required residence unless the candidate shall liave exhibited independence and originality, as well as industry, in research. (Catalogre, 1898-99.)

Richmond College, Richmond, Ohio.-The Ph. D. degree may be conferred on any bachelor of arts of good moral character who shall successfully pursue a three years' course of study in metaphysics under the direction of the president and professors of this institution. (Catalogue, 1895-96.)

University of Wooster, Wooster, Ohio. -The Ph. D. degree will be conferred upon candidates having bachelor's degrees on the completion of a major course with a minor course in cognate studies. The major course consists of two parts: each of which represents an amount of work which, under favorable circumstances, may be accomplished in a year, and a minor course represents about one year's work. Residence at the university is not required, and examinations in absentia may be arranged whereby students may pass written examinations, other than final, under supervision approved by the faculty. The thesis required of candidates shall ordinarily contain from 5,000 to 10,000 words and is expected to be either a contribution to human knowledge, as embodying the results of original research, or such a discussion of a sabject as byew and clearer exposition will lead to more ready acceptance and wider diffusion of established truth. (Catalogne, 1898-90.)

Witlamette Unirersity, Salem, Oreg.-Graduates of this miversity, or other university or college requiring equal work, with the A. B. or Ph. B. degree are eligible for the Ph. D. degree. The case of graduates with other degrees will be specially considered. The completion of six groups of studies in a course entitle a graduate to the degree. A course may be taken entire or four groups may be taken from one course and two from another. Candidates will be entitied to eraminations at the completion of each group. Examinations will be sent to some selected person. and if such person requires compensation the candidate must pay the amount. Except by special dispensation, no candidate will be allowed to receire the degree in less than three years. The theses are to be the result of original investigation on a specified subject, exhibiting originality, careinl research, and good literary taste, and must be carefully written in ink. (Yearbook, 1898-99.)

Western University of Pennsylvania, Allegheny, Pa.-The candidate for the Ph. D. degree must either be a baccalarreate of an American or foreign university, the degrees of which are accepted by this university as the equivalent of its own, or he mast satisfy the examiners appointed by the faculty that he possesses an equivalent preparation for graduate stadies. He must show proficiency in three studies, tested by written or oral examinations. The minimum time in which the degree will be allowed after matriculation is two years, and in most cases fully three years will be required. Residence at the university is not required, but is recommended for at least a portion of the time, especially in cases in which the candidate has elected as his major branch of study one of the sciences refuiring practical work in the laboratory or museum. In case of nonresidence the student will be required to submit annually to a rigorous personal examination in all branches which have been prescribed and present himself at the close of his course at the miversity for graduation, at which time he must be prepared to present and defend a thesis. (Catalogne, 1893-99.)

Horavian College, Bethlehem, Pa.-The Ph. D. degree may be conferred on college graduates who, after having taken a bachelor's degree, shall have devoted themselves for not less than two years to advanced studies under the direction of
the faculty, passed examinations in them, and presented a dissertation embodying the result of original investigation on some topic previonsly approved by the faculty. Candidates must spend at least one of the two years of study in residence at this college. (Catalogue, 1898-99.)
Bryn Hawe College, Bryn Mawr, Pa. -The Ph. D. degree may be conferred upon graduates of Bryn Mawr College and upon graduates of other colleges who shall show that the course of stuaty for which they received a degree is equivalent to that for which the A. B. degree is given at Bryn Mawr College. or that it has been adequately supplemented by subsequent collegiate studies. The candidate must have pursued for at least three years a course of liberal adyanced study at some approved college or university, and must have spent at least two of these years at Bryn Mawr College. She must have written, on some subject connected with her chief subject of study, a dissertation that bears satisfactory evidence of original research, and must pass an oral examination before the faculty on one major or chief subject, and a written and an oral examination on two minor subjects. In special cases one minor subject may be substituted for two minor subjects. The degree is given to no one who can not read French and German or who is znacquainted with Latin. The dissertation must have been printed before the degree is conferred. (Programme, 1898.)
Lafayette College, Easton, Pa.-The Ph. D. degree may be conferred on any graduate of this college who shall have taken a prescribed coutse of special reading for three years after graduation, passed examinations in approved courses of study, and presented a thesis showing evidence of original research. The same degree may be conferred two years after graduation on any college graduate who, during two years of continuous residence at the college, shall have devoted himself exclusively to advanced studies under the direction of the faculty, passed examinations in them, and presented a satisfactory thesis on one of the studies pursued. (Catalogue, 1897-98.)
Pennsylvania College, Gettysburg, Pa.-Only those who hate receired bachelor degrees equivalent to those given in this college are eligible candidates for the Ph. D. degree. Not less than three years' work under the direction of the faculty will be required. At least one year's residence in the case of graduates of this institution, and two years' residence in case of graduates from ofter institutions. In the case of nonresidents, reports of progress must be made, and examinations will be made in such manner and as frequently as the professors may direct. At the close of the course a satisfactory thesis showing evidence of original investigation must be submitted. Each candidate must select one major and two minor subjects. (Catalogue, 1848-99.)
Grove City College, Grove City, Pa.-Offers three-year courses in philosophy and in political andsocial science leading to the Ph. D. degree. Miatrictatates nust have a bachelor's degree or show that they have acquired by independent study an equivalent culture. The courses may be pursued by nonresident students. An examination in each year's work may be had at the close of the year, or examinition in the whole course may bo deferred to the close of the third year's work. Resident students can shorton the time greatly. (Catalogue, 1898-99.)

University of Pennsylvania, Phitadelphia, Pa.-Any person holding a bachelor's degree in arts, letters, philosophy, pure or applied science, granted by this institution or by any college or university whose degrees are recognized by this university, may become a candidate for the Ph. D. degree. He must possess a good reading knowledge of two European languages besides English, one of which must be a modern tongue. He must select a major subject and two minor subjects which shall be so related as to conduce to some recognized and approred end. He must also present a thesis upon some topic in the line of his major subject, showing high attainment or power of original and independent research, which must be typewritten or printed unless specially excused. The candidate must pass a private written examination and a public oral examination. The degree will in no case be conferred before the expiration of two years after the date of the candidate's baccalaureate degree, and as a rule three years will be required to do the worlk to fit himself for the degree. (Catalogue, 1898-99.)

Waynesburg College, Wamnesburg, Pa.-A graduate of this or any other accredited college, on a course leading to any of the four degrees, bachelor of arts, of science, of literature, of philosophy, will be admitted to the Ph. D. degree on the completion of two years' additional work. Those qualified to enter upon the studies leading thereto, may, without recitation in the College, be admitted to the degree on completion of the course of study, and after he shall have submitted to an examination and presented a thesis. (Catalogue, 1809-1900.)

Brom Unirersity, Proridence, R. I.-The Ph. D. degree is conferred under the following conditions: The candidate must be a bachelor of arts, of philosophy, of science, or of letters. He must have resided at the university at least two years after graduation pursuing a systematic course of study and sustaining satisfactory examinations thereon, concluding his course with a thesis giving evidence of high scholarship and of special excellence in the studies pursued. At least two courses are required, a major and a minor. A good knowledge of Latin, French, and German is necessary unless for special reasons excused from one or more of these languages. The degree is not conferred in less than two years from the time of enrollment. The examinations are public. The thesis must be typewritten or printed. (Catalogue, 1898-99.)

Allen University, Columbia, S. C.-The Ph. D. degree, for which only college graduates may be candidates, is recommended on compliance with the following conditions: (1) A two-years course of study in two subjects of science or literature, or one subject of each, at this college, under the direction and to the approval of the professors in the departments to which these subjects belong; (2) an examination upon these subjects and a meritorious thesis upon ono of them. (Catalogue, 1898-99.)

Southwestern Presbyterian University, Clarksville, Tem.-The candidate must present an A. B. or A. M. diploma of this institution or of some other institution which shall be satisfactory to the faculty. He shall select one major and two minor subjects, the major course to extend through three years, each minor throngh one year, or a candidate may choose a minor to extend through two years. Residence shall be required during each of the three years. Each candidate shall subuit a thesis showing original work on some subject embraced in his major course, and shall undergo examinations in his major and minor courses. (Catalogrue, 18:8-9?.)

American Temperance University, Harriman, Tenn.-Students may enter any one of the graduate courses at any time and pursue their studies under the immediate direction of the faculty. Nonresident students may take the courses largely by correspondence. In special cases examinations in absentia may be arranged by correspondence with the examiner, whereby students may pass written examinations under supervision approved by the faculty. On the payment of required fees and the presentation of a thesis of 3,000 words on an accepted theme the master's degree, corresponding to the bachelor's degree already received, will be conferred. At the end of the second year's work, in accordance with the same requirements, the Ph. D. degree will be conferred. (Catalogue, 1898-99.)

Camberland University. Lebanon, Tenn.-The candidate must have completed a course of study equivalent to that required in this university for the A. B. degree. Holders of the B. S. degree will be admitted as candidates, provided they pass satisfactorily an examination in Greek such as is required for admission to the freshman class, or devote five hours a week to the study of Greek during their year of residence. Candidates must pursue, under the direction of the faculty, a course of study embracing one major and two minor groups of sabjects, must pass satisfactory examinations in them, and present a thesis within the field of the major subject showing original research. At least one year of residence is required. Students may complete the course in three years. or, if they are well prepared, with two years of resident study. (Catalogue, 1898-99.)

Tanderbilt University, Nashville, Tenn.-The candidate must have received from this maversity or from some other institution of good standing the degree of A. B. or B. So, including Latin. The A. B. candidate is required to pursue three distinct studies, one principal and two subsidiary, for not less than three years, two of which must be spent in attendance at this university. He must have a reading knowledge of French and German and must submit, before his examination, a thesis which shall give evidence of independent investigation. The thesis must be printed by the candidate and 50 copies placed in the university library. The same is required of the B.S. candidate, but he must elect the studies from the schools of Latin, Romanic languages, Germanic languages, English, mental and moral philosophy, and history and economics. (Catalogue, 1898-99.)

University of Virginia, Charlottesville, Va.-The candidate must hold the A. B. degree or other degree of like value from this university or some other college or university of good standing. or must give satisfactory evidence of having an equivalent collegiate education. He must select three subjects of study-a major, in which a dissertation is to be prepared; a cognate minor, and an independent minor. No time limit is set for the acquisition of the degrea, except a minimum
time limit of three years of study therefor after the acauisition of the bachelor"s degree. The major subject shall be pursued during the whole time, the first minor during at least two years, and the second minor during at least one year. A reading knowledge of French and German is necessary. Wach candidate must stand a final examination upon the whole course covered in both major and minor studies. Graduate work in other universities may be accepted, but the last year of work must be done here. If approved, the thesis must be printed, and 50 copies thereof deposited in the university library. (Catalogue, 1893-99.)

Washington and Lee University, Lexingion, Va.-The Ph. D. degree will be conferred on any bachelor of arts who shall pursue at the university, for not less than three years, a special course of study in any one subject tanght in the academic department of the university. The one special subject shall have associated with it at least one subsidiary or affiliated study. It is expected that from time to time the candidate submit evidence of independent research in his special line of strdy, that he stand at least two examinations during his course, and that he produce a thesis the final year showing the progress he has made. (Catalogue, 1898-99.)

University of Washington, Seattle, Wash.-The Ph. D. degree is open to all strudents who have recoived a bachelor's degree in arts, science, philosophy, or letters, and have a knowledge of French and German sufficient for purposes of research. As a rule, three years of graduate study will be necessary to attain the degree, the last of which must be spent in residence at the university. The candidate must select a major study and two minor studies, one of which may be in the same department as the major, but involving a more thorough treatment of the same. Both minors must be cognate to the major. The thesis must be read and defended in public, and if accepted, the candidate must have it printed and present 25 copies to the university library. (Catalogue, 1893-99.)

University of Wisconsin, Mradison, Wis.-The Ph. D. degree will be conferrea on successitul candidates after three years of graduate study, of which the last year or the first two years must be pursued at this university. Special attainments are requisite, particularly the power of original thought and independent investigation. The candidate will be examined on three subjects-one major and two minors. A thesis must be presented which shall give evidence of original research and independent treatment. In case the candidate is successivl he is required to print his thesis and deposit 100 copies in the university library. All candidates must have a reading knowledge of French and German at least one year before the degree is conferred. (Catalogue, 1898-99.)

Thbie 1．－Whole number of students receiving higher education（including stu－ dents in undergraduate and graduate departments of universities and colleges， colleges for women，schools of technology，and in professional schools and depart－ ments）．

| State or Territory． | Universities and colleges for men and for both sexes |  |  |  | Schools of technology |  | Professional schools and departments cine and the－ ology）． |  | Total num ber of stu－ dents in higher edu cation． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\stackrel{\dot{6}}{\underline{y}}$ |  |  |  | 范 |  | 宅 |  | 閏 | 管 |
| United State | 53，454 | 18，948 | 4， | 10，S83 | 9，038 | 1，339 | 42，154 | 1，159 | 109， 659 | 37，505 |
| North Atlantic Division South Atlantic Dirision South Central Division North Central Division Western Division ．．．．．．． |  |  | $\begin{array}{r} 4,0!8 \\ 442 \\ \hdashline-55 \\ \hline 82 \\ \hline \end{array}$ | $\begin{array}{r} 813 \\ 4,374 \\ 4,399 \\ 1,294 \\ , 29 \\ \hline \end{array}$ | $\begin{array}{r} 2,992 \\ 1,975 \\ 3,903 \\ 3,063 \\ 809 \\ \hline \end{array}$ |  | $\begin{array}{r} 13,129 \\ 5,520 \\ 5,033 \\ 17,103 \\ 1,346 \\ 1,36 \\ \hline \end{array}$ |  | 38,015 <br> 13,631 <br> 12,312 <br> 39,386 <br> 5,815 |  |
| North Atiantic Division New Hampsini Vermont Rhissachusetts Rhode Island Tiew York New Jersey－ |  | $\begin{aligned} & 188 \\ & 0 \\ & 014 \\ & 424 \\ & 401 \\ & 116 \\ & 688 \\ & 6815 \end{aligned}$ | 2,595 <br> $-\ldots .09$ <br> 1,099 |  | $\begin{array}{r} 103 \\ \hdashline 15 c 0 \\ 81 \\ 59 \\ 406 \\ 450 \end{array}$ | $\begin{array}{r} 47 \\ 36 \\ 34 \\ 706 \\ 10 \\ 10 \end{array}$ |  | $\begin{array}{r} 5 \\ 0 \\ 0 \\ 03 \\ 130 \\ 0 \\ 018 \\ 018 \\ 160 \end{array}$ |  |  |
| thatlantic Division： <br> Delaware <br> District of Columbia <br> Virginia <br> West Virginia <br> North Crorolina <br> South Carolina <br> Georgia <br> Florida |  | $\begin{aligned} & 127 \\ & 150 \\ & 37 \\ & 158 \\ & 134 \\ & 67 \\ & 175 \\ & 115 \end{aligned}$ | 196 |  | 287 561 561 261 361 301 232 | 14 0 0 |  | 69 4 40 4 |  |  |
|  |  | 281 881 864 231 31 292 299 259 209 14 16 16 |  |  | $\begin{gathered} 299 \\ 208 \\ \hdashline 850 \\ \hdashline 660 \end{gathered}$ | 19 <br> 10 <br> 0 <br> 0 <br> 8 | $\begin{gathered} 1,2482 \\ 2,341 \\ 315 \\ 68 \\ 483 \\ 453 \\ 453 \\ 151 \end{gathered}$ | 10 15 0 0 3 11 11 |  |  |
|  |  |  | 51 | 291 <br> 129 <br> 38 <br> 14 <br> 14 <br> 788 <br> $\cdots$ <br> $\cdots$ <br> 68 |  |  |  |  |  |  |
|  | $\begin{array}{r} 1, \ldots 10 \\ 4 \pi \\ 3 . \\ 3.5 \\ 13 \\ 13 \\ 93 \\ 90 \\ 96 \\ 4.5 \\ 381 \\ 285 \\ 2,316 \end{array}$ | $\begin{array}{r} 51 \\ 51 \\ 24 \\ 2.5 \\ 0 \\ 40 \\ 80 \\ 80 \\ 8 . \\ 3+ \\ 31 \\ 150 \\ 1,351 \end{array}$ |  |  |  | 14 <br> 64 <br> 64 <br> 21 <br> 48 <br> 48 <br> -6 <br> 63 <br> 141 |  | 33 $\cdots$ $\cdots$ $\cdots$ -0 90 90 | $\begin{array}{r} 76 \\ 35 \\ 1,033 \\ 99 \\ 53 \\ 518 \pm \\ 18 \pm \\ 96 \\ 4.3 \\ 493 \\ 588 \\ 3,1 \% 3 \end{array}$ |  |

TABLE 2．－Nimber of madergraduate and graduate students in public miversitier， colleges，and schools of technology．

| State or Territory． | Collegiate depart－ ments． |  |  | Graduato departments． |  |  |  |  |  | Total number of undergraduate and graduate students． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Pesident． |  |  | Nonresident． |  |  |  |  |  |
|  | $\begin{aligned} & \dot{Q} \\ & \stackrel{y}{心} \\ & \text { 感 } \end{aligned}$ |  | $\begin{aligned} & \text { Ni } \\ & \text { Hin } \\ & \text { E } \end{aligned}$ |  |  | त E － |  | $\begin{aligned} & \text { © } \\ & \text { 島 } \\ & \text { घु } \\ & \text { E } \end{aligned}$ | $\stackrel{\text { ت゙ }}{\stackrel{\mathrm{J}}{0}}$ |  |  | － |
| United States． | 22，029 | 6，602 | 28，641 | 900 | 419 | 1， 409 | $1 \% 6$ | 38 | 214 | 23， 305 | 7， 058 | 30， 2061 |
| North Atlantic Division． | 4，892 | 199 | 5， 021 | 63 | 1 | 64 | 5 | 4 | 9 | 4，\％io | 291 | 5，1\％ |
| South Atlantic Division－ | 3，36\％ | 275 | 3，638 | 111 | 10 | 124 | 17 | 1 | 18 | 3， 493 | 24 | 3，${ }^{180}$ |
| South Central Division－－ | 2.280 | 485 | 2，765 | 65 | 18 | 83 | 15 | 5 | 20 | 2． 360 | 5118 | 2，283 |
| North Central Division－ | 9，136 | 4， 1,0 | 13，316 | 599 | 265 | 864 | 133 | $\therefore 6$ | 159 | 0， 0 ， 8 | 4，411 | 14． 339 |
| Western Division－－－－－－－ | 2，309 | 1，5\％R | 3，881 | 14.9 | 125 | $2 \% 1$ | 6 | 2 | 8 | 2，46去 | 1，649 | 4.113 |
| Nortll Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine－．－．－－－－－－．．－ | 257 | 0 | 287 | 6 | 0 | 6 | 0 | 0 | 0 | 293 | 0 | 293 |
| New Hampshire | 101 | 9 | 110 | 3 | 0 | 2 | 0 | 0 | 0 | 103 | 9 | 11. |
| Vermont．－．．．．． | 229 | 63 | 202 | 3 | 1 | 4 | 3 | 0 | 3 | 235 | 81 | ？0： |
| Massachusetts | 1，248 | $4 \%$ | 1，293 | 17 | 0 | 17 | 1 | 0 | 1 | 1，204 | 43 | 1，811 |
| Phode Island | 84 | 26 | 129） | 0 | 0 | 0 | 1 | 4 | 5 | 83 | 40 | 1： 2 |
| Connecticut | 55 | 24 | \％9 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 24 | \％ |
| New York | 1，248 | 0 | 1，248 | 0 | 0 | 0 | 0 | 0 | 0 | 1，243 | 0 | 1，21s |
| New Jersey | 140 | 10 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | ， 110 | 10 | 150 |
| Pennsylvania | 1，50： | 10 | 1，512 | 35 | 0 | 33 | 0 | 0 | 0 | 1，537 | 10 | 1，5if |
| South Atlantic Division： <br> Delaware | 05 | 1 | 102 | 6 | 0 | 6 | 0 | 0 | 0 | 101 | $\%$ | 103 |
| Waryland | 354 | 0 | 364 | 13 | 0 | 13 | 0 | 0 | 0 | $3 \% \%$ | 0 | 3 |
| District of Columbia． | 81 | 32 | 113 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 32 | 113 |
| Virginia，－－－－－－－－．．．－ | 841 | 0 | 841 | 37 | 0 | 37 | 2 | 0 | 2 | 880 | 0 | 881 |
| West Virginia | 173 | 85 | 259 | 9 | 5 | 14 | 15 | 1 | 16 | 107. | 9\％ | 289 |
| North Carolina | 588 | 21 | 669 | 27 | 2 | 29 | 0 | 0 | 0 | 615 | 23 | 638 |
| South Carolina | $51 \pm$ | 18 | 562 | 9 | 0 | 9 | 0 | 0 | 0 | 523 | 18 | $5 \% 1$ |
| Georgia | 548 | 23 | 571 | 8 | 0 | 8 | 0 | 0 | 0 | 256 | 23 | $5 \%$ |
| Florida－－－－－－－－－．－．－ | 128 | 89 | $21 \%$ | 5 | 3 | 8 | 0 | 0 | 0 | 133 | 93 | $2 \geqslant 0$ |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky－－－－－－－－－－ | 210 | 50 | 200 | 8 | $\stackrel{2}{2}$ | 10 | 0 | 0 | 0 | 218 | ${ }^{2}$ | 20 |
| Tennessee | 223 | \％3 | 301 | 4 | 2 | 6 | 0 | 0 | 0 | $23 \%$ | 75 | 807 |
| Alabama | 417 | 41 | 491 | 29 | 2 | 21 | 0 | 0 | 0 | 460 | 4.6 | 515 |
| Mississippi | 334 | 39 | 373 | 9 | 0 | 9 | 15 | 5 | 20 | 358 | 41 | 40.3 |
| Louisiana | 186 | 0 | 186 | 3 | 0 | 3 | 0 | 0 | 0 | 189 | 0 | 189 |
| Texas | 639 | 163 | 801 | 14 | 10 | 21 | 0 | 0 | （） | 653 | 10 | 828 |
| Arkansas | 150 | 5 | 221 | 1 | 0 | 1 | 0 | 0 | 0 | 151 | 1 | 22 |
| Oklahoma | S6 | 40 | 12 | 4 | 2 | 6 | 0 | 0 | 0 | 90 | 4.8 | 133 |
| Indian Territory | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Iforth Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio <br> T1 diana | 1，009 | 303 | 1． 401 | 58 | 35 | ${ }^{93}$ | ${ }^{0}$ | 0 | 0 | 1． 096 | $48 \%$ | 1． 404 |
| Indiane | 1， 20 | 371 | 1， 561 | 88 | 36 | 124 | 19 | 0 | 19 | 1，303 | $40 \%$ | 1．10 |
| Ilinois | 580 | 28 | 807 | 21 | 8 | 3. | 2 | 1 | 26 | 6829 | 236 | 897 |
| Wichigen | 1，431 | 668 | 2，039 | 54 | 18 | r2 | 1 | 1 | 2 | 1， 486 | 68\％ | 2．1＇3 |
| Wisconsin | 1，102 | 364 | 1，466 | 67 | 23 | 95 | 3 | 1 | 4 | 1，170 | 393 | 1， |
| Minnesota | 646 | 495 | 1，141 | $1 \pm 7$ | 48 | 195 | 0 | 0 | 0 | 793 | 513 | 1，936 |
| Iowa． | 905 | 313 | 1，218 | 40 | 23 | 63 | 33 | 5 | 40 | 380 | 341 | 1，321 |
| Missouri | 486 | $16 \%$ | 603 | 20 | 6 | 28 | 0 | 0 | 0 | 508 | 173 | ． 681 |
| North Dakota | 138 | 56 | $19 \pm$ | 3 | 4 | 7 | 6 | 1 | \％ | 147 | 61 | dis |
| Soutli Dakota | 283 | 117 | 400 | 10 | 6 | 16 | 0 | 0 | 0 | 293 | 123 | 416 |
| Nebraska． | 529 | 446 | 975 | 40 | 28 | 68 | 33 | 16 | － $5 \frac{1}{1}$ | $60 \%$ | 490 | 1． 0.95 |
| Kansas | $88 \%$ | 50.4 | 1，391 | 46 | 25 | r＇1 | 10 | 1 | 11 | 313 | 530 | 1，4\％ |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Miontana | 59 | 5 | 111 | 1 | 0 | 1 | 0 | 0 | 0 | 60 | 52 | 11. |
| Wroming | 33 | 23 | 56 | 2 | 1 | 3 | 2 | 0 | 2 | 37 | 24 | （\％］ |
| Colorado | 529 | 367 | 696 | 18 | \％ | 25 | 0 | 0 | 0 | 547 | 13 | Y21 |
| New Mexico | 33 | 21 | 54 | 6 | 0 | 6 | 0 | 0 | 0 | 39 | 21 | 60 |
| Arizona | 53 | 33 | 91 | 0 | 2 | 2 | 0 | 0 | 0 | 53 | 40 | 93 |
| Utah | 165 | 116 | 281 | 2 | 1 | 3 | 0 | 0 | 0 | $16 \%$ | $11 \%$ | 921 |
| Nevad | 94 | 78 | 172 | 2 | 7 | 9 | 0 | 0 | 0 | 96 | 85 | 141 |
| Idaho． | 41 | 31 | 75 | 1 | 3 | 4 | 0 | 0 | 0 | 45 | 34 | 98 |
| Washington | 217 | 163 | 380 | 10 | 4 | 14 | 0 | 0 | 0 | 227 | $1(\% \pi$ | 39. |
| Oregon | 229 | 151 | 383 | 8 | 11 | 19 | 0 | 0 | 0 | 237 | $15 \%$ | 4073 |
| California | 853 | 679 | 1，532 | 99 | 89 | 188 | 4. | 2 | 6 | 856 | 770 | 1． 90 |

TABLE 3．－Number of undergraduate and graduate students in private universi－ ties，colleges，and schools of technology．

| State or Territors． | Coilegiate depart－ ments． |  |  | Graduate departments． |  |  |  |  |  | Total number of undergraduate and giaduate students． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Resident． |  |  | Nonresi－ dent． |  |  |  |  |  |
|  | $\begin{array}{r} \dot{\circ} \\ \stackrel{\rightharpoonup}{ت ゙} \end{array}$ |  | $\begin{aligned} & \text { ت⿹\zh26灬 } \\ & \stackrel{0}{0} \end{aligned}$ |  |  | $\begin{aligned} & \text { İ } \\ & \text { IN } \\ & \text { E- } \end{aligned}$ |  |  | $\begin{aligned} & \text { تुं } \\ & \text { H. } \end{aligned}$ |  |  |  |
| United States | 41，549 | 27，419 | 68， 998 | 2，887 | 1，306 | 4，203 | 644 | 60 | \％04 | 45，120 | 28，785 | 23，975 |
| North Atlantic Division． | 18，34\％ | 7，03\％ | 25，384 | 1，544 | 500 | 2,074 | 25.2 | 17 | 263 | 20，173 | 7，5924 | 27， 727 |
| South Atlantic Division． | 4，266 | 5，473 | 9， 733 | 359 | 92 | 461 | 23 | 0 | 23 | 4，658 | 5，565 | 10，223 |
| South Central Division－． | 4，811 | 6，270 | 11， 113 | 73 | 215 | 288 | 35 | 4 | 39 | 4， 949 | 6，491 | 11，440 |
| North Cential Division．－ | 12，177 | 7，649 | 19， 823 | 818 | 49 | 1，237 | 333 | 39 | $3{ }^{\text {兄 }}$ | 13，328 | 8,137 | 131，465 |
| Western Division．－．．．．－－ |  |  | 2，935 | 63 | 50 |  | 1 | 0 | 1 | 2，012 | 1，038 | 3， 050 |
| North Athntic Dirision： |  |  |  |  |  |  |  |  |  |  |  |  |
| Tiaine－－．．．－－－．．．－ | 521 | 215 | 736 | 0 | 6 | 6 | 0 | 0 | 0 | 521 | ， | 742 |
| New Hampshi | 610 110 | ${ }_{48}^{0}$ | 610 158 | ${ }_{0}^{4}$ | ${ }_{2}^{0}$ | $\stackrel{4}{2}$ | 0 | 0 0 | 0 1 | 614 | 0 | 61 |
| Massachinsetts | 4，049 | 8，026 | \％，055 | 426 | 118 | 544 | 36 | 0 | 36 | 4，511 | 3， 144 | 7，655 |
| Rhode Island | 661 | 165 | 820 | 45 | 39 | 84 | 12 | 3 | 15 | 718 | 207 | 925 |
| Connecticut | 2.115 | 73 | 2，188 | 217 | 43 | 260 | 33 | 0 | 33 | 2，365 | 116 | 2，481 |
| New York | 4，584 | 1，833 | 6，417 | 575 | 182 | \％ 57 | $5 \%$ | 9 | 66 | 5，216 | 2，024 | \％， 24.0 |
| New Jersey | 1，5ă |  | 1，555 | $13 \pm$ | 1 | 185 | 21 | 0 | 21 | 1，708 |  | 1， 112 |
| Pennsylvania | 4，146 | 1，670 | 5，818 | 173 | 109 | 282 | 92 | 5 | 97 | 4，411 | 1，786 | 6，197 |
| South Atlantic Division： <br> Delaware | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Maryland | 787 | 755 | 1，542 | 219 | 5 | 215 | 0 | 0 | 0 | 997 | 760 | 1，757 |
| District of Columbia－ | 402 | 105 | 50\％ | 133 | 13 | 146 | 0 | 0 | ， | 535 | 118 | ， 6.53 |
| Virginia | \％99 | 1，045 | 1，8\％ | 16 | 11 | $2 \pi$ | 3 | 0 | 3 | 798 | 1，056 | 1，854 |
| West Virginia | 109 | 77 | 180 | 0 | 0 | 0 | 0 | 0 | ， | 109 | 1， 77 | 186 |
| North Carolina | 969 | 976 | 1， 945 | 8 | 7 | 15 | 13 | 0 | 13 | 990 | 983 | 1，973 |
| South Carolin | 501 | 1，034 | 1，595 | 0 | 21 | 21 | \％ | 0 | 7 | 508 | 1，115 | 1，6\％3 |
| Georgia | $67 \pm$ | 1，39\％ | $2,0 \% 1$ | $\stackrel{2}{0}$ | 35 | 37 | 0 | 0 | 0 | 676 | 1，432 | ？， 108 |
| Florida－．．．－．－．．．．．．－ | 45 | 24 | 69 | 0 | 0 | 0 | 0 | 0 | － | 45 | 24 | 69 |
| South Central Division： Kentucky | $3 \mathrm{a} \frac{1}{4}$ | 1，081 | 2，035 | 11 | 7 | 18 | 2 | 0 | 8 | 967 | 1，088 | 2，055 |
| Tennessee | 1，507 | 1，938 | 3，445 | 49 | 31 | 80 | 28 | 0 | 28 | 1，584 | 1，959 | 3，553 |
| Alabama | 601 | 788 | 1，389 | 1 | 24 | 25 | 0 | 0 | 0 | 602 | 1812 | 1，414 |
| Nississippi | 209 | 1，06\％ | 1，276 | 4 | 17 | 21 | 0 | 0 | 0 | 213 | 1，084 | 1，297 |
| Louisiana | 441 | 284 | \％25 | ， | 93 | 93 | 0 | 0 | 0 | 445 | 379 | 824 |
| Texas－－ | 925 | 863 | 1，\％93 | 3 | 41 | 44 | 5 | 3 | 8 | 933 | 912 | 1，845 |
| Arkansas | 180 | 230 | 420 | 0 | 0 | ， | 0 | 0 | 0 | 190 | 230 | 4.0 |
| Okiahoma－．．．．．．． | ， | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Indian Serritory | 14 | 16 | 39 | 1 | 0 | 1 | 0 | 1 | 1 | 15 | 17 | 33 |
| Ohio | 2，451 | 1，808 | 4，683 | 69 | 29 | 98 | 201 | 11 | 212 | 2，${ }^{2}$ 21 | 1，6\％8 | 4，399 |
| Indiana | 1，287 | 413 | 1，760 | 40 | 23 | 63 | 3 | 1 | 4 | 1，330 | ${ }^{4} 37$ | 1， 767 |
| Illinois | 2，974 | 1，95\％ | 4，9\％9 | $65 \%$ | 345 | 1，003 | 33 | 4 | 37 | 3，65\％ | 2，304 | 5，971 |
| Mifchigan | 599 | 296 | ． 835 | 3 | 5 | 8 | 5 | 7 | 12 | 567 | 303 | 875 |
| Wisconsin | 590 | 220 | 812 | 16 | 4 | 20 | 30 | 0 | 30 | 635 | 223 | S62 |
| Minneso | 587 | 237 | 824 | 1 | 1 | 2 | 11 | 1 | 12 | 599 | 239 | $8: 38$ |
| Iowa．． | 1，283 | $7^{7} 49$ | 2，032 | 17 | 12 | 29 | 18 | 5 | 23 | 1，318 | 766 | 2，081 |
| Missouri |  | 1．350 | 2，588 |  | 17 |  | 19 | 0 |  | 1，236 |  | 2，633 |
| North Dak | 23 | 12 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 12 |  |
| South Dako | 87 | 43 | 130 | 1 | 0 | 1 | 2 | 0 | 2 | 90 | 43 | 133 |
| Nebrasta | 337 | $22^{7}$ | 56. | \％ | 1 | 3 | 6 | 6 | 12 | 345 | 234 | 549 |
| Kaneas－－－．－．．． | \％ 3 | 510 | 1，263 | 3 | 9 | 12 | 5 | 4 | 9 | 76 | 593 | 1，289 |
| Western Division： <br> Montana | 16 |  |  | 0 | 0 | 0 | 0 | 0 | 0 |  |  | 32 |
| Wyoming | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ， |
| Colorado | 160 | 137 | 297 | 3 | 4 | 7 | 0 | 0 | ， | 163 | 141 | 301 |
| New Mexic | 0 | 0 | ， | 0 |  | 0 | 0 | 0 | ， | 0 | ， |  |
| Arizona | ， | 0 | 0 | 0 | 0 | 0 | 0 | 0 | － | 0 | ， | 0 |
| Utah | 1 \％ | 11 | 28 | ， | 0 | 0 | 0 | 0 | 0 | 17 | 11 | 28 |
| Nevada | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Idaho． | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Washing | 23. | 95 | 300 | 2 | 0 | 2 | 1 | 0 | 1 | 267 | 96 | 363 |
| Oregon | 180 | 128 | 308 | 5 | 0 | ） | 0 | ， | 0 | 185 | 128 | 313 |
| Calicornia | 1，311 | 600 | 1，911 | 53 | 43 | 99 | 0 | 0 | 0 | 1，364 | $6 \pm 5$ | 2，010 |

TABLE 4. - Nomber of undergraduate siudents in universities and colleges for men and for both sexes (Table 38).


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Table 5.-Classification of miniversitites and colleges for men and for both sexes (Table 38) according to amount of endoument funds.

| State or Territory. | Institutions having- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| United States .- | 181 | 13 | 13 | 5 | 18 | 39 | 12 | 1.3 | 39 | 14 | 13 | \% | 4 | 5 | 3 | 1 | 13 | 3 | 3 | 1 | 2 | 3 | 1 | 2 |
| N.Atlantic Division S. Atlantic Division S. Central Division N.CentralDivision. Western Division.- | $\begin{aligned} & 25 \\ & 30 \\ & 42 \\ & 60 \\ & 60 \end{aligned}$ | 3 <br> -3 <br>  <br> 1 <br> 1 | $\begin{aligned} & 9 \\ & 5 \\ & 5 \\ & 8 \\ & 8 \end{aligned}$ | $\begin{aligned} & 1 \\ & \frac{1}{2} \\ & 2 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{array}{r}- \\ 3 \\ 12 \\ 12 \\ 1 \\ \hline\end{array}$ | 3 <br> 5 <br> 5 <br> 19 <br> 7 | $\begin{array}{r}3 \\ 8 \\ 4 \\ 24 \\ 1 \\ \hline\end{array}$ | 5 <br> 11 <br> 10 <br> 11 <br> 6 | $\begin{gathered} 8 \\ 6 \\ 4 \\ 20 \\ 1 \\ \hline \end{gathered}$ | 6 <br> 2 <br> 3 <br> 3 <br> 2 <br> 1 | 5 | 2 -1 4 | 1 1 1 1 | 1 | 2 | 1 | 5 | 3 | $\begin{gathered} \hline 1 \\ \cdots \\ \hdashline 1 \\ 1 \end{gathered}$ | 1 | 2 | 2 | 1 | 1 - -1 |
| N. Atlantic Division: Maine New Hampshive | - 1 | 1 |  |  |  |  |  |  | 1 | 1 | 1 |  | 1 |  |  |  |  | 1 |  |  |  |  |  |  |
| Mermont ---..-- | $\underline{2}$ | 1 |  |  |  |  |  |  |  |  |  |  |  | 1 | 1 |  | 3 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| Connecticut.-.- |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  | 1 |  |  |  | 1 |  |  |  |
| New York <br> New Jersey.-. | 8 | 1 |  |  |  | 1 | 1 | 1 | 1 | 1 | 3 |  |  | 1 |  |  | 1 | 2 |  |  |  | 1 | 1 |  |
|  | $1{ }^{3}$ |  |  |  |  | 2 | 2 | 4 | 6 | 2 | 3 | 1 |  | 1 |  |  |  |  | 1 |  | 1 | 1 |  |  |
| Pennsylvania S.Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S.Atlantic Division: Delaware........ Maryland | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | \% |  |  |  | 1 | 1 |  | - 1 |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |
| Dist. Columbia | 1 |  |  | 1 | 1 |  | 1 | ${ }_{3}^{1}$ | 1 | 1 |  |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |
| West Virginia- | 2 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 6 |  | 2 |  |  |  |  | $\because$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| South Carolina- | 3 |  | 1 |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Georgia Florida | 6 1 |  | 1 |  | 1 |  | 1 | $\stackrel{2}{1}$ |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S. Central Division: Kentucky - .... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 3 |  | 1 |  |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tennessee --....- | 9 | 2 | 2 |  | 1 | 2 |  | 3 | 1 |  | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Alabama } \\ & \text { Mississippi-...... } \end{aligned}$ | 5 |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 5 |  |  |  |  | 1 |  |  |  |  |  | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |
| Louisiana .-.---- | 12 | 1 |  |  |  | 1 | ${ }^{-}$ |  |  | 1 |  |  | 1 |  |  |  | 1 |  |  |  |  |  |  |  |
| Arkansas.-.-.-- | , |  | 1 |  | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| klahoma <br> Indian Tei $\qquad$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| N.Central Division: Ohio Indiana |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | \% |  |  |  | 1 |  | 7 | 4 |  | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 |  |  |  |  |  |  |  |
|  |  |  |  |  | 1 |  |  | $\stackrel{2}{5}$ |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| Mlinois --........ | ${ }_{1}^{6}$ | 3 | 2 |  | 2 | 3 | 3 | 5 | $\stackrel{2}{5}$ | 1 | 1 | 1 |  |  |  |  |  |  | 1 |  |  | 1 |  |  |
| Wisconsin-------- | + |  |  |  | 1 |  | 1 |  | 2 |  | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Minnesota------ | $\stackrel{2}{2}$ |  | 2 |  |  |  | 1 | 2 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |
|  | ${ }^{5}$ | 2 | 2 |  | $\stackrel{3}{3}$ |  | 5 | ${ }_{2}^{4}$ |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Missourio.-.-.-. | 11 |  | 1 | 1 |  |  | 3 | 2 | 4 |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |
| North Dakota-- | 4 |  |  |  |  |  | $\square^{-1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nebraska <br> Kansas | 5 |  | 1 |  | 1 | , | 1 | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |
|  | 11 | 1 |  | 1 | 1 | 3 | 2 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Division: Montana |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wyoming <br> Colorado |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arizona -........ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | 1 |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nevada............ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Washington-...-Oregon-...----California |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 2 | 1 | 2 |  |  |  |  | , | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 4 |  |  | 1 | 1 |  |  | 1 |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |

TAbLe B.-Classification of universitics and colleges for men and for both sexes (Table 38) according to the number of undergraduaie students.


Table \%.-Nonsectarian and religious control of universities and colleges for men and for both sexes, with the number of professors and students in undergraduate collegiate departments, and the total amount of endowment funds.


Table 8.-Nonsectarian and religious control of universities and colleges for men and for both sexes, etc.-Continued.

| State ol' Territory. | Methodist Episcopal. |  |  |  | Baptist. |  |  |  | Presbyterian. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \dot{0} \\ & \frac{1}{0} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | n +0 0 0 0 0 0 0 |  |  |  |  |  |  |  |  |  |
| United States | 85 | 889 | 8,997 | \$11, 189, 593 | 53 | $79 \%$ | 7,581 | \$13,772, 258 | 56 | 498 | 4, $1 \% \%$ | \$5, 110, 769 |
| North Atlantic Division | 6 | 147 | 1,769 | 3,867,553 | 8 | 190 | 1,977 | 4,766,556 | 5 | 66 | 897 | 1,334, 030 |
| South Atlantic Division | 15 | 103 | 1,204 | 658.000 | $9$ | 141 | 1,231 | 1,275, 418 | $6$ | 41 | 398 | $218,0 \times 1$ |
| South Contral Division | 18 | 167 | 1,225 | 1,310, 300 | 15 | 111 | 1,371 | -583, 500 | 15 | 121 | 990 | 1,058,538 |
| North Centrai Division. | 38 | 395 | 4, 453 | 5,077, 810 | 18 | 336 | 2, 817 | 7,068, 754 | 25 | 240 | 1,803 | 2,498,601 |
| Westerr Division....... | 8 | 75 | 317 | 245, 930 | 3 | 14 | 185 | 73,000 | 5 | 30 | 89 | 1,600 |
| NorthAtiantic Division: Maine |  |  |  |  | 2 | 35 | 475 | 825, 353 |  |  |  |  |
| Mrassachusetts ------ | 1 | 26 | 418 | \%90,000 |  |  |  |  |  |  |  |  |
| Rhode Island |  |  |  |  | 1 | 72 | 8:6 | 817,61: | -- |  |  |  |
| Connecticut | 1 | 35 | 324 | 1,258, 943 |  |  |  |  |  |  |  |  |
| New Yol'k.-.-------- | 1 | 49 | 570 | 1,313,010 | 3 | 50 | 393 | 2, 723,591 |  |  |  |  |
| Pennsylvania ---.-.- | 3 | 37 | 456 | 505,000 | 2 | 33 | 283 | 400, 000 | 5 | 66 | 897 | 1,334, 030 |
| South Aclantic Division: Maryland | 1 | 6 | 11 | 20,000 |  |  |  |  | 1 | 5 | 30 | 0 |
| District of Columbia |  |  |  |  | $\stackrel{1}{2}$ | 66 | 346 | 256,075 |  |  |  | - |
| Virginia | ${ }_{1}$ | 16 | 179 | $1 \% 6,000$ | 2 | 18 | 236 | 281,000 | 1 | 8 | 36 | 0 |
| West Virginia | 1 | 7 | 82 |  |  |  |  |  |  |  |  |  |
| North Carolina | 3 | 22 | 253 | 230, 000 | 2 | 19 | $26:$ | 287, 373 | 2 | 17 | 221 | 12\%,000 |
| South Carolina | 3 | 20 | 177 | 63, 000 | 1 | 10 | 155 | 65, 000 | 2 | 11 | 111 | 91,000 |
| Georgia | 5 | 34 | 502 | 175, 000 | 2 | 15 | 195 | 186, 000 |  |  |  |  |
| Florida ---------.- |  |  |  |  | 1 | 13 | 37 | 200,000 |  |  |  |  |
| South Central Division: <br> Kentucky | 2 | 14 | 129 | 42,000 | 3 | 24 | 301 | 325, 000 | 2 | 28 | 299 |  |
| Tennessee | $\stackrel{3}{3}$ | 57 | 262 | 1, 108, 300 | 3 | 28 | $3 \geqslant 9$ | 105,000 | 8 | 58 | 465 |  |
| Alabama | 1 | 6 | 131 | -50, (000 | 1 | 9 | 120 | 1,000 | 8 |  |  |  |
| Mississippi | 2 | 12 | 111 | 110, 000 | 1 | 7 | 100 | 39,000 |  |  |  |  |
| Louisiana | 2 | 11 | 76 | 110 | 2 | 11 | 86 | 117, 500 |  |  |  |  |
| Texas..-. | 5 | 48 | 363 | 0 | 3 | 17 | 276 | 1,000 | ${ }^{2}$ | 14 | 138 | 93,500 |
| Arkansas - | 3 | 19 | 153 | 0 | 1 | 8 | 150 | 0 | 2 | 12 | 67 | 25,500 |
| Indian Territory .-.. |  |  |  |  | 1 | 7 | 9 | 0 | 1 | 9 | 21 | - 0 |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio | 6 | 6.2 | 976 | 1,012, 1\%0 | 2 | 22 | 230 | 489, 000 | 3 | 22 | 38 2 | 426,500 |
| Indiana | 3 | 36 | 464 | 231,000 | 1 | 9 | 152 | 213,000 | 1 | 10 | 98 | 175,000 |
| Thlinois. | 5 | 80 | 993 | 2, 664, 258 | 3 | 197 | 1,489 | 5,336, 729 | 4 | 47 | 340 | 786,000 |
| Michigan | 1 | 12 | 225 | - 230,000 | 2 | 19 | 276 | -459, 433 | 1 | 10 | 42 | 218,501 |
| Wisconsin | 1 | 13 | 111 | - 212,000 | 1 | 8 | 54 | 83, 743 | 1 | 16 | 50 | -0 |
| Minnesota | 1 | 18 | 170 | 103, 110 | 1 | 6 | 11. | 60,000 | 1 | 8 | 65 | 8, 000 |
| Iowa--- | 7 | 78 | \%13 | 317,302 | 2 | 21 | 118 | 79, 849 | 4 | 41 | 268 | 218,600 |
| Missouriol | 6 | 40 | 355 | 229,000 | 4 | 39 | 333 | 232,000 | 4 | 38 | 350 | 581,000 |
| North Dakota | 1 | 5 | 9 |  |  |  |  |  |  |  |  |  |
| South Dakota | 2 | 15 | 60 117 | 30, 000 |  |  |  |  | 1 | 7 | 8 | 0 |
| Nebraska | 1 | 10 | 117 | - 0 | 1 | 6 | 29 | 35,000 | 2 | 17 | 79 | 20,000 |
| Westernas | 4 | 32 | 259 | 40,000 | 1 | 9 | 125 | 80, 000 | 3 | 24 | 121 | 65,000 |
| Western Division: Montana | 1 | $\%$ | 10 | 0 |  |  |  |  | 1 | 4 | 2\% | 0 |
| Colorado | 1 | 14 | 84 | 175,085 |  |  |  |  |  |  |  |  |
| Utah-.- |  |  |  |  |  |  |  |  | $\overline{1}$ | 2 | 8 | 0 |
| Washington | 1 | 9 | 25 |  | 1 | 6 | 111 | 0 | 1 | 5 | 20 | 0 |
| Oregon | 2 | 20 | 54 | 40,000 | 1 | 4 | 56 | 38, 000 | 1 | 8 | 24 | 1,600 |
| California | 3 | 25 | 174 | 60,845 | 1 | 4 | 18 | 35,000 | 1 | 11 | 15 | 0 |

Table 9-Nonsectarian and religious control of universities, etc.-Continned.


Table 10. -Nonsectarian and religious control of universities, etc.-Continued.

| State or Territory. | Protestant Episcopal. |  |  |  | Lutheran. |  |  |  | Friends. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| United States. | 5 | 69 | 489 | \$1,777, 894 | 24 | 192 | 1,881 | \$1,270,685 | $\cdots$ | 89 | 842 | \$1, 233,000 |
| North Atlantic Division South Atlantic Division | 3 | 43 | 275 | 1,204, 288 | 4 | $\begin{aligned} & 36 \\ & 24 \\ & 24 \end{aligned}$ | $\begin{aligned} & 4: 27 \\ & 300 \end{aligned}$ | $\begin{aligned} & 471,280 \\ & 101,100 \end{aligned}$ | $\left\|\begin{array}{l} 2 \\ 1 \end{array}\right\|$ | $\begin{aligned} & 40 \\ & 10 \\ & 10 \end{aligned}$ | $\begin{array}{r} 345 \\ 99 \end{array}$ | $\begin{array}{r} 975,110 \\ 50,000 \end{array}$ |
| South Central Division. | 1 | 15 | 120 | 100,000 |  |  |  |  |  |  |  |  |
| North Central Division <br> Western Division........ | 1 | 11 | 94 | 293, 608 | 13 | 13. | 1,154 | 698, 405 | 1 | $\begin{array}{r}31 \\ 8 \\ \hline\end{array}$ | $\begin{array}{r}390 \\ 48 \\ \hline\end{array}$ | 200,000 8,000 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Connecticut <br> New York | ${ }_{2}^{1}$ | $\stackrel{20}{20}$ | 13 | 762,000 562,286 |  |  |  |  |  |  |  |  |
| Pennsylvania-------- |  |  |  |  | 4 | $3{ }^{-8}$ | 427 | 471,280 | $\stackrel{\square}{2}$ | 40 | 305 | 975,000 |
| South Atlantic Division: <br> Virginit |  |  |  |  | 1 | 10 | 134 |  |  |  |  |  |
| North Carolina |  |  |  |  | $\stackrel{1}{2}$ | 7 | 159 | 6,000 | 1 | 10 | 99 | 50,600 |
| South Carolina.....- |  |  |  |  | 1 | 7 | 107 | 35, 000 |  |  |  |  |
| South Central Division: | 1 | 15 | $1: 0$ | 160,000 |  |  |  |  |  |  |  |  |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio <br> Indiana | 1 | 11 | $9!$ | 293,608 | 3 1 | 27 | $\begin{array}{r}221 \\ 124 \\ \hline\end{array}$ | 236, 793 | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | $\begin{array}{r} 6 \\ 14 \end{array}$ | $\begin{array}{r} 55 \\ 205 \end{array}$ | $\begin{array}{r} 40,000 \\ 130,000 \end{array}$ |
| IIITinois |  |  |  |  | 2 | 17 | 152 | 391, 920 |  |  |  |  |
| Wisconsin. |  |  |  |  | $\stackrel{2}{3}$ | 14 | 199 | ${ }^{0}$ |  |  |  |  |
| Minnesota |  |  |  |  | 3 | $\stackrel{3}{3}$ | 207 | 37, 000 |  |  |  |  |
| Iowa.. |  |  |  |  | 2 | 18 | 125 | 8,527 | 1 | 11 | 130 | 30,000 |
| Western Division: |  |  |  |  | 3 | $\sim$ | 120 |  |  |  |  |  |
| Oregon... |  |  |  |  |  |  |  |  | 1 | 8 | 43 | 8,000 |

Table 11.-Nonsectarian and religious control of universities and colleges for mon and for both sexes, etc.-Continued.

| State or Territory. | Unirersalist. |  |  |  | German and. United Evangelical. |  |  |  | Methodist Protestant. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & \dot{v} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & N_{1} \end{aligned}$ |  |  |  | $\begin{aligned} & \dot{\omega} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \dot{B} \end{aligned}$ |  |  |
| United States | 4 | 71 | 553 | \$2,011,016 | 4 | 28 | $27 \%$ | \$28,805 | 3 | 45 | $20 \%$ | \$80,000 |
| North Atiantic Division South Atlantic Division | 2 | 47 | 391 | 1,661,016 | 2 | 18 | 148 | 25,000 | 1 | 20 |  |  |
| North Central Division Western Division. ......- | 2 | 24 | 102 | 350,000 | $\left[\begin{array}{c} -1 \\ 1 \\ 1 \end{array}\right.$ | $\begin{array}{r} -7 \\ 4 \\ 4 \end{array}$ | $\begin{aligned} & -91 \\ & 98 \\ & 38 \end{aligned}$ | $\begin{array}{r} 3,805 \\ 0 \end{array}$ | 2 | \% | 91 | 80,009 |
| NorthAtlantic Division: <br> Massachusetts <br> New York <br> Pennsylvania | $\frac{1}{1}$ | $\begin{aligned} & 35 \\ & 12 \end{aligned}$ | $\begin{aligned} & 287 \\ & 104 \end{aligned}$ | $1,300,000$ 361,016 | 2 | 18 | 148 | 25, 000 | - |  |  |  |
| South Atlantic Division: Maryland |  |  |  |  |  |  |  |  | 1 | 23 | 173 | 0 |
| North Central Division: <br> Ohio | 1 | 11 | 93 | 200,000 |  |  |  |  |  |  |  |  |
| Illinois -------------- | 1 | 13 | $\%$ | 150,000 | 1 | 6 | 91 | 3,805 |  |  |  |  |
| Michigan ---..---...-. |  |  |  |  |  |  |  |  | 1 | 12. | $\begin{aligned} & 64 \\ & 30 \end{aligned}$ | 80,000 0 |
| Western Division: Oregon |  |  |  |  | 1 | 4 | 38 | 0 |  |  |  |  |

Table 12.-Nonsectarian and religious control of universities and colleges formen and for both sexes, etc.-Continued.

| State or Territory. | Reformed. |  |  |  | Seventin-Day Adventist. |  |  |  | Other denominations. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & \text { 合 } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |
| United States | 7 | 99 | 681 | \$1,411,000 | 1 | 12 | 154 | 0 | 6 | 34 | 168 | 9354. 633 |
| North Atlantic Division South Atlantic Division | 3 | $\begin{array}{r} 56 \\ 8 \end{array}$ | $\begin{array}{r} 412 \\ 21 \end{array}$ | $\begin{array}{r} 1,030,000 \\ 32,000 \end{array}$ | - | ... | .-. |  | 1 | 4 | 24 | 115, 633 |
| North Central Division. Western Division. | 3 | 35 | 248 | 349,060 | i- | -12 | -154 | 0 | 1 | ${ }^{2} 7$ | $\begin{array}{r} 131 \\ 13 \end{array}$ | $\begin{aligned} & 139,000 \\ & 109,000 \end{aligned}$ |
| N. Atlantic Division: New Jersey Pemnsylvania | 1 | $\begin{aligned} & 27 \\ & 29 \end{aligned}$ | $\begin{aligned} & 166 \\ & 246 \end{aligned}$ | $\begin{aligned} & 500,000 \\ & 530,000 \end{aligned}$ |  |  |  |  | 1 | 4 | 24 | 135,633 |
| S. Atlantic Division: North Carolina. | 1 | 8 | 21 | 32, 000 |  |  |  |  |  |  |  |  |
| N. Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio <br> Illinois | 1 | 13 | 115 | 95, 000 | - |  |  |  | 1 | 3 | 11 | 31,000 |
| Michigan | 1 | -12 | $8{ }^{-7}$ | 230,009 |  |  |  |  | 2 |  |  |  |
| Wisconsin | 1 | 10 | 46 | 24, 000 |  |  |  |  |  |  |  |  |
| Iowa--.......... |  |  |  |  |  |  |  |  | 1 | 7 | 10 | 0 |
| Western Division: |  |  |  |  | 1 | 12 | 154 | 0 |  |  |  |  |
| Utah ....-...... |  |  |  |  |  |  |  |  | 1 | $\%$ | 13 | 100, 000 |

Table 13.- Professors and instructors in universities and colleges for men and for both sexes (Table 38).

| State or Teristory. |  | Preparatory departments. |  | Collegiate departhents. |  | Professional departments. |  | Total num' er (excluding duplicates). |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | $\begin{aligned} & \text { Fe- } \\ & \text { male. } \end{aligned}$ | Male. | Feinale. | Male. | $\mathrm{Fe}-$ male. | Male. | $\begin{aligned} & \text { Fe- } \\ & \text { male. } \end{aligned}$ |
| United States | 484 | 2,261 | 952 | 7,11\% | 825 | 3,821 | 59 | 12,030 | 1.738 |
| North Atlantic Division | 81 | $38 \pm$ | 103 | 2, 417 | 73 | 1,281 | 1 | 3,944 |  |
| South Atlantic Division | 73 | 24. | 103 | 799 | 71 | 406 | 2 | 1,313 | 165 |
| South Central Division.. | $8 \pm$ | 278 | 173 | 699 | 155 | 471 | 2 | 1,3:8 | 320 |
| North Central Division | 198 | 1,109 | 468 | 2,594 | 430 | 1,226 | 41 | 4, 314 | 904 |
| Western Division ...... | 45 | 1, 246 | 105 | 603 | 96 | 1, 437 | 13 | 1,131 | 192 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
|  | 4 | 0 | 0 | 92 | 3 | 33 | 0 | 118 |  |
| New Hampshire | $\stackrel{2}{3}$ | 0 | 0 | 51 | 0 | 15 | - 0 | 74 |  |
| Vermont --.... | 3 | 0 | 0 | 54 | 0 | 28 | 0 | 81 |  |
| Massachusetis Rhode Island | 9 1 | 39 0 | 6 0 | 482 71 | 8 | 366 0 | ${ }_{0}^{1}$ | $8 \pi 1$ |  |
| Connecticut - | 3 | 0 | 0 | 218 | 0 | 92 | 0 | 815 | 0 |
| New York. | 23 | 191 | 53 | \%64 | 24 | 441 | 0 | 1,358 | ${ }_{69}$ |
| New Jersey | 5 | 20 | 4 | 131 | 0 | 4 | 0 | 143 | 4 |
| Pennsylvania -- | 34 | 126 | 40 | 554 | 37 | 302 | 0 | 913 | 71 |
| South Atlantic Division: | 2 | 2 | 1 | 17 | 0 | 0 | 0 | 19 |  |
| Maryland - | 11 | \% | 8 | 184 | 14 | 52 | 1 | $2 \% 0$ | 17 |
| District of Columbia | 7 | 31 | 1 | 149 | 4 | 247 | 1 | 422 | 10 |
| Virginia | 10 | 20 | 3 | 108 | 0 | 43 | 0 | 155 |  |
| West Virginia | 3 | 8 | 1 | 53 | 10 | 4 | 0 | 68 | 14 |
| North Carolina | 15 | 39 | 20 | $11 \%$ | 13 | 40 | 0 | 157 | 33 |
| South Carolina | 9 | 14 | 23 |  | $\stackrel{2}{5}$ | 1 | 0 | 79 | 2.5 |
| Geor'gia. | 11 | $\stackrel{27}{33}$ | 20 26 | 32 34 | 15 13 | 17 8 8 | 0 0 | 95 48 | 28 31 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Kentricky | 13 | 45 | 32 | 103 | 11 | 66 | 1 | 208 | 50 |
| Tenuessee | 24 | 85 | 53 | 218 | 63 | 266 |  | 515 | 109 |
| Alabama. | 8 | 9 | 6 | 74 | 4 | 26 | 0 | 108 | 10 |
| Mississippi | 9 | 18 | 4 | 29 | ${ }^{3}$ | 8 | 0 | 47 | 1 |
| Louisiana. | 9 | 20 | 26 | 86 | 19 | 41 | 0 | 139 | 41 |
| Texas..- | 16 | 70 | 31 | 126 | 30 | 45 | 1 | 217 | 65 |
| Arkansas | 7 | 20 | 14 | 50 | 13 | 19 | 0 | 78 | 21 |
| Oklahoma --- | 1 | 10 | 1 | 8 | 11 |  |  | 10 | 17 |
| Indian Territory.-..- | 2 | 1 | 6 | 5 | 11 | 0 | 0 | 6 | 17 |
| North Central Division: | 34 | 194 | 65 | 45 t | 61 | 210 | 1 | 773 | 135 |
| Indiana. | 13 | 74 | 14 | 211 | 16 | 21 | 0 | 274 | 28 |
| Illinois | 31 | 188 | 69 | 543 | 75 | 360 | 28 | 954 | 182 |
| Michigan | 9 | 44 | 23 | 180 | 25 | 113 | 3 | 287 | 53 |
| Wisconsin | 10 | 61 | 16 | 187 | 23 | 50 | 0 | 246 | 37 |
| Minnesota | 9 | 38 | 14 | 180 | 31 | $1 \stackrel{11}{1}$ | 2 | 364 | 44 |
| Iowa | 25 | 143 | 76 | 235 | 61 | 111 | 0 | 357 | 118 |
| Missouri | 27 | 118 | 88 | 220 | 44. | 85 | 0 | 413 | 124 |
| North Dakota | 3 | 16 | 9 | 18 | 4 | 0 | 0 | 21 | 11 |
| South Dakota | ${ }^{6}$ | 41 | 24 | 41 | 20 | 0 | 0 | 50 | $3{ }^{2}$ |
| Nebraska | 11 | 55 | 26 | 123 | 30 | 78 | 1 | 236 | 56 |
| Kansas-- | 20 | 137 | 44 | 202 | 40 | 87 | 6 | 339 | 84 |
| Western Division: |  |  |  |  |  |  |  |  |  |
| Montana | 3 | 13 | 11 | 13 | 10 | 0 | 0 | 18 | 16 |
| Wyoming | 1 | 11 | 3 | 11 | 3 | 0 | 0 | 11 | 8 |
| Colorado- | 4 | 45 | 11 | 61 | 9 | 99 | 3 | 184 | 56 |
| New Mexico | 1 | 13 | 4 | 10 | 2 | 0 | 0 | 13 | 4 |
| Arizona--. | 1 | ${ }^{6}$ | 3 9 | 11 | $\stackrel{2}{2}$ | 0 | 0 0 | 12 | 4 |
| Nevada | 4 | ${ }_{7} 7$ | $\stackrel{5}{5}$ | 15 | 6 | 0 | 0 | 15 | 8 |
| Idaho.- | 1 | 2 | 1 | 11 | 5 | 0 | 0 | 13 | 6 |
| Washington | 8 | 22 | 9 | 74 | 11 | 0 | 0 | 82 | 20 |
| Oregon--.-- | 12 | 44 57 | 22 27 | 68 307 | 17 29 | 57 281 | 0 10 | ${ }_{6}^{132}$ | 5 |
| Calitornia | 12 | 57 | 27 | 307 | 29 | 281 | 10 | 604 | 58 |

Table 14．－Students in umiversities and colleges for men and for both sexes （Table 38）．

| State or Territors． | Prepara－ tol＇y depart－ ments． |  | Collegiate depart－ ments． |  | Graduate depart－ ments． |  |  |  | Profes－ sional depart－ ments． |  | Total num－ ber（exclud－ ing dupli－ cates）． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Resident． | Nonresi－ dent． |  |  |  |  |  |
|  | $\begin{gathered} \dot{0} \\ \text { 馬 } \end{gathered}$ |  |  |  | 寄 |  | － | $\begin{aligned} & \text { 淢 } \\ & \text { Hen } \end{aligned}$ | 命 |  | 突 | － | $\stackrel{\stackrel{y}{3}}{\stackrel{y}{ت}}$ |  |
| United States | 31，156 | 15，071 | 2ั！， 760 | 17，\％\％ | 3， 304 | 1，191 | 800 | 94 | 2\％，120 | 1，145 | 120，441 | 37，879 |
| Norch Atlantic Division． | 5，931 | 1.091 | 20， 737 | 2，402 | 1，617 | 220 | 295 | 17 | 8， 003 | 488 | 37， 691 | 4.425 |
| South Atlantic Division． | 3， 469 | 1，315 | 5，94， 7 | 968 | 449 | 23 | 40 | 1 | 2，${ }_{2} 1$ | 60 | 12， 762 | 2， 865 |
| South Central Division．－ | 5，244 | 3,155 | 6，219 | 2， 418 | 111 | 110 | 50 | $?$ | 4，153 | 61 | 16，C62 | 6，223 |
| Nouth Central Division－ | 13， 969 | \％， 5 5\％ | 18， 395 | 9， 850 | 1，30\％ | 649 | 448 | 65 | 10，381 | $45 \%$ | 46， 003 | 19， 888 |
| Western Division．．－ | 2，543 | 1.90 c | 3,462 | 2,117 | 198 | 161 | 7 | 2 | $96 \%$ | $8!$ | 7，323 | 4， 478 |
| North Atlantic Division： <br> Maine | 0 | 0 | 808 | 188 | 6 | 0 | 0 | 0 | 195 | 0 | 1，003 | 188 |
| New Hampshire | 20 | 0 | 610 | 0 | 4 | 0 | 0 | 0 | 141 | 0 | 755 | 0 |
| Vermont | 0 | C | 339 | 111 | 3 | 3 | 4 | 0 | 210 | 0 | 608 | 114 |
| Massachusetts | 379 | 17 | 3， 813 | 393 | 425 | 31 | 36 | 0 | $\stackrel{\sim}{2} 199$ | 114 | 6，819 | 555 |
| Phode Island | 0 | （ | 661 | 165 | 45 | 39 | 12 | 3 | 0 | 0 | \％18 | 207 |
| Connecticut | 0 | 0 | 2，115 | 73 | 217 | 43 | 33 | 0 | 399 | 0 | 2，792 | 185 |
| New York | 3， 649 | 616 | 5， 406 | 594 | 575 | 89 | $5{ }^{*}$ | 9 | 3，049 | 335 | 12， $7 \times 0$ | 1，642 |
| New Jersey | 280 | 39 | 1， 337 | 0 | 134 | 0 | 21 | 0 | 31 | 0 | 1， 803 | 1，39 |
| Pennsylvania | 1，603 | 419 | 5， 618 | 8.8 | 208 | 36 | 92 | 5 | 2，679 | 39 | 10，473 | 1，495 |
| South Atlantic Division： <br> Delaware | 15 | 9 | 95 | ， | 6 | 0 | 0 | 0 | 0 | 0 | 116 | 16 |
| Maryland－－－－－－－－－－－－－－－ | 563 | 79 | 871 | $12 \%$ | 216 | 0 | 0 | 0 | 251 | 42 | 1，901 | 218 |
| District of Columbia． | 481 | 34 | 483 | 137 | 133 | 13 | $(1)$ | 0 | 1，400 | 15 | 2，569 | 306 |
| Virginia ．－．．．－．．．．－．．． | 278 | 88 | 1， 068 | 37 | 44 | O | 5 | 0 | 429 | 0 | 1，833 | 123 |
| West Virginia ．．．．．．－ | 260 | 53 | 282 | 153 | 9 | 5 | 15 | 1 | 140 | 3 | 1742 | 245 |
| North Carolina | 651 | 347 | 1，308 | 152 | 20 | 2 | 13 | 0 | 365 | 0 | 2，349 | 698 |
| South Carolina | 442 | $30 \%$ | 677 | 67 | 6 | 0 | \％ | 0 | 25 | 0 | 1，15\％ | 369 |
| Georgia | 545 | 207 | 990 | 175 | 10 | 0 | 0 | 0 | 110 | 0 | 1，660 | 614 |
| Florida－－－－－－－－－－－－－ | 234 | 190 | 173 | 113 | 5 | 3 | 0 | 0 | 8 | 0 | 435 | 316 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 1， 055 | 757 | 1，164 | 279 | 19 | $\stackrel{2}{8}$ | $\stackrel{2}{8}$ | 0 | ． 583 | 0 | 2， 8 \％ 4 | 1，117 |
| Tennessee | 1，520 | $89 ?$ | 1，735 | 850 | 53 | 8 | $\because 8$ | 0 | 2.142 | 23 | 5，694 | 2，143 |
| Alabama | 219 | 152 | 765 | 293 | － | 0 | 0 | 0 | 190 | 0 | 1，168 | 375 |
| Mississip | 101 | 20 | 340 | 31 | 8 | 0 | $1{ }^{\circ}$ | 5 | 62 | 0 | 534 | 71 |
| Louisiana | 378 | 182 | 627 | 198 | ， | 34 | 0 | 0 | 498 | 6 | 1，617 | 480 |
| Texas | 1，214 | 647 | 1，212 | 547 | 13 | 12 | － | 3 | 547 | 29 | 2， $50 \%$ | 1，239 |
| Arkansas | 495 | 317 | 310 | 251 | 1 | 0 | 0 | 0 | 108 | 0 | 949 | 583 |
| Oklahoma | 114 | 75 | 22 | 14 | 2 | 0 | ， | 0 | 23 | 3 | 161 | 92 |
| Indian Territory ．．．． | 148 | 106 | 14 | 16 | 1 | 0 | 0 | 1 | 0 | 0 | 163 | 123 |
| North Central Division： | 2，403 |  | 3 ก๐0 | 1，81 | 11 | 5 | co1 | 11 |  | 19 |  |  |
| Indiana | － 978 | 1， 241 | 1，769 | 1， 15 | 108 | 37 | 0 | 1 | 1，211 | \％ | 3， 046 | 3，996 |
| Illinois | 2，298 | 1，188 | 3， 357 | 2,004 | 681 | 331 | 58 | 5 | 3，598 | 210 | 10，376 | 4，108 |
| Michigan | 5.1 | 210 | 1，439 | 871 | 56 | 23 | 6 | 8 | 1，538 | 88 | 3，620 | 1，234 |
| Wisconsin | 6.5 | 157 | 1，699 | 554 | 83 | 32 | 33 | 1 | 276 | 7 | 2，747 | 751 |
| Minnesot | 445 | $20 \%$ | 1，233 | 718 | 148 | 49 | 11 | 1 | 1，084 | 44 | 3，412 | 1，275 |
| Iowa | 1，632 | 1，2\％8 | 1，708 | 949 | 44 | 33 | 53 | 10 | 858 | 32 | 4，437 | 2，3ă6 |
| Missouri | 2， 042 | 1，078 | 1，7\％4 | 736 | 31 | 16 | 19 | 0 | 545 | 3 | 4， 736 | 1，912 |
| North Dakota | 212 | 33？ | 75 | 49 | 0 | 3 | 6 | 1 | 0 | 0 | 293 | 385 |
| South Dakota | 305 | 273 | 127 | 85 | 2 | 2 | 2 | 0 | （ | 0 | 584 | 463 |
| NebrasEa | 764 | 557 | 866 | 678 | 42 | 29 | 44 | 22 | 263 | 22 | 2，155 | 1， 321 |
| Kansas | 1，514 | 835 | 1，185 | 688 | 25 | 18 | 15 | 5 | $35 \%$ | 27 | 3，190 | 1，861 |
| Western Division： |  |  | 46 |  |  |  |  |  |  |  |  |  |
| Montana | 112 | 111 | 46 | 51 | 1 | 0 | 0 | 0 | 0 | 0 | 159 | $16 \%$ |
| Wyoming | 39 | 42 | 33 | 23 | 2 | 1 | 2 | 0 | 0 | 0 | 76 | $6{ }^{6}$ |
| Colorado | 365 | $2 \% 4$ | 333 | 240 | 21 | 11 | 0 | 0 | 248 | 19 | 960 | 537 |
| New Mexico | 30 | 36 | 10 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 43 | 36 |
| Arizona | 20 | 20 | 53 | 38 | 0 | 2 | 0 | 0 | 0 | 0 | 73 | 60 |
| Utah | 471 | 616 | 92 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 583 | 696 |
| Nerada | 63 | 87 | 94 | 78 | 2 | 7 | 0 | 0 | 0 | 0 | 159 | $17 \%$ |
| Idaho | 62 | 42 | 44 | 31. | 1 |  | 0 | 0 | 0 | 0 | 107 | 76 |
| Washington | 305 | 154 | 374 | 198 | 10 | 2 | 1 | 0 | 0 | 0 | 702 | 360 |
| Oregon | $44 \%$ | 331 | 219 | 149 | 6 | 3 | 0 | 0 | 125 | 17 | 853 | 518 |
| California | 629 | 245 | 2，164 | 1， 209 | 152 | 132 | 4 |  | 589 | 48 | 3，698 | 1，765 |

Table 13．－Students pursuing various conrses of study in universitics and col－ leges for men and for both sexes（Table 38）．

| State or Territory． |  |  |  |  | $\begin{gathered} \text { Mechanical engi- } \\ \text { neering. } \end{gathered}$ | $\begin{aligned} & \text { Civil engineer- } \\ & \text { ing. } \end{aligned}$ | $\begin{aligned} & \text { Electrical engi } \\ & \text { neering. } \end{aligned}$ |  |  | Ped̃a－ gogy． |  | Business． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { 感 } \\ \text { 。 } \end{gathered}$ |  |  |  |  |
| Un | 29，878 | 18，024 | 7，88 | 883 | 2，160 | 1，923 | 1，584 | 592 | 4154 | 4，132 | 4，69 | 5， 10 | 1，432 | 12，033 |
| Northi Atlantic Division－ | 11， 939 | 3，902 | 2，168 | r | r | 1，031 | 840 | 154 | 335 | 730 |  | 726 | $\stackrel{24}{4}$ | 2， 497 |
| South Atlantic Division－ |  | 1， $90 \pm$ | 1，137 | 8 | ＋${ }^{4} 4$ | ＋ 73 | $\begin{aligned} & 35 \\ & 26 \end{aligned}$ |  |  | ${ }_{501}^{533}$ |  | ${ }_{767}^{361}$ | $\begin{array}{r} 89 \\ 196 \end{array}$ | 1，705 |
| North Central Division | 9，241 | 9,307 | 3，236 | 435 | 350 | 458 | 574 | 152 | 681 | 1，302 | 2，0：3 | 2，931 | 1，023 | 4，593 |
| Western Division． | 1，255 | 2， 199 | 48 ® | 29 | 246 | 210 | 59 | 274 |  | 565 | 1，206 | 317 | 95 | 1，153 |
| North Atlantic Division： <br> Miaine <br> New Fampshire <br> Vermont <br> Massachnsetts <br> Phode Is？and $\qquad$ <br> Connecticut． $\qquad$ <br> New York $\qquad$ <br> New Jersey <br> Pennsylvania $\qquad$ | 695 | 31 | 51 | 4 | 34 |  |  |  |  |  |  |  |  |  |
|  | 327 | 115 | ， |  |  | 11 |  |  |  |  |  |  |  |  |
|  | 146 | 121 | （ | ${ }_{2}^{24}$ | 21 | ${ }^{6 \%}$ | 14 |  |  |  |  |  |  | 260 |
|  | 2， 5.1 | ${ }^{251}$ | 0 | 23 |  |  | 147 | 2 | 12 | 118 | $1{ }^{1}$ |  |  |  |
|  | 1．335 | 103 |  |  | 23 |  |  |  |  |  | 12 |  |  |  |
|  | 2，860 | 1，245 | 1 |  | $3 \overline{1}$ | 3 |  | 6 | 139 | 434 |  | 256 |  |  |
|  | 880 |  | 20 |  |  | 102 | 15 |  |  |  | 0 | 14 |  | 117 |
|  | 2,654 | 1，819 |  | 11 |  | 319 |  |  | 69 |  | 63 | 44.7 | 24 | 17 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 50 | 173 | 12 | 31 |  |  |  |  |  |  | 41 | 41 |  | － 361 |
|  | 832 |  | 11 |  |  |  |  |  |  | 5 |  | 27 |  | 12 |
|  | 1，052， | 28 |  |  |  |  |  |  |  | 156 |  |  |  |  |
|  | 179 | 186 | 5 | 21 | 21 | 33 |  |  |  | 15 | 10 | 13 | 36 | 144 |
|  | 698 | 304 | 21 |  |  |  |  |  |  | 134 | 189 | 91 | 11 | 235 |
|  | $4 \%$ | 146 | ？ 9 |  |  | $1{ }^{\text {a }}$ |  |  |  | 80 |  |  |  | 7 75 |
|  | \％13 | 9 | 8 |  |  | 19 | 20 |  |  | 113 | 125 | 38 | 10 | 310 |
|  |  |  |  |  |  |  |  |  |  | 27 | \％ | 112 | 27 |  |
| South Central Division： <br> Kentucky | $4 \%$ |  | 相 |  |  |  |  |  |  | $1 \% 6$ |  |  | 21 |  |
| Tennessee | 794 | 426 | 3 | 34 | 11 | 53 |  |  |  | 15.2 | 190 | 285 | 133 | 35 |
| Alabama | 493 | 251 |  |  |  | 6 |  |  |  |  |  |  |  | －220 |
| Mississip | 123 | 45 | 9 |  |  |  |  |  |  | 31 | 18 | 10 |  |  |
| Louisian |  | 10. | 145 | 42 | 68 | 37 |  |  | $\bigcirc$ | 8 | 29 | 11. |  |  |
| Texas． | 743 | 435 | 88 |  |  | 21 |  |  |  | 11. | 112 | 164 | 35 | 19 |
| Arkansas－－－．．．．．－－－－ | 158 | $9{ }^{9}$ | 晨 |  |  | 14 | 20 |  |  | 13 | 18 | 11 | 5 | 37 |
| Indian Territory |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North Central Division： <br> Ohio $\qquad$ | 1，986 | 1，$\% 05$ | 11， | 88 | 59 | 56 | 106 |  |  | 30. | 259 | 423 | 173 | ， |
| Indiana | 644 |  | 13 |  | 20 | 15 | 21 |  |  | 147 | 87 | 63 | 10 |  |
| tlinois | 1，660 | 2，18！ | 36 | 12 | 71 | 76 |  |  | 59 | 295 | 433 | 568 | 169 | 43 |
| Michigan |  |  | 2כ |  |  |  |  |  |  | 4.3 |  | 45 |  |  |
| Wisconsi | \％11 | 781 | 26 ！ | 3.306 | 69 | $\% 3$ | 69 |  |  | 79 | 56 | 136 | 67 | 602 |
| Minnes | $55 \%$ | \％13 | 40 |  | 33 | 35 | 55 |  |  | 104 | 56 | O |  | 15 |
| Iowa | 919 | 1，010 | 51 |  | 0 | 49 |  |  | 0 | 291 | 360 | 399 | 130 | 371 |
| Missour | 901 | 423 | 24 | 50 | 18 | 56 | 27 | 73 |  | 190 | 153 | 252 | 82 |  |
| North Da |  | 49 | 4. |  |  |  |  |  |  |  | 20 | 23 | 3 |  |
| South Dale | 84 | 34 | 40 |  |  |  |  |  |  | 42 | \％4． | 105 | 36 | 19 |
| Nebras | 350 | 628 | 15 |  |  |  |  |  |  | 99 | 241 | 76 | 290 |  |
| Western Division： | 58. | ［ 16 | 1.58 |  |  | 35 |  |  |  | 200 | $\begin{array}{r} 218 \\ 8 \end{array}$ | 759 |  |  |
|  |  |  |  |  | 5 | ．．．． |  |  |  |  |  |  |  |  |
| Western Division： <br> －Montana－．．．． | 48 11 | 16 <br> 10 |  |  |  |  |  |  |  | ${ }_{1}^{4}$ |  | 8 | 0 |  |
| Colorado |  | $23 \%$ |  |  |  |  |  |  |  | 10 | 21 | 21 | 0 | ， |
| New Mex |  |  |  |  |  |  |  |  |  |  |  | ${ }^{6}$ |  |  |
| Arizona Utah |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nevada |  |  | 19 |  |  |  |  | 55 |  |  | 5 | 19 |  | 15 |
| Itaho | 182 | －－13 |  |  |  |  |  |  |  | ） |  |  |  | 107 |
| Washing |  |  | 11 |  | －${ }_{1}^{1}$ |  | －－－ |  |  |  | 51 | 60 |  |  |
| Oregon | 145 |  | 102 |  |  |  |  |  |  | 30 | 88 |  |  |  |
| Catiforn | 852 | 1，560 | 11 |  | 295 |  |  |  |  | 203 | 635 | 115 | 9 | 521 |

Tabie 16.-Degrees conjerped on men by universities and colleges for men and for both sexes (Table 38).

| State or Territory. | $\stackrel{0}{4}$ | $\begin{aligned} & \dot{n} \\ & \dot{\theta} \end{aligned}$ | $\begin{aligned} & \dot{A} \\ & \frac{a}{\partial 1} \end{aligned}$ | $\stackrel{\dot{H}}{\stackrel{i}{4}}$ | $\begin{aligned} & \dot{1} \\ & 0 \\ & 0 \\ & \dot{\theta} \end{aligned}$ | 도 ت $\oplus$ | $\begin{aligned} & \dot{1} \\ & \dot{\mu} \\ & \dot{1} \end{aligned}$ | $\begin{gathered} 9 \\ 90 \end{gathered}$ |  | $\dot{8}$ |  | $\begin{gathered} \dot{0} \\ \dot{\sim} \\ \dot{A} \\ \dot{A} \end{gathered}$ | $\begin{gathered} \circ \\ 0 \\ \infty \end{gathered}$ |  | 㵄 | 守 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | 4,910 | 1,689 | $83 \%$ | 308 | 14 | 31 | 2 | 26 | 8 | 18 | 10 | 30 | 6 | 2 | 1 | 1 |
| North Atlantic Division. South Atiantic DivisionSouth Central Division.North Central Division.Western Division $\qquad$ | $\begin{array}{r} 2,326 \\ 625 \\ 341 \\ 1,406 \\ 212 \end{array}$ | $\begin{aligned} & 698 \\ & 113 \\ & 144 \\ & 632 \\ & 102 \end{aligned}$ | $\begin{array}{r} 334 \\ 35 \\ 19 \\ 438 \\ 41 \end{array}$ | $\begin{array}{r} 3 \pi \\ 8 \\ 22 \\ 204 \\ 34 \\ \hline \end{array}$ | $\begin{aligned} & 8 \\ & 1 \\ & 1 \\ & \hline \end{aligned}$ | $\begin{gathered} 23 \\ 2 \\ 2 \\ \hline \end{gathered}$ | $\left\|\begin{array}{c} ---1 \\ 1 \\ 1 \end{array}\right\|$ | $\begin{array}{\|c\|} \hline 11 \\ \hdashline 15 \end{array}$ |  | $\begin{array}{r} 12 \\ 1 \\ -\quad \\ \hline \end{array}$ | $\begin{gathered} 2 \\ 1 \\ \hdashline-9 \\ 3 \\ \hline \end{gathered}$ | $\begin{array}{r} 1 \\ 5 \\ 10 \\ 8 \end{array}$ | $\begin{gathered} 2 \\ 4 \\ 4 \end{gathered}$ | 2 | 1 | 1 |
| North Atlantic Division: Maine <br> New Hampshire <br> Vermont <br> Massachusetis <br> Rhode Island $\qquad$ <br> Counecticut. <br> New York <br> New Jersey <br> Pennsylvania $\qquad$ | 112 61 22 219 69 69 359 $30 \%$ 150 456 | 12 27 25 276 7 12 184 184 78 285 | $\begin{array}{r} 6 \\ 2 \\ 59 \\ 147 \\ 149 \\ 69 \\ -48 \end{array}$ | 23 <br> -7 <br> -10 <br> 10 | 8 | 23 |  | 11 | 8 | 12 | 2 |  |  | 2 | 1 |  |
| South Atlantic Division: <br> Delaware. <br> Maryland <br> District of Columbia- <br> Virginia <br> West Virginia <br> North Carolina <br> South Carolina <br> Georgia $\qquad$ | 11 11 133 33 137 23 130 151 51 86 6 | 9 13 13 35 3 18 18 11 18 | 1 $\ldots$ $\cdots$ 1 3 15 10 | 1 <br> 1 <br> -1 | $\begin{array}{r}1 \\ --1 \\ \hdashline-\end{array}$ | 2 | 1 |  |  | ---1 | 1 | $\gamma$ |  |  |  |  |
|  | 66 109 38 37 37 43 19 3 3 1 | $\begin{array}{r}28 \\ 34 \\ 23 \\ 10 \\ 19 \\ 29 \\ 3 \\ \hline 9\end{array}$ | $\begin{gathered} 3 \\ 2 \\ 4 \\ 4 \\ 4 \\ \hdashline- \\ 4 \\ 4 \end{gathered}$ | $\begin{array}{r}12 \\ 2 \\ \cdots \\ -- \\ \hline 8\end{array}$ | 1 |  | 1 | 12 |  |  |  | $\stackrel{2}{3}$ |  |  |  |  |
| North Central Division: Ohio <br> Indiana | 311 | 82 23 | 88 106 | ${ }^{31}$ |  |  |  |  |  |  |  | 6 |  |  |  |  |
| milinois. | 237 | 149 | 80 | 6 |  |  |  |  |  |  |  |  |  |  |  |  |
| Michigan | 90 | 94 | 44 | 31 |  |  |  |  |  |  |  |  |  |  |  |  |
| Wisconsin | 91 | 51 | 119 | 50 |  |  |  |  |  |  |  |  |  |  |  |  |
| Iova... | 108 | \% 1 | 70 | 1 |  |  |  |  |  |  | 1 | 3 | a |  |  |  |
| Missouri-.-- | $12 \pm$ | 46 | 9 | 13 |  |  |  |  |  | 1 |  |  |  |  |  |  |
| North Dakot South Dakota | 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nebraska. | $7 \%$ | 89 | 1 | 49 |  |  |  |  |  |  |  |  |  |  |  |  |
| Kansas ---.-.-. | 118 | 25 | 8 | 1 |  |  |  |  |  |  | 1 | 1 |  |  |  |  |
| Western Division: Montana. Wyomillg | \| 4 | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Colorado | 11. | 19 | 8 | 13 |  |  |  |  |  |  |  |  | 4 |  |  |  |
| Utah. |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nevada |  | 13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Washington | 25 | 10 |  |  |  |  |  |  |  |  |  | 6 |  |  |  |  |
| Oragon California | +295 | 10 | $\begin{aligned} & 1 \\ & 32 \end{aligned}$ | ${ }_{17}^{4}$ |  |  |  |  |  |  | 3 | , |  |  |  |  |

Table 17.-Degrees conferred on men by universities and colleges for men and for both sexes (Table 38)-Continued.


Table 18.-Degrees conferred on women by coeducational college:; (Table 9S).

| State or 'rerritory. | $\begin{aligned} & \dot{4} \\ & \dot{4} \end{aligned}$ | $\begin{aligned} & \dot{\sim} \\ & \dot{1} \end{aligned}$ | $\begin{aligned} & \dot{\circ} \\ & \stackrel{\dot{1}}{\sim} \end{aligned}$ | $\dot{H}$ |  | $\begin{aligned} & \dot{\infty} \\ & \dot{y} \\ & \underset{y}{*} \end{aligned}$ |  | $\begin{array}{r} \mathrm{B}_{0} \\ \mathrm{n}_{1}^{\circ} \end{array}$ | $\begin{gathered} u \dot{0} \\ \dot{1} \\ \dot{\mu} \\ \dot{\mu} \end{gathered}$ | $\begin{aligned} & \text { Hi } \\ & \dot{4} \end{aligned}$ | $\begin{aligned} & \omega \dot{A} \\ & \dot{A} \end{aligned}$ | $\begin{aligned} & \text { er } \\ & \text { 品 } \end{aligned}$ | $\xrightarrow[~+~]{\text { - }}$ | $\left.\begin{array}{\|c} 8 \\ 0 \\ 0 \\ 0 \\ 0 \\ 3 \end{array} \right\rvert\,$ |  | $\begin{gathered} \dot{A} \\ \dot{\sim} \\ \dot{C} \\ \dot{A} \end{gathered}$ | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | 973 | 200 | 445 | 377 | 3 | 4.9 | 5 | 37 | 5 | 116 | 23 | 10 | 19 | 2 | 8 | 1 | 20 |
| North Atlantic Division South Atlantic Division. South Central Division North Central Division. Western Division. | $\begin{array}{r} 287 \\ 53 \\ 63 \\ 474 \\ 474 \\ \hline 151 \end{array}$ | $\begin{array}{r} 55 \\ 8 \\ 34 \\ 177 \\ 27 \\ 27 \end{array}$ | $\begin{array}{r} 93 \\ 8 \\ 13 \\ 289 \\ 48 \end{array}$ | $\begin{array}{r} 24 \\ 3 \\ 22 \\ 293 \\ 38 \end{array}$ | $\bigcirc$ | $\begin{gathered} 73 \\ 8 \end{gathered}$ | $\begin{gathered} 3 \\ -- \\ -2 \\ -- \\ \hline \end{gathered}$ | $\left.\begin{array}{r} 2 \\ 7 \\ 28 \end{array} \right\rvert\,$ | 5 | $\begin{gathered} 42 \\ 4 \\ \tilde{\gamma} \\ 6 \\ 49 \\ 12 \end{gathered}$ | $\begin{array}{r}2 \\ 3 \\ 1 \\ 15 \\ \hline\end{array}$ | $\begin{aligned} & 1 \\ & 8 \end{aligned}$ | $\begin{array}{r} 3 \\ 10 \\ 6 \end{array}$ | 2 | 8 | 1 | 11 |
| North Atlantic Division: Maine <br> Vermoint. <br> Massachusetis <br> Rwode Island <br> Connecticut <br> New York <br> Pennsylvania | $\begin{aligned} & 38 \\ & 9 \\ & 48 \\ & 18 \\ & 28 \\ & 57 \\ & 29 \end{aligned}$ | 3 <br> - <br> 8 <br> 21 <br> 20 | 9 18 15 11 34 6 | 1 <br> 4 <br> 19 | -- | $\begin{aligned} & 7 \\ & 1 \end{aligned}$ | 3 |  |  | 17 17 15 18 4 | 2 | 1 |  |  | 8 | 1 | $\stackrel{2}{3}$ |
| South Atlantic Division: Delaware |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maryland | 15 |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |
| District of ColumbiaVirginia | 8 | 3 |  |  |  |  |  |  |  | 4 | 3 |  |  |  |  |  |  |
| West Virginia ------ | 3 |  | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North Carolina. | 5 | 2 | 4 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| South Carolina | 16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Florida. | 5 |  |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| South Central Division: Kentucky. | 11 |  |  | 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tennessee | 2 | 10 | 6 | 1 |  |  |  | 2 |  | 2 | 1 |  |  |  |  |  |  |
| Alabama. | $\stackrel{2}{2}$ |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Louisiana. | 11 | 6 |  |  |  |  |  |  |  | 1 |  | 1 |  |  |  |  |  |
| Texas --- | 11 | 4 |  | 12 |  |  |  |  |  | 3 |  |  | 3 |  |  |  |  |
| Arkansas ---..... | 9 | 1 | 6 | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Indian Territory ---- |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North Central Division: Ohio | 90 | 26 | 66 | 78 |  | 4 |  |  |  | 10 | 2 |  | 1 |  |  |  |  |
| Indiana | 56 | 5 | 25 | 8 | -- | 1 | -- |  |  | $\stackrel{2}{3}$ | 1 |  |  |  |  |  |  |
| Michigan | 50 | 18 | 42 | 31 |  |  | - |  | $\bigcirc$ | $\stackrel{3}{5}$ | 1 | 5 | $\stackrel{2}{2}$ |  |  |  |  |
| Wisconsin | 16 | 19 | 20 | 46 |  |  |  |  |  | $\stackrel{2}{2}$ |  |  | 4 |  |  |  |  |
| Minnesot | 19 | 21 | 16 | 56 |  | 5 |  |  |  | 4 | 4 | 1 | 1 |  |  |  |  |
| Iowa --- | 33 | ${ }^{22}$ | 59 | 4 |  | 12 |  | 5 |  | 8 | 4 |  |  |  |  |  |  |
| Missouri | 25 | 18 | 4 | 28 |  | 1 |  | 1 |  | 3 | 1 |  |  | 2 |  |  |  |
| Nouth Dakot | 4 | 2 |  | 3 |  | 2 |  |  |  |  |  |  |  |  |  |  |  |
| Nebrask | 50 | 11 |  |  |  |  |  |  |  | 7 |  |  |  |  |  |  |  |
| Kansas--...-- | $5 \frac{1}{2}$ | 7 | 11 | 2 |  | 4 | 2 | 1 |  | 5 |  | 2 |  |  |  |  |  |
| Western Division: Montana | 3 |  | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Wyoining | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Colorado <br> Utah .-. | 10 2 |  | 6 | 1 | 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| Nevad | 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho. |  | 2 | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Washingto | 11 |  |  |  |  |  |  | 19 |  | 1 |  |  |  |  |  |  |  |
| Oregon-- | 84 | 11 | 30 | 31 |  | 8 |  | 9 |  | $\stackrel{2}{9}$ | 2 |  | 6 |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Tabie 19.-Honorary degrees conferred by universities and colleges for men and for both sexes (Table 38).

| State or Territory. | $\dot{\theta}$ | 号 | $\stackrel{\dot{C}}{\substack{\text { a } \\ 4 \\ 4 \\ 4}}$ | $\begin{aligned} & \dot{A} \\ & \dot{E} \\ & \dot{i} \end{aligned}$ |  | $\stackrel{\dot{\text { A }}}{\text { - }}$ |  |  | $\left\lvert\, \begin{aligned} & \dot{A} \\ & \dot{y y y y y y} \\ & \dot{y y} \end{aligned}\right.$ | $\begin{gathered} \stackrel{\rightharpoonup}{H} \\ \dot{4} \end{gathered}$ |  |  | $\begin{aligned} & \dot{A} \\ & \dot{3} \\ & \dot{y} \\ & \ddot{y} \end{aligned}$ | $\begin{aligned} & \text { a } \\ & i \end{aligned}$ | $\dot{n} \dot{n}$ | $\begin{aligned} & 0 \\ & \dot{a} \\ & \vec{n} \end{aligned}$ | $\left\lvert\, \begin{aligned} & \dot{x} \\ & \text { in } \\ & \text { 宿 } \end{aligned}\right.$ | $\underset{i}{A-}$ | in | A |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unitel States. | 307 | 165 | 11 | 14 | 3 | 10 | 10 | ' | 1 | $15 \%$ | 12 | 1 | 2 | 7 | 5 | 3 | 1 | 1 | 2 | 2 |
| North Atlantic Division- | 95 | 70 | 5 | $5$ | 3 | 5 | 6 | 5 |  | 72 | 6 | 1 |  | 4 | 2 | 3 | 1 |  |  |  |
| South Atlantic Division. | 53 | 20 | 1 | $\begin{aligned} & 1 \\ & 8 \end{aligned}$ |  |  |  |  |  | 21 |  |  |  |  |  |  |  |  |  |  |
| South Central Central Division-- | 129 | 4 | ${ }_{4}$ |  |  | 4 | 3 | 1 | 1 | 42 | 5 | -- | 1 | - | 1 |  |  |  | 1 |  |
| Western Division........- | 8 | 7 |  |  |  |  |  |  |  | 3 |  |  |  |  | 1 |  |  | 1 | 1 |  |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine .-...---....... | 5 | 4 |  |  | 1 |  |  |  |  | 5 | 1 |  |  |  |  |  |  |  |  |  |
| New Hampshir | $\stackrel{2}{2}$ | , |  |  |  |  | 1 |  |  | 4 |  |  |  |  |  |  |  |  |  |  |
| Vermont - .-. | $\stackrel{2}{5}$ | ${ }^{3}$ |  |  |  |  |  |  |  | ${ }_{1}^{2}$ |  |  |  |  |  |  | 1 |  |  |  |
| Massachusetts | 5 | 13 |  | 3 |  |  | 3 |  |  | 12 |  |  |  |  |  |  |  |  |  |  |
| Rloode Island | 6 | $\stackrel{1}{8}$ |  |  | 1 |  | 1 |  |  | 10 |  |  |  |  |  | 3 |  |  |  |  |
| New York. | 20 | 20 |  |  |  | 2 | 1 | 1 |  | 14 | 5 | 1 |  | 1 |  |  |  |  |  |  |
| New Jersey | 4 | 7 |  |  |  | 2 |  |  |  | 3 |  |  |  | 2 |  |  |  |  |  |  |
| Pennsylvania | 43 | 11 | 5 | 2 | 1 | 1 |  | 4 |  | 2 |  |  | 1 | 1 | 2 |  |  |  |  |  |
| South Atlantic Division: | 5 |  |  |  |  |  |  |  |  | 4 | 1 |  |  |  |  |  |  |  |  |  |
| District of Columbia. |  | 10 |  |  |  | 1 |  | 1 |  | 4 |  |  |  |  |  |  |  |  |  |  |
| Virginia. | 10 | 5 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| North Carolina | 11 | 3 | 1 |  |  |  |  |  |  | 4 |  |  |  |  | 1 |  |  |  |  |  |
| South Carolina ------ | $1 \pm$ |  |  | 1 |  |  |  |  |  | 8 |  |  |  |  |  |  |  |  |  |  |
| Gouth Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky. | 3 | $\%$ |  |  |  |  |  |  |  | 5 |  |  |  |  |  |  |  |  |  |  |
| Tennessee. | 12 | 8 |  | 8 |  |  | 1 |  |  | 9 |  |  |  | 3 |  |  |  |  |  |  |
| Alabama |  |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |
| Mississipl | - |  | 1 |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Texas .-. | 10 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arkansas. | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oklahoma |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio --..... | 11 | 1 | 1 |  |  | 3 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Inlinois | 18 | 3 |  |  |  |  | 2 |  |  | ${ }_{3}$ |  |  | 1 |  |  |  |  |  |  |  |
| Michigan | 11 | , |  |  |  |  |  |  | 1 | 1 | , |  |  |  |  |  |  |  |  |  |
| Wisconsin | 10 |  |  |  |  |  |  |  |  | 3 | 1 |  |  |  |  |  |  |  |  |  |
| ifimnesot | 1 |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| lowa | 8 |  |  |  |  |  |  |  |  | 3 |  |  |  |  |  |  |  |  |  |  |
| North Dak | 1 |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| South Dakot | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nebraska | 3 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kansas | 9 |  | 1 |  |  |  |  |  |  | 13 |  |  |  |  |  |  |  |  |  |  |
| Vestern Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Colorado. Idalo |  | 3 |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| Washing | 1 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |
| Oregon. | 2 | 3 |  |  |  |  |  |  |  |  |  |  |  |  | 1 |  |  |  | 1 |  |
| Catiformia | 4 |  |  |  |  |  |  |  |  | 2 |  |  |  |  |  |  |  |  |  |  |

Table 20.-Property of universities and colleges for men and for both sexes (Table 39).


Table 21. -Income of miversities and colleges for men and for both sexes (Table 30).


TABLE 22．－Professors and students in colleges for women，Division A（Table 4o）．

| State or＇Territory． | nq！qsu！jo doquin | Professors and instructors． |  |  |  |  |  | Students． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Prepara－ tory de－ partments |  | Collegiate depart－ ments． |  | Total num－ ber（ex－ cluding du－ plicates）． |  |  |  |  |  |
|  |  | 鸰 | 这 | 空 | － |  |  |  |  |  |  |
| United States | 13 | $\%$ | 25 | 256 | 286 | 293 | 312 | $24^{10}$ | 4，318 | 245 | 4，840 |
| North Atlantic Division．－ | 9 | 0 | 5 | 232 | 234 | 235 | 248 | 43 | 3，809 | 239 | 4， 091 |
| South Atlantic Division－－ | 2 | 0 | 0 | 17 | 24 | 21 | 30 | 30 | 469 | 3 | 802 |
| North Central Division． | 1 | 0 | 5 | 0 | 12 | 0 | 17 | 38 | ． 48 | 3 | 89 |
| Western Division | 1 | 7 | 15 | 7 | 16 | 7 | 83 | 136 | 22 | 0 | 158 |
| North Atlantic Division： <br> Massachusetts | 4 | 0 | 0 | 146 | 150 | 146 | 150 | 0 | 2，500 | 86 | 2，505 |
| New York | 4 | 0 | 5 | 146 | 169 | 146 | 17 | 43 | 1，013 | 86 | 1，142 |
| Pennsylvania－－－－－－－－－－－－ | 1 | 0 | 0 | 23 | 15 | 23 | 15 | 0 | 287 | 67 | 354 |
| South Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |
| Maryland－－－－－－－－－－－－－－ | 1 | 0 | 0 | 12 | 16 | 12 | 16 | 0 | 276 | ${ }_{0}$ | 276 |
| Virginia＇－－－－－－－－－－－－－－ | 1 |  |  | 5 | 8 | 9 | 14 | 30 | 193 | 3 | 296 |
| North Central Division： <br> Illinois | 1 | 0 | 5 | 0 | 12 | 0 | 17 | 38 | 48 | 3 | 89 |
| Western Division： California．．．．．． | 1 | 7 | 15 | $\tau$ | 16 | $\%$ | 23 | 136 | 22 | 0 | 158 |

Table 23．－－Students in various courses of study in colleges for women，Division A （Table 40）．

| State or Territory． | Classical course． | Other general calture courses． | General scienco course． | Peda－ gog＇y． | Busi－ ness． |
| :---: | :---: | :---: | :---: | :---: | :---: |
| United States | 2，674 | 1，160 | 259 | 182 | 1 |
| North Atlantic Division | 2，456 | 933 | 239 | 143 |  |
| South Atlantic Division | 162 | 214 | 20 | （35） |  |
| North Central Division． | 48 |  |  |  |  |
| Western Division ．－．－． | 8 | 14 |  | 4 | 1 |
| North Atlantic Division： <br> Massachusetts． | 1，483 | 831 | 58 | 197 |  |
| New York ．－． | － 845 | 101 | 50 | 14 |  |
| Pennsylvania． | 128 |  | 131 | $\stackrel{1}{2}$ |  |
| South Atiantic Division： <br> Maryland |  |  |  |  |  |
| Maryland <br> Virginia | 102 60 | $1 \% 4$ | 20 | 35 |  |
| North Central Division： |  |  |  |  |  |
| Tllinois．－．－－－－ | 48 |  |  |  |  |
| Western Division： California | 8 | 14 |  | 4 | 1 |

Table 24.—Degrees conferred by colleges for women, Division A (Table 40).

| State or Territors. | A. B. | B.S. | B. L. | A. 71. | Mus. B. | Ph. D. | Honorary. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | LL.D. | D. C.L. | A.M. |
| United States | 592 | 1.4 | 109 | 53 | 3 | 5 | 1 | 1 |  |
| North Atlantic Division.. South Atlantic Division.. | $\begin{array}{r}531 \\ 50 \\ \hline\end{array}$ | 14 | 105 | ${ }^{43}$ | 3 | วั | 1 | 1 | 1 |
| North Central Division... Western Division | 10 |  | 3 |  |  |  |  |  |  |
| Noi'th Atlantic Division: Massachusetts. TVem York <br> Pennsylvania $\qquad$ | $\begin{array}{r} 336 \\ 152 \\ 152 \\ 43 \end{array}$ | 9 | 1051 | 1920 | 3 | $\left\|\begin{array}{r} \cdots \cdots \\ 3 \\ 3 \end{array}\right\|$ | 1 | 1 |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 7 |  |  |  |  |  |
| South Atlantic Division: Maryland | 464 |  |  | 2 |  |  |  |  |  |
| Virginia |  |  |  | 5 |  |  |  |  |  |
| Nortli Central Division: | 10 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| California..... | 1 |  | 3 |  |  |  |  |  |  |

Table 25.-Property of colleges for women, Division A (Table 40).

| State or Territors. | Number of ships. | Num- <br> ber of <br> schol- <br> ships. | Libraries. |  |  | Value of scientific apparatus. | Value of grounds and buildings. | Productive funds. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Tolumes. | Pamphlets. | Value. |  |  |  |
| United States | 20 | 389 | 188,065 | 15, 800 | \$3503, 193 | S663, 203 | 35, 394,198 | 34, ${ }^{17} 17,035$ |
| North Atlantic Division | 16 | 3:21 | 165, 6: | 11,700 | 318,193 | 5\%7, 263 | 5,206, | 4, 138, 446 |
| Sonth Atlantic Division - | 2 | 46 | 10,200 | 2,100 | 13, 000 | 59, 000 | 802, 900 | 439, 000 |
| North Central Division.- | 2 | 7 | 6,240 |  | 7,000 | 25, 000 | 135, 000 | 65, 623 |
| Western Division.......- |  | 15 | 6,000 | 2,000 | 15,000 | 2,000 | 250,000 | \%ธ龴, 00 |
| North_Atlantic Division: Massachusetts |  |  |  |  | 180, 800 | 358, 9\%0 | 2,535,433 | 1,820, 32 |
| New York.... | 2 | 59 | 46, 700 | 2,350 | \%7, 393 | 168,293 | 1,948, 965 | 1,316, 122 |
| Pennsylvania --....... | 14 | 46 | 29,425 | 7,000 | 60,000 | 50,000 | 700,000 | 1,000,000 |
| South Atlantic Division: <br> Maryland | 2 | 34 | \%,600 | 1,600 | 10,000 | 45, 000 | 680,000 |  |
| Virginia. |  | 12 | 2,600 | , 500 | 3,000 | 14, 000 | 122, 900 | $10,060$ |
| North Central Division: Illinois | 2 | 7 | 6,240 |  | \%,000 | 23,000 | 135, C00 | 63, 6ว |
| Western Division: |  |  |  |  |  |  |  |  |
| California--- |  | 15 | 6,000 | 2,000 | 15, 000 | 2,000 | 250,000 | \%, 000 |

Table 23. - Income of colleges for women, Division A (Tible 40).

| State or Territory. | Tuition fees. | From productive funds. | From other sources. | Total. income. | Benefactions. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| United States | \$989, 439 | 5208, 231 | \$96, 216 | \$1,814,386 | \$6.29, 200 |
| North Atlantic Division Sonth Atlantic Division Nortli Central Dirision | $\begin{array}{r} 859,601 \\ 56,457 \\ 19,081 \\ 54,300 \end{array}$ | $\begin{array}{r} 197,803 \\ 24,784 \\ 3,039 \\ 3,105 \\ \hline \end{array}$ | $\begin{array}{r} 81,634 \\ 13,500 \\ 1,08 \% \\ 0 \end{array}$ | $\begin{array}{r} 1,139,038 \\ 94,741 \\ 23,202 \\ 5 \pi, 405 \end{array}$ | $\begin{aligned} & 518, \frac{4}{46} \\ & 68,500 \\ & 2,281,201 \\ & 20,000 \\ & \hline \end{aligned}$ |
| North Atlantic Division: <br> Massachusetts. $\qquad$ <br> New York <br> Pennsylvania | $\begin{gathered} 512,765 \\ 310,830 \\ 46,000 \end{gathered}$ | $\begin{aligned} & \begin{array}{l} 0,1,155 \\ 5 \pi, 618 \\ 60,000 \end{array} \end{aligned}$ | $\begin{aligned} & 2 \breve{5}, 173 \\ & 56,461 \\ & 0 \end{aligned}$ | $\begin{aligned} & 608.123 \\ & 4.9 .915 \\ & 100,000 \end{aligned}$ | $\begin{array}{r} 41 \%, 124 \\ 76,29 \\ 25,000 \\ 20 \end{array}$ |
| South Atlantic Division: <br> Maryland <br> Virginia |  | $19,28 \pm$ 5,500 | 13, 500 | 62,641 32,000 | 25,000 51,500 11,000 |
| North Central Division: <br> Illinois | 19,081 | 3,039 | 1,082 | 23,202 | 22,284 |
| Westerin Division: California | 51,300 | 3,105 | 0 | ¢ั̃, $40 \sim$ | 20,000 |

Table 27.-Professors and students in colleges for women, Division B (Table 41).


Table 28.-Students in various courses of study in colleges for women, Division B (Table 41).

| State or Territors. | A. B. course. | II.E. L. or B.L. course. | $\begin{aligned} & \text { B. S. } \\ & \text { course. } \end{aligned}$ | Other degree coul'ses. | Pedagogy. | Music. | Art. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | 3,043 | 1,849 | 1,011 | 308 | 462 | 8,691 | 1,900 |
| North Atlantic Division South Atlantic Division South Central Division North Central Division. Western Division. | $\begin{array}{r} 231 \\ -1,460 \\ 1,044 \\ 250 \\ 28 \\ 28 \end{array}$ | $\begin{array}{r} 93 \\ 409 \\ 949 \\ 493 \end{array}$ | $\begin{array}{r} 57 \\ 460 \\ 426 \\ 48 \end{array}$ | $\begin{array}{r} 34 \\ 86 \\ 188 \end{array}$ | $\begin{aligned} & 2: 2 \\ & 135 \\ & 228 \\ & 47 \\ & 30 \end{aligned}$ | $\begin{array}{r} 783 \\ 3,197 \\ 3,002 \\ 1,629 \\ 7 \% \end{array}$ | 166 766 682 306 80 80 |
| North Atlantic Division: <br> Maine <br> Massachusetts $\qquad$ <br> New Jersey <br> Pennsylvania $\qquad$ $\qquad$ | 15 216 | 88 | 57 | 12 | 14 | 80 <br> 75 <br> 74 <br> 24 <br> 604 | 41 9 8 105 |
| South Atlantic Division: Maryland. | $8 \frac{1}{4}$ | 25 | \% | 15 |  | 269 | C0 |
| Virginia --..... | 214 | 53 | $\pi$ | 11 | 4 | 631 | 164 |
| West Virginia |  |  |  |  |  | -40 | ${ }^{6}$ |
| North Carolina. | 331 | \%9 | 25 |  | 7 | 702 | 22.3 |
| South Carolina Georgia | $\begin{aligned} & 382 \\ & 449 \\ & 4 \end{aligned}$ | 170 8.2 | 141 | 50 | 5 | ${ }_{9 \pm 5}^{609}$ | 191 |
| South Central Division: |  |  |  |  |  |  |  |
| Kentucky - | 199 | 68 | 130 |  |  | 600 | 113 |
| Tennessee | 1268 | 363 169 | 68 | ${ }^{60}$ | 18 | 880 | 136 94 |
| Mississippi | 313 | 227 | 133 | 1 | 150 | 561 | $1: 9$ |
| Louisiana........-- | 29 |  | 25 | 7. |  | 62 | 13 |

TAble 28.-Students in rarious courses of study in colleges for women, Division $B$ (Table 41)-Continued.

| State or Territory. | $\begin{gathered} \text { A. B. } \\ \text { course. } \end{gathered}$ | M.E. I. or B.L. course. | B. S. course. | Other degree courses. | $\begin{aligned} & \text { Peda- } \\ & \text { gogy. } \end{aligned}$ | Music. | Art. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| South Central Division-Con tinued. |  |  |  |  |  |  |  |
| Texas -....--------------- | 54 | 12 | 60 | 75 | 31 | 511 | 129 |
| North Central Division: |  |  |  |  |  | \% 5 |  |
| Ohio -----.-. | 73 | 54 | 22 |  |  | 244 | 16 |
| Iminois - | 31 |  | -------- | ------..- | 22 | 187 | 51 |
| Wisconsin | $\stackrel{2}{8}$ | 30 | - |  |  | 62 39 | ${ }_{11}^{4}$ |
| Kansas.- | 35 | 41 |  |  | \% | 126 | 28 |
| Western Division: California | 28 |  |  |  | 30 | $\%$ | 30 |

Table 29.—Degrees conferred by colleges for women, Division B (Table 41).


Table 30.-Property of colleges for women, Division B (Table 41).

| State or Territory. | Libraries. |  | Value of scientific apparatus | Value of grounds and buildings. | Productive funds. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Volumes. | Value. |  |  |  |
| United States | 254, $58 \pm$ | ¢880, 037 | \$151, 803 | \$8, 743, 4\%1 | \$894, |
| North Atlantic Division | 53,970 | 66, 012 | 22,958 | 1,352, 047 | 195, 000 |
| South Atlantic Division | 80, 565 | 82, 650 | 61.610 | 2,927, 000 | 253, 500 |
| South Centrai Division | 71,756 | 70, 170 | 21,685 | 2, 180, 000 | 7T, 000 |
| North Central Division | 51, 793 | 54,200 | 27,550 | 2, 040, $42 \pm$ | 369,225 |
| Western Division | 6,500 | 7,000 | 15,000 | 233, 000 | 0 |
| North Atlantic Division: |  |  |  |  |  |
| Massachusett | 2, 3 , 300 | 12,000 | 2,009 | 1 100,000 | (\%), 000 |
| New Yoik. | 7,678 | 12, 612 | 12,958 | 229, 047 | 40,090 |
| New Jersey | 3,000 | 4,000 | 200 | 25,090 | 0 |
| Pennsylvania----. | 29,800 | 31, 400 | 5,800 | 765,000 | 5,000 |
| Maryland | 16,300 | 17,500 | 33,450 | 540,000 | \%,500 |
| Virginia. | 9,585 | 9,125 | 5,450 | 585, 000 |  |
| West Virginia |  | 359 |  | 6,500 |  |
| North Carolina | 20, 309 | 21,800 | 4,009 | 648,009 | 16, 000 |
| Sonth Carol | 9,900 | 11,309 | 6,110 | 432, 509 | 100, 000 |
| Georgia. | 24,130 | 22,5\% | 15, 600 | 715,000 | 110,000 |
| South Central Division: |  |  |  |  |  |
| Kentucky-- |  | 14, 2500 | 9, 515 | 481,000 550,000 | - ${ }_{47 \text { O }}$ |
| Alabama. | 5, 300 | 6,000 | 1,100 | 370, 000 | , |
| Mississippi | 13,959 | 11,8\% | 3,450 | 450, 009 | 0 |
| Louisiana. | 1,600 | 1,6vi | 1,000 | 78,000 | 30,090 |
| Texas | 8,575 | 10, 550 | 1,309 | 294,000 | 0 |
| Arkansas | 1,000 | 500 | 60 | 30,000 | 0 |
| North Central Division: |  |  |  |  |  |
| Illino--- | 6, 600 | 20,609 | $\stackrel{10}{2}, 100$ | 209,000 | 8,1000 |
| Wisconsin | 3,773 | 2,500 | 2,000 | 150, 000 | 150,000 |
| Minnesota | 1,000 | 1,000 | 500 | 40,409 |  |
| Missouri | 17,200 | 20,600 | 6,950 | 685, 000 | 111,500 |
| Kansas --...-. | 2,500 | 2, 500 |  | 392,000 | 3,000 |
| California... | 6,500 | 7, 000 | 15,000 | 238,000 | 0 |

TabIE 31.-Income of colleges for women, Division $B$ (Table 41).

| State or Territory. | Tuition fees. | From productive funds. | State or municipal appropria tions. | From other sources. | Total in. come. | Benefac. tions. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | \$1,443, 023 | \$45, 855 | \$93,190 | ¢ 409,982 | \$1,922,030 | \$123, 406 |
| North Atlantic Division | 288, $0 \sim 8$ | 9, 786 | 2,600 | $79,81 \%$ | 34, 281 | 1\%,960 |
| South Atlantic Division. | 426, 182 | 12, 270 | 100 | 81, 865 | 520,918 | 56.3\%5 |
| South Central Division. | 394.079 | 5, 600 | 20,490 | 131, 273 | - 51,442 | 17,6\%5 |
| North Central Division. | 281,681 | 16,6.9 |  | 117, 0 \% \% | 416, 590 | 30,456 |
| Western Division ....... | 59,000 |  | 0 | 0 | 59,009 | 1,600 |
| North Atlantic Division: |  |  |  |  |  |  |
| Maine | §,000 |  |  | 1,000 | 18,700 | 1,000 |
| Massachusett | 15.000 690 | \% ${ }^{0}$ | ${ }^{0}$ | 60,000 | 75, 000 |  |
| New York | C9, 903 | 2,086 | 600 | ${ }_{81 \%}^{0}$ | \%3, 406 |  |
| New Jersey. <br> Pennsylvania | 10, ${ }^{1009}$ |  | 0 0 | 18,000 | 195, 120 | 16.90 |
| South Atlantic Division: | 176, |  |  |  |  | 10, 200 |
| Maryland. | 45,900 | 1,410 | 0 |  | $4 \%, 310$ | $9.0 ¢ 0$ |
| Virginia --- | 99, 339 |  | 0 | $\bigcirc 00$ | 100, 850 | $2.1 \%$ |
| West Virginia | 1,100 |  |  | 1,040 | 2, 100 |  |
| North Carolina | 87, $9 \% 5$ | 860 | 0 | 21, 865 | 110,709 | 500 |
| South Carolina | 91,469 | 6,000 | 0 | 12, 000 | 109.469 | 30, 000 |
| Georgia --.-.-.-.-.-. | 100,388 | 4,500 | 100 | 39,500 | 144,488 | 14,\%00 |
| South Central Division: | 90, 325 |  |  |  | 83,123 | 300 |
| Tennessee | 112, 100 | 2,600 | 0 | 45,900 | 160,600 | 15,000 |
| Alabama. | 57,640 |  | 0 | 15,000 | 7?, 610 | 15 |
| Mississippi | 77,500 |  | 20,490 | 32, 573 | 130, 265 | 300 |
| Louisiana. | 11,950 | 3,000 |  | ],500 | 16,451) |  |
| Texas. | 40,554 |  | 0 | 29,500 | \% 20,064 | 1.000 |
| Arkansas | 4,000 | 0 | 0 | 4,000 | 8,000 | 1,000 |
| North Central Division: |  |  |  |  |  |  |
| Ohio | 6\%, 136 | 3,520 | 0 | 2\%, 802 | 93, 460 | 11,600 |
| Wisconsin | 57,009 | ¢,000 | 0 | 30,000 545 | 31.501 | 11, 11.00 |
| Minnesota | 2, 500 |  | 0 | 2.500 | 5,000 | -2,500 |
| Missouri | 104, 163 | \%,659 | 0 | 53, 6\%: | 165.493 | 309 |
| Kansas, | $22^{2}, 931$ | 500 | 0 | 2,500 | 25,931 | 8,500 |
| Western Division: | 59, 000 | 0 | 0 | 0 | 53,000 | 1,000 |

Table 32.-Professors and students in schools of technology (Tablo 42).


Table 33.-Students in various courses of study in schools of techrology (Table 42).

| State or Territory. |  |  |  |  |  |  |  |  | Pedagogy. |  | Business. |  | $\underset{\text { Milics. }}{\text { Milary tac- }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | ¢ |  | ¢ |  |
| United States | 416 | 708 | 1, \%10 | 2,216 | 62.2 | 783 | 440 | 212 | 6 | 21 | 115 | 48 | 4,983 |
| North Atantic Division. South Atlantic Division- | 16 | 148 86 | 249 189 |  | 266 54 5 | 215 114 | 5: | 64 10 |  |  | 4 | 9 | 841 1,614 |
| South Central Division. |  |  | 462 | 4\% | 52 | 47 | 1 |  |  |  |  |  | 1,034 |
| North Central Division- | 400 | 383 | 68.5 | 807 | 185 | 38. | 181 | 138 |  |  |  |  | 709 |
| Western Division....... |  | 91 | 125 | 181 | 65 | 28 | 206 |  | 6 | 21 | 111 | 39 | 785 |
| North Atlantic Division: New Hampshire |  |  | 19 | 19 |  | 2 |  |  |  |  |  |  | 79 |
| Massachusetts....... |  | 4 | 129 | 218 | 129 | 144 | 53 | 64 |  |  |  |  | 392 |
| Rhode Island |  |  | 33 | 65 | 10 | 46 |  |  |  |  | 4 | 9 | 75 |
| Connecticut |  |  | 68 |  |  |  |  |  |  |  |  |  | 64 |
| New York. | 15 | 4 |  | 10 | 134 | 23 |  |  |  |  |  |  | 231 |
| New Jersey |  | 140 |  | 214 |  |  |  |  |  |  |  |  |  |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Virginia. |  | 85 | 85 |  | 9 | 64 |  |  |  |  |  |  | 552 |
| North Carolina |  |  | 29 | 7 |  |  |  | 13 |  |  |  |  | 225 |
| South Carolina. |  |  | 125 | 185 | 25 | 50 |  |  |  |  |  |  | 557 |
| South Central Division: <br> Alabama. |  |  | 108 | 45 | 9 | 47 | 1 |  |  |  |  |  | 301 |
| Mississippi |  |  | 168 | 112 |  |  |  |  |  |  |  |  | 256 |
| Texas .-. |  |  | 175 | 273 | 43 |  |  |  |  |  |  |  | 352 |
| Oklahoma |  |  | 11 | 45 |  |  |  |  |  |  |  |  | 125 |
| North Central Division: <br> Ohio |  |  |  |  |  |  | 40 | 10 |  |  |  |  |  |
| Indiana |  | 179 | 92 | 209 | 121 | 164 |  | 97 |  |  |  |  |  |
| 11 l mois. |  |  |  | 75 |  | 100 |  | 25 |  |  |  |  |  |
| Michiga |  |  | 270 | 165 |  |  | 117 |  |  |  |  |  |  |
| Iowa - |  | 94 | 109 | 35 | 34 | 98 | 1 |  |  |  |  |  | 339 |
| North Dakota |  |  | 57 | 35 |  |  |  | 1 |  |  |  |  | 120 |
| South Dakot |  |  | 68 | 147 |  |  | 23 | 5 |  |  |  |  | 250 |
| Kansas - | 400 |  | 89 | 101 |  |  |  |  |  |  |  |  |  |
| Western Division: |  | 12 | 8 |  |  | 3 |  |  |  | 15 |  |  |  |
| Colorado.. |  | 60 | 23 | 50 | 47 |  | 185 |  |  |  | 48 | 17 | 245 |
| New Mexic |  | 19 | 1 | 6 |  |  | 5 |  | 6 | 6 | 22 | , |  |
| Utah -...... |  |  | 21 | 3 |  |  |  |  |  |  |  |  | 210 |
| Washington |  |  | 21 | 13 | 9 | 19 | 16 |  |  |  |  |  | 149 |
| Oregon. |  |  | 51 | 107 |  | 6 |  |  |  |  |  |  | 190 |

Table 34．－Degrees conferred on men by schools of technology（Table 42）．

| State or Territory． | $\dot{\infty} \dot{\dot{n}}$ | $\begin{aligned} & \text { Hi } \\ & \text { 佞 } \end{aligned}$ | $\begin{aligned} & 1 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \dot{\sim} \\ & \underset{A}{\prime} \end{aligned}$ |  | $\begin{aligned} & \dot{1} \\ & \dot{0} \\ & \dot{0} \end{aligned}$ | $\begin{aligned} & \dot{y} \\ & \dot{y} \\ & \dot{n} \end{aligned}$ |  | $\begin{aligned} & \text { 足 } \\ & \dot{A} \\ & \dot{\mu} \end{aligned}$ |  | $\begin{aligned} & \dot{4} \\ & 4 \end{aligned}$ | Honorary． |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  | $\dot{A}$ | $\begin{aligned} & \text { 注 } \\ & \text { 住 } \end{aligned}$ | 安 | $\underset{r+1}{\underset{r}{\text { min }}}$ | i |
| United States | 721 | 70 | 29 | 29 | 40 | 6 | 9 | 31 | 8 | 3 | 4 | 1 | 2 | 1 | ： | 3 |
| North Atiantic Division． South Atlantic Division South Central Division． North Central Division Western Division． | $\begin{array}{r}231 \\ 74 \\ -71 \\ 294 \\ 51 \\ \hline\end{array}$ | $\begin{array}{r} 54 \\ 3 \\ 4 \\ 9 \end{array}$ | 26 $\cdots$ 2 1 1 | 7 3 4 15 | $\begin{gathered} 1 \\ 19 \\ 20 \end{gathered}$ | 6 | 9 | 13 4 -14 | $\begin{gathered} 7 \\ 1 \\ 1 \end{gathered}$ | $\begin{aligned} & 7 \\ & 1 \\ & \hdashline \end{aligned}$ | $\frac{1}{3}$ | 1 | 2 | 1 | 1 | $\cdots$ $\cdots$ 1 1 1 |
| North Atlantic Division： <br> New Hampshire ．．．． | 11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Massachusetts－．．．．．． | 207 | 1 |  | 7 |  |  | － |  |  |  |  |  |  |  |  |  |
| Rhode Isiand． Connecticut | 12 |  |  |  |  |  |  | 13 |  |  |  |  |  |  |  |  |
| New York． | 1 | 53 | 20 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| South Atlantic Division： | 28 | 03 |  | 3 |  |  |  |  |  |  |  |  | 2 |  | 1 |  |
| North Caroina | 20 | 皃 |  |  |  |  |  | 4 |  |  |  |  |  |  |  |  |
| South Carolina ．．．．．． | 16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Georgia－－．．－－－－．．．．． | 10 |  |  |  |  | －－ |  |  |  |  |  | －－ |  |  |  |  |
| South Central Division： <br> Alabama | 20 | 4 |  | 4 | 1 |  |  |  |  |  |  | 1 |  |  |  | 1 |
| Texas | 21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oklahoma | 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North Central Division： Ohio ． | 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Indiana． | 117 | 9 | 8 | 3 |  |  |  |  |  | 1 | 1 |  |  |  |  |  |
| Milinois | 39 44 4 |  |  |  | 19 |  |  |  |  |  |  |  |  |  |  |  |
| Iowa．－ | 23 |  |  |  |  | 6 | 9 | 14 | 7 |  |  |  |  | 1 |  |  |
| North Daiota | 2 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |  |  |
| Soutl Dakota | $\stackrel{6}{\sim}$ |  |  | 3 |  |  |  |  |  |  |  |  |  |  |  |  |
| Kansas．－－．．．－－ | $3 \pi$ |  |  | 8 |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Division： Montana |  |  |  |  |  |  |  |  | 1 |  | 3 |  |  |  |  |  |
| Colorado | 17 |  | 1 |  | 20 |  |  |  |  | 2 |  |  |  |  | 1 | 1 |
| New Miexi | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Washingto | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oregon ．．．．．．．．．．．－．．．．－ | 17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Tabie 35．－Degrees conferred on women by schools of technology（Table 42）．

| State or Territory． | B．S． | B．Agr． | B．H．S． | II．S． | B．L． |
| :---: | :---: | :---: | :---: | :---: | :---: |
| United Statas | 61 | 5 | $1 \%$ | 7 | 15 |
| North Atlantic Division | 10 | 5 |  |  |  |
| South Central Division | 9 |  |  | 2 |  |
| North Central Division | 38 |  | 17 | 5 | 13 |
|  |  |  |  |  |  |
| North Atlantic Division： |  |  |  |  |  |
| New Hampshire－．．．－ |  |  |  |  |  |
| Massachusetts． | 3 |  |  |  |  |
| Rhode Island | 5 |  |  |  |  |
| Connecticut－－－－－．．． |  | 5 |  |  |  |
| South Central Division： |  |  |  |  |  |
| Alabama．－ <br> Oklahoma | ${ }_{2}^{7}$ |  |  | 2 |  |
| North Central Division： |  |  |  |  |  |
| Indiana－－－－－．．． | 9 |  |  | 4 |  |
| Michigan． | 3 |  |  |  |  |
| Iowa－ | 6 |  |  |  | 13 |
| South Dakota | 4 |  |  |  |  |
| Kansas－－．－－－ | 16 |  |  | 1 |  |
| Western Division： |  |  |  |  |  |
| Coloracio． | 1 | －－－－－．．．－ |  |  |  |
| Washington | 2 |  |  |  | 2 |
| Oregon．．．．－ |  |  | 17 |  |  |

TABLE 36.-Property of scilools of techmology (Table 43).

| State or Territory. | Number of fellow.ships. |  | Libraries. |  |  | Value of scientific apparatus. | Value of grounds and build. ings. | Produc. tive <br> funds. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Volumes. | Pamphlets. | Value. |  |  |  |
| United States. <br> N. Atlantic Division <br> S. Atlantic Division <br> © Central Division <br> N. Central Division. <br> Western Division. | 4 | 531 | 406,354 | 123,683 | S669, 663 | S3, 314, 803 | 311, 962, 150 | \$10, 222,498 |
|  | 1 | 264 | 152, 769 | 38, 23 \% | 241,853 | 1,016,732 | 4,503,130 | 4,588,533 |
|  | 3 | 269 | 63, 114 | 8,59\% | 83,500 | 1,398, 713 | 1, 811, 430 | 643, 51 |
|  | 0 | 9 | 33,074 | 21,593 | 39, 861 | 261, 872 | 758,545 | 6.59,650 |
|  | 0 | 9 | 119,4\% | 42,400 | 245, 914 | 1,309,204 | 3,962.8\% | 4, ¢19, 546 |
|  | 0 | 0 | 33, 920 | 12,855 | 58, 432 | 1398,282 | 926, 175 | - 210,918 |
| N. Atlantic Division: <br> New Hampshire <br> Miassachusetts <br> Rhode Island $\qquad$ <br> Connecticut $\qquad$ <br> New York. <br> .......- <br> New Jersey <br> S. Atlantic Division: <br> Maryland <br> Virginia. <br> North Carolina <br> South Carolina <br> Georgis |  |  |  |  |  |  |  |  |
|  | 0 | 54 | 6, 300 | 4, 000 | 6,600 | 55,500 | 204, 816 | 41,809 |
|  | 1 | 186 | \%1, 511 | 17,121 | 199,000 | 299, 613 | 1,395, 725 | 8, 419,968 |
|  |  |  | 7.830 | 7, 500 | 12,302 | 91,239 | 182, 650 | 50,000 |
|  | 0 | 0 | 6,532 |  | 10,000 | 7,7\%0 | 150,000 | 135, 000 |
|  | 0 | 0 | 50.246 | 9,613 | 64,051 | 499. 580 | 2,245,183 | $4 \pm 1,765$ |
|  | 0 | 24 | 10, 330 |  | 20,000 | 63,000 | 325, 000 | 500, 000 |
|  | 0 | 0 | 40.000 |  | 40.030 | 100.000 | 793 808 | 0 |
|  | 3 | 200 | 13,014 | 4.997 | 21,030 | 122, 000 | 398, 060 | 334.312 |
|  | 0 | 0 | 3, 100 | 2,200 | 3,500 | 18,000 | 150,251 | 125, 000 |
|  | 0 | 68 | 8,500 | 1,400 | 10,000 | 93, 713 | 317,284 | 154, 439 |
|  | 0 | 1 | 500 |  | 1,000 | 65,000 | 150,000 |  |
| S. Central Division: |  |  |  |  |  |  |  |  |
|  | 0 | ${ }_{1}$ | $13,76 \%$ 9,709 | 1, ${ }^{12} 806$ | 14, 1200 | 80,000 104,243 | 140,000 211,210 | - 2730,500 |
|  |  |  | 5, 000 | 12, 300 | 5,500 | 40,629 | 347,335 | 209.003 |
|  | 0 | 0 | 4, 398 | 3,500 | \%,500 | 3ĩ,000 | 30, 050 |  |
| Indian | 0 | 0 | 17\%,950 | 5,000 | 32, 500 | 389,000 | 553,600 | 910,000 |
| Itlinois | 0 | 6 | 18,000 |  | 20,000 |  | 1,500,000 |  |
| Michiga | 0 | 3 | 55, 240 | \%,100 | 29,395 | 2\%4,092 | 1, 45\%, 293 | 694,000 |
| Iowa. | 0 | 0 | 12,460 | 2,000 | 50,000 | 180,000 | 475, 000 | 682,833 |
| North Dakota | 0 | 0 | 8, 100 | 2,500 | 10, 090 | 18,000 | 11\%,000 |  |
| South Dakota | 0 | 0 | 6, 400 | 10,200 | 10, 800 | 18,000 | 11\%,000 | 0 |
| Kansas ------ | 0 | 0 | 13,425 | 14,600 | 33, 219 | 230, 142 | 243, 510 | 502,813 |
| Western Division: Montana |  | 0 | 3,\%61 | 3,000 | 10,000 | 40,090 | 130,000 |  |
| Colorado | 0 | 0 | 13,950 | 1, 810 | 22,53? | 138, 413 | 301, $8 \%$ | 68,612 |
| New Mexic | 0 | 0 | 3,740 | 1,700 | 7,900 | 36, 500 | 107,009 | , |
| Utah |  |  | 6,911 | 4,310 | 8,000 | 41), 869 | 169, 800 |  |
| Washingt |  |  | 3,530 | 2,036 | 5,000 | 55,000 | 115,000 |  |
| Oriegon |  |  | 4,000 |  | 5,000 | 17,500 | 106, 500 | $13 \mathrm{~T}, 304$ |

TABLE 3\%.-Income of schools of technology (Table 43).

| State or Territory. | Tuition and other fees. | From productive funds. | State or municipal ap-propriations. | United States Goverinment ap-propriations. | $\begin{aligned} & \text { From } \\ & \text { other } \\ & \text { soulces. } \end{aligned}$ | Total income. | Benefactions. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | \$451, 883 | \$480, 761 | \$785,837 | \$2,294,684 |  | S4, 260, 699 | \$845, 099 |
| North Atlantic Division South Atlantic Division. South Central Division Nort̄̄ Central Division. Western Division | $\begin{array}{r} 315,876 \\ 40,100 \\ 140 \\ 91,448 \\ 4,3,1 \end{array}$ | $\begin{array}{r} 172,37 t \\ 35,113 \\ 46,390 \\ 219,362 \\ 7,563 \end{array}$ | $\begin{array}{r} 103,500 \\ 1641,500 \\ 61,933 \\ 204,878 \\ 251,026 \end{array}$ | $\begin{array}{r} 607,189 \\ 1,080,171 \\ 139,324 \\ 234,000 \\ 234,000 \end{array}$ | $\begin{array}{r} 31,221 \\ 17,810 \\ 2,874 \\ 140,499 \\ 3,490 \end{array}$ | $\begin{array}{r} 1,230,160 \\ 1,337,724 \\ 270,561 \\ 890,185 \\ 532,1699 \end{array}$ | $\begin{array}{r} 61,599 \\ 27,506 \\ 750,009 \end{array}$ |
| North Atlantic Division: <br> New Hampshire <br> Maseachusetts. <br> Rhode Island $\qquad$ <br> Connecticut $\qquad$ <br> New York <br> New Jersey $\qquad$ $\qquad$ | $\begin{array}{r} 25,701 \\ 0 \\ 08,560 \\ 32,615 \end{array}$ | $\begin{array}{r} 4,800 \\ 116,813 \\ 2,500 \\ 6,750 \\ 21,511 \\ 20,000 \end{array}$ | $\begin{array}{r} 5,500 \\ 58,000 \\ 15,000 \\ 15,000 \\ 10,000 \\ 0 \end{array}$ | $\begin{array}{r} 39,000 \\ 39,000 \\ 39,000 \\ 31,500 \\ 458,689 \\ \hline 0 \end{array}$ | $\begin{array}{r} 22,698 \\ 3,062 \\ 0 \\ 60 \\ 401 \\ 5,000 \end{array}$ | $\begin{array}{r} 71,998 \\ 471,576 \\ 5,5 \cdots 0 \\ 5,510 \\ 509,161 \\ 67,615 \end{array}$ | $\begin{array}{r} 10,000 \\ \cdots \\ 0 \\ 51,500 \end{array}$ |
| South Atlantic Division: <br> Maryland <br> Virginia <br> North Carolina <br> South Carolina <br> Georgia . | 0 19,000 17,700 4,000 | 0 21,839 $\%, 500$ 5,751 0 | $\begin{array}{r} 0 \\ 45,000 \\ 17,500 \\ 77,00 \\ 25,000 \end{array}$ | $\begin{array}{r} 338,1 \% 1 \\ 31,000 \\ 24,000 \\ 27,000 \\ 0 \end{array}$ | 0 7,933 4,375 5,532 0 | $\begin{array}{r} 998,171 \\ 124,792 \\ 53,375 \\ 13,386 \\ 29,000 \end{array}$ | 27,500 |
| South Central Division: <br> Alabama <br> Mississippi <br> Texas <br> Oklahoma | 0 140 | $\begin{aligned} & 20,280 \\ & 11,830 \\ & 14,230 \end{aligned}$ | $\begin{array}{r} 6,433 \\ 20,200 \\ 27,500 \\ 7,500 \end{array}$ | $\begin{aligned} & 28,324 \\ & 39,000 \\ & 33,000 \\ & 39,000 \end{aligned}$ | $\begin{array}{r} 7,623 \\ 12,908 \\ 0 \\ 2,243 \end{array}$ | $\begin{aligned} & 62,660 \\ & 84,378 \\ & 74,780 \\ & 48,743 \end{aligned}$ |  |
| North Central Division: <br> Ohio | $2 \mathrm{3}, 00$ | 45, 000 |  |  |  | 70,000 |  |
| Indiana | 21,786 | 49, 060 | 61,525 | 39,000 | 23, 728 | 201,033 |  |
| Michisa | \%\%,787 | 50, 403 | 50,500 | 39,000 |  | 100, 165 |  |
| Iowa. | 3,266 | 47,178 | 30, 203 | 39,000 |  | 119, $64 \%$ |  |
| North Dakota | 338 |  | 27,700 | 39,000 | 4, 608 | 71, 646 |  |
| South Dakota Kansas. | 269 |  | 16,200 15,550 | 39,000 39,000 | $\begin{array}{r} 8,423 \\ 15,917 \end{array}$ | $\begin{aligned} & 64,030 \\ & 98,307 \end{aligned}$ |  |
| Western Division: |  |  |  |  |  |  |  |
| Colorado | 3,000 |  | 12,000 | 32, | 0 | 54, 000 |  |
| Colorado |  | 0 | 75,956 8,991 | 39,000 39,000 | 5,950 3,88 | 121,418 49,610 |  |
| Utah ---.... |  | 0 | 13,750 | 39,000 | 7,553 | 60, 303 |  |
| Washington |  | 4,000 | $\begin{array}{r} 113,735 \\ 26,534 \end{array}$ | $\begin{aligned} & 39,000 \\ & 39,000 \end{aligned}$ | - ${ }_{\text {2, }}^{18,80 \%}$ | 155,2 |  |

Table 38.-Statistics of universities and

|  | Location. | Name. | Religious or nonsectarian control. | Yearoffirstopen-ing. | Professors and instructors. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Preparatory department. |  | Collegiate de-partment. |  |
|  |  |  |  |  |  |  |  | - |
|  | 1 | 9 | 3 | 4 | 5 | $\epsilon$ | 8 | 8 |
|  | ALABAMA. |  |  |  |  |  |  |  |
| 1 | East Lake........... | Howard College.... | Bapt ....... | 1841 |  |  | 9 | 0 |
| 2 | Greensboro | Southern Uni versity | M. E. So .-. | 1859 | 1 | 0 | 6 | 0 |
| 3 | Hartselle. | Hartselle College.... | Nonsect. .-. - | 1883 | 0 | 2 | 3 | 2 |
| 4 | Lafayette | Lafayette College | Nonsect. | 1885 | 0 | 3 | 2 | 0 |
| 5 | Lineville. | Lineville College. | Nonsect. | 1890 | 0 | 1 | 3 | 2 |
| 6 | St. Bernard | St. Bernard College | R. C | 1892 | 4 | 0 | 10 | 0 |
| 7 | Spring Hill | Spring Hill College - | R. C | 1830 | 4 | 0 | 23 | 0 |
| 8 | University | University of Alabama. | State | 1831 | 0 | 0 | 18 | 0 |
|  | ARizona. |  |  |  |  |  |  |  |
| 9 | Tucson | University of Arizona | Territory .-. | 1891 | 6 | 3 | 11 | 2 |
|  | ARKANSAS. |  |  |  |  |  |  |  |
| 10 | Arkadelphia....... | Arkadelphia Methodist College.. | M. E. | 1890 | 0 | 1 | 5 | 3 |
| 11 | --do------------- | Ouachita Baptist College .-.-.-.-. | Bapt | 1886 | 0 | 1 | 6 | 2 |
| 12 | Batesville | Arkansas College.----- | Presb ------- | 1872 | 3 | 1 | 5 | 0 |
| 13 | Clarksville | Arkansas Cumberland College | Cumb.Presb | 1891 | 5 | 2 | 5 | 2 |
| 14 | Conway | Fiendrix College.---------.-- | M. E. So...-- | 1884 | 3 | 0 | 6 | 0 |
| 15 | Fayetteville | University of Arkansas $\alpha$ | State. | 1872 | 8 | 8 | 20 | 4 |
| 16 | Little Rock .........- | Philander Smith College.......... | M. E......... | 1877 | 1 | 1 | 3 | 2 |
|  | CALIFORNTA. |  |  |  |  |  |  |  |
| 17 | Berkeley | University of California | State | 1869 | 0 | 0 | 132 | 1 |
| 18 | Claremont. | Pomona College | Cong | 1888 | 12 | 5 | 12 | 5 |
| 19 | College Par'k ......- | University of the Pacific .-......-- | M. $\mathrm{E}^{\text {L }}$ | 1851 | 6 | $\stackrel{2}{2}$ | 8 | 3 |
| 20 | Los Angeles . .-. .-. | Occidental College ---- | Presb | 1887 | 4 | 5 | ${ }_{6}^{6}$ | 5 |
| 21 | ---do-.--- | St. Vincent's College | R.C. | $186 \%$ | 7 | 0 | 15 | 0 |
| 22 | Oakland | California College.-- | Bapt | 1870 | 2 | 2 | 2 | 2 |
| 23 | Pasadena :- | Throop Poly techinic Institute ---- | Nonsect | 1891 | 9 | 5 | 6 | 1 |
| 24 | San Francisco | St. Ignatius College..--.------------ | R. C | 1855 | 3 | 0 | 18 | 0 |
| 95 | Santa Clara... | Santa Clara College. ------------------- | R.C. | 1851 | 4 | 0 | 21 | 0 |
| 26 | Santa Rosa | Pacific Methodist College.........- | M. E.So | 1861 | 0 | 2 | 2 | 3 |
| 27 | Stanford University. | Leland Stanford Junior University. | Nonsect ...- | 1891 | 0 | 0 | 79 | 6 |
| 28 | University coloirado. | University of Southern California. | II.E | 1880 | 10 | 6 | 6 | 3 |
| 29 | Boulder ${ }^{\circ}-$--.-...... | University of Colorado | State.------ | $18 \%$ | 9 | 4 | 23 | 3 |
| 30 | Colorado Springs - | Colorado College .-.------------------ | Nonsect --- | 1814 | 21 | 4 | 21 | 4 |
| 31 | Denver --------- | College of the Sacred Heal't ------ | P. C------. | $18 \% 6$ | 7 | 0 | 5 | 0 |
| 32 | University Park.. | University of Denver-------------- | M.E. | 1881 | 8 | 3 | 12 | 2 |
|  | CONNECTICUT. |  |  |  |  |  |  |  |
| 33 | Hartford -- | Trinity College.-.--------.-.-.-. --. | P. E | 1824 | 0 | 0 | 20 | 0 |
| 34 | Middaletown | Wesleyan University ......-.-.-.-. | M. E--------- | 1831 | 0 | 0 | 35 | 0 |
| 35 | New Haven. | Yale Úniversity .-...- | Cong | 1701 | 0 | 0 | 163 | 0 |
|  | DELAWARE. |  |  |  |  |  |  |  |
| 26 | Dover. | State College for Colored Stu- | State. | 1892 | 2 | 1 | 3 | 0 |
| 37 | Newark | dents. ${ }_{\text {delaware College }}$ | State----- | 1831 | 0 | 0 | 14 | 0 |
|  | DISt. OF COLUMBIA. |  |  |  |  |  |  |  |
| 38 | Washington .-....- | Catholic University of America -- | R.C. | 1889 | 0 | 0 | 18 | 0 |
| 39 | -.- do----.---------- | Columbian University -...-. --.-. | Bapt -- | $18 \% 1$ | 0 | 0 | 66 | 0 |
| 40 | do | Gallaudet College --------------. - - | Nation | 1864 | 5 | 1 | 15 | 3 |
| 41 | --. do | Georgetown University .-.-.-.... | R. ${ }^{1}$ | 1791 | 12 | 0 | 27 | 0 |
| 42 | --.-do | Gonzaga College -------------------- | R.C | 1821 | 5 | 0 | 10 | 0 |
| 43 | .....do | Howard University | Nation | 1867 | 3 | 0 | 7 | 1 |
| 44 | do | St. Jolin's College.. | R.C | 1866 | 6 | 0 | 6 | 0 |
|  |  | a Formerly Arkansas Industrial | niversity. |  |  |  |  |  |

colleges for men and for both sexes．

| Professors and instructors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profes－ sional de－ partments． |  | Total num－ ber（ex－ cluding du－ plicates）． |  | Prepara－ tory de－ partment． |  | Collegiate depart－ ment． |  | Graduate depart－ ment． |  |  |  | Profes－ sional de－ partments． |  | Total num． bel＇（ex－ cluding du－ plicates）． |  |  |
|  |  | Resid | ent． |  |  | $\begin{array}{r} \mathrm{N} \\ \text { resi } \end{array}$ | an- |  |  |  |  |  |
|  |  |  |  |  | 隹 |  |  |  |  |  | $\begin{aligned} & \text { ※゙ } \\ & \text { ت゙ } \\ & \text { む̈ } \\ & E=1 \end{aligned}$ | 年 | 禺 | 号 | 先 |  | 潁 | 䘷 | － |  |
| （3） | 10 | 且 | H ${ }^{\text {P }}$ | 173 | 14 | 135 | 14. | 18 ${ }^{3}$ | 188 | 19 | P0 | B1 |  | 98 | T ${ }^{\text {宾 }}$ |  |
| 0 | 0 | 3 | 0 | 13 | 0 | 1：0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | $13 \frac{1}{4}$ | 0 | 1 |
| 0 | 0 | 7 | 0 | 14 | 6 | 124 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 138 | 13 | 2 |
| 0 | 0 | 3 | 4 | 35 | 45 | 65 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 115 | 3 |
| 0 | 0 | 2 | 3 | 60 | 75 | 50 | 39 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 114 | 4 |
| 0 | 0 | 3 | 3 | 30 | 26 | 93 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 123 | 106 | 5 |
| 5 | 0 | 18 | 0 | 8 | 0 | 78 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 101 | 0 | 6 |
| 0 | 0 | 27 | 0 | 59 | 0 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 0 | 7 |
| 21 | 0 | 39 | 0 | 0 | 0 | 164 | 27 | 6 | 0 | 0 | 0 | 175 | 0 | 338 | 27 | 8 |
| 0 | 0 | 12 | 4 | 20 | 20 | 53 | 38 | 0 | 2 | 0 | 0 | 0 | 0 | 73 | 60 | 9 |
| 0 | 0 | 5 | 4 | 30 | 60 | 20 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 120 | 10 |
| 0 | 0 | 6 | 3 | 115 | 93 | \％ 5 | 75 | 0 | 0 | 0 | 0 | 0 | 0 | 190 | 168 | 11 |
| 0 | 0 | 5 | 1 | 13 | 34 | 33 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 46 | 60 | 12 |
| 0 | 0 | 5 | 2 | 35 | 45 | 3 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 50 | 13 |
| 0 | 0 | 9 | 0 | 80 | 4 | 46 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 126 | 16 | 14 |
| 19 | 0 | 44 | 8 | 192 | 63 | 150 | 74 | 1 | 0 | 0 | 0 | 108 | 0. | 451 | 137 | 15 |
| 0 | 0 | 4 | 3 | 30 | 18 | 13 | 2 | 0 | 0 | 0 | 0 | U | 0 | 48 | $3 \%$ | 16 |
| 231 | 9 | 363 | 10 | 0 | 0 | 853 | 679 | 99 | 89 | 4 | 2 | 485 | 33 | 1，531 | 908 | 17 |
| 0 | 0 | 12 | 5 | 54 | 28 | 55 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 109 | 74 | 18 |
| 0 | 0 | 13 | 6 | 77 | 63 | 35 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 112 | 84 | 19 |
| 0 | 0 | 6 | 7 | 36 | 21 | 7 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 29 | 20 |
| 0 | 0 | 17 | 0 | 50 | 0 | 90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 140 | 0 | 21 |
| 0 | 0 | 4 | 4 | 25 | 23 | 8 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 33 | 22 |
| 0 | 0 | 9 | 5 | 86 | 30 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 96 | 40 | 23 |
| 0 | 0 | 21 | 0 | 110 | 0 | 223 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 333 | 0 | 24 |
| 0 | 0 | 25 | 0 | 50 | 0 | 170 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 220 | 0 | 25 |
| 0 | 0 | 2 | 5 | 16 | 6 | 10 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 16 | 26 |
| 0 | 0 | 79 | 6 | 0 | 0 | 639 | $4: 0$ | 51 | 43 | 0 | 0 | 0 | 0 | 690 | 463 | 27 |
| 50 | 1 | 53 | 10 | 125 | 74 | 64 | 34 | 2 | 0 | 0 | 0 | 104 | 10 | 295 | 118 | 28 |
| 28 | 1. | 59 | 8 | 135 | 175 | 173 | 103 | 18 | $\square$ | 0 | 0 | 92 | 11 | 411. | 289 | 29 |
| 0 | 0 | 26 | 7 | 69 | 65 | 95 | 98 | 3 | 4 | 0 | 0 | 0 | 0 | 167 | 168 | 30 |
| 0 | 0 | 12 | 0 | 100 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 120 | 0 | 31 |
| 71 | 2 | 87 | 11 | 61 | 33 | 45 | 39 | 0 | 0 | 0 | 0 | 156 | 8 | 262 | 80 | 32 |
| 0 | 0 | 20 | 0 | 0 | 0 | 132 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 135̆ | 0 | 33 |
| 0 | 0 | 35 | 0 | 0 | 0 | 251 | 73 | 5 | 2 | 0 | 0 | 0 | 0 | 256 | 75 | $3 \pm$ |
| $9{ }^{2}$ | 0 | 260 | 0 | 0 | 0 | 1，732 | 0 | 209 | 41 | 33 | 0 | 399 | 0 | 2，401 | 110 | 05 |
| 0 | 0 | 5 | 1 | 15 | 9 | 11 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 16 | 36 |
| 0 | 0 | 14 | 0 | 0 | 0 | 84 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 90 | 0 | 37 |
| 16 | 0 | 34 | 0 | 0 | 0 | 0 | 0 | 49 | 0 | 0 | 0 | 119 | 0 | 168 | 0 | 38 |
| 105 | 0 | 173 | 0 | 0 | 0 | 241 | 105 | 57 | 13 | 0 | 0 | 625 | 0 | 923 | 118 | 39 |
| 0 | 0 | 15 | 3 | 19 | 13 | 45 | 26 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 39 | 40 |
| 78 | 0 | 113 | 0 | 135 | 0 | 106 | 0 | 27 | 0 | $1)$ | 0 | 365 | 0 | 6\％ 4 | 0 | 41 |
| 0 | 0 | 15 | 0 | 127 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 157 | 0 | 42 |
| 47 | 1 | 60 | 7 | 106 | 21 | 36 | 6 | 0 | 0 | 0 | 0 | 290 | 15 | 504 | 149 | 43 |
| 0 | 0 | 19 | 0 | 94 | 0 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 0 | 44 |

TABLE 38.-Statistics of miversities and

colleges for men und for both sexes-Continued.


TAble 38．－－Statistics of universities and

|  | Location． | Name， | Religious or nonsectarian control． | Year of first open－ ing． | Professors and instructors． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Collegi part ment． |  |
|  |  |  |  |  |  | 守 | 剩 | 淢 |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|  | indiana－cont＇d． |  |  |  |  |  |  |  |
| 98 | Hanover | Hanorer College | Presb | 1833 |  | 1 | 10 | 0 |
| 99 | Ir irington | Butler College－－－－－－．－－ | Christian | 1855 | 5 | 2 | 15 | $\stackrel{2}{3}$ |
| 100 | Merom－ | Union Christian College | Christian | 1859 | 4 | 2 | 5 | 3 |
| 102 | Notre Dam | University of Notre Dame | R． C | 1842 | 23 | 0 | $\stackrel{5}{3}$ | 0 |
| 103 | Richmond | Earlham College | Friend | 1817 | 1 | 0 | 11 | 3 |
| 104 | St．Meinra | St．Meimrad College | R．C． | 1857 | 4 |  | 10 | 0 |
| 105 | Upland． | Taylor University． | M．E． | 1847 | 3 | 3 | 12 | 3 |
|  | Indian territolry． |  |  |  |  |  |  |  |
| 108 | Bacone | Indian University | Eapt | 1880 | 0 |  | 2 | 5 |
| $10 \%$ | Muscogee | Henry Eendall College | Pres | 1894 | 1 | 2 | 3 | 0 |
|  | IOWA． |  |  |  |  |  |  |  |
| 108 | Cedai Rapids ．．．．．－ | Coe College ．．．．． | Presb－－ | 1881 | 7 | 4 | \％ |  |
| 109 | Charles City ．－ | Charles City College | Ger．M．E．－ | 1881 | 8 | 1 | 5 | 0 |
| 110 | Clinton | Wartburg College | Luth | 1868 | 1 | 0 | 6 |  |
| 111 | CollegeSprings | Amity College | Nonsect | 1855 | 3 | 0 | 4 | 2 |
| 112 | Decorah | Luther College | Luth | 1861 | 12 |  | 12 | 0 |
| 113 | Des Moines | Des Moines College | Bapt | 1885 | 1 | 1 | 5 | 3 |
| 114 |  | Drake University | Christiail |  | 17 | 8 | 21 |  |
| 115 | Dubuque | St．Joseph＇s College | R．C | 1873 | ${ }^{6}$ | ， | 6 | 0 |
| 116 | Fairfield | Parsons College－ | Pres | 1850 | 10 | \％ | 13 | 3 |
| 117 | Fayette | Upper Iowa University | M．E | 1857 | 7 | 7 | 8 |  |
| 118 | Grinnell． | Iowa College ．－ | Cong | 1848 | ${ }_{6}^{6}$ | ${ }_{6}^{6}$ | 18 | 5 |
| 119 | Hopkinton | Lenox College．－ | Presb | 1859 | $\stackrel{2}{6}$ | 3 | 3 | 4 |
| 129 | Indianola | Simpson College | M．E | 1867 | ${ }_{6}^{6}$ | 10 | 6 | 5 |
| 122 | Iowa City | State University of low | State L － | 18895 | － | 0 3 3 | $\stackrel{43}{3}$ | 3 4 |
| 123 | Legrand | Palmer College．．－ | Christian | 1889 | 3 | 2 | 4 | 0 |
| 124 | Mount Pleasant | German College | M．E． | $18: 3$ | 3 | 1 | 3 | 1 |
| 125 | －do | Iowa Wesleyan University | M．E | 1844 | 9 | 2 | 9 | 1 |
| 126 | Mount Vernon | Cornell College． | M．E | 1857 | 5 |  | $1 \pi$ |  |
| 127 | Oskaloosa．． | Penn College－ | Friends | 1873 | 6 | 4 | 8 | 3 |
| 128 | Pella | Contral University of Iowa | Bapt | 1853 | 9 |  | $\stackrel{9}{\sim}$ | 4 |
| 129 | Sioux City | Morningside College－－．－．－． | M．E． | 1899 | 3 | $\stackrel{2}{2}$ | ก | ${ }_{6}^{6}$ |
| 130 | Storm Lake | Buena Vista College | Presb | 1891 |  | 3 | $\stackrel{5}{\sim}$ | 3 |
| 131 | Tabor | Tabor College | Cong | 1865 |  | 3 |  |  |
| 13\％ | Toledo | Western College | U．B | 1856 | 5 | 0 | 6 | 1 |
|  | Kansas． |  |  |  |  |  |  |  |
| 133 | Atchison | Midland College | Luth | 1887 | 2 |  | 6 | 1 |
| 134 |  | St．Benedict＇s College | R．C | 1858 | 9 | 0 | 15 | 0 |
| 135 | Baldwin | Baker University | M．E | 1858 | ${ }_{2}^{4}$ | ${ }_{6}^{6}$ | 8 |  |
| 136 | Dodge City | Soule College．．．． | M．E | 1893 | 2 | 1 | 6 | 1 |
| 137 | Emporia ．－ | College of Emporia－－ | Presb | 1883 | 11 | 1 | 11 |  |
| 138 | Highland ．－．－．－．．．－ | Highland University | Presb－－．．．．． | 1887 | ${ }_{2}^{2}$ | 4 | 3 | 2 |
| 139 | Holton－－－－－－－．－．－－ | Campbell University | Nonsect．－．．－ | 188.2 | 12 |  | 12 | 5 |
| 140 | Kansas City | Kansas City University | Meth．Prot－－ | 1895 | ， | 1 | 11 | 1 |
| 141 | Lawrence－－－－－－－－－ | University of Kausas | State． | 1866 | 0 | 0 | 46 | 5 |
| 142 | Lecompton | Lane University | U．B－．．．－－ | 1865 | 5 | 1 | 5 | 1 |
| 143 | Lincoln ．．．． | Kansas Christian College | Christian | 1882 | 5 | 3 | 5 | 4 |
| 144 | Lindsborg | Bethany College． | Luth | 1881 | 9 | 1 | 9 | 1 |
| 145 | Ottawa－－．．．．－．．．－． | Ottawa University | Bapt | 1865 | 10 | 2 | 8 | 1 |
| 146 | St．Marys ．－．－－－－－－ | St．Mary＇s College | R．${ }^{\text {c }}$ | 1869 | 24 | 0 | 11 | 0 |
| 148 | Salina． | Kansas Wesleyan Universit | M．E．－．－．－． | 1886 | $\stackrel{4}{1}$ | $\stackrel{2}{1}$ | 4 | 1 |
| 148 | Sterling | Cooper Memorial College | Un．Presb－ | 1887 | 1 | 1 | ${ }^{6}$ | 1 |
| 149 | Topeka | Washbul＇n College | Cong | 1865 | 6 | 3 | 10 | 4 |
| 150 | Wichita | Frirmount College | Cong | 1892 | 14 | 6 | 14 | ${ }^{6}$ |
| 151 | Winfield | St．John＇s Lutheran College | Luth | 1893 | 5 | 0 | 4 | 1 |
| 152 | －do | Southwest Kansas College | M．E． | 1886 | 10 | 5 | 8 | 1 |

colleges for men and for both sexes－Continued．

|  |  | 00 | $0-1000000$ | $\omega$ | Male． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0000000000000000000000 | 0 | 00000000 | \％os | Female． |  |  |
|  |  | 42 |  | bad | Male． |  |  |
|  |  | $\infty$ | cocoonrmuio | 10d | Femalo． |  |  |
|  |  | Win |  | －3 | Male． |  |  |
|  |  | 或筞 |  | R－1 | Female． |  |  |
|  |  | oer |  | lod cir | Male． |  |  |
|  |  | た |  | \％ed | Female． |  |  |
| 0000000100ทivnoo00000 |  | $\mapsto 0$ | 00200＇ruo | n－ | Malo． | $\begin{aligned} & 50 \\ & 0 \\ & 0 \\ & 2 . \\ & 0 . \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ |  |
| 0000000000000010000 |  | 00 | －OnOO゙ール | $\stackrel{1}{2}$ | Female． |  |  |
| 00000000000000000 | $00000-100000 \mathrm{M}$ | 00 | $: 000000$ | cre | Male． |  |  |
| 000000000001000000 | $00000100000 \mathrm{volwro0000000}$ | $\mapsto 0$ | 1000000 | ${ }^{20}$ | Female． |  |  |
| $0000000000 \operatorname{Hin}_{4}^{20}=00000$ | $000000006000^{3} 1000000^{20} 000000$ | 00 | $\text { Exoco } 000$ | 10 | Male． |  |  |
| 0000000000 W゙ヒ0000000 | 000000000001000000100000 | 00 | 0000 cro | 12 | Female． |  |  |
|  |  | $\stackrel{\leftarrow}{\sim}$ | いたいC゚いぃい | （2） | Malo． |  |  |
|  |  | Cres | No | 2\％ | Female． |  |  |
|  |  | $\underset{\substack{\text { Wo } \\ \stackrel{\rightharpoonup}{\circ} \\ \hline}}{ }$ |  |  |  |  |  |

TABLE 3S.-Statistics of miversities and

|  | Location. | Name. | Religious oi nonsectarian control. | Fear of first opening. | Professors and instructors. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | $\begin{aligned} & \text { Prepar- } \\ & \text { ator'y } \\ & \text { depart- } \\ & \text { ment. } \end{aligned}$ |  | Collegiate de-partment. |  |
|  |  |  |  |  | $\xrightarrow{\text { cis }}$ | 宽 | $\stackrel{\stackrel{\text { ¢ }}{\text { ¢ }} \text { ¢ }}{\text { ¢ }}$ | - |
|  | I | 2 | 3 | 4 | 5 | 6 | 7 | צ |
|  | KENTUCKY. |  |  |  |  |  |  |  |
| 133 | Barbourville | Union College | II. S $^{\text {S }}$ | 1386 | 3 | 0 | 3 | 0 |
| 154 | Berea | Berea College | Nonsect | 1853 | 8 | 11 | 9 | 1 |
| 155 | Bowling Green | Ogden Colloge. | Nonsect. | $18 \%$ | 4 | 0 | 4 | 0 |
| 156 | Danvilie .-. -- | Centre College | Presb .- | 1822 | 2 | 0 | 10 | 0 |
| 157 | Georgetown | Georgetorvn College | Bapt | 1829 | 3 | 3 | 10 | 6 |
| 158 | Glascovr -. | Liberty College .... | Bapt | 1855 | 2 | 3 | ? | 1 |
| 159 | Hopkinsville. | South Kentucky Colle | Christian | 1849 | 0 | 2 | 5 | 1 |
| 1 CO | Lexington .-. | Acricultural and Nechanical College of Kentucky. | State.-...- | 1866 | 4 | 0 | 11 | 0 |
| 161 | do | Kentucky Uniren'sity - - --- -- - .-. - | Christian | 1533 | 2 | 0 | 8 | 1 |
| 16. | Richmond | Central University .-. | Presb .-. | 1874 | 10 | 10 | 18 | 0 |
| 163 | Russellyille | Bethel College.-.- | Bapt | 1854 | 1 | 0 | 5 | 0 |
| 164 | St. Marys | St. Mary ${ }^{\text {coll Coge }}$ | R. C | 18\%1 | 4 | 0 | 5 | 0 |
| 165 | Winchester | Kentucky Wesleyan College...... | 1I.E.SO | 18.6 | 3 | 3 | 10 | 1 |
|  | LOUISTANA. |  |  |  |  |  |  |  |
| 106 | Eaton Rotge | Louisiana State University-.-.... | State | 1860 | $\because$ | 0 | 19 | 0 |
| $16 \%$ | Convent -... | Jefferson Collegs...---...---------- | R.C | 1864 | 2 | 0 | 12 | 0 |
| 168 | Tackson | Centenary College of Louisiana.- | M. E. So | 1825 | 2 | 0 | 5 | 0 |
| 169 | Keatchie...- | Keatchie College c .-..--.-.-.-.-- | Bapt | 1856 | 1 | 2 | 4 | 0 |
| 170 | New Orleans. | College of the Immaculate Conception. | R.C. | 1817 | 4 | 0 | 9 | 0 |
| 11 | -do | Teland University --.-.----------- | Bapt | $18 \% 0$ | 3 | 5 | 3 | 4 |
| 172 | -do | New Orleans Unirersity | 1r.E. | 1843 | 2 | 5 | 4 | 2 |
| 173 | do | Straight University . | Cong | 1869 | 4 | 8 | 4 | 3 |
| 174 | do | Tulane University . | Nonsect | 183! | 0 | 6 | 20 | 10 |
|  | MAINE. |  |  |  |  |  |  |  |
| 1\%5 | Brunswick | Bowdoin College | Cong | 1802 | 0 | 0 | 20 | 0 |
| 176 | T,ewistoll | Bates College-- | Free Bapt | 1863 | 0 | 0 | 18 | 1 |
| $17 \%$ | Orono.- | University of Maine | State...- | 1868 | 0 | 0 | 40 | 0 |
| 178 | Waterville | Colby College...... | Bapt | 1818 | 0 | 0 | 14 | $\stackrel{\square}{8}$ |
|  | mamivlant. |  |  |  |  |  |  |  |
| 179 | Anmapolis | St. John's College | Nonsect. | 1\%89 | 2 | 0 | 9 | 0 |
| 180 | Baltimore | Johns Hopkins University | Nonsect. | 1876 | 0 | 0 | $8{ }^{2}$ | 0 |
| 181 | -.-- do | Loyola College .-.-......... | P. C.... | 185? | 8 | 0 | 7 | 0 |
| 182 | ----do | Morgan College | M. E. | 1876 | 4 | 3 | 4 | 2 |
| 183 | Chestertown | Washington College | Nonsect. | 1783 | 5 | 2 | 5 | 2 |
| $18 \frac{1}{2}$ | College Park | Mharyland Agricultural College .- | State. | 1859 | 1 | 0 | 19 | 0 |
| 185 | Ellicott City | Rock Hill College .------------ -- | R.C | $185 \%$ | 10 | 0 | 1. | 0 |
| 186 | --- do.--------- | St. Cliarles College ------ | R. ${ }^{\text {C }}$ | 1848 | 13 | 0 | 16 | 0 |
| 187 | Irount St. Marys.. | Mount St. Mary's Collego | R.C | 1808 | 21 | 0 | 15 | $1)$ |
| 188 | New Windsor .-..- | New Windsoĩ Collego .-.... | Presb ---.--- | 1843 | 1 | 1 | 3 | $\stackrel{2}{8}$ |
| 189 | Westminstel | Wester'n Maryland College.-.-.-. | Meth. Prot.- | 1863 | 4 | 2 | 12 | 8 |
|  | MASSACHUSETTS. |  |  |  |  |  |  |  |
| 190 | Amherst.-.--.-...- | Amherst College | Nonsect | 1821 | 0 | 0 | 8.2 | 0 |
| 191 | Boston ----------- | Boston College --....-.-.--------.-- | R. C--..--.- | 1864 | $1 \pm$ | 0 | 13 | 0 |
| 192 | - -- do .-.-. | Boston University ----- ------------ | M. E.--- | $187 \%$ | 0 | 0 | 24 | 2 |
| 193 | Cambridge | Harvard University - ----------------- | Nonsect | 1638 | 0 | 0 | 314 | 0 |
| 194 | Springfield .-.-... | French-American College --...-- | Nonsect .-. | 1885 | 6 | 6 | 6 | 6 |
| 195 | Tufis College.....- | Tufts College | Univ .------ | $185 \frac{1}{2}$ | 7 | 0 | 35 | 0 |
| 196 | Wriliamstown -- | Williams College | Nonsect --.- | 1193 | 0 | 0 | 3. | 0 |
| 197 | Worcester --.----- | Clark University | Nonsect ---- | 1889 | 0 | 0 | 11 | 0 |
| 198 | ---- do -- --.------- -- | College oi the Holy Cross.-.-.-.-. | P. C ...-.-.-. | 1843 | 12 | 0 | 15 | 0 |
|  | MICHIGAN. |  |  |  |  |  |  |  |
| 199 | Adrian .-.---------- | Adrian College -------------------- | Meth. Prot.- | 1859 | 1 | 1 | 8 | 5 |
| 200 | Albion --------------- | Albion College ------------------------------ | IM. E.-.------ | 1843 | 2 | 6 | 10 | 2 |

colleges for men and for both sexes－Continned．

| Professors and instructors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profes－ sional de－ partments． |  | Total num－ ber（ex－ cluding du－ plicates）． |  | Prepara－ tory de－ pariment． |  | Collegiate depart－ ment． |  | Graduate depart－ ment． |  |  |  | Piofes－ sional de－ partments． |  | Total num－ ber（ex． cluding du－ plicates）． |  |  |
|  |  | Resi | ent． |  |  | $\begin{aligned} & \mathrm{N} \\ & \text { resi } \end{aligned}$ | n－ ent． |  |  |  |  |  |
| 号 |  |  |  |  |  |  |  |  |  |  |  | $\xrightarrow{\text { ® }}$ | 迫 | 䔍 | $\begin{aligned} & \text { ⿷匚 } \\ & \text { 合 } \\ & \text { gid } \\ & \text { En } \end{aligned}$ | 㳫 |  |  |  |  |
| 9 | 10 | 1 I | 12 | Ti3 | 14 | 13 | 16 | 17 | 113 | $\underline{13}$ | 23 | 理㬝 | 29 | 13 ${ }^{3}$ | 2－3 |  |
| 0 | 0 | 3 | 0 | 13 | 7 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 9 | 133 |
| 0 | 0 | 17 | 15 | 359 | 293 | 33 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 400 | 308 | 154 |
| 0 | 0 | 4 | 0 | 44 | 0 | 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 0 | 155 |
| 3 | 0 | 11 | 0 | 59 | 0 | 149 | 0 | 8 | 0 | 2 | 0 | 26 | 0 | 221 | 0 | 156 |
| 0 | 0 | 1\％ | 9 | 102 | 5.5 | 147 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 249 | 1.37 | 156 |
| 0 | 0 | 2 | 4 | 25 | 35 | 15 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 45 | 1.58 |
| 0 | 0 | 6 | 5 | 16 | 14 | 80 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 99 | 69 | 159 |
| 0 | 0 | 24 | 1 | 85 | 14 | 210 | 50 | 8 | 2 | 0 | 0 | 0 | 0 | $3 \% 0$ | 110 | 160 |
| 21 | 1 | 33 | 2 | 13 | \％ | 168 | 55 | 2 | 0 | 0 | 0 | 181 | 0 | 363 | 62 | 151 |
| 39 | 0 | 67 | 10 | 150 | 135 | 140 | 10 | 0 | 0 | 0 | 0 | 376 | 0 | 666 | 145 | 162 |
| 0 | 0 | 6 | 0 | 4.6 | 0 | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $10 \pm$ | 0 | 103 |
| 0 | 0 | 9 | 0 | 41 | 0 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 0 | 164 |
| 0 | 0 | 11 | 4 | 97 | 194 | 101 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 198 | 219 | 165 |
| 0 | 0 | 19 | 0 | 98 | 0 | 186 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 238 | 0 | 166 |
| 0 | 0 | 14 | 0 | 36 | 0 | 76 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 112 | 0 | 167 |
| 0 | 0 | 6 | 0 | 49 | 0 | 58 | 5 | （1） | 0 | 0 | 0 | 0 | 0 | 188 | 5 | 168 |
| 0 | 0 | 4 | 2 | 9 | 6 | 24 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 48 | 109 |
| 0 | 0 | 18 | 0 | 81 | 0 | 6.7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 850 | U | $1 \%$ |
| 0 | 0 | 4 | 5 | 11 | 23 | 18 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | $2 \%$ | $1 \%$ |
| 7 | 0 | 13 | 7 | 14 | 27 | 6 | 7 | 0 | 0 | 0 | 0 | 3： | 0 | $5:$ | 34 | $1 \%$ |
| 3 | 0 | 4 | 11 | 56 | 40 | ${ }^{6}$ | 1 | 0 | 0 | 0 | 0 | 9 | 3 | 71 | 59 | $1 \% 3$ |
| 31 | 0 | 57 | 16 | 0 | 80 | 193 | 139 | 4 | 94 | 0 | 0 | $45 \%$ | 3 | 654 | 310 | 1\％ |
| 18 | 0 | 35 | 0 | 0 | 0 | 234 | 0 | 0 | 0 | 0 | 0 | 126 | 0 | 360 | 0 | 17 |
| 7 | 0 | 23 | 1 | 0 | 0 | 160 | 120 | 0 | 0 | 0 | 0 | 39 | 0 | $18 \%$ | 129 | 176 |
| 8 | 0 | 46 | 0 | 0 | 0 | 287 | 0 | 6 | 0 | 0 | 0 | 30 | 0 | 399 | 0 | $1 \%$ |
| 0 | 0 | 14 | 2 | 0 | 0 | 127 | 68 | 0 | 0 | 0 | 0 | 0 | 0 | $12 \sim 3$ | 68 | $1 \% 8$ |
| 0 | 0 | 11 | 0 | 51 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 131 | 0 | 119 |
| 45 | 1 | $12 \%$ | 1 | 0 | 0 | 187 | 0 | 210 | 0 | 0 | 0 | 210 | 40 | 60.3 | 4.2 | 180 |
| 0 | 0 | 15 | 0 | 118 | 0 | 60 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $1 \% 8$ | 0 | 181 |
| 2 | 0 | 6 | 3 | 15 | 4 | 10 | 1 | 0 | 0 | 0 | 0 | 13 | 0 | 38 | 5 | 182 |
| 0 | 0 | 5 | 2 | 30 | 30 | 31 | 27 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | $5 \%$ | 183 |
| 0 | 0 | 20 | 0 | 18 | 0 | 84 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 108 | 0 | 184 |
| 0 | 0 | 2.2 | 0 | 90 | 0 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 139 | 0 | 185 |
| 0 | 0 | 20 | 0 | 66 | 0 | 164 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 230 | 0 | 186 |
| 5 | 0 | 29 | 0 | 107 | 0 | 102 | 0. | 0 | 0 | 0 | 0 | 28 | 0 | 237 | 0 | $18 \%$ |
| 0 | 0 | 3 | 3 | 13 | 6 | 16 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 20 | 188 |
| 0 | 0 | 12 | 8 | 55 | 39 | 88 | 85 | 0 | 0 | 0 | 0 | 0 | 0 | 143 | ［：2 | 189 |
| 0 | 0 | 32 | 0 | 0 | 0 | 376 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 380 | 0 | 190 |
| 0 | 0 | 20 | 0 | 255 | 0 | 200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 455 | 0 | 191 |
| 118 | 0 | 142 | 2 | 0 | 0 | 121 | 297 | \％2 | 30 | 0 | 0 | 680 | （\％） | 842 | 333 | 192 |
| 195 | 0 | 509 | 0 | 0 | 0 | 2，289 | 0 | 308 | 0 | $1 \pm$ | 0 | 1，301 | 0 | 3，912 | 0 | 198 |
| 0 | 0 | 6 | 6 | 49 | $1 \%$ | 2， 10 | 1 | 0 | 0 | 0 | 0 | － 0 | 0 | 59 | 18 | 194 |
| 53 | 1 | 92 | 1 | 5 | 0 | $19 \%$ | 95 | 7 | 1 | 0 | 0 | 218 | $5: 2$ | 420 | 148 | 19\％ |
| 0 | 0 | 32 | 0 | 0 | 0 | 365 | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 335 | 0 | 196 |
| 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 0 | 0 | 0 | 0 | 36 | 0 | 197 |
| 0 | 0 | 27 | 0 | $\%$ | 0 | 260 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 330 | 0 | 198 |
| 2 | 0 | 8 | 5 | 38 | 14 | $3 \%$ | 27 | 0 | 0 | 0 | 9 | 23 | 0 | 75 | 41 | 199 |
| 0 | 0 | 14 | 12 | 74 | 44 | 130 | 95 | 2 | 1 | $\dot{j}$ | ， | 0 | 0 | 233 | 16） | 20 |

Table 35.-Statistics of universities and


* Statistics of 189ï-98.
colleges for men and for both sexes-Continned.

a Includes $3: 8$ men and 60 women in school of agriculture.

Table 38.-Statistics of universities and

$a$ Discontinued college work in June, 1899.
colleges for men and for both sexes－Continned．

| Professors and instructors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profes－ sional de－ partments． |  | Total num－ ber（ex－ clading du－ plicates）． |  | Prepara－ tory de－ partiment． |  | Collegiate depart－ ment． |  | Graduate depart－ ment． |  |  |  | Profes－ sional de－ partments． |  | Total num ber（ex－ cluding du－ plicates）． |  |  |
|  |  | Resident． | Non－ resident． |  |  |  |  |  |  |  |  |
| $\begin{gathered} \text { 玉id } \\ \text { 感 } \end{gathered}$ |  |  |  |  |  | $\frac{\dot{a}}{\stackrel{y}{3}}$ |  | $\begin{aligned} & \text { 官 } \\ & \text { 感 } \end{aligned}$ |  | $\begin{aligned} & \text { 合 } \\ & \text { 岂 } \end{aligned}$ | $\begin{aligned} & \text { 合 } \\ & \text { है } \\ & \text { है } \end{aligned}$ |  | $\begin{aligned} & \text { o. } \\ & \text { aj } \\ & \text { gid } \\ & \text { en } \end{aligned}$ | $\underset{y}{\text { ®. }}$ |  |  |  |  |
| 9 | 10 | 直 1 | H2 |  |  | 13 | 14 | 15 | 16 | 17 | T 8 | 19 | 2 3 | 思睘 | 38 | 38 | $2{ }^{2}$ |  |
|  | 0 | 5 |  | 25 | 42 | 16 | 13 |  |  |  |  | 0 | 0 | 46 | 60 | 251 |
| 26 | 0 | 33 | 5 | 25 | 11 | 12 | 5 | 2 | 0 | 0 | 0 | 54. | 5 | 93 | 20 | $2{ }^{2}$ |
| 0 | 0 | 17 | 4 | 97 | ${ }^{7} 1$ | \％ 6 | \％ 8 | 0 | 0 | 0 | ， | 0 | 0 | 173 | 149 | 253 |
| 0 | 0 | 10 | 1 | 26 | 29 | 45 | 41 | 0 | 1 | 0 | 0 | 0 | 0 | 81 | 71 | 254 |
| 0 | 0 | ${ }_{6}^{6}$ | 4 | 48 | 15 | 17 | 12 | 0 | 0 | 1 | 1 | 0 | 0 | 86 | 39 | 205 |
| 0 | 0 | ${ }^{6}$ | 4 | 51 | 48 | 30 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 81 | 68 | 256 |
| 14 | 0 | 81 | 19 | 140 | 96 | 529 | 446 | 40 | 28 | 38 | 16 | 116 | 2 | 981 | 591 | 257 |
| 0 | 0 | 4 | 3 | 32 | 84 | 9 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 19 | 2－9 |
| $\bigcirc$ | 1 | $5{ }^{5}$ | 1 | 121 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 93 | 15 | 269 | 15 | 259 |
| 0 0 | 0 | 15 | 7 | 126 63 | 109 59 | － | 45 8 | 0 | 0 0 | 0 0 | 0 | 0 0 | 0 0 | 198 | $\underline{151}$ | $\begin{array}{r}\square 60 \\ \hdashline 61\end{array}$ |
| 0 | 0 | 15 | 8 | 63 | $8{ }^{3}$ | 84 | 78 | 2 | 7 | 0 | 0 | 0 | 0 | 159 | 102 | 568 |
| 14 1 | 0 | 505 | 0 0 | 80 | 0 | 549 31 | 0 | ${ }_{0}^{4}$ | 0 0 | 0 0 | ${ }_{0}^{0}$ | 131 10 | ${ }_{0}^{0}$ | 694 61 | 0 | ${ }^{263}$ |
| 0 | 0 | 12 | 0 | 103 | 0 | 51 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 1\％ | 0 | 265 |
| 0 | 0 | 8 | 0 | 24 | 0 | 70 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 94 | 0 | 205 |
| 0 | 0 | 31 | 4 | 99 | 39 | 166 | 0 | $\stackrel{2}{2}$ | 0 | 0 | 0 | 0 | 0 | 267 | 29 | 267 |
| 0 | 0 | 11 | 0 0 | 0 | 0 | 96. | 0 | 132 | 0 | 0 | 0 | 0 | 0 | 1，099 | 0 | \％68 |
| 4 | 0 | 11 | 0 | 51 | 0 | 80 | 0 | 0 | 0 | 0 | 0 | 31 | 0 | 163 | 0 | 869 |
| 0 | 0 | 13 | 4 | 30 | 36 | 10 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 43 | 36 | $2 \pi 0$ |
| 3 | 0 | 17 | ， | 47 | 53 | 42 | 24 | 1 | 2 | 0 | 1 | 2 | 0 | 92 | 80 | $2 i 1$ |
| 6 | 0 | 18 | 0 | 35 | 0 | 50 | 0 | 0 | 0 | 0 | 0 | \％ 0 | 0 | 155 | 0 | 27 |
| 0 | 0 | 9 | 0 | 10 | 0 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 | 0 | 273 |
| 0 | 0 | 24 | 49 | 448 | 563 | 15 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 463 | 65.5 | 274 |
| 0 | 0 | 35 | 3 | 520 | 0 | 82 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 603 | 0 | 275 |
| 0 | 0 | 26 | 0 | 199 | 0 | 42 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 241 | $1)$ | 276 |
| 4 | 0 | 19 | 0 | 116 | 0 | 58 | 0 | 0 | 0 | 0 | 0 | 60 | 0 | 234 | 0 | $27 \%$ |
| $\stackrel{0}{\sim}$ | 0 | 20 | 0 | 185 | 0 | 29 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 224 | 0 | $2 \pi 8$ |
| \％ | 0 | 18 | 1 | 0 | 0 | 73 | 31 | 0 | 0 |  | 8 | 15 | 5 | 96 | 43 | 279 |
| 0 | 0 | 18 | 0 | 0 | 0 | 150 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 150 | 0 | 280 |
| 0 | 0 | 15 | 0 | 0 | 0 | 92 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 92 | 0 | 281 |
| 8 | 0 | 33 | ， | $1+1$ | 0 | 131 | 0 | 1 | 0 | 0 | 0 | 49 | 0 | 322 | 0 | 282 |
| 7 | 0 | 279 | 5 |  | 0 | 1，208 | 249 | 149 | 41 | 0 | 0 | 439 | 20 | 1，885 | 316 | 283 |
| 0 | 0 | 50 | 0 | 449 | 0 | 1.97 | 0 | 0 | 0 | 35 | 0 | 0 | 0 | 681 | 0 | 234 |
| －${ }_{15}^{0}$ | ， | 60 339 | 0 | $68 \%$ | 0 | 1，017 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1，704 | 0 | 235 |
| 150 | 0 | 339 | 0 | 0 | 0 | 862 | 0 | 271 | 0 | 0 | 0 | 1，075 |  |  | 0 | 286 |
| 0 | 0 | 291 | 0 | 570 | 0 | 146 | ${ }^{0}$ | 0 109 | 0 | 0 | 0 | 0 | 0 | 1 716 | 0 | 287 |
| 118 | 0 | 151 | 0 |  | 0 | 219 | 0 | 129 | 32 | 0 | 0 | 1，116 | 297 | 1，364 | 329 | 288 |
| 0 8 | 0 0 | $\stackrel{27}{27}$ | 0 | 161 81 | 0 $* \quad 0$ | 86 98 |  | 0 0 | 0 | 0 | 0 0 | 0 59 | 0 0 | 217 | 0 0 | 289 |
| 8 | 0 | 15 | 0 | 81 0 | ${ }^{0}$ | $\stackrel{92}{196}$ | 0 | 8 | 0 0 | 0 9 | 0 0 | 59 | 0 0 | ${ }_{213}^{23}$ | 0 0 | $\stackrel{290}{291}$ |
| 0 | 0 | 23 | 0 | 0 | 0 | 186 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 186 | 0 | 292 |
| 60 | 0 | 103 | 4 | 0 | 0 | 37.2 | 198 | 15 | 14 | 0 | 0 | 164 | 7 | a 561 | a 219 | 203 |
|  | 0 | 14 | 0 | 28 | 0 | 67 | ${ }_{0}$ | 0 | 0 | 0 | 0 | 14 | 0 | 93 | 0 | 294 |
| 17 | 0 | 28 | 0 | 0 | 0 | 339 | 7 | 12 | 2 | 0 | 0 | 133 | 0 | 480 | ， | 295 |
| 5 | 0 | 12 | 0 | 135 | 0 | 69 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 223 | 0 | 296 |
| 0 | 0 | 10 | 0 | 0 | 0 | $15:$ | 0 | 1 | 0 | 13 | 0 | 35 | 0 | 173 | 0 | 297 |
| 0 0 | 0 | 19 | 0 | 63 | 7 | 123 | 20 | 7 | 0 | 0 | 0 | 0 | 0 | 193 | 27 | 298 |
| 0 | 0 | 8 | 4 | 28 | 20 | $3{ }^{3}$ | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 60 | 40 | 299 |

a In the college of fine arts there are 55 men and 342 women，with 23 instructors．

Table 38. -Statistics of universities and


[^31]colleges for men and for both sexes-Continued.


Table 38．－Statistics of unirersities and

|  | Location． | Name． | Religious or nonsectarian control． | $\begin{aligned} & \text { Year } \\ & \text { of } \\ & \text { first } \\ & \text { open- } \\ & \text { ing. } \end{aligned}$ | Professors and instructors． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Prepar depart ment． |  | Collegi－ ate de－ part－ ment． |  |
|  |  |  |  |  |  | 淾 | $\begin{aligned} & \text { 寽 } \\ & \text { 品 } \end{aligned}$ |  |
|  | 1 | s | 3 | $\pm$ | 5 | 6 | 7 | 8 |
|  | pennsyminala． |  |  |  |  |  |  |  |
| 356 | Allegheny | Western University of Pennsyl－ | Nonsect ．－．－ | 1819 | 0 | 0 | 16 | 0 |
| 3 5 | Allentown | Mruhlenberg College | Luth ．－．．．．．． | 1867 | 2 | 0 | 10 | 0 |
| 358 309 | Annville．．． | Iebanon Valley College | U．B．．．．．．．．． | 1866 1846 | 6 6 | $\stackrel{4}{0}$ | 9 | 0 |
| 360 | Bearer | Beaver College ．．．－ | M．E | 1853 | 0 | 4 | 2 | 6 |
| 361 | Beaver Falls | Geneva College | Ref．Presb－－ | 1849 | 1 | 2 | 6 | 1 |
| 366 | Bethithem | Moravian College | Moravian－ | $180 \%$ | 0 | 0 | 4 | 0 |
| 364 | Chester | Penusylvania Military College | Nonsect－－．．． | 1862 |  |  | 12 | 0 |
| 365 | Collegeville | Ursinus College | Reformed．． | 1870 | 11 | 4 | 13 | 2 |
| 366 | Easton－．．． | Lafayette College | Presb． | 1832 | 0 | 0 | 28 | 0 |
| 367 | Gettysburg | Pemnsylvania Colleg | Luth | 1832 | 4 | 0 | 13 | 0 |
| 368 | Greenville | Thiel College | Luth | $18 \% 0$ | 5 | 1 | 7 | 0 |
| 369 | Grove City | Grove City Collega | Nonsect | 1884 | 3 | 8 | 9 | 0 |
| 381 | Haverford．． | Haverford Colleg | Triends－－．．．－ | 1883 | $1{ }^{0}$ | $\stackrel{8}{2}$ | 11 | 0 |
| 318 | Lancaster | Franklin and Marshall College ． | Refoth． | 1836 | 7 |  |  | 0 |
| 373 | Lewisburg | Buckneil University ．．．．．．．．．．． | Bapt－．－．－－ | 1846 | 5 | 7 | 21 | 1 |
| 3.4 | Lincoln Univer－ | Lincolin University＊ | Pres | 1851 | 0 | 0 | 8 | 0 |
| 315 | Mreadville | Allegheny College | M．E． | 1813 |  |  | 1.3 |  |
| 376 | Myerstown | Albright College ． | Un．Evang ．－ | 1881 | 3 | 1 | 8 | 5 |
| $37 \%$ | New Berlin－－．．．．．． | Central Pennsylvania Coliege | Un．Evang－． | 1855 | 2 | 0 | 4 | 1 |
| 378 | New Wilmington． | Westminster College | Un．Presb－－－ | $185 \%$ | 4 | 4 | 6 | ， |
| 379 | Philadelphia．．．． | Central High Sciool | City | 1887 | 0 | 0 | 45 | 0 |
| 381 | do | Uns Salle conege ．－．．．．．．．．－ | İonsec | 1740 | 0 | 0 | 106 | 0 |
| 28.3 | Pittsburg | Holy Ghost College．．． | R．C | $18 \% 8$ | 0 | 0 | $6_{6}$ | 0 |
| 383 | Selinsgrove | Susquehanna University | Luth | 1858 | 4 | 0 | 6 | 0 |
| 384 | South Bethlehem． | Lehigh University | Nonsect－．．． | 1886 | ， | 0 | 42 | 0 |
| 385 | State College | Pennsylvania State College | State | 1859 | $\stackrel{2}{2}$ | 0 | 40 | 3 |
| 386 | Swarthmore | Swarthmore College | Frien | 1869 | 0 | 0 | ${ }_{13}^{12}$ | 9 |
| 388 | Volant | Volant College | Nonsect | 1890 | 5 | 1 | 13 | O |
| 389 | Washington | Washington andJefferson College | Presb．． | 1802 | 8 | 0 | 13 | 0 |
|  | rhode island． |  |  |  |  |  |  |  |
| 390 | Providence | Brown University | Bapt ．．．．．．．－． | 1\％61 | 0 | 0 | \％1 | 1 |
|  | SOUTH CAbolina． |  |  |  |  |  |  |  |
| 391 | Charleston | College of Charleston． | City | 1791 | 0 | 0 | $\tau$ | 0 |
| 392 | Clinton | Presbyterian College of South | Presb | 1880 | 1 | 0 | 6 | 0 |
| 393 | Columbia | Allen University | A．M．E． | 1881 | 1 | 6 | 5 | 0 |
| 394 | I | South Carolina College | State | 1805 | （1） | 0 | 12 | 0 |
| 39.5 | Duewest | Erskine College | A．R．Presb | 1839 | 1 | 0 | 5 | 0 |
| 396 | Greenville | Furman University | Bapt | 1852 | 4 | 0 | 10 | 0 |
| 397 | Newberry | Newberry College | Luth－－．．．．－． | 1858 | 1 | ${ }^{0}$ | 7 | 0 |
| 398 | Orangeburg－．－．．．－ | Clafin University Wofiond College | M．E－ $\mathrm{E}_{\text {－}}$ | 1869 |  | 17 | ${ }_{6}^{6}$ | $\stackrel{2}{2}$ |
| 399 | Spartanburg ．．．．．． | wofrord College． | II．E．So | 1854 | 2 | 0 | 7 | 0 |
|  | SOUTII DAKOta． |  |  |  |  |  |  |  |
| 400 | Hot Springs | Black Hills College＊．．．．．．．．．．．．．－ | M．E－－－－－－－－－ | 1890 |  | 3 | 3 |  |
| 401 | Huron | Huron College－－－．－－－－－－－－－－－－－ | Presb－．．．．．－ | 1883 | 5 | 5 | 5 | 2 |
| 402 | Mitchell | Dakota University | M．E． | 1885 | 8 | 1 | 7 | 1 |
| 403 | Redineld | Reãfeld College＊－－－．－．－ | Cong ．－．．．．．．－ | 1887 | ${ }^{6}$ | ${ }_{7}^{3}$ | ${ }_{1}^{6}$ | 3 7 7 |
| 405 | Xankton．．． | Tankton College ． | Cong | 1882 | 6 | 5 | ${ }_{6}$ | 3 |

colleges for men and for both sexes－Continued．

| Professois and instructors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profes－ sional de－ pariments． |  | Total num ber（ex－ cluding du－ plicates）． |  | Prejara－ tory de－ partment． |  | Collegiato depart－ ment． |  | Graduate depart－ ment． |  |  |  | Profes－ sional de－ pay＇tments． |  | Total num－ ber（ex－ cluding du－ plicates）． |  |  |
|  |  | Resi | ent． |  |  | $\begin{array}{r} \mathrm{N} \\ \text { iesi } \end{array}$ | In－ ent． |  |  |  |  |  |
| $\begin{gathered} \stackrel{0}{3} \\ \text { 侖 } \end{gathered}$ |  |  |  |  | $\begin{aligned} & \dot{0} \\ & \text { స్ } \\ & \text { 息 } \\ & \text { E. } \end{aligned}$ |  |  | $\begin{gathered} \text { ® } \\ \text { 岕 } \\ \hline \end{gathered}$ | $\begin{aligned} & \text { 追 } \\ & \text { 品 } \\ & \text { E, } \end{aligned}$ | $\stackrel{\oplus}{\stackrel{0}{3}}$ |  | 蕆 | 㳫 | $\begin{aligned} & \stackrel{1}{\text { N }} \\ & \text { ज゙ } \end{aligned}$ |  |  |  | $\stackrel{\dot{G}}{\stackrel{\text { B }}{\text { B }}}$ |  |  |
| 9 | 10 | 1 1 | 12 | 13 | 14 | 15 | 16 | 18 | 188 | 19 | 20 | 21 | 28 | 2＇3 | 2正 |  |
| 83 | 0 | 102 | 0 | 0 | 0 | 150 | 3 | 2 | 0 | 0 | 0 | 610 | 11 | 764 | 14 | 3 3¢6 |
| 0 | 0 | 12 | 0 | 36 | 0 | 119 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 155 | 0 | 357 |
| 0 | 0 | 11 | 5 | 52 | 23 | 87 | 24 | 0 | 0 | 16 | 1 | 0 | 0 | 15.5 | 48 | 358 |
| 5 | 0 | 27 | 0 | 115 | 0 | 91 | 0 | 18 | 0 | 0 | 0 | 43 | 0 | 278 | 0 | 359 |
| 0 | 0 | 2 | 6 | 4 | 11 | 9 | 35 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 48 | 360 |
| 0 | 0 | $\%$ | 3 | 68 | 99 | 23 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 91 | 40 | 301 |
| 4 | 0 | 4 | 0 | 0 | 0 | 21 | 0 | 0 | 0 | 12 | 0 | 11 | 0 | 47 | 0 | 36. |
| 9 | 0 | 98 | 1 | 1105 | 6 | 208 | 31 | 0 | 0 | 0 | 0 | 99 | 2 | 422 | 39 | 363 |
| 0 | 0 | 14 | 0 | ¢9 | 0 | 101 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 140 | 0 | 364 |
| 7 | 0 | 23 | 5 | 59 | 10 | 71 | 7 | 1 | 0 | 0 | 0 | 21 | 0 | 155 | $1 \%$ | 265 |
| 0 | 0 | 28 | 0 | 0 | 0 | 276 | 0 | 9 | 0 | 21 | 0 | 0 | 0 | 309 | 0 | 366 |
| 0 | 0 | $1 \%$ | 0 | 46 | 20 | 178 | 7 | 0 | 1 | 2 | 0 | 0 | 0 | 225 | 23 | 307 |
| 0 | 0 | 8 | 1 | 29 | 21 | 48 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 38 | 308 |
| 0 | 0 | 12 | 8 | 181 | 99 | 144 | 51 | 0 | 0 | 2 | 0 | 0 | 0 | 365 | 160 | 363 |
| 0 | 0 | 19 | 0 | 0 | 0 | 117 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 117 | 0 | $3{ }^{3} 0$ |
| 5 | 0 | 19 | 3 | 11 | 3 | 11 | 0 | 0 | 0 | 0 | 0 | 29 | 24 | 209 | 13 | $3 \% 1$ |
| 6 | 0 | 20 | ${ }_{\sim}^{0}$ | 122 | 0 | 169 | 0 | 0 | 0 | 0 | 0 | 59 | 0 | 33.2 | － 0 | 318 |
| 0 | 0 | 25 | 7 | 70 | 64 | 201 | 65 | 1 | 0 | 25 | 4 | 0 | 0 | 298 | 133 | 373 |
| 8 | 0 | 10 | 0 | 0 | 0 | 156 | 0 | 0 | 0 | 0 | 0 | 47 | 0 | $\because 03$ | 0 | 374 |
| 0 | 0 | 14 | 2 | 78 | $4 \%$ | 110 | 63 | 0 | 1 | 0 | 0 | 0 | 0 | 188 | 111 | 375 |
| 0 | 0 | 11 | 6 | 27 | 9 | 44 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | \％1 | ¢ว | 376 |
| 0 | 0 | 6 | 1 | 50 | 5 | 43 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 93 | 20 | 377 |
| 0 | 0 | \％ | 7 | $4 \%$ | $\cdots$ | 125 | 53 | 0 | 0 | 0 | 0 | 0 | 0 | 172 | 80 | 378 |
| 0 | 0 | 4.5 | 0 | 0 | 0 | 1，275 | 0 | 32 | 0 | 0 | 0 | 0 | 0 | 1． $30 \%$ | 0 | $3 \% 9$ |
| 0 | 0 | 15 | 0 | 101 | 0 | 108 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21， | 0 | 380 |
| 165 | 0 | 258 | 0 | 0 | 0 | 629 | 304 | 123 | 35 | 0 | 9 | 1， 224 | $?$ | 2， 419 | 34 | 381 |
| 0 | 0 | 14 | 0 | 80 | 0 | 100 | 0 | 0 | 0 | 0 | 0 | 1， 0 | 0 | $\sim 180$ | 0 | $38:$ |
| 3 | 0 | 11 | 2 | 70 | 碞 | 62 | 5 | 0 | 0 | 0 | 0 | 15 | 0 | $14 \%$ | 27 | 383 |
| 0 | 0 | 42 | 0 | 0 | 0 | 394 | 0 | 11 | 0 | 10 | 0 | 0 | 0 | 325 | 0 | 384 |
| 0 | 0 | 42 | 3 | 31 | 0 | 297 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 319 | 10 | 385 |
| 0 | 0 | 12 | 9 | 0 | 0 | 74 | 114 | 0 | 0 | 0 | 0 | 0 | 0 | 71 | 114 | 386 |
| 4 | 0 | 19 | 0 | 47 | 0 | 94 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 152 | 0 | 387 |
| （） | 0 | 7 | 2 | 30 | 20 | 25 | 20 | 8 | 0 | 0 | 0 | 0 | 0 | 63 | 40 | 388 |
| 0 | 0 | 16 | 0 | 92 | 0 | 253 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34.5 | 0 | 389 |
| 0 | 0 | ${ }^{1} 1$ | 1 | 0 | 0 | 661 | 16．） | 45 | 39 | 12 | 3 | 0 | 0 | $\bigcirc 18$ | $20 \sim 3$ | 390 |
| 0 | 0 | i | 0 | 0 | 0 | 41 | 0 | 0 | 0 |  | 0 | 0 | 0 | 41 | 0 | 391 |
| 0 | 0 | 6 | 0 | 8 | 1 | $\because 4$ | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 83 | 17 | 392 |
| 0 | 0 | 6 | 6 | 58 | 53 | 14 | b | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 58 | 383 |
| 1 | 0 | 13 | 0 | 0 | 0 | 135 | 18 | 6 | 0 | 0 | 0 | 25 | 0 | 166 | 18 | 394 |
| 0 | 0 | 6 | 0 | 9 | 0 | 71 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 80 | 0 | 395 |
| 0 | 0 | $1 \pm$ | 0 | 26 | 0 | 150 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | $1 \% 6$ | 5 | 396 |
| 0 | 0 | 8 | 0 | 40 | 0 | 95 | 12 | 0 | 0 | 7 | 0 | 0 | 0 | 142 | 12 | $3.9 \%$ |
| 0 | 0 | 10 | 19 | 201 | $2 \pm 8$ | 20 | $\underset{\sim}{2}$ | 0 | 0 | 0 | 0 | 0 | 0 | 271 | 25 | 3398 |
| 0 | 0 | 9 | 0 | 50 | 0 | 127 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | $17 \%$ | 4 | 399 |
| 0 | 0 | 4 | 5 | 12 | 80 | 11 | 8 | 1 | 0 | 2 | 0 | 0 | 0 | 32 | 33 | 400 |
| 0 | 0 | 7 | 5 | 37 | 30 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 35 | 401 |
| 0 | 0 | 10 | 4 | 85 | 43 | 26 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 169 | 102 | $40:$ |
| 0 | 0 | 8 | 4 | 16 | 6 | 15 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 129 | 403 |
| 0 | 0 | 14 | 7 | 106 | 111 | 40 | 42 | 1 | 2 | 0 | 0 | 0 | 0 | 164 | 180 | 404 |
| 0 | 0 | 7 | $\%$ | \％9 | 63 | 27 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 106 | 79 | 405 |

TABLE 38．－Statistics of universities and

|  | Iocation． | Name． | Religious or nonsectarian control． | $\left\|\begin{array}{c} \text { Year } \\ \text { of } \\ \text { Sirst } \\ \text { open- } \\ \text { ing. } \end{array}\right\|$ | Professors and instructors． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Prepari－ atory depart－ ment． |  | Collegi－ ate do－ part－ ment． |  |
|  |  |  |  |  | $\begin{gathered} \dot{⿹} \\ \underset{A}{心} \\ \underset{A}{心} \end{gathered}$ |  |  |  |
|  | 1 | 8 | 3 | 4 | 5 | 6 | 7 | 8 |
|  | TENNESSET． |  |  |  |  |  |  |  |
| 403 | Athens | U．S．Grant University | NI．E－ | 1867 | 10 | 7 | 10 | 7 |
| 407 | Bristol | King College－－－－－－－－－－－－－－－－－－－ | Presb－－－－－－ | $186 \%$ | 4 | 0 | 4 | 0 |
| 403 | Clarixsville | Southwestern Presbyterian Uni－ versity． | Presb ．－．．．．．． | 1855 | 0 | 0 | 11 | 0 |
| 409 | Harriman | American Temperance Univer． sity． | Nonsect．．．－． | 1893 | 10 | 3 | 16 | 5 |
| 410 | Hiwassee Colliege．－ | Hiwassee College－．－．－．－．－．－．－．－ | Nonsect．．．－－ | 1849 |  |  | 5 | 1 |
| 411 | Jackson－．．．－－－－－．－－ | Southwestern Baptist Univer－ sity．＂ | Bapt ．－．－．－．－ | 1847 | 2 | 1 | 9 | 1 |
| 412 | Enoxvill | Knoxville College ．．．．．．．．．．．．－．．－． | Un．Presb．－－ | 1875 | 4 | 7 | 5 | 3 |
| 413 | ．do | University of Tennesseo | State | 1794 | 0 | 0 | 27 | 1 |
| $41 \pm$ | Ieebanon | Cumberland University | Cumb．Presib | 1842 | 2 | 0 | 7 | 0 |
| 415 | MicKenzie．．．－．－．－． | Bethel College．．．－－－－－－－－－－－－－－－－－ | Cumb．Presb | 1850 | 3 | 4 | 3 | 4 |
| 416 | Maryville．－－－－－－－－ | Maryville College－．．．．．．．．．．．－．－．－－ | Presb－－．－－－ | 1819 | 4 | 4 | 8 | 0 |
| 417 | Memphis | Christian Brothers College＊－－．－ | R．C． | $18 \% 1$ | 5 | 0 | 6 | 0 |
| 418 | Miiligan | Milligan College．－－．．－－－－－－．－．．．－． | Christian | 1882 | 1 | 2 | 5 | 1 |
| 419 | Mossy Creek | Carson and Newman Collego | Bapt | 1851 | 8 | 4 | 8 | 4 |
| 420 | Nashville．．． | Central Tennessee Collego．． | M．E． | 1866 | 3 | 1 | 4 | 1 |
| $4 \% 1$ | －－－－do－ | Fisk University－．－．．．．．．．．．． | Cong | 1856 | 5 | 7 | 6 | 4 |
| 42 | －do | Roger Williams University－．－．．． | Bapt | 1855 | 3 | 3 | 4 | 2 |
| 423 | ．－．do | University of Nashville | Nonsect | 1785 | 7 | 5 | 15 | 12 |
| $4{ }^{4}$ | －．do | Vanderbilt University | M．E．So． | 1875 | 0 | 0 | 35 | 0 |
| 425 | Sewanee | University of the South ．．．．．．．．．．． | P． $\mathrm{E}^{\text {．}}$ | 1868 | 6 | 0 | 15 | 0 |
| 425 | Spencer |  | Christian | 1848 | 1 | 1 | 4 | 6 |
| $42 \%$ | Sweetwater | Sweetwater College＊．．．．．．．．．．．．．－ | Nonsect． | 1874 | 1 | 1 | $\stackrel{2}{2}$ | 6 |
| 423 | Tusculum | Greenevilio and Tusculum Col－ lege． | Presb ．－．－．．． | 1794 | 4 | 2 | 5 | 3 |
| 429 | Washington Col－ lege． |  | Iresb | 1795 | 2 | 1 | 3 | 2 |
|  | TEXAS． |  |  |  |  |  |  |  |
| 430 | Austin | St．Edward＇s College．．．－－－－－－－－－－ | P．C． | 1881 | 13 | 0 | 5 | ${ }_{6}$ |
| 431 | －－－do | University of Texas－－－－－．．－－．－．－ | State | 1883 | 0 | 0 | 31 | 7 |
| 433 | Brown wood | Howard Payne College－－－－－－－－－－ | Bapt－－－ | 1890 | 3 | 3 | 3 | 0 |
| 433 | Campbell | Henry College | Nonsect | 1892 | 2 | 1 | 7 | 1 |
| $43 \pm$ | Fort Worth | Fort Worth University | M．E－－－ | 1831 | 6 | 5 | 8 | 2 |
| 435 | －－－do－－．． | Polytechnic College－－． | M．E．So | 1891 | 6 | 2 | ¢ | 0 |
| $43 \%$ | Galveston | St．Mary＇s University＊． | R．C－－． | 1854 | 2 | 4 | 10 | 0 |
| 437 | Georgetown | Southwestern University | M．E．So | 1873 | 3 | 2 | 13 | 4 |
| 438 | Greemville． | Burleson College．－．．．－．－ | Bapt－－． | 1833 | 4 | 0 | 4 | 3 |
| 439 | Marshall | Wiley University | M．E | 1873 | 5 | 4 | 5 | 4 |
| 441） | San Antonio． | St．Louls（ 0 llego | R．C | 1894 | 10 | 0 | 5 | 0 |
| 441 | Sherman．．． | Austin College－．－． | Presb－－－－－－－ | 1850 | 4 | 0 | 8 | 0 |
| $44 \%$ | Tehaacana | Trinity University－－．．．．． | Cumb．Presb | 1869 | （ | 2 | 5 | 1 |
| 443 | Waco | Add－Ran Christian University－ | Christian－－－ | 1873 | $\stackrel{2}{2}$ | 1 | 7 | 4 |
| 444 | ．．．do | Baylor University ．－．－．－－－－－．－． | Bapt ．．．－－ | 1845 | 1 | 3 | 7 | 0 |
| $44{ }^{\circ}$ | －－－－do | Paul Quinn College－－－－－－－－－－－－－ | A．M．E | 1881 | 3 | 4 | 3 | 4 |
|  | UTAH． |  |  |  |  |  |  |  |
| 446 | Logan． | Brigham Yomng College | L．D．S | 1878 | 14 | 2 | 7 | 0 |
| 447 | Salt Lake City | Salt Lake College ．－．．．．． | Cong－－．．．．．． | 1895 | 1 | 1 | $\stackrel{\sim}{8}$ | 1 |
| 448 | －－－．do． | Sheldon Jackson Collego | Presb ．－．．．－． | 1897 | 1 | 4 | $\stackrel{2}{2}$ | 0 |
| 449 |  | University of Utah．．． | State．－－－．－－ | 1850 | 10 | 2 | 16 | 1 |
|  | VERMONT． |  |  |  |  |  |  |  |
| 450 | Burlington－－－－．．．． | University of Vermontand State | State．．．．．．．－ | 1800 | 0 | 0 | 33 | 0 |
| 451 | Middlebury．．．．．．．． | Agricultural College． <br> Miadlebury College | Nonsect． | 1800 | 0 | 0 | 11 | 0 |
| $45:$ | Northfield． | Norwich University | Nonsect． | 1831 | 0 | 0 | 10 | 0 |

$\%$ Statistics of 1897－98．
colleges for men and for both sexes－Continned．

| Professors and instructors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Profes－ sional de－ partments． |  | Total num ber（ex－ cluding du plicates）． |  | Prepara－ tory de－ partment． |  | Collegiate depart－ ment． |  | Graduate depart－ ment． |  |  |  | Profes－ sional de－ partments |  | Total num－ ber（ex－ cluding du－ pincates）． |  |  |
|  |  | Resident． | Non－ resident． |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { gig } \\ & \text { 嵒 } \end{aligned}$ |  |  |  | $\begin{gathered} \text { 足 } \\ \text { 冎 } \end{gathered}$ |  | $\begin{gathered} \text { 要 } \\ \stackrel{y}{*} \end{gathered}$ | $\begin{aligned} & \text { 感 } \\ & \text { 炭 } \end{aligned}$ | $\frac{\stackrel{0}{\tilde{a}}}{\stackrel{y}{a}}$ |  | $\stackrel{9}{9}$ |  | $\underset{\sim}{\text { 品 }}$ | $\begin{aligned} & \text { ® } \\ & \text { ä } \\ & \text { g } \\ & \text { an } \end{aligned}$ |  | $\begin{aligned} & \dot{0} \\ & \text { 荮 } \\ & \ddot{0} \\ & \text { E } \end{aligned}$ | $\frac{\stackrel{3}{3}}{\frac{3}{B}}$ |  |  |
| Э | 10 | 11 | 18 |  |  | 13 | 14 | 15 | 16 | 18 | 18 | 19 | $2 \mathfrak{2}$ | 923 | 28 | 23 | S ${ }^{\text {P }}$ |  |
| 50 | 0 | 60 | 7 | 100 | 100 | 29 | 10 | 0 | 0 | 1 | 0 | 2\％3 | $\stackrel{2}{2}$ | 569 | 216 | 406 |
| 0 | 0 | 4 | 0 | 25 | 0 | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | \％ | 0 | 407 |
| 6 | 0 | 12 | 0 | （） | 0 | 117 | 0 | 1 | 0 | 0 | 0 | 26 | 0 | 142 | 0 | 408 |
| 8 | 0 | 25 | 5 | 85 | 38 | 36 | 10 | 3 | 1 | $2 \pi$ | 0 | 15 | 0 | 197 | 108 | 409 |
| 0 | 0 | 5 <br> 10 | 1 | 28 | 0 | 40 127 | 20 20 20 | 0 | 0 0 | 0 | 0 0 | 0 6 | 0 0 | 20 | 20 48 | 410 411 |
| 42 | 0 | 13 64 | 10 | 103 0 | 133 | $\begin{array}{r}10 \\ 208 \\ \hline\end{array}$ | －88 | 0 4 | 0 2 0 | 0 | 0 0 0 | 36 | 0 | 123 | 141 | 412 |
| 48 9 | ${ }_{0}^{0}$ | 18 | ${ }_{0}^{1}$ | 51 | 4 | 48 | ${ }^{1} 3$ | 4 | $\stackrel{\sim}{0}$ | 0 | 0 | ${ }^{307} 120$ | 0 | 295 | 7 | 414 |
| 0 | 0 | 3 | 4 | 60 | 62 | 50 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 98 | 415 |
| 0 | 0 | 12 | 4 | 206 | 103 | 45 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 231 | 129 | 416 |
| 0 | 0 | 13 | 0 | 93 | 0. | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 179 | 0 | 417 |
| 0 | 0 | 6 | 3 | 64 | 47 | 52 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 116 | 7 | 418 |
| 0 | 0 | 8 | 4 | 80 | 60 | 100 | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 180 | 125 | 419 |
| 27 | 0 | 34 | 2 | 14 | 4 | 11 | 1 | 0 | 0 | 0 | 0 | 219 | 14 | 257 | 70 | 420 |
| 3 | 0 | 9 | 22 | 77 | 11 | 47 | 10 | 0 | 0 | 0 | 0 | 4 | 0 | 131 | 118 | 421 |
|  |  | 5 | 4 | 50 | 7 | 13 | 2 | 0 | 0 | 0 | 0 | 16 | 0 | 98 |  | $42 \%$ |
| 20 | 0 | 47 | 23 | 180 | 200 | 202 | 404 | 0 | ， | 0 | 0 | $31 \%$ | 3 | 699 | 607 | 423 |
| 54 | 0 | 93 | 0 | 0 | 0 | 193 | 18 | 34 | 5 | 0 | 0 | 549 | 4. | \％ 89 | 27 | 484 |
| 40 | 0 | 55 | 0 | 100 | 0 | 120 | 0 | 4 | 0 | 0 | 0 | 168 | 0 | 391 | 0 | 4205 |
| 0 | 0 | 5 | 6 | 44 | 38 | 6 | 46 | 0 | 0 | 0 | 0 | 0 | 0 | 106 | 84 | 486 |
| 0 | 0 | $\stackrel{3}{5}$ | ${ }_{6}^{6}$ | 4 | 11 | 54 | 50 | 0 | 0 | ${ }_{0}^{0}$ | 0 | 0 | 0 | 58 | 61 | 437 |
| 0 | 0 | 5 | 3 | 78 | 43 | 22 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 100 | 55 | 4 |
| 0 | 0 | 5 | 3 | \％ 5 | 38 | 22 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 95 | 54 | 429 |
| $\bigcirc$ | ${ }_{1}$ | 18 |  | 130 |  |  |  |  |  | 0 | 0 | 0 337 | ${ }_{26}^{0}$ |  |  |  |
| 26 0 | 0 | 57 6 | 8 | 0 66 | ${ }_{4}^{0}$ | 237 27 | $\begin{array}{r}165 \\ 9 \\ \hline 5\end{array}$ | 10 0 | 10 0 | 0 0 | 0 0 | 337 0 | 26 0 | 599 | 291 | 431 432 |
| 0 | 0 | 9 | 2 | 69 | 40 | 155 | \％0 | 0 | 0 | 0 | 0 | 0 | 0 | 215 | 110 | 433 |
| 17 | 0 | 26 | 5 | 126 | 84 | 21 | 16 | 1 | 0 | 0 | 0 | 14. | 3 | 230 | 103 | 434 |
| 0 | 0 | 7 | ， | 160 | 80 | 50 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 210 | 98 | $4: 35$ |
| 0 | 0 | 12 | 4 | 80 | 109 | 126 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 206 | 100 | 436 |
| 0 | 0 | 13 | 0 | 113 | 89 | 151 | \％ 5 | 0 | 0 | 0 | 0 | 0 | 0 | 264 | 164 | 437 |
| 0 | 0 | 8 | 3 | 90 | 60 | 40 | 20 | 0 | 0 | 0 | 0 | 0 | 0 | 130 | 80 | 438 |
| 0 | 0 | 5 | 4 | 23 | 20 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 24 | 439 |
| 0 | 0 | 15 | 0 | 88 | 0 | 20 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 110 | 0 | 440 |
| 0 | 0 | 8 | 0 | 39 | 0 | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 108 | 0 | 441 |
| 0 | 0 | 10 | 5 | 51 | 21 | 53 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 115 | 38 | 442 |
| 0 | 0 | 9 | 5 | 28 | 27 | 99 | 40 | 0 | 0 | 0 | 0 | 0 | 0 | 127 | ${ }^{67}$ | 443 |
| 2 | 0 | 11 | 8 | 144 | 73 | 77 | 87 | 0 | $\stackrel{2}{0}$ | 5 | 3 | 65 | 0 | 226 | 155 | 444 |
| 0 | 0 | 3 | 4 | 16 | 5 | 10 | 11 | 0 | 0 | 0 | 0 | 3 | 0 | 29 | 16 | 445 |
| 0 | 0 | 21 | 2 | 202 | 260 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 219 | 263 | 446 |
| 0 | 0 | 3 | 4 | 16 | 29 | $\stackrel{2}{5}$ | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 34 | 448 |
| 0 0 | 0 | $\begin{array}{r}3 \\ 20 \\ \hline\end{array}$ | 4 | 35 211 | 41 286 | $\stackrel{5}{75}$ | 69 | 0 0 | 0 0 | 0 0 | 0 | 0 | 0 | 280 28 | 345 | 448 449 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 28 | 0 | 60 | 0 | 0 | 0 | 229 | 63 | 3 | 1 | 3 | 0 | 210 | 0 | a 497 | 64 | 450 |
| 0 | 0 | 11 | 0 | 0 | 0 | 60 | 48 | 0 | 2 | 1 | 0 | 0 | 0 | 61 | 50 | 451 |
| 0 | 0 | 10 | 0 |  | 0 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 0 | 452 |

$a$ Includes 52 men in dairy school．

Table 38．－Statistics of universities and

|  |  |  |  |  |  | ofess astru | Ors | and |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Location． | Name． | Peligious or nonsectarian control． | $\begin{aligned} & \text { Year } \\ & \text { of } \\ & \text { first } \\ & \text { open- } \end{aligned}$ | Pre at dep me | $\begin{aligned} & \text { pary- } \\ & \text { ory } \\ & \text { artt- } \end{aligned}$ | Col ate pa me | $\begin{aligned} & \text { legi- } \\ & \text { di- } \\ & \text { rit- } \\ & \text { nt. } \end{aligned}$ |
|  |  |  |  | 1－1 | $\begin{aligned} & \text { 总 } \\ & \text { 㔄 } \end{aligned}$ |  | $\begin{aligned} & \text { 寍 } \\ & \text { 品 } \end{aligned}$ | 守 |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 17 | 8 |
|  | VIRGILIL． |  |  |  |  |  |  |  |
| 453 | ishlard | Randolph－Riacon College ．－．－． | 7．F．EO－ | 183.2 | 0 |  | 11 |  |
| 4 | Bridgewater－－－－－－ | Biridgewater Coilege－－．－－－－－－－－－－－－ Unirersity of Tirginia－－－－ | Ser．Bapt． | 1882 | 3 0 | 3 0 | 24 | 0 |
| 450 | Emory－．．．－．．．－． | Emory and Eenry College．－．．．．．．．． | M．E．${ }^{\text {a }}$ | 1838 | 2 | 0 | 5 | 0 |
| $45 \%$ | Firedericksburg | Fredericirsburg College． | Presb | 1393 | 6 | 0 | 8 | 0 |
| 458 | Hampden－Sidney－－ | Hampden－Sidney College－－．．．．．－－ | Nonsect． | $17 \% 0$ | 0 | 0 | 9 | 0 |
| 4 | Lerington－－－．．．．．． | Vasininton and Lee University－ | Nonsect | 1149 | 0 | 0 | 19 | 0 |
| 461 | Salem | Roanoke College | Lath | 1853 | $\stackrel{3}{2}$ | 0 | 10 | 0 |
| 462 | Williamsburg－ | College of Wiliam andilary | State． | 1693 | $\stackrel{3}{7}$ | 0 | － | 0 |
|  | mishmagon． |  |  |  |  |  |  |  |
| 463 | Eurion | Tachon College． | Nonsect． | 1592 | 4 | 4 |  |  |
| 46. | Coifax | Colfax College ch | Bapt |  |  |  |  | 3 |
| 466 | Spokane－－－－－－－－－－－－－－ | Gonzaga Coilese ．－．．．－．．．． | R．C | $188 \%$ | 1 | 0 | 12 | $\stackrel{\sim}{0}$ |
| $46 \%$ | Sumner． | Whitworth College $b$ | Presb | 1880 | 3 | 0 | 3 | 2 |
| 463 | Tacoma | Puget Sound University＊．．．．．．．． | M．E | 1890 | 2 | 3 | 9 | 0 |
| 469 | Vancourer | St．James College | R．C | 1850 | 3 | 0 | 6 | 0 |
| 470 | Walla Walla－－．．． | Whitman College | Cong | 1863 | 9 | 2 | 3 | 1 |
|  | thest ymginia． |  |  |  |  |  |  |  |
| $4 \% 1$ | Baiboursville | Barboursrille College．．．．－－－－－－－．－ | III．E．So | 1888 | 0 |  | 3 |  |
| $4{ }^{\text {\％}}$ | Bethany ．．． | Bethany College＊ | Christian | 1811 | 0 | 0 | ， | 2 |
| $4{ }^{43}$ | Moigantown－－．．．． | West Yirginia Universits ．．．．．．．． | State－－－ | 1863 | 8 | 0 | 41 | 2 |
|  | yisconsin． |  |  |  |  |  |  |  |
| $4 \%$ | Aprieton | Tamrence University－．－．－－－－．．．－． | M．I．．．－．－ | 18.9 | 8 | 6 | 9 |  |
| 475 | Beloit－．． | Beloit Collego ．．．－－－－－－－．－．．．．－．．．－－ | Nonsect | 1817 | 8 | 0 | 16 | 2 |
| $4{ }^{4} 6$ | Franklin | Mission Hous | Reformed． | 18．93 | 3 | 3 | 10 | C |
| $4{ }^{4}$ | Mradison ． | University of Wisconsin | State． | 18819 | 0 | ${ }_{0}$ | 104 | 8 |
| $4 \% 9$ | Milton． | Milton College．．．． | \％D．Bapt | 1844 | 4 | 2 | 6 | 2 |
| 480 | Milyankee | Concordia College | Luth ． | 1881 | 9 | 0 | 9 | 0 |
| 481 | ．．．．du | Marquette College | R．C | 1881 | 9 | 0 | 8 | 0 |
| $48{ }^{\circ}$ | Ripon | Ripon Collego ．－．－．．．． | Nonsec | 1885 | 8 | 5 | 8 | 3 |
| 483 | Watertown | Noithwestern University－－．－－－－ | Luth | 1865 | 3 | 0 | 5 | 0 |
|  | WYoning． |  |  |  |  |  |  |  |
| 484 | Lamamie． | University of Wyoming | State | 1887 | 11 | 3 | 11 | 3 |

＊Stetistics of 1897－93．
a Closed in 1900.
$b$ Removed to Tacoma，Wash．
colleges for men and for both sexcs－Continued．

| Professols and instructors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Plofes－ sional de－ partments． |  | Total num－ ber（ex－ cluding du－ plicates）． |  | Prepara－ tory de－ partment． |  | Collegiate depart－ ment． |  | Graduate depart－ ment． |  |  |  | Profes． sional de－ partments． |  | Total num－ ber（ex－ cluding du－ plicates）． |  |  |
|  |  | Resi | ent． |  |  | $\begin{array}{r} \text { IN } \\ \text { resi } \end{array}$ | n－ <br> ent． |  |  |  |  |  |
| $\begin{aligned} & \frac{0}{9} \\ & \stackrel{y}{5} \end{aligned}$ |  |  |  | $\begin{aligned} & \dot{0} \\ & \text { 忈 } \\ & \text { H } \end{aligned}$ | $\begin{gathered} \dot{\Omega} \\ \text { 岂 } \\ \text { gid } \\ =1 \end{gathered}$ |  |  |  | ［ | 号 |  | － | \％ | 膆 |  | 閏 | 咸 |  | 苞 |  |
| $\bigcirc$ | 10 | 11 | 12 |  | 14 | 15 | 16 | 17 7 | 18 | 13 | 20 | 21 | 30 | 23 | 32 |  |
| 0 | 0 | 11 | 0 | 0 | 0 | 114 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 150 | 0 | $4{ }^{4} 3$ |
| 0 | 0 | 6 | 3 | 52 | 48 | 18 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | \％ 9 | Et | 451 |
| 32 | 0 | 51 | 0 | 0 | 0 | 238 | 0 | 28 | 0 | 2 | 0 | 324 | 0 | 585 | 0 | 45.5 |
| 0 | 0 | r | 0 | 33 | 0 | 65 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 98 | 0 | 4.56 |
| 0 | 0 | 9 | 3 | 30 | 40 | 21 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 52 | 4 －${ }^{\text {a }}$ |
| 0 | 0 | 9 | 0 | 0 | 0 | 114 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 116 | 0 | 458 |
| 8 | 0 | 26 | 0 | 0 | 0 | 117 | 0 | 8 | （） | 0 | 0 | 42 | 0 | 159 | 0 | 459 |
| 3 | 0 | 17 | 0 | 0 | 0 | 208 | 4 | 0 | 0 | 0 | 0 | 56 | 0 | 2.58 | 4 | 460 |
| 0 | 0 | 12 | 0 | 20 | 0 | 120 | 12 | 3 | 0 | 0 | 0 | 0 | 0 | 161 | 13 | 461 |
| 0 | 0 | 7 | 0 | 143 | 0 | 51 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $19 \pm$ | 0 | 4.62 |
| 0 | 0 | 8 | 5 | 53 | 13 | 13 | $\stackrel{4}{8}$ | 0 | 0 | 0 | 0 | 0 | 0 | \％8 | 28 | 483 |
| 0 | 0 | 3 | 3 |  |  | $4 \%$ | 69 | 0 | 0 | 0 | 0 | 0 | 0 | 42 | 63 | 464 |
| 0 | 0 | 23 | 2 | 21 | 18 | 110 | 102 | 8 | 2 | 0 | 0 | 0 | 0 | 142 | 122 | 465 |
| 0 | 0 | 12 | 0 | 36 | 0 | 113 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 119 | 0 | 466 |
| 0 | 0 | 3 | 2 | 4 | $\because$ | 11 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 16. | $46 \%$ |
| 0 | 0 | 11 | 3 | 93 | \％ | 21 | 4 | 2 | 0 | 1 | 0 | 0 | 0 | 117 | \％${ }^{1}$ | 468 |
| 0 | 0 | 9 | 0 | 40 | 0 | 44 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 | 0 | 49 |
| 0 | 0 | 11 | 5 | 50 | 32 | 80 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 75 | 49 | 470 |
| 0 | 0 | 3 | 4 | $?$ | 15 | 40 | 48 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 67 | 411 |
| 4 | 0 0 | 59 | ${ }_{6}^{4}$ | 251 | 4 | 69 173 | 83 | $\stackrel{0}{0}$ | $\stackrel{0}{5}$ | ${ }_{15}^{0}$ | 1 | 0 140 | 3 | 6 | 18 | 4\％ |
| 0 | 0 | 11. | 9 | 93 | 6.3 | 61 | $4 \pi$ | 16 | 4 | 0 | 0 | 0 | 0 | 179 | 111 | 4\％ |
| 0 | 0 | 24 | 2 | $15 \%$ | 0 | 140 | 64 | 0 | 0 | 0 | 0 | 0 | 0 | 29.2 | $6!$ | 4 45 |
| 4 | 0 | 17 | 0 | 33 | 0 | 46 | 0 | 0 | 0 | 0 | 0 | 16 | 0 | 95 | 0 | $4 \sim 13$ |
| 0 | 0 | $1 \%$ | 6 | 20 | 15 | 30 | 20 | 0 | 0 | 39 | 0 | 0 | 0 | 80 | 35 | $4 \%$ |
| 46 | 0 | 124 | 13 | 0 | 0 | 1，102 | 394 | 67 | 38 | 3 | 1 | 200 | 7 | 1，441 | 4.00 | $4 \% 8$ |
| 0 | 0 | 8 | 2 | 23 | 48 | 132 | $2 \%$ | 0 | 0 | 0 | 0 | 0 | （） | 1， 5 | 68 | $4 \%$ |
| 0 | 0 | 9 | 0 | 57 | 0 | 133 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 190 | 0 | 480 |
| 0 | 0 | 17 | 0 | 167 | 0 | 56 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 0 | 41 |
| 0 | 0 | 8 | 5 | 38 | 29 | 37 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | \％ 5 | 59 | 489 |
| 0 | 0 | 8 | 0 | 63 | 4 | －2 | 14 | 0 | 0 | 0 | 0 | 0 | 0 | $11 \%$ | 18 | 433 |
| 0 | 0 | 11 | 3 | 39 | 42 | 33 | 23 | 2 | 1 | 2 | 0 | 0 | 0 | $\% 6$ | 60 | 484 |

Table 39.-Statistics of universitien and colleges

|  | Name. | Expenses in collegiate department. |  | Living exрепses. |  |  |  | Library. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  | $\begin{aligned} & \text { is } \\ & \text { U } \\ & \text { E } \\ & \text { E } \\ & \text { E } \end{aligned}$ |  |  |  | $\begin{aligned} & \dot{3} \\ & \text { B } \\ & 0 \\ & 0 \\ & 0 \\ & H \end{aligned}$ |  |  |  | $\xrightarrow{\underset{\sim}{8}}$ |
|  | 1 | ' | 8 | 4 | 5 |  |  | 6 | $\%$ | 8 | 9 | [6) |
|  | ALABAMA. |  |  |  |  |  |  |  |  |  |
| 1 | Howard College | 800 | 815 | 8200 | \$250 |  |  | 1.500 |  |  |
| 2 | Southern Unirersity | 50 | 8 | 150 | 160 |  | 19 | 10,000 |  | \$5,500 |
| 3 | Hartselle College... | 30 | 1 | 54 | 79 |  | 3 | 209 | 25 | 200 |
| 4 | Lafayette Colleg | 13 |  | \% 5 | 100 | 0 | 0 | 200 | 300 | 100 |
| 5 | Jinevilie College | 10 |  | ${ }^{75}$ | 90 |  |  | 900 | 200 | - 500 |
| 6 | St. Bernard College------------ |  |  | \% 180 |  | 0 | 0 | 3,000 | 500 | 7,000 |
| \% | Spring Hill College. | 60 | 10 | 200 | 210 |  |  | 75, 000 |  |  |
| 8 | University of Alabama | $b 40$ |  | 130 | 1i5 | 5 |  | 15,000 | 3,000 | 25,000 |
|  | ARYZONA. |  |  |  |  |  |  |  |  |  |
| 9 | University of Arizona............. | 0 |  | $1 \div 0$ | $1 \%$ |  |  | 4,000 |  | 6, 646 |
|  | AREANSAS. |  |  |  |  |  |  |  |  |  |
| 10 | Arkadelphir Methodist College.. | อ 0 |  | 90 | 120 | 0 | 11 | 1,000 | 100 | 500 |
| 11 | Ouachita Baptist College....-.... | 50 | 5 | 75 | 95 |  |  | 3,000 |  | 3,000 |
| 12 | Arkansas College --.---.-......... | 50 | 5 | 8.2 | 108 |  | 4 | 3,500 | 1,000 | 5,000 |
| 13 | Arkansas Cumberland College | 40 | - | 130 | 150 |  | 0 | 8,000 | $\because$ | $\stackrel{4}{4}, 000$ |
| 14 | Hendijx College --.-........... | 60 | 4 | 90 | 110 |  | 6 | 5,300 | 4, 560 | 5,000 |
| 15 | University of Arkansas...-.-...-. | b30 | 5 | 18 | 110 | 0 | 0 | 8,118 | 6,688 | 9,000 |
| 18 | Philandea Smith College | 12 |  | 48 | C.5 |  |  | 810 | 200 | 700 |
|  | CAlifornia. |  |  |  |  |  |  |  |  |  |
| $1 \%$ | University of California .......... | 0 | 0 | 100 | 30.0 | 6 | $8{ }^{\prime \prime}$ | \%9.124 |  |  |
| 18 | Pomona College -.-.------------ | 60 | 8 | 120 | 295 |  |  | 3,000 | 1,000 | 6, 000 |
| 19 | University of the Pacific.......... | 25 |  |  | 109 | 0 | 0 | 4,000 | $\therefore, 000$ | 6, 000 |
| 20 | Occidental College .-...............- | 60 | --...- | 125 | $1 \%$ | 0 | 1 | 1,000 | 200 | 1,000 |
| 21 | St. Vincent's College | 50 | --.... | 200 |  |  |  | 3,000 | 500 | 3,000 |
| 2 n | California College .-..-.-.-............ | 70 | - | 209 | 200 |  |  | 3, 100 | 600 | 2,000 |
| 23 | Throop Polyteclinic Institute ... | 105 | 4 | 140 | 280 | 0 | 17 | 1,700 | 1,200 | 2, 100 |
| 24 | St. Ignatius College ---- - .-. - .-. - . | 80 | 26 |  |  |  |  | 27,941 | 7, 737 | 70,000 |
| 85 | Santa Clara College |  |  | a 350 |  |  |  | 22,300 | 1, 800 | 25,003 |
| $\underset{\sim}{20}$ | Pacific Metlodist College...-....-. | 70 |  | 133 | 150 | 2 | 8 | 1,000 | 200 | 1,500 |
| 27 | Leland Stanford Junior University. | 0 | 20 |  | 29 | 0 | 0 | 43, 000 | 18,000 | 45,000 |
| 23 | University of Southern California | 60 | 2 | 100 | $1 \%$ | 0 | 2 | 4,000 | 3,060 | 6, 000 |
|  | colorano. |  |  |  |  |  |  |  |  |  |
| 29 | University of Co.osado | 320 |  | 150 | 250 | 6 |  | 20,000 | 3,000 | 33, 000 |
| 30 | Colorado College ..... | 35 | 3 | 150 | 225 |  | 70 | 25, 2000 | 20,000 | 23, 000 |
| 31. | College of the Sacred Heart* | 30 | 5 | 150 | 20 |  | 9 | 4,500 | 100 | 1,500 |
| 32 | University of Denver... | 30 | 6 | 110 | 225 | 0 | 2 | 9,800 | 6,000 | 11,000 |
|  | CONNECTICUT. |  |  |  |  |  |  |  |  |  |
| 33 | Trinity College.- | 100 | 30 | 250 | 400 | 1 | €9 | 39, 68\% | 32,000 | 25,000 |
| 34 | Wesleyan University .-...-.-....... | 75 | 33 | 200 |  |  | $\stackrel{2}{9}$ | 55, 000 |  | 50,000 |
| 35 | Yale University ......................- | 150 |  | 350 | 545 | 24 | 49 | 290,000 |  |  |
|  | DELAWARE. |  |  |  |  |  |  |  |  |  |
| 36 | State College for Colored Students. | $b 20$ | 2 | 76 | 95 | $\ldots$ |  | 400 | 300 | 500 |
| 37 | Delaware College -.-....-.-.......... | b 60 | 11 | 150 | 200 | -- | -.. | 10,600 | 8,000 | 10, 000 |
|  | DISTRICT OF COLUMBIA. |  |  |  |  |  |  |  |  |  |
| 38 | Catholic University of America.. | 75 |  | 350 | 500 | 7 | 17 | 30, 000 |  |  |
| 39 | Columbian University----.......- | 100 | 0 | 200 | 250 | 0 | 45 | 12,000 | 3,000 | 15,000 |
| 40 | Gallaudet College ....-. |  |  |  |  | 4 | 60 | 4,000 |  | 4,000 |
| 41 | Georgetown University | 100 | 12 | 175 | 325 | . | 6 | 85,000 | 50, 000 | 90,000 |
| 42 | Gonzaga Collega. | 40 |  |  |  |  |  | 1,000 | 500 | 1,000 |
| 43 | Howard University | 0 | 0 |  |  | 0 | 0 | 14, (10) |  |  |
| 44 | St. John's College. | 100 |  |  |  |  |  | 3,000 |  | 5,000 |

for men and for both sexes-Continued.

|  |  | Productive funds. | Income. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | ros 0. +2 +2 . -2 Fiv F | $\begin{aligned} & \text { From other } \\ & \text { sources. } \end{aligned}$ |  |  |  |
|  | R 18 | 19:B | $1{ }^{8}$ | 15 | 16 | 且界 | $\underline{1} 9$ | 6 | : ${ }^{(1)}$ |  |
|  | 8100, 000 | $\$ 1,000$$50,000$ | \$13, 000 | \$80 |  | 0 | 0 | 813, 080 | \$34,500 |  |
|  | 100, 000 |  | 5,258 | ๑, 140 |  | 0 | 92, 29.1 | 9,693 |  | 133 |
|  | 4,500 | $50,000$ | 1,800 | 0 | 0 8300 | 0 | 0 | 2,100 | - .-.-. |  |
| 500 | 15,000 | 0 | 1,500 | 0 | 1,200 | 0 | 300 | 3, 000 | 10 | 4 |
| 450 | 4,000 | 0 | 1,800 | 0 | - 500 | 0 | 0 | 2,360 |  | 5 |
| 4,000 | 88, 000 | 0 | 10,000 | 0 | 0 | 0 | 0 | 10,00\% |  | 6 |
| 40.000 | 500, 000 | - 0 | 30, 000 | 0 | 0 | $1)$ | 0 | 330,000 |  | 7 |
| 50,000 | 2:5,000 | 300,000 | 600 | 24, 000 | 5,000 | 0 | 9,00 | 38, 600 |  | 8 |
| 40, 60, | 90, 000 | 0 | 239 | 0 | 35,000 | \$39, 000 | 2,680 | 56,919 |  | 9 |
| 2, 1000 | 40,000 |  |  |  |  |  |  |  |  | 10 |
| 1,500 | 82, 090 | $\begin{array}{r}0 \\ 5 \\ \hline\end{array}$ | 9,000 | 0 200 | 0 | 0 | 0 | 9, 000 |  | 11 |
| 1,000 1,000 | 20,000 40,000 | 5,500 20,000 | 1,700 | 200 1,000 | 0 0 | 0 0 | 1, 200 | 3, 100 |  | 1 12 |
| 3.000 | 40,000 60,000 | $\cdots$ | 3,500 | 1,00 | 0 | 0 | 1,200 | 4, 400 | 12,000 | 18 |
| 37, 644 | 239. 600 | 130, 010 | 3, 05 | 10, 400 | 31,741 | 32, 454 | 1, 0 | \%\%, 650 | 1.20 | 15 |
| 600 | 30, 000 | 0 | 1,47\% | 0 | 0 | 0 | 2,300 | 3,7\%9 |  | 16 |
| 370,000 | 1, 767.671 | 2,843,093 | 0 | 176,876 | 255, 565 | 89,000 | 13,735 | 48.7, 136 | 75\%,000 | 17 |
| 3,000 | 75, 000 | 100,000 | 8,500 | 6,000 | 0 | 0 | 0 | 11,500 | 650 | 18 |
| 4, 000 | 200, 000 | 30, 000 | 20, 000 | 900 | 0 | 0 | 100 | \%1, 00 | 1.500 | 19 |
| , 500 | 17,000 | 0 | 1,800 | 0 | 0 | 0 | 0 | 1,800 | 2,500 | 20 |
| 1,000 | 55, 000 |  |  |  |  |  |  |  |  | 21 |
| 1,000 | 40, 000 | 35, 000 | 2,000 | 2,500 | 0 | 0 | 0 | 4, 509 | 5, 100 | 28 |
| 20,600 | 70, 000 | 28,200 | 14,000 | 1,600 | 0 | 0 | 0 | 15, 600 | 2\%,885 | 23 |
| 115,000 | 800, 000 | 0 | 4,509 | 0 | 0 | 0 | 0 | 4,509 |  | 24 |
| 55, 000 | 95, 000 | 0 | 35, 000 | 0 | 0 | 0 | 0 | 35, 000 |  | 20\% |
| 500 | 30, 000 | 10,000 | 1,500 | 500 | 0 | 0 | 500 | 2,500 |  | 26 |
| 60, 000 | 2,000,000 | 15, 000,000 | 22,000 | 180,000 | 0 | 0 | 0 | 203, 000 | 11,000,000 | $2 \%$ |
| 4, 0000 | \%0, 60 | 20,845 | 6, 61~ | 1,168 | 0 | 0 | 3, 700 | 11,480 | 7,500 | :8 |
| 39,129 | 230, 300 | 80, 000 | 3, 52 4 | 4,000 | 126,000 | 0 | 0 | 133, 524 |  | 29 |
| 21,600 | 425, 000 | 323,635 | 10, 400 | 19,764 | 0 | 0 | 0 | 30, 164 | 27, 466 | 30 |
| 4,000 | 150, 000 | - 0 | 11, 000 | 0 | 0 | 0 | 0 | 11,000 |  | 31 |
| 36,000 | 650,000 | 175, 085 | 17, 500 | 13,511 | 0 | 0 | 38,000 | 69, 011 | 6,846 | 32 |
| 15, 000 | $\begin{array}{r} 1,200,000 \\ 531,300 \end{array}$ | $\begin{array}{r} 76: 3,000 \\ 1,278,943 \\ 4,554,8: 9 \end{array}$ | $\begin{array}{r} 18,000 \\ 36,188 \\ 560,200 \end{array}$ | $\begin{array}{r} 33,000 \\ 60,858 \\ 2: 20,642 \end{array}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ | 0000 | $\begin{array}{r} 0 \\ 11,623 \\ 9,580 \end{array}$ | $\begin{array}{r} 51,000 \\ 108,669 \\ 730,42: \end{array}$ | $\begin{array}{r} 30,010 \\ 11,9+4 \\ 200,19 \tau \end{array}$ | 33 |
| 142, 890 |  |  |  |  |  |  |  |  |  | 34 |
|  |  |  |  |  |  |  |  |  |  | 35 |
| 8,500 | 13,800 | 0 | 1,251 | 0 | 0 | 4,800 | 0 | 6, 051 | --...-----. | 36 |
| $4{ }^{4}, 000$ | 82, 700 | 83, 000 | 3,940 | 4,980 | 0 | 34,200 | 0 | 43,1:0 | --------. | 37 |
| 91,898 | 756, 821 | 1,017,003 | 7,740 | 47,545 | 0 | 0 | 21,9:6 | 7\%7,211 | 43,195 | 38 |
| 20,000 | 1, 000, 000 | 1,2056,075 | 83,556 | 29,814 | 0 | 0 | 0 | 113,270 | 18,105 | $3!$ |
| 1,000 | 700, 000 | - 0 |  |  | 0 | 57,500 |  | 5\%.500 |  | 412 |
| \%5, 000 | 1,215,500 | 50,000 | 120,216 | 2,134 | 0 | 0 | 0 | 122,350 | 30,000 | 11 |
| 500 | 100,000 | 5 0 |  |  |  |  |  |  | 1,000 | 42 |
|  | 700, 000 | 180,060 | 8,497 | 8, 500 | 0 | 33, 600 | 6,5010 | 57,097 | 2,500 | 43 |
| 900 | 136,000 |  | 8,000 |  | 0 |  | 0 | 8,000 |  | 44 |

Table 39.-Statistics of universities and colleges

for men and for both sexes-Continued.


Table 39.-Statistics of universities and colleges

|  | Name. | Expenses in collegiate department. |  | Living expenses. |  |  |  | Library. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | - |
|  | 1 | 2 | 3 | 4 | 5 |  | 6 | 7 | 8 | 9 | 10 |
|  | Indiana-continued. |  |  |  |  |  |  |  |  |  |
| 97 | De Pauw Universi |  | \$37 | \$100 | \$200 |  |  | 24,630 | 3,482 | 836,970 |
| 99 | Hanover College |  | 21 | 76 | 133 |  |  | 12,000 | 2,000 | 15,000 |
| 99 | Butler College. | \$33 |  | 90 | 108 |  |  | 10,000 |  | 15, 000 |
| 100 | Union Christian College | 30 |  | 120 | 150 |  |  | 3,890 | -200 | 4, 000 |
| 101 | Moores Hill College - | 34 |  | 125 | 160 |  |  | 3,040 | 2,000 | 4.500 |
| 102 | University of Notre Dame |  |  | a 300 |  | 0 | 4 | 50, 019 |  | 75,009 |
| 103 | Earlham College | 77 |  | 139 |  |  |  | 6.009 |  | 10,009 |
| $10 \pm$ | St. Meinrad Colleg |  |  | a 155 |  | 0 | 0 | 14,000 |  | 14,000 |
| 105 | Taylor University | 36 |  | 72 | $\chi_{2}$ | 0 | 0 | 3, 010 | 1,000 | 6,090 |
|  | indian termerory. |  |  |  |  |  |  |  |  |  |
| 106 | Incian University | 18 |  | 125 | 140 |  |  | 500 |  | 500 |
| 107 | Henry Kendall College | 23 |  | 90 |  | 0 | 0 | 1,250 | 1,000 | 750 |
|  | IOWA. |  |  |  |  |  |  |  |  |  |
| 108 | Coe College | 37 | 0 | 180 | 150 | 0 | 25 | 2,500 | 500 | 3, 000 |
| 109 | Charles City College | 39 |  | 83 | 102 |  |  | 1,500 | 100 | 1,500 |
| 110 | Wartburg College | 40 | 15 | 90 |  |  |  | 2,233 |  | 3,500 |
| 111 | Amity College. | 30 | 5 | 12.5 | 200 |  | 9 | 4,090 | 1,060 | 5,000 |
| 112 | Luther College | 0 | 22 | 74 |  | 0 | 16 | 9,291 |  | 9,000 |
| 113 | Des Moines Colleg | 36 | 3 | 126 | 176 | 0 | 16 | 3 3,009 | 2,040 | 4, 000 |
| 114 | Drake University | 40 | 8 | 100 | 150 |  |  | 7,000 |  | 10,000 |
| 115 | St. Joseph's College | 40 | 5 | 155 |  |  | 3 | 2, 200 | 630 | 3, 809 |
| 116 | Parsons College | 38 | 3 | 150 | 800 |  |  | 5,000 |  | 5,000 |
| 117 | Upper Iowa University | 36 | 1 | 68 | 87 |  | 2 | 5 , (n)0 | 1,509 | 10,000 |
| 118 | Iowa College | 50 |  | 76 | 133 | 0 | 15 | 25, 020 |  | 10, 000 |
| 119 | Lenox College | 30 | , | 78 | 99 |  |  | 2,800 | 22,000 | 3,000 |
| 120 | Simpson College | 32 | 6 | 85 | 133 |  |  | 3,200 | 1,800 | 4,700 |
| 121 | State University of | 85 | 0 | 200 | 300 | 0 | 0 | 43, 000 |  | 50,000 |
| 122 | Graceland Coliege | 32 | 5 | 80 | 100 | 0 |  | 900 | 200 | 1,000 |
| 123 | Palmer College | 30 |  | 75 | 100 | --- |  | 1,000 | 100 | 509 |
| 124 | German College | 39 | 5 | 125 | 150 |  |  | 1,000 |  |  |
| 125 | Iowa Wesleyan University | 13 | 30 | 120 | 150 |  |  | 4, 010 |  | 2,000 |
| 120 | Cornell College | 41 | 7 | 87 | 150 | 0 | 100 | 17,249 | 5,000 | 25, 000 |
| 127 | Penn College | 38 |  | 75 | 150 | 1 | $\stackrel{2}{2}$ | 5, 000 | 1,300 | 5, 000 |
| 128 | Central University of Iowa | 24 |  | 135 | 175 |  | 18 | 4, 000 |  | 3,000 |
| 129 | Morningside College .-.... | 34 | 2 | 108 | $1: 27$ | 0 | 0 | 700 | 100 | 1,000 |
| 130 | Buena Vista College | 36 |  | 90 | 130 | 0 |  | 1,2010 | 200 | 2,000 |
| 131 | Tabor College | 33 |  | 150 | 250 | 0 | 18 | 8,300 | 3,800 |  |
| 13: | Western College | 33 | 1 | 100 | 150 |  |  | 3, 000 |  | 3, 000 |
|  | mansas. |  |  |  |  |  |  |  |  |  |
| 133 | Midland College | 40 |  | 125 | 150 |  |  | 5, 000 | 1,000 | 4,000 |
| 134 | St. Benedict's College | 50 |  | 150 |  | 0 | 1 | 17.400 | 1,600 |  |
| 135 | Baker University | 28 |  | 72 | 150 |  |  | 7, 100 | 1,500 | 25, 000 |
| 130 | Soule College | 39 | 3 | 108 | 125 |  |  | 1,200 | 200 | 1,200 |
| 137 | College of Emporia | 30 |  | 85 | 115 | 0 | 1 | 4,000 | 500 | 3,000 |
| 138 | Highland University | 25 | 3 | 109 | 150 |  | 2 | 5,000 |  | 3,500 |
| 139 | Campbell University | 40 |  | 110 | 130 |  |  | 2,800 | 500 | 3, 000 |
| 141 | Kansas City University | 33 |  | 114 | 153 |  |  | $5(1)$ |  | 510 |
| 141 | University of Kansas | $b 0$ |  | 100 | 150 |  | 3 | 30, 223 | 7,000 | 65,000 |
| 142 | Lane University | 27 | 3 | 73 | 9 |  |  | 1,009 | 500 | 2,000 |
| 143 | Kansas Christian Colle | 29 | $\stackrel{0}{8}$ | 75 | 110 |  |  | 3,000 | 200 | 3,000 |
| 145 | Bethany College-.. | 40 | $\stackrel{2}{4}$ | -90 | 110 |  |  | 5,000 | 1,000 | 4,000 |
| 146 | St. Mary's College | ${ }_{30} 0$ |  | 150 | 200 |  |  | 8,000 | 1,000 | 2, 0 |
| 147 | Kansas Wesleyan University | 33 | 5 | 80 | 133 |  |  | 3,000 | 1,500 | - 3,50 |
| 148 | Cooper Memorial College | 30 |  | 140 | 175 |  |  | 1,000 | 2200 | 1,000 |
| 149 | Washburn College | 40 | 0 | 130 | 150 |  | 12 | 8,009 | 2,000 | 5,000 |
| 150 | Fairmount College | 25 | 25 | 80 | 110 | 0 |  | 18,000 | 30,000 | 10,003 |
| 151 | St. John's Lutheran Colleg | 33 |  | 70 | 120 |  |  | 300 | 200 | 400 |
| 152 | Southwest Kansas College | 30 |  | 110 | 150 | 0 | 0 | 1,500 | 2,000 | 2,500 |

for men and for both sexes-Continued.

|  |  |  | Income. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 13 | 20 |  |
| 85, 24 | \$250,000 | \$216,000 | \$15, 988 | \$8, 4\% 0 | 0 | 0 | \$7,390 | \$31, 818 | 812,480 | 97 |
| 5,000 | 125,000 | 175, 000 |  |  |  |  |  | (1,818 | , | 98 |
| \%, 500 | 150, 000 | 250,000 | 5,000 | -15,000 | 0 | 0 | 0 | 20,000 |  | 99 |
| 1, 780 | 50,000 | 38,000 | 2,180 | 2,300 | 0 | 0 | 600 | 5,030 | 6,290 | 100 |
| ${ }^{\text {a }} 800$ | -30,000 | 18,000 | 3, $0 \cdot 0$ | 2,000 | 0 | 0 | 550 | 5,550 | 500 | 101 |
| 25,000 | $2,000,000$ 300,000 | 130,000 | 13,000 | 6,000 | 0 | 0 | 5,600 | 24.000 | 278 | 108 |
| 30,000 | 300, 000 | 18, | 12, 000 |  | 0 | 0 | 5,000 | 17,000 | 0 | 104 |
| 2,000 | 60,000 | 0 | 4, 500 | 0 | 0 | 0 | 0 | 4,500 | 2,000 | 105 |
| 50 1,009 | 35,000 35,000 | 0 0 | 450 5,640 | 0 0 | 0 0 | 0 0 | 3,000 | 3,450 5,640 | 5, 100 7,500 | 106 107 |
| 7,000 | 120,000 | 50,000 | 3,209 | 3,000 | 0 | 0 | 800 | 7,000 | 5, 000 | 108 |
| ,200 | 50,000 | 18,000 | 2,909 | 1,030 | 0 | 0 | 1,600 | 5,530 | 10,000 | 109 |
| 1,509 | 75,000 |  | 忿, 75 |  | 0 | 0 | 5,389 | 8,146 | 1,965 | 110 |
| 2, 600 | 40,000 | 30,600 | 3,000 | 2,500 | 0 | 0 | 1,000 | 6, 500 |  | 111 |
| 3,000 | 80,000 $6 \check{2}, 000$ | 8,527 56,500 | 2,214 3,122 | 3, 386 | 0 0 | 0 | 0 0 | 2,690 | 4, 2,03 | 113 |
| 15,000 | 150, 000 | 150,000 | 30, 00 | 10,000 | 0 | 0 | 0 | 40,000 | 62, 600 | 114 |
| 10,000 | 150, 1000 |  |  |  |  |  |  |  |  | 115 |
| 80,000 2,000 | 100,000 125,000 | 160,000 50,000 | 5,000 6,490 | $\begin{array}{r}10,000 \\ 2,200 \\ \\ \hline\end{array}$ | 0 | 0 | 0 | 15,000 8,740 | 20,000 6, 800 | 1116 |
| 15,000 | 150, 000 | 400, 009 | 23, 000 | 22,000 | 0 | 0 | 2,000 | 47,000 | 40,000 | 118 |
| 1,590 | 30, 009 | 8,000 | 2,966 | - 450 | 0 | , | 125 | 3, 5 ¢ |  | 119 |
| 2,300 | 100,000 | 65, 3:2 | 8.201 | 4,063 | 0 | 0 | 0 | 12,323 | 1,338 | 120 |
| 200, 000 | 500,000 | 232, 090 | 61, 090 | 14, 800 | \$75,500 | 0 | 0 | 151,360 | 0 | 121 |
| 200 10 | 30,000 |  | 600 | 0 | 0 | 0 | 0 | 609 |  | 120 |
| 1. | 80,009 | $2 \%$ \%000 | 916 | 2,167 | 0 | 0 | 75 | 3.835 | 603 | 123 |
| 13,000 | 150, 000 | 57,900 | 7,620 | 3,888 | 0 | 0 | 1,663 | 13,173 | 1,800 | 125 |
| 39,000 | 204, 925 | 100, 000 | 20,901 | 4,107 | 0 | 0 | 1, 879 | 26,887 | 140,000 | 126 |
| 3,500 | 75009 | 30,000 | 8, 383 | 1.590 | 0 | 0 | 400 | 10.283 | 3,000 | $12 \%$ |
| $2 \cdot 6000$ | 50,000 50,000 | 23,349 | 2, <br> 7,500 <br> , 500 | 1,588 | 0 0 | 0 0 | 0 0 0 |  | 1,993 80,90 | 128 |
| 200 | 30,000 | 600 | 2, 800 | 15 | 0 | 0 | 85 | 2, 900 | 5,715 | 150 |
| 24,476 | 53,384 | 103,620 | 4,935 | 5,100 | 0 | 0 | 451 | 10,496 | 2, 700 | 131 |
| 5,000 | 80,000 | - | 5,576 | 0 | 0 | 0 | 2,500 | 8,133 | 15, 000 | 132 |
| 3,500 | 45,000 | 24, 107 | 3,392 | 1,663 | 0 | 0 | 5,373 | 10, 434 |  | 133 |
| 15,000 | 69,000 | 40,000 | 12,000 | 1,000 | 0 | 0 | 5,000 | 18,000 | 20,000 | 135 |
| 500 | 100,000 |  | 1,100 |  | 0 | 0 | - 800 | 1,900 |  | 135 |
| 2,000 | 100, 000 |  | 2,000 | 0 | 0 | 0 | 8,400 | 10, 000 |  | 137 |
| - 500 | 倥,000 | 40,000 | 660 | 2,400 | 0 | 0 | 0 | 3, 000 | 1,125 | 138 |
| 2,509 | \%5, 000 | 0 | 12,5\%\% | 0 | 0 | 0 | ${ }^{0}$ | 12, 505 |  | 139 |
| 200,000 | 200,000 470,090 | 133, 000 | 2,000 1,500 | 5,009 | 120,000 | 0 0 0 | 3,000 0 | 5,090 125,500 | 8,000 | 140 |
| 1,000 | 40, 000 | 12, 000 | $\stackrel{1}{2}, 000$ | -800 | 0 | 0 | 1,000 | -3,800 | 19,000 | 142 |
|  | 15,009 | 500 | $\stackrel{2}{2,000}$ | 30 | 0 | 0 | 50 | 2,080 |  | 143 |
| 1,090 | 125, 000 |  | 15, 000 |  | 0 | 0 | 10,000 | 25,090 | 2,000 | 144 |
| 3,000 | 56,000 180,000 | 80, 000 | 7,000 | 5,600 | 0 | 0 | 1,621 | 14,221 |  | 145 |
| 800 | 130,000 50,000 | 0 | 45,000 8,200 | 0 0 | 0 0 0 | 0 0 | 5,000 1,500 | 50,000 9,700 | 0 | 146 147 |
| 250 | 27,000 | 25,000 | 2,000 | 2,000 | 0 | 0 | , 300 | 4,300 | 5,000 | 148 |
| 3,000 | 200,000 | 70, 000 | 8,394 | 4, 362 | 0 | 0 | 1,771 | 14,727 | 5,018 | 149 |
| $5{ }_{5}^{8}, 000$ | 62,00 50,000 | 0 | 1,603 | ---- | 0 | 0 | 0 | 1, ¢00 | 2,900 | 150 |
| 2,500 | 59, 500 | 0 | T, 5:0 | 0 | 0 | 6 | 0 | 7,500 | 3,000 | 152 |

Table 39.-Statistics of universities and colleges

for men and for both sexes－Continued．

| $\begin{gathered} \text { Value of scientific } \\ \text { apparatus. } \end{gathered}$ | Value of glounds andbuildings． | 菅Z000000000 | Income． |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| 1退 | 12 | 13 | $1{ }^{1}$ | 15 | 16 | 1 \％ | 18 | 15 | 29 |  |
| $-1,800$1,5005,0009,0000100$5 \pi, 000$ | $\begin{array}{r} \$ 10,000 \\ 119,800 \\ 40,000 \\ 100,000 \\ 191,000 \\ 25,000 \\ 60,000 \\ 167,000 \end{array}$ | $\begin{array}{r} 88,000 \\ 301,670 \\ 180,000 \\ 250,000 \\ 225,000 \\ 0 \end{array}$ | \＄2， 000 | $\$ 130$5,951 | 0 | 0 | \＄43， $\begin{array}{r}0 \\ 8\end{array}$ | \＄2． 130 |  | 153 |
|  |  |  | 4，\％09 |  |  |  |  | 53， 160. | 184，485 | 15.1 |
|  |  |  | 1，405 | 7，692 | 0 | 0 | 0 | 9， $\mathrm{US7}_{7}$ | 0 | 155 |
|  |  |  | 6，000 | 14，000 | 0 | 0 | 0 | \％0， 000 |  | 155 |
|  |  |  | 10，250 | 12，875 | 0 | 0 | 215 | 23， 400 |  | $15 \%$ |
|  |  |  | 4，200 |  | 0 | 0 | 0 | 4，200 | 0 | 158 |
|  |  |  |  |  |  |  |  |  |  | 159 |
|  |  | 165， 000 | 1， 416 | 8，645 | 334， 660 | \＄35， 580 | 16，601 | 95， 870 | 6 | 100 |
|  | 200,000120,000 | $\begin{aligned} & 203,479 \\ & 150,000 \\ & 100,000 \end{aligned}$ | $\begin{array}{r} 5,085 \\ 15,000 \\ 3,500 \end{array}$ | 11，593 <br> S， 000 <br> 6， 000 | 000 | 000 | $\begin{array}{r} 232 \\ 2,000 \\ 0 \end{array}$ | $\begin{array}{r} 16,910 \\ 25,000 \\ 9,500 \end{array}$ | 13， 000 | 161 |
| $---3,-700$1,500 |  |  |  |  |  |  |  |  |  | $16 \%$ |
|  | $\begin{array}{r} 100,004 \\ 50,000 \\ 55,030 \end{array}$ |  |  |  |  |  |  |  |  | 163 |
| －－－－－7， |  | －－－－－7－00 | －－－5， 50 | －－1， 000 | 0 | 0 | 1，200 | 5， $\mathrm{c}^{0} 0$ | 5， 000 | 102 |
| 50，000 | 150，000 | 318，313 |  | 14，556 | 15， 500 | 26，6\％3 | 5， 635 | $\begin{aligned} & 62,384 \\ & 22 \end{aligned}$ | －－－－－ 0 | 166 |
| 5，000 | 80，060 | 0 | －5，000 | 0 | － 0 | － 0 |  |  |  |  |
| 1，500 | 80， 000 |  | 6，000 |  | 0 | 0 | 0 0 | 6， 600 | 1，000 | 168 |
| 3，000 | 30， 000 | 0 | 5，000 | 0 | 0 | 0 | 0 | 5，000 | 2，000 | 169 |
| 5， 000 |  |  |  |  |  |  |  |  |  | 130 |
| 200 | 120，000 | 117， 500 | 0 | 5，600 | 0 | 0 | 0 | 5，600 | 26，403 | 111 |
| 500 | 100，000 | 17， 0 | 7，170 | 0 | 0 | 0 | 350 | 7，5：20 |  | $1{ }^{172}$ |
| 250 | 100，（000 | 6，000 | 2，600 | 500 | 0 | 0 | 3，000 | 5，500 | 525 | 173 |
| 45，000 | 810，000 | 1，477，000 | 20，000 | 85， 000 | 0 | 0 | 0 | 105，000 |  | 171 |
| 50， 000 | 500， 000 | 614，665 | 29，163 | ．33， 567 | 0 | 0 | 0 | 62,730 | 4， 760 | 175 |
| 10，000 | 200， 100 | 352，000 | 10．099 | 20，481 | 0 | 0 | － $\begin{array}{r}0 \\ \hline 204\end{array}$ | 30， 580 | 19， 030 | 176 |
| $35,001)$ | 191， 566 | 219，900 | 29， 12 | 9，915 | 20， 000 | 39，000 | 2，504 | 93，631 | － 0 | 17 |
| 25， 000 | 200， 100 | 473,353 | 12， 314 | 18，065 | 0 | 0 | 0 | 30， 20.9 | 14，800 | $1 \%$ |
| 10，000 | 250，000 | 0 | 8，000 | 0 | 14，200 | 0 | 0 | 22， 200 |  | 179 |
| 117， $17 \%$ | 747， 620 | 3，250， 000 | 47， 500 | 72， 297 | 100，000 | 0 | 0 | 219，727 |  | 180 |
| 5，000 | \％50，000 |  |  |  |  |  |  |  |  | 181 |
| 1，000 | 45， 000 | $20,0 \subset 0$ | 1，100 | 1，000 | － 0 | 0 | 5， $5 \cdots 3$ | 7，623 | 15，500 | 182 |
| 1，000 | 60， 000 | 30，000 | 3，000 | 1，200 | 5）， 000 | 0 | － 0 | 9，\％00 |  | 183 |
| 30,000 | 113， 600 | 105， 000 | 12， 542 | 6，142 | 23， 000 | 39， 000 | 2\％， 464 | 108， 148 | 0 | 184 |
| 5，600 | 67，000 | 0 | 24， 000 | 0 | 0 | 0 | － 0 | 24， COO | 0 | 125 |
| 5.000 | 150，000 | 0 | 55，000 | 0 | 0 | 0 | 0 | －5． 000 | 235 | 186 |
|  | 20，000 | 0 | －2，000 | 0 | 0 | 0 | 330 | －2，350 | N00 | 188 |
| 5，000 | 200，000 | 0 | 45， 000 | 0 | 0 | 0 | 0 | 45， 000 | 0 | 189 |
| 200， 000 | 800，000 | 1，400，000 | 50，000 | 50， 000 | 0 | 0 | 0 | 100，000 | 05， 000 | 190 |
|  | 800， 400 | \％90，000 | 77，831 | －65， 891 | 0 | 0 | 01， 820 | 255，042 | 2，9\％1 | 192 |
| 1，500，000 | 4，500， 500 | 11，766， 37.2 | 644，564 | 462，867 | 0 | 0 | 127，309 | 1，234， 740 | 1，514，330 | 193 |
| 1，2，500 | 75，（000 | 2，000 | 2，300 | 0 | 0 | 0 | 200 | 2，500 | 1，25， 000 | $19 t$ |
| 40，000 | 600， 000 | 1，300， 000 | 45， 000 | 600，000 | 0 | 0 | 0 | 105， 000 |  | 19\％ |
| 10，000 | 452， 425 | 1，04S，317 | 35， 595 | 48，319 | 0 | 0 | 082 | 81，, 806 |  | 196 |
| 3，500 | 300，000 | - - - - - | －19， 800 | －－－－－－－－ | －－－－－－ | －－－－－0 | －－－－－－ | －19，860 | －－－－－－ 0 | 198 |
| 3，000 | 120，000 | 80， 010 | 5，750 | 3， $4 \% 4$ | 0 | 0 | 3，2．20 | 12，444 | 1，\％00 | 199 |
| 15，0，10 | 80，000 | 230， 060 | 12，909 | 10，500 | 0 | 0 | 6，040 | 29， 449 | 1\％，150 | 200 |
| 6，300 | 60，000 | 215， 401 | 3，000 | 5， 000 | 0 | 0 | 2，317 | 11，017 | 131， 513 | 201 |
| 540,000 | 1，610，000 | 554，946 | 184， 126 | 38，500 | 240，000 | 0 | 18， 720 | 481， 25 | 131，013 | 202 |

$b$ For residents；$\$ 65$ for nonresidents．

Table 39.-Statistics of universities and colleges


* Statistics of 189\%-98
$a$ Includes tuition.
for men and for both sexes-Continued.

| $\begin{aligned} & \text { Value of scientific } \\ & \text { apparatus. } \end{aligned}$ |  |  | Income. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | $\begin{aligned} & \text { From other } \\ & \text { sources. } \end{aligned}$ |  |  |  |
| 11 |  | 13 | 14 | 星5 | 16 | 17 | 18 | 13 | 20 |  |
| --50,000 | $\begin{array}{r} \$ 160,000 \\ 150,009 \end{array}$ | \$240,000 | \$2,080 | \$11.943 | 0 | ------- | 0 | \$14, 02? | \$3. 000 | 203 <br> 804 <br> 00 |
|  |  |  |  |  |  |  |  |  |  |  |
| -- 1,000 | $\begin{aligned} & 75,000 \\ & 60,000 \end{aligned}$ | 219,433 | 6,185 |  | 0 | 0 | 4,398 | 22, <06 | 1,905 | 205 206 |
| 46,254 | 158,757 | 90,205 | 13,009 | 4,634 | 0 | 0 | 0 | 17,643 | 25, 168 | 207 |
| 2,000 | 300,000100,000 | 0 | 30,000 | $\begin{array}{r} 0 \\ 2,000 \end{array}$ | 00 | $\begin{array}{r} 0 \\ 0 \\ \$ 39,000 \end{array}$ | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ | 30,000 | $\begin{array}{r} 0 \\ 6,500 \end{array}$ | 208209 |
|  |  | $\begin{array}{r} 30,000 \\ 1,307,219 \end{array}$ | 3,005 |  |  |  |  | 5,005 |  |  |
| 90, 000 | 1,672,000 |  | 91,0,0 | $\begin{array}{r} 2,000 \\ 55,429 \end{array}$ | \$129,335 |  | 58, 777 | 373,541 | -----. | 210 |
| 50, 000 | 200,000 | 100,000 | 12, 637 | 6,243 | 0 |  | 4,437 | 23, 217 | $3,58{ }^{3}$ |  |
| 1,800 | 29,883 | 7,000 | 2,960 | 240 | 0 | 0 | 100 | 3, 300 | 6,000 | 212 |
| 5, 000 | 180, 000 | 109, 110 | 12,57S | 4,500 | 0 | 0 | S, 535 | 20,613 |  | 213 |
| 3,500 | 209,000 | 8,090 | 4,000 | 500 | 0 | 0 | 3,500 | 8,000 | 4,000 | 214 |
| 7,000 | 60.000 | - 0 | 6, 799 | 0 | 0 | 0 | 7,880 | 14,679 | 200 | 215 |
| 1,000 | 25,000 | 60,000 | 900 | 2,500 | 0 | 0 | 100 | 3,500 |  | 216 |
| 3,000 | 50,090 | 39,000 | 4,200 | 2,7500 | 0 | 0 | 10,000 | 16,950 | $\begin{aligned} & 3,000 \\ & 2,000 \\ & 1,000 \end{aligned}$ | 217 |
| 400 | 100, 000 |  | 2.250 |  | 0 | 0 | 4,000 | 6,250 |  | 218 |
| 2,000 | \%0, 000 | 110,000 | 3,500 | 6,500 | 0 | 0 | 2,000 | 12,090 |  | 219 |
| 40, 000 | 250, 000 | 544, 000 | 5,090 | 32, 640 | 6,000 | 0 | 1,400 | 45, 040 |  | 哭0 |
| 125 | 30, 000 | 7.000 | 2,0004,500 | 490 | 0 | 000 | $\begin{array}{r} 0 \\ 500 \\ 0 \end{array}$ | $\begin{array}{r} 2,4,4 \\ 5,000 \\ 14,000 \end{array}$ | ---.. | 221 |
| 150 | 32, 000 | 0 |  | 0 | 0 |  |  |  |  | 232 |
| 800 | 25,000 | 0 | 14,000 | 0 | 0 |  |  |  |  | $\because 23$ |
| 400 | 5,000 |  |  |  |  |  |  |  |  | 224 |
| 500 | 33,000 | 19,000 | 2,100 | 0 | 0 | 0 | 0 | 2,100 | 1,600 | 225 |
| 8 300 | 30,000 | 15,000 | 2,600 | 800 | 0 | 0 | 200 | 3, 600 | 200 | 226 |
| 8,000 900 | 75,000 10,000 | 20,000 | 2. 900 | 1,200 | 0 | 0 | 0 | 4, 100 |  | 2727 $2 ; 2$ 2 |
| 114, 000 | 935, 000 | 1,235,839 | 13,228 | 62,762 | 57, 714 | 32, 780 | 5,400 | 171, 821 |  | 290 |
|  | 20,000 | 0 | ?,500 | 0 | 0 | 0 | 0 | $\therefore, 500$ |  | 230 |
| 15,000 | 275,000 | 140, 000 | 6,500 | 5,500 | 0 | 0 | 1,000 | 13,000 | 140,000 | 231 |
| 2,000 | 40,000 | 210,000 | 3,300 | 11,360 | 0 | 0 | 0 | 14,800 | 533 | 232 |
| 15,000 | 46, 000 | 77,000 | 2,300 | 6,200 | 0 | 0 | 0 | 8, 500 |  | 233 |
| 600 | 20,000 | 12,000 | 1,500 | 600 | 0 | 0 | 0 | 2, 100 |  | $\because 34$ |
| 5,000 | 109,500 | 200, 000 | 7, 200 | 10,833 | 0 | 0 | 0 | 18,033 | 10,000 | 235 |
| 5,000 | 125, 000 | 112,000 | 8,308 | 8,298 | 0 | 0 | 3,380 | 19,986 | 408 | 238 |
| 1,200 | 25, 000 | 0 | 4,200 | 0 | 0 | 0 | 0 | 4,900 |  | 237 |
|  | 30,000 | 0 | 6,000 | 0 | 0 | 0 | 0 | 6,000 |  | 238 |
| 100 | 6,500 | 0 | 1,800 | 0 | 0 | 0 | 0 | 1,800 | 0 | 239 |
| 7,090 | 500. 010 | 200,000 |  |  |  |  |  |  |  | 210 |
| 5, 800 | 600, 000 |  |  |  |  |  |  |  |  | 241 |
| 20.000 | 800,000 |  |  |  |  |  |  |  |  | 212 |
| 178,000 | 660, 010 | 1,207,000 | 124.000 | 27,000 | 0 | 0 | 7,000 | 158,000 | 142,000 | 243 |
| 7, 0000 | 150,000 | 250,000 | \%,500 | 13, 456 | 0 | 0 | 1,1\%0 | 2\%, 126 | 2, 120 | 214 |
| 3,000 150 | 80,000 30,000 | 59,000 | 5,540 | 2, 110 | 0 | 0 | 1,093 | 8, 743 | 5,748 | ${ }_{2} 15$ |
| I, $\begin{array}{r}150 \\ \hline\end{array}$ | 30,000 100,000 | 0 70,000 | 4,750 4,300 | 4, 000 | 0 0 | 0 0 | 1,000 1,000 | 5,350 9,300 | 13,518 2,000 | 246 247 |
| 800 | 30,000 | (b) | $\begin{aligned} & 8,442 \\ & 1,400 \end{aligned}$ | [ ${ }^{0}$ | - 0 |  | 00 | $\begin{array}{r} 8,412 \\ 31,400 \end{array}$ | 12,000300 | $\begin{aligned} & 218 \\ & 249 \\ & 250 \end{aligned}$ |
| 1,000 | 60, 000 |  |  |  |  |  |  |  |  |  |
| 25, 000 | 100,000 |  |  |  |  |  |  |  |  |  |
| 6, 000 | $\begin{array}{r} 82,000 \\ 100,000 \\ 200,000 \end{array}$ | $\begin{array}{r} 5,000 \\ 0 \\ 0 \end{array}$ | $\begin{array}{r} 1,800 \\ 2,000 \\ 16,000 \end{array}$ | $\begin{array}{r} 300 \\ 0 \\ 0 \end{array}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \end{aligned}$ | 000 | 900 | 3, 000 | 6, 600 | 501 |
|  |  |  |  |  |  |  | 200 | 2, 200 | 12,700 | 25: |
| 15, 000 |  |  |  |  |  |  | 0 | 16, 000 |  | 253 |

Table 39.-Statistics of unirersities and colleges

for men and for both sexes-Continued.


Table 39.-Statistics of universities and colleges


* Statistics of 1897-93.
for men and for both sexes-Continued.

|  |  |  | Income. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| 11 | 12 | 13 | 14. | 15 | 16 | 17 | 18 | 15 | 20 |  |
| 81,000 | \$25, 000 | 0 | \$2,000 | 0 | 0 | 0 | 0 | \$2,000 | \$1,500 | 301 |
| 1,000 | 15,000 | \$6,000 | 1,500 | \$360 | 0 | 0 | 0 | 1,860 |  | $30 \%$ |
| 600 | 12,000 | 3:2,000 | 2, 200 | 1,920 | 0 | 0 | 0 | 4,120 | 10, (00) | 303 |
| 7,8\%5 | 82, 125 | 31, 238 | 3, 677 | 275 | 0 | 0 | \$11,914 | 15,866 | 12,361 | 304 |
|  | 10,000 | 0 | 2,000 | 0 | 0 | 0 | 0 | 2, 000 |  | 305 |
| 1,510 | 125,000 | 0 | 1,000 | 0 | \$45 | 0 | 6, 000 | 7,045 | 4, 50) | 304 |
| 20,000 | 100, 000 | 256, 135 | 8,700 | 13,783 | 0 | 0 | 0 | 32, 493 | 5, 530 | $80 \%$ |
| 2,165 | 40,300 | 30,000 | 1,50\% | 1,801 | 0 | 0 | 0 | 2,808 | 27, 460 | 303 |
| 15,000 | 105, 000 | 0 | 2,000 |  | 49,000 | 0 | 2,500 | 53,500 | 0 | 310 |
| 200 | 43,000 | 0 | 1,100 | 0 | 0 | 0 | 2,000 | 3,100 | 130 | 311 |
| 21,000 | 225, 000 | 200. 090 | 4,200 | 8,400 | 0 | 0 | 2,600 | 15,200 |  | 319 |
| 5,000 | 50, 000 | 632,800 | 10,200 | 3, 300 | 0 | 0 | 1,300 | 15,200 | 1,000 | 313 |
| 25, 000 | 250,000 | 150, 000 | 3,500 | 11,000 | 31, 000 | 0 | - 0 | 4ă, 500 |  | 314 |
| 2,000 | 133,584 | 80, 98\% | 3,175 | 3,906 | 0 | 0 | 1,470 | 8,531 | $55 \%$ | 315 |
| 1,000 | 97,049 | 93,933 |  |  |  |  |  |  | 10, 145 | 315 |
| 200 | 20, 000 | 20,060 | 1,200 | 1,:00 | 0 | 0 | 1, 100 | 3, 500 | I, 109 | 317 |
| 7,000 | 100, 000 | 0 |  |  |  |  |  |  |  | 315 |
| 35, 000 | 315, 000 | 800, 000 | 24, 000 | 33, 600 | 66,000 | 0 | 0 | 193, 600 | 170,000 | 319 |
| 8,000 | 150, 090 | 178 | 4,000 | 0 | 0 | 0 | 0 | 4,000 |  | 320 |
| 95,000 | 979,690 | 1,113, 718 | 65, 009 | 158,799 | 0 | 0 | 0 | 283, 76 | 124, 500 | 321 |
| 2,000 | 125,000 | -36, 793 | 2, 330 | 1,410 | 0 | 0 | 6, 766 | 10,506 |  | 322 |
| 150, 000 | 2, 278,000 | 553, 065 | 30,281 | 33, 065 | 176,058 | \$24, 000 | 14, 169 | 277,573 | 1,000 | 323 |
| - 250 | 20,000 | 0 | 1.798 | 0 | 0 | - 0 | 300 | 2,098 | 50 | 394 |
| 5, 000 | 521,000 | 744,000 | 3\%, 500 | 29,500 | 0 | 0 | 0 | 6:2, 000 | 250, 000 | 325 |
| , 500 | 100,000 | 31,000 | 2,217 | 1, 116 | 0 | 0 | ${ }^{0}$ | 3,333 | 1,936 | 326 |
| 45,240 | 312, 651 | 293,608 | 2,591 | 17,589 | 0 | 0 | 2,470 | 23.650 | 41,700 | 327 |
| 18,000 | 160, 000 | 420,000 | 6, 500 | 22,000 | 0 | 0 | 2,5100 | 31,000 | 20,000 | 398 |
| 10, 000 | 100, 000 | 135, 000 | 8,700 | 5,000 | 0 | 0 | 5, 144 | 18, 844 |  | 339 |
| 2,040 | 50,000 | 0 | 3,000 | 0 | 0 | 0 | 2,400 | 5, 400 | 30,000 | 334) |
| 18,009 | 120, 000 | 190, 000 | 5,300 | 7,700 | 0 | 0 | 0 | 13,000 | 800 | 231 |
| 3, 2, 200 | 12,000 30,000 | - 0 | 2,500 | - 0 | 0 | 0 | 0 | \%,500 |  | 330 |
| 2, ${ }^{21,500}$ | -30, 000 | 36,500 919 | 4,575 | 2,569 50,350 | 0 | 0 | \% | 7, ${ }^{7}$, 144 | 8,893 | 323 |
| 30,000 | 150, 000 | 60,000 | 1,800 | 4,000 | 25,000 | 0 | 6,000 | 130, 360 | 19, 60 | 334 385 385 |
| 1, 010 | 40,000 | 0 | 3,000 | 0 | 0 | 0 | 0 | 3,000 | 1,000 | 336 |
| 500 | 35, 000 | 69,000 | 2, 200 | 3,900 | 0 | 0 | 0 | 6,100 | 209 | 337 |
| 4,000 | 50, 000 | 0 | 8,400 |  | 0 | 0 | 0 | 3, 400 |  | 338 |
| 5, 000 | 350,000 | 300, (00) | 10, 000 | 10, 000 | 0 | 0 | 0 | 20, 100 |  | 539 |
| 500 | 125, 000 | 95,000 | 4,403 | 5, 187 | 0 | 0 | 0 | 9,590 | 2,500 | 340 |
| 25,000 | 65,000 | 69, 000 | 4,200 | 4,800 | 0 | 0 | 2,000 | 11,000 | 8,000 | 341 |
| 14, 000 | 114, 000 | 30, 400 | 2,364 | 1,636 | 18,868 | 0 | 6, 142 | 27, 010 | 8, 629 | 312 |
| 4, 1000 | 25,009 | 40,000 | 4,000 | 2,500 | 0 | 0 | 0 | 6,500 | 2,000 | 313 |
| 40,000 | 250,000 | 370,000 | 17, 500 | 10, 35ั5 | 0 | 0 | 3,000 | 30, 85\% | 19,200 | 344 |
| 2, 000 | 100, 000 | 100,060 | 3,52\% | 2,500 | 0 | 0 | 0 | 6, 027 | 1,200 | 345 |
| 6,000 | 60,000 | 0 | 1,138 | 0 | 19,000 | 0 | 0 | 20,158 |  | 346 |
| 1,500 | 37,900 | 1,600 | 4,500 | 80 | 0 | 0 | 0 | 4,580 | 2,300 | 318 |
| 20, 000 | 110,000 | 150,000 | 2,000 | 10,000 | 30,000 | 0 | 0 | 4.3,000 | 0 | 348 |
| $2,500$ | 150,000 | 200, 000 | 6,000 | 14,000 | 0 | 0 | 2, 500 | 22, 5000 | 5, 000 | 319 |
| , 600 | 8,000 | - 0 | -850 | - 0 | 0 | 0 | 125 | - 975 | 5, | 350 |
| 3,000 | 35,000 | 38,000 | 2, 100 | 2, 500 | 0 | 0 | 0 | 4, 600 | 1,001) | 3 3 1 |
| , 500 | 25, 000 | 8,000 | 2,500 | 500 | 0 | 0 | 0 | 3,000 | 6,000 | 352 |
| 1,500 | 12, 1000 | 5,000 | 1,600 | 200 | 0 | 0 | 0 | 1,900 |  | 353 |
| 6,000 | 160, 000 | 40,000 | 3,700 | 3,200 | 0 | 0 | 0 | 6,900 |  | 3 25 |
| 2,000 | 150, 000 | 0 | 5, 120 | 0 | 0 | 0 | 0 | 5,020 | 1,200 | 355 |

Table 89.-Statistics of universities and colleges


[^32]$a$ Includes tuition.

Por men and for both sexes-Continued.


Table 39.-Statistics of universities and colleges

|  | Name. | Expenses in collegiate department. |  | Living ex penses. |  | $\begin{aligned} & \text { Number of fellow- } \\ & \text { ships. } \end{aligned}$ |  | Library |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  | $\begin{aligned} & \text { wi } \\ & 0 \\ & 0 \\ & 0 \\ & 5 \\ & 5 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  | $\begin{aligned} & { }_{3}^{3} \\ & 0 \\ & 0 \\ & 0 \\ & n \end{aligned}$ |  |  | $\begin{aligned} & \dot{n} \\ & 0 \\ & \tilde{y} \\ & \frac{1}{0} \\ & p \end{aligned}$ |  | ¢ |
|  | 1 | ฉ | 3 | 4 | 5 |  | 6 | 8 | 8 | 9 | 10 |
|  | TENNESSEE. |  |  |  |  |  |  |  |  |  |
| 406 | U. S. Grané University | 830 | $\$ 9$ | 850 | 8100 |  |  | 8,009 | 2, 000 |  |
| 407 | King College.-.-. | 50 | 8 | 90 | 112 |  |  | 4,000 | \% 200 | 52,500 |
| 408 | Southwestern Presbyterian Uníversity. | 69 | 16 | 88 | 108 |  |  | 8,000 | 2,000 | 10,000 |
| 403 | American Temperance Universitr. | 39 |  | 80 | 100 | .-.- | ---- | 1,090 | 200 | 1, C00 |
| 410 | Hiwasse College..-.---.-.---...- | 40 | 2 | 50 | 75 |  | 6 | 2. 000 | 1,000 | 2,000 |
| 411 | Southwestern Baptist University.* | 60 |  | 73 |  |  |  | 4,000 | E0) | 4,000 |
| 412 | Knoxville College ----------------- | 5 |  | 60 |  |  |  | 2,000 | 500 | 2,000 |
| 415 | University of Tennessee | 0 | 20 | 100 | 15 | 0 | 6 | 16,030 | 12, 000 | 17,000 |
| 41. | Cumberland University | 60 | 8 | 75 | 13.5 | 0 | 0 | 12,000 | 3, 000 | 10, 000 |
| 41.5 | Bethel College. | 40 | 3 | 43 | 90 |  |  | ],090 | 1,000 | 2,0¢0 |
| 416 | Maryville College - ------- | 1. |  | \% | 125 | 0 | 3 | 12,000 |  |  |
| 417 | Chiristian Brothers College* |  |  |  |  |  |  | $\because, 000$ | 1,500 |  |
| 418 | Milligan College...-.-..--. | 33 |  | 65 | 93 |  |  | 2,000 |  | 1,009 |
| 419 | Carson and Newman College | 35 | 5 | Y 9 | 90 |  | 6 | 3, 160 |  | 3,500 |
| 420 | Central Tennessee College.-- | 18 | 3 | 88 | 95 | 0 | 0 | 5, 550 | S00 | 8,000 |
| 421 | Fisk University | 14 | 1 | 19 |  | 0 |  | 6,68\% |  |  |
| 422 | Roger Villiams Unirersity | 12 |  | 79 |  | 0 | - | 4, 500 |  | 5,000 |
| 493 | University of Nashville .... | 10 |  | 120 | 200 |  | 202 | 12, 00 |  |  |
| 42 t | Vanderbilt University ----------- | 85 | 15 | 100 | 125 | 15 | 25 | 15,010 | 5, 000 | 48, 000 |
| 410 | University of the South | 100 | 10 | 120 | 800 | 0 | 51 | 49,000 | 21,000 | 83, 000 |
| 426 | Purritt College.-- | 20 | 10 | 40 | 60 |  |  | 3, 650 | 1, 200 | 3, 000 |
| 427 | Sweetwater College*--.-.---.-. | 30 | 2 | 100 | 125 |  |  | 500 | 25 | 600 |
| 483 | Greeneville and riusculum College. | 38 |  | 75 | 109 | 0 | 10 | 8,100 | 400 | 2,500 |
| 429 | Washington College -----..---.-. - | $2 \%$ | 3 | 50 | 60 | --- |  | 1,800 | 300 | 2,000 |
| 430 | St. Edward's College | 60 |  | 150 |  | 0 | 0 | 3. 000 | 500 | 4.000 |
| 431 | University of Texas | 0 | 10 | 114 | 151 | 7 | 0 | 32, 361 | 6, 090 | 50, 000 |
| $43 \%$ | Howerd Payne Colleg | 50 |  | 100 | 125 | --- | ... | 2,000 | 1,000 | 2,500 |
| 433 | Henry College .-. | 45 | 3 | 75 | 90 |  |  |  | 300 |  |
| 434 | Fort Worth University | 48 | $\stackrel{2}{8}$ | 128 | 150 | -... |  | 3, 050 |  |  |
| 435 | Polytechuic College.- | 42 | 5 | 85 | 105 |  |  | 1,800 | 200 | 1,500 |
| 436 | St. Mary's Univer'sity | 60 |  |  |  |  |  | 2,369 |  | 2,000 |
| 437 | Southwestern University | 60 | 5 | 90 | 133 | 0 | 0 | 3,000 | 1,560 | 3,060 |
| 438 | Burleson College | 50 | 2 | 110 | 150 |  | 1 | 60 | 306 | 2,000 |
| 439 |  | 10 |  | 81 | 100 |  |  | 3, 209 | 1,000 | 12,000 |
| 440 |  | 40 | 0 | 150 | 200 | 0 | 0 | 900 | 200 | 8 80 |
| $4!1$ | Austin College. | 50 | 11 | \% | 135 |  |  | 10,000 |  |  |
| 41. | 'Trinity University -------.-. | 50 | 6 | 81 | 90 | 0 | 0 | 4,000 |  | 6,009 |
| 443 | Add Ran Christian University. | 50 |  | 80 | 125 |  |  | 3, 00: | 1,000 | 3,500 |
| 444 | Baylor University - | 50 | 3 | 75 | 190 | 1 | 4 | 8,000 | \% 200 | 10, 000 |
| 445 | Paul Quinn College | 23 | 8 | 75 | 85 |  |  | 800 | 409 | 1,500 |
|  | UTAH. |  |  |  |  |  |  |  |  |  |
| 446 | Brigham Young College .-.......-- | 10 | 1 | 76 | 95 | 0 | 0 | 2,500 | 800 | 2,127 |
| $4{ }^{7}$ | Salt Lake College | 22 | 3 | 108 | 125 | 0 | 0 | 3, 048 | 1,8\%0 | 1,500 |
| 448 | Sheldon Jackson College.-------- | 35 |  | 100 |  |  |  | - 500 |  | 1,000 |
| 449 | University of Utah... | 0 | 10 | 67 | 133 | 0 | 0 | 16,000 | 4,000 | 25, 000 |
|  | VERMONT. |  |  |  |  |  |  |  |  |  |
| 450 | University of Vermont and State Agricultural College. | 60 | 22 | 130 | 180 | 0 | 45 | 56, 903 | 25,000 | 100, 000 |
| 451 | Midilebury College. | 60 | 12 | 120 | 150 | 0 | 120 | 23,383 | 1,800 | 25,000 |
| 45. | Norwich Ưniversity | 65 | 25 | 120 |  |  | 32 | 5,000 |  |  |

* Statistics of 1897-98.
for men and for both sexes-Continued.


Table 39．－Statistics of universities and colleges

|  |  | Expens | es in |  | gex－ |  | 安 |  | Library |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | part |  |  |  |  | $\begin{aligned} & 0.0 \\ & 0 \\ & \hline 7 \end{aligned}$ |  |  |  |
|  | Name． |  | $$ | $\begin{aligned} & \text { + } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  | 关 E E 0 8 |  |  |
|  | 1 | P | 3 | 1 | 5 | 6 | g | 8 | 9 | 16 |
|  | virginla． |  |  |  |  |  |  |  |  |  |
| 453 | Randolph－Macon College | $5 \%$ | 521 | \＄90 | 590 |  | 20 | 8，500 |  | \＄3，500 |
| 45.5 | Bridgewater College－－．－． | 33 |  | S0 | 108 |  |  | T（k） | 3 H | 500 |
| 455 | University of Virginia | \％ | 40 | 13.5 | 162 | 1 | 5 | 40，193 | 831 | 85，000 |
| 456 | Emory and Henry College ．．．．．．．． | 59 | 30 | 85 | 85 | 0 | 4 | 10，100 | 2,00 | 12，000 |
| 453 | Fredericksburg College．－． | 59 | 5 | i00 | 18.3 |  |  | 800 | 200 | 1200 |
| 458 | Hampden－Sidney College | 51 | 19 | 90 | 144 | 2 | 16 | 13，060 | 2，460 | 15， 000 |
| 459 | Washington and Lee University． | 50 | 30 | 100 | 159 | 1 | 17 | 40，000 | 10，000 | 50，000 |
| 440 | Richmond College．．．．－．．．．．．．－－－－－－ | $\%$ | 19 | 110 | 150 |  | 29 | 13.300 | 2，090 | 40.000 |
| 461 | Roanoke College－－．．．．．．．．． | 50 | 1. | 83 | 115 | 0 | 23 | 21，000 |  | 25，000 |
| 46： | College of Wiliam and Par | 35 | © | 90 | 108 |  | 6 | 10， 200 | 3，500 |  |
|  | WASHINGTON． |  |  |  |  |  |  |  |  |  |
| 483 | Vashon College | 60 | 6 | 122 | 150 | 0 | 0 | 1，208 |  | 900 |
| 434 | Colfax College－－．．．－． | 45 |  | \％ 5 | 103 |  |  | 60 | 300 | 1，200 |
| 467 | University of Washington | 0 |  | 90 | 150 | 0 | 0 | 10， 1030 | 10，060 | 30，000 |
| 46 | Gonzaga College－．．．－．－．－ | 30 |  | 220 |  |  |  | 4．000 | 2， 100 | 4，000 |
| $46 \%$ | Whitworth College－ | 26 |  | 159 |  |  |  | 588 | 100 | 850 |
| 468 | Puget Somind University | 4.5 |  | 100 | 150 | 0 | 0 | 3，000 | 1，000 | 7，060 |
| 469 | St．James College ．．．．． | 40 | 10 | 209 |  |  |  | 3．000 | 1，060 |  |
| 47.0 | Whitman College | 48 |  | 140 | 175 |  | 17 | 6，000 | 1，500 | 5，010 |
|  | WEST VIRGINIA． |  |  |  |  |  |  |  |  |  |
| 4．1 | Barboursville College－－－．－－－－－－－－ | 80 | 3 |  | 100 |  |  | 600 | 200 |  |
| 4 | Bethany College＊${ }^{\text {West }}$ Virginia University | 40 0 | 15 | $\begin{aligned} & 180 \\ & 11 t \end{aligned}$ | 第等 | 9 | 0 | 11，017 | 3，000 |  |
|  |  |  |  |  |  |  |  |  |  |  |
| $46^{\prime \prime}$ | Lawreuce University－．．．．．．．．．．．－． | 6 | 30 | $\%$ | 125 | 2 | 20 | 15，893 | 6，400 | －95， $0 \times 0$ |
| 475 | Beloit College | 36 | 9 | 118 | 209 | 4 | 40 | 25． 040 | 8，000 | 20，UC0 |
| 426 | Mission House | 20 | 10 | 80 | 80 | 0 |  | 6，000 |  |  |
| 477 | Gale Coilego－ | 33 | 5 | 100 | 120 |  | 3 | 5，000 | 1，000 | 10，001） |
| 478 | University of Wisconsin | $a 13$ |  | 200 | 300 | 18 | 6 | 5\％， 000 | 17，009 | 94， 487 |
| $4 \tau 9$ | Milton College－．．．．．．．．． | 36 | 0 | 85 | 120 |  | －－． | 4，8：0 | 1，000 | 4，5\％0 |
| 480 | Concordia College | 40 | 20 | 68 | 6.8 |  |  | 3， 540 | 490 | 2，500 |
| 481 | Marcuette College | 60 |  | 150 | 190 | 0 | 8 | 9,350 | 1，160 |  |
| 48.3 | Ripois College | 36 | 18 |  | 86 | 0 |  | 8， 090 | 3， 200 | 5， 600 |
| 483 | Northwestern University | 30 | 5 | 80 | 120 |  |  | 3， 239 | 500 | 8，000 |
|  | W Yoming． |  |  |  |  |  |  |  |  |  |
| $48 \pm$ | University of Wyoming ．－．．－－．．．． | 0 | 3 | 150 | 200 | 0 | 0 | 6， 940 | 4，800 | 10，000 |

for men for both sexes－Continued．

|  |  |  | Income． |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | $\begin{aligned} & \text { From other } \\ & \text { sources. } \end{aligned}$ |  |  |  |
| $1{ }^{1}$ | 19 | 178 | 是迷 | 面管 | H 6 | 显翌 | 18 | 直 9 | 880 |  |
| \＄12，500 | \＄95，000 | $\$ 120,000$ | 9\％，003 | $57,19 \pm$ |  | 0 | \＄3， 666 | $81 \%, 8 \%$ | \＄35，120 |  |
| 1，000 | 9，800 |  |  |  |  | 0 | － 0 | $\begin{array}{r} 3,350 \\ 13: 318 \end{array}$ | ¢m， $1 \times 0$ | 453 |
| 50，000 | 1，000，000 | 366， 100 | 3,080 67,498 | 19，911 | \＄43，750 | 0 | 1，219 |  | －－20， 0 | 45 |
| 1，000 | 1，109，000 | 20，009 | 5，000 | $\begin{array}{r} 600 \\ 0 \end{array}$ | －10， 0 | 0 | 2，400 | 8，000 | 0 | 456457 |
| 1，000 | los， 000 | － 0 | 4,5004,282 |  | 00 | 0 |  | 4，500 |  |  |
| 5，（100 | 100，000 | 145， 000 |  | 8,53332,500 |  |  | 0 |  | 1,5008,500 | 458 |
| 16，000 | 200，000 | 630，¢15 | 9，500 |  | 0 | 0 | 0 | 12,800 42,010 |  | 459410 |
| 6，000 | 700,000 | 270，000 | 15， 000 | 15，000 | 0 | 0 | 0 | 30,00 | $\begin{array}{r} 2,500 \\ 30,000 \\ 30,000 \end{array}$ |  |
|  | 100， 000 | 60,010127,900 | 6，500 | $\begin{aligned} & 2,000 \\ & 4,034 \end{aligned}$ | 015,000 | 0 | 6，000 | $\begin{aligned} & 14,500 \\ & 20,22 . \end{aligned}$ |  | 461 |
| 25， 000 | 125，000 |  | 1，198• |  |  | 0 |  |  | －－－．－．－ 412 |  |
| 2，590 | 33， 000 | 0 | 20， 280 | 0 | 0 | 0 | 0 | 20，780 |  | 463 |
| 1，000 | 12，000 | 0 | 2，900 | 0 | $\xrightarrow{0}$ | 0 | 0 | 2，900 |  | 4.64 |
| 25，000 | 560，000 | 0 | 0 | 0 | 40，250 | 0 | 0 | 40， 250 | 1，500 | 465 |
| 1，000 | 300，000 | 0 |  |  |  |  |  |  |  | 466 |
| 220 | 20， 000 | 0 |  |  |  |  |  |  | 65,060 | 468 |
| 1，500 | 30， 000 | 0 | 12，000 | 0 | 0 | 0 | 1，000 | 13，000 |  | 468 |
| 8，000 | 10，000 | 0 |  |  |  |  |  |  |  | 469 |
| 1，000 | 40，000 | 165， 000 | 7，000 | 3，000 | 0 | 0 | 0 | 16,030 | 85，060 | 470 |
|  | 25，000 | 0 | 1，000 |  | 0 0 | 0 | 650 | 1，650 |  | $4 \%$ |
| 23， 000 | 233， 090 | 114，750 | 5，135 | 6， 538 | 88， 409 | S3 1,000 | 20， 876 | 161，972 |  | 4 |
| 23，000 | 210，000 | 212，000 | 6.215 | 12，300 | 0 | 0 | 5,980 | 21， 495 | 23， 000 | 4＊4 |
| 23， 600 | 367，250 | 448，132 | 11，643 | 18，045 | 0 | 0 | 0 | 20， 688 | 25，（00） | $4 \%$ |
| 2，500 | 40， 000 | 21,000 | 2，58： | 573 | 0 | 0 | 0 | 3， 15 | 10，8\％ | $4 \pi 6$ |
| 1，000 | 30， 000 | － 0 | 1，500 | 0 | 0 | 0 | 4，500 | 6，000 | 3，500 | $4 \%$ |
| 219，3i1 | 1，152，973 | 530.000 | 32， 800 | 24， 500 | 289，000 | 39， 030 | 1，000 | 3：9，300 |  | 478 |
| 8， 000 | 31，000 | 83， 743 | 2，594 | 4，498 | 0 | 0 | 0 | r，0 02 | 328 | 479 |
| 1，500 | 150， 000 | 0 | 40 | 0 | 0 | 0 | 0 | 4.0 | 500 | 480 |
| 2，700 | 130， 000 | 0 | 6，000 | 0 | 0 | 0 | 500 | 6，500 | 500 | 481 |
| 10，000 | 90， 000 | 201，548 | 2，271 | 13， 803 | 0 | 0 | 4， 160 | 20， $2 \pm 1$ |  | $48^{\circ}$ |
| 8，000 | \％0， 000 | 0 | 1，003 | 0 | 0 | 0 | 10，000 | 11，003 |  | 483 |
| 62， 503 | 111， 510 | 0 | 514 | 0 | 9，288 | 39,000 | 437 | 49， 219 |  | 484 |

Table 40.-Statistics of colleges

for women, Division $A$.


Table 41.—Statistics of colleges


* Statistics of 1897-98.
for women, Division B.


for women, Division $B$-Continued.


Table 41.-Statistics of colleges


* Statistics of 189 亿̈-98.
for women, Division B-Continned.


Table 41.-Statistics of colleges


[^33]for women, Division B-Continued.


|  | Location. | Name. | Control. | $\begin{aligned} & \text { Year } \\ & \text { of } \\ & \text { first } \\ & \text { open } \\ & \text { ing. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | 是 | 2 | 3 | 4 |
| 1 | Auburn | Alabama Polytechnic Institute | State | 18\%\% |
| 8 | Fort Collins, | Colorado Agricultural College | State | $18 \% 9$ |
| 3 | Golden, Colo | State School of Mines. | State | 18\% 4 |
| 4 | Storrs, Coun | Connecticut Agricultural College ---------- | State | 1881 |
| 5 | Atlanta, Ga | Georgia School of Technology -----------.-- | State | 1883 |
| 6 | Chicago. Ill | Armour Institute of Technolog |  | 1893 |
| 7 | La Fayette. In | Purdue University | Sta | $18 \% 4$ |
| 8 | Terre ETante, Ind | Rose Polvtechnic Institute.---------------- |  | 1883 |
| 9 | Ames, Iowa | Iowa State College of Agriculture and Mechanic Arts. | State------ | 1868 |
| 10 | Manhettan, Ka | Kansas State Agricultural College .-......... | State. | 1863 |
| 11 | Annapolis Md. | United States Naval Academy --. | Nation | 1845 |
| 12 | Amherst. Nass | Massachusetts Agricultural College.-.----- | State. | 1867 |
| 13 | Boston, Mass. | Massachusetts Institute of Technology------ | State | 1865 |
| 11 | Worcester, Dass -------. | Worcester Polytechnic Institute -..... - .-. - |  | 1868 |
| 15 | AgliculturalCollege, Mich | Wichigan Agricultural College | Stat | 183 \% |
| 19 | Houghton, Mich | Michigan College of Mines | State | 1885 |
| 17 | AgriculturalCollege, BISs. | Mississippi Agricultural and Mechanical College. | State | 1880 |
| 18 | Westside, Miss | Alcorn Agricultural and Mechanical College. | State | 18\% |
| 19 | Bozeman, Mont | Montana College of Agriculture and Mechanic Arts. | State. | 1893 |
| 20 | Durham, N.H | New Hampshire Coliege of Agriculture and Mechanic Arts. | State. | 186\% |
| 21 | Hoboken, N. | Sterens Institute of Technology |  | 18.1 |
| $2 \cdot$ | Newark, N.J |  | City | 1885 |
| 23 | Mesilla Park, N. Mex | New Mexico College of Agriculture and Mechanic Arts. | Terxitory-- | 1891 |
| 24 | Socorro, N. Mex | New Miexico School of Mines. ---------------- | Territory - | 1893 |
| \% ${ }^{\text {a }}$ | Potsdam, N. Y | Clarkson School of Technology | -orritory-- | 1896 |
| 26 | Troy, N.Y | Rensselaer Polytechinic Institute *---------- |  | 1832 |
| 22 | West Point, N. Y | United States Military Acarlemy .--.-. -- -- |  | 1812 |
| 28 | Greensboro, N.C | Agricultural and Męchanical College for the Colored Race. | State. | 188\% |
| 29 | West Raleigh, N. C----.--- | Worth Carolina College of Agriculture and Mechanic Arts. | State. | 1889 |
| 30 | Agricultural College, N. Dat. | North Dakota Agricultural College .-....... | State - - | 1891 |
| 31 | Cleveland, Ohio-............. | Case School of Applied Science .-......-...- |  | 1881 |
| 32 | Stillwater, Okla | Oklahoma Agricultural and Mechanical College. | Territory- | 1891 |
| 33 | Colvallis, Oreg | Oregon State Agricultural College --..-...-- |  | 18\%0 |
| 31 | Kingston, P. I.-...-------- | Rhode Island College of Agriculture and Mechanic Arts. | State. | 1890 |
| 30. | Charleston, S.C | South Carolina Military Academy-.-...- | State | 1813 |
| 36 | Clemson College, | Clemson Agricultural College --... | State | 1893 |
| 37 | Brookings, S. Dak | South Dakota Agriculturai College | State | 1881 |
| 38 | Rapid City, S. Dak------ |  | State | 1887 |
| 39 | College station, Tex...... | Agricultural and Mechanical College of Texas. | State. | 18.6 |
| 40 | Logan, Utah | Utah Agricultural College ---.....----.---.- | State | 1890 |
| 41 | Blacksburg, Va | Virginia Agricultural and Mechanical College. | State | $18 \%$ |
| 42 | Lexington. Va | Virginia Military lnstitute | State | 1839 |
| 43 | Pullman, Wash | Washington Agricultural College....-...-...- | State. | 189\% |

[^34]of schools of technology．

| Professors and instructors． |  |  |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Prepara－ tory de－ partment． |  | Collegiate depart－ ment． |  | Total number （exclud－ ing dupli－ cates）． |  | Prepara－ tory de－ partment． |  | Collegiate depart－ ment． |  | Graduatedepartment． |  |  |  | Total num－ ber（ex－ cluding du－ piicates）． |  |  |
|  |  | Resi | ent． |  |  | $\begin{aligned} & \text { Yon } \\ & \text { de } \end{aligned}$ | esi- <br> t． |  |  |  |  |  |
| 咢 |  |  |  | $\underset{\text { 栄 }}{\stackrel{y}{*}}$ | $\begin{aligned} & \text { ó } \\ & \text { 島 } \\ & \text { 苟 } \\ & \text { En } \end{aligned}$ |  |  | $\stackrel{\text { ® }}{\stackrel{\text { ® }}{\sim}}$ |  |  | $\begin{aligned} & \dot{9} \\ & \text { 骨 } \\ & \text { g } \\ & \text { E. } \end{aligned}$ |  |  | ¢ |  |  |  | 盛 | 岸 |  |
| 3 | 6 | ${ }^{7}$ | 8 | 5 | 㗊 ${ }^{3}$ | 县通 | 12 | 显是 | 目 | 15 | 13 | 18 | 自楽 | R 43 | 23 |  |
| 1 | 0 | 29 | 0 | 30 | 0 | 38 | 0 | 283 | 17 | 16 | 2 | 0 | 0 | $33 \%$ | 19 | 1 |
| 0 | 1 | 29 | 2 | 29 | 3 | 31 | 14 | 171 | 64 | 0 | 0 | 0 | 0 | 259 | 9.5 | 2 |
| 0 | 0 | 11 | 0 | 11 | 0 | 0 | 0 | 135 | 0 | 0 | 0 | $\bigcirc$ | 0 | 185 | 0 | 3 |
| 0 | 1 | 10 | 1 | 10 | 2 | 9 | 3 | 55 | 24 | 0 | 0 | 0 | 0 | 64 | 27 | 4 |
| 5 | 0 | 15 | 0 | 20 | 0 | 100 | 0 | 232 | 0 | 0 | 0 | 0 | 0 | $33: 2$ | 0 | 5 |
| 13 | 2 | 23 | 2 | 32 | 3 | 300 | 200 | 200 | 0 | 0 | 0 | 0 | 0 | 500 | 650 | 6 |
| 0 | 0 | 58 | 6 | 58 | 6 | 0 | 0 | 618 | 69 | 25 | 29 | 15 | 0 | 658 | 91 | 7 |
| 0 | 0 | 20 | 0 | 20 | ${ }^{0}$ | 0 | 0 | 109 | 0 | 0 | 1 | 3 | 0 | 103 | 0 | 8 |
|  |  | 50 | 17 | 50 | 17 | 95 | 34 | 480 | 120 | 13 | 2 | 0 | 0 | 588 | 156 | 9 |
| 4 | 2 | 29 | 10 | 33 | 1.3 | 90 | 20 | 460 | 261 | 24 | 16 | 0 | 0 | 574 | 297 | 10 |
| 0 | 0 | 56 | 0 | 56 | 0 | 0 | 0 | 280 | 0 | 7 | 0 | 0 | 0 | 287 | 0 | 11 |
| 0 | 0 | 19 | 0 | 19 | 0 | 0 | 0 | 129 | 0 | 10 | 0 | 1 | 0 | 140 | 0 | 12 |
| 0 | 0 | 163 | 2 | 163 | ？ | 0 | 0 | 1，11\％ | 47 | 6 | 0 | 0 | 0 | 1，2\％ | 47 | 13 |
| 0 | 0 | 30 | 0 | 37 | 0 | 0 | 0 | 236 | 0 | 1 | 0 | 0 | 0 | ： 236 | 0 | 14 |
| 0 | 0 | 37 | 6 | 37 | 6 | 0 | 0 | 435 | 93 | 0 | 0 | 0 | 0 | 435 | 93 | 15 |
| 0 | 0 | 19 | 0 | 19 | 0 | 0 | 0 | 110 | 0 | 1 | 0 | 0 | 0 | 117 | 0 | 16 |
| 4 | 0 | 16 | 0 | 20 | 0 | 80 | 0 | 176 | 10 | 5 | 0 | 0 | 0 | 231 | 10 | 17 |
| 12 | 0 | 8 | 0 | 20 | 0 | 280 | 10 | 27 | 0 | 0 | 0 | 0 | 0 | 307 | 10 | 18 |
| 0 | 2 | 11 | 6 | 11 | 8 | 109 | 30 | 23 | 17 | 0 | 0 | 0 | 0 | 138 | 8 r | 19 |
| 5 | 0 | 20 | 0 | 21 | 0 | 8 | 0 | 101 | 9 | 2 | 0 | 0 | 0 | 111 | 9 | 20 |
| 10 | 0 | 22 | 0 | 30 | 0 | 147 | 0 | 214 | 0 | 0 | 0 | 0 | 0 | 361 | 0 | 21 |
| 1 | 0 | 9 | 0 | 10 | 0 | 35 | 0 | 1 18 | 10 | 0 | 0 | 0 | 0 | 175 | 10 | 23 |
| 1 | 4 | 1.3 | 2 | 15 | 6 | 101 | 45 | 18 | 21 | 3 | 0 | 0 | 0 | 145 | 67 | 23 |
| 1 | 1 | 1 | 0 | 3 | 1 | 45 | 18 | 5 | 0 | 0 | 0 | 0 | 0 | 50 | 18 | 21 |
| 0 | 0 | 7 | 1 | 7 | 1 | 0 | 0 | 57 | 103 | 0 | 0 | 0 | 0 | 57 | 100 | 25 |
| 0 | 0 | 15 | 0 | 15 | 0 | 0 | 0 | 138 | 0 | 0 | 0 | 0 | 0 | 138 | 0 | 23 |
| 0 | 0 | 52 | 0 | $5 \%$ | 0 | 0 | 0 | 231 | 0 | 0 | 0 | 0 | 0 | 231 | 0 | 27 |
| 3 | 2 | 10 | 1 | 10 | 2 | 47 | 35 | 41 | 11 | 0 | 0 | 0 | 0 | 88 | 49 | 28 |
| 1 | 0 | 26 | 0 | 27 | 0 | 29 | 0 | 208 | 0 | 15 | 0 | 0 | 0 | 252 | 0 | 29 |
| 9 | 3 | 20 | 3 | 20 | 3 | 88 | 40 | 86 | 19 | 3 | 1 | 0 | 0 | 1\％ | 60 | 30 |
| 0 | 0 | 80 | 0 | 20 | $0$ | 0 | 0 | 210 | 0 | 10 | 0 | 0 | 0 | 250 | 0 | 31 |
| 1 | 1 | 13 | 2 | 14 | 3 | 81 | 41 | 64 | 26 | 2 | 2 | 0 | 0 | 147 | \％${ }^{2}$ | 32 |
| 0 | 0 | 19 | 5 | 19 | 5 | 0 | 0 | 199 | 133 | 7 | 8 | 0 | 0 | 197 | 141 | 33 |
| 3 | 2 | 16 | 7 | 16 | 7 | 23 | 3 | 81 | 36 | 0 | 0 | $!$ | 4 | 132 | 51 | 34 |
| 0 | 0 | 8 | 0 | 8 | 0 | $\bigcirc$ | 0 | 111 | 0 | 0 | 0 | 0 | 0 | 111 | 0 | 3.5 |
| 5 | 0 | 21 | 0 | 29 | 0 | 183 | 0 | 257 | 0 | 3 | 0 | 0 | 0 | 446 | 0 | 36 |
| 6 | 0 | 10 | 4 | 16 | 4 | 91 | 35 | 220 | 75 | 9 | 4 | 0 | 0 | 320 | 11.4 | 57 |
| 6 | 1 | 8 | 0 | 8 | 1 | 15 | 12 | \％3 | 0 | 0 | 0 | 0） | 0 | 38 | 1.2 | 38 |
| 0 | 0 | 21 | 0 | 21 | 0 | 0 | 0 | 350 | 0 | 4. | 0 | 0 | 0 | 356 | 0 | 39 |
| 3 | 1 | 19 | 3 | 20 | $3$ | 248 | 91 | 90 | 47 | 2 | 1 | 0 | 0 | 340 | 139 | 40 |
| 0 | 0 | 29 | 0 | 29 | 0 | 0 | 0 | 296 | 0 | 7 | 0 | 0 | 0 | 303 | 0 | 41 |
| 0 | 0 | 19 | 0 | 16 | 0 | 0 | 0 | 250 | 0 | 2 | 0 | 0 | 0 | 258 | 0 | 42 |
| 4 | 3 | 23 | 3 | 23 | 5 | 76 | 23 | $10 \%$ | 61 | 2 | 2 | 0 | 0 | 185 | 115 | 43 |

Table 43.-Statistics of schools

|  |  |  |  |  |  |  | $\dot{\square}$ |  | dibrary |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Name. | pen ${ }_{\text {inc }}$ | ses <br> lle- <br> te <br> art- <br> nt. | Ann liy ex pen | $\begin{aligned} & \text { ual } \\ & \text { ing } \\ & \text { x- } \\ & \text { ses. } \end{aligned}$ |  |  |  |  |  |
|  |  | $\begin{aligned} & \dot{8} \\ & \text { © } \\ & \text { E } \\ & \text { B } \\ & \text { En } \end{aligned}$ |  | $\begin{aligned} & +i \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & H \end{aligned}$ |  | $T_{0}^{T O} \operatorname{TOquIn}_{N T}$ |  | $\begin{aligned} & \dot{2} \\ & 0 \\ & \text { O} \\ & \text { O} \\ & 0 \\ & \beta \end{aligned}$ |  | $\begin{aligned} & \stackrel{9}{7} \\ & \stackrel{\text { n }}{10} \end{aligned}$ |
|  | 1 | 2 | 3 | 4 | 5 | 6 | \% 7 | 8 | 9 | 10 |
| 1 | Alabama Polytechnic Institute | a |  |  |  |  |  |  | 1,706 |  |
| $\stackrel{1}{2}$ | Colorado Asricultural College |  |  | 120 | 180 | 0 | 0 | 10,000 | 1,000 | 10, 752 |
| 3 | (Colorado) State School of̂ Min | 30 |  | 189 | 850 | 0 | 0 | 3, 950 | 810 | 11, 780 |
| 4 | Connecticut Agricultural College | 0 | 0 |  |  | 0 | 0 | 6,55, |  | 10, 000 |
| 5 | Georgia School of Technology ... |  |  |  |  |  | 1 | 5 5\% |  | 1,000 |
| 6 | Al'mour Institute of Teclinology |  |  |  |  |  | 6 | 18,000 |  |  |
| 7 | Purulue University |  |  | 150 |  | 0 | 0 | 8,950 | 3, 000 | 15,500 |
| 8 |  |  |  |  | 300 | 0 |  | 9,020 | 2,000 | 17.000 |
| 9 | Iowa State College of Agriculture and Mechanie Arts. | 0 |  |  |  | 0 | 0 | 12, 460 | 2,000 | 50,000 |
| 10 | Kansas State Auricultural College....-.-....... |  |  |  |  |  |  | 19,425 | 14, 600 | 33,219 |
| 11. | United States Naval Academy- |  |  |  |  |  |  | 40,000 |  | 40,000 |
| 12 | Massachusetts Agriculturai College | 80 |  | 115 | 145 | 1 | 150 | 19,300 | 11,121 | 19,000 |
| 13 | Massachusetts Institute of Technol |  |  |  |  |  |  | 46, 711. | 14,121 | 100,000 |
| 14 | Worcester PolytechnicInstitate | 180 |  | 150 | 200 |  | 66 | 5, 500 | 3,000 | 10,040 |
| 15 | Michigan Agricultural College. |  |  | 12. | 150 |  |  | 21,000 | 5, 010 | 42, 125 |
| 16 | Michigan Coliege of Mines..-. | d 2 |  | 17! | 190 |  | 3 | 14, 210 | 2,100 | 37, 270 |
| 17 | Mississippi Agricultural and Mechanical College. | a 0 |  |  | \% 5 |  | 1 | 6,709 | 7,893 | 8,864 |
| 18 | Alcor'n Agricultural and Mechanical College. - |  |  |  |  |  |  | 3, 000 | 5,00? | 4,000 |
| 19 | Montana College of Agriculture and Mechanic Arts. |  | 10 | 150 |  |  |  | 3,761 | 3, 000 | 10,000 |
| 20 | New Hampshire College of Agriculture and Mechanic Arts. |  |  |  | 123 |  | 54 | 6,300 | 4,000 | 6,600 |
| 21 | Stevens Institute of Technology |  |  | 200 | 280 |  | $2 \cdot 1$ | 9,500 |  | 18,000 |
| 20 | Newark 'Technical School |  |  |  |  |  |  | 830 |  | $\stackrel{2}{2}, 000$ |
| 3 | New Mexico College of Agriculture and Mechanic Arts. | 0 |  | 150 | $\therefore 50$ | 0 |  | 3,490 | 1,500 | 7,500 |
| 24 | New Mexico School of Mines......-.-...-. --. --. |  |  |  |  |  | 0 | 250 | 290 | 409 |
| 5 | Clarkson Śchool of 'iechnology | 80 |  | 110 | 150 |  |  | 735 | 1,023 | 2,051 |
| 26 | Rensselaer Polytechnic Institute* | 200 |  | 190 | 300 | 0 | 0 | 6,500 | 1,506 | 10,000 |
| 27 | United States Mrilitary Aeademy ------------ | 0 |  | 180 |  |  |  | 43,011 | 7,030 |  |
| 88 | Agricultural and Mechanicel College for the Colored Race. |  |  |  |  |  |  | 7 m | 2,200 | 1,000 |
| 29 | North Carolina College of Agriculturo and Mechanic Arts. |  |  | 180 | 150 |  |  | 2,400 |  | 2,500 |
| 30 | North Dakota Agricultural College. |  |  | 110 | 150 |  |  | S,000 | 2,500 |  |
| $31$ |  | 100 |  | 144 |  |  |  | 2,000 | 1,000 | 5.0000 |
| $32$ | Oklahoma Agricultural and Mechanical College. | , |  | \% |  |  |  | 4,598 | 3,500 | 7,500 |
| 33 | Oregon State Agiricultural College - --.------ |  |  | 100 | 150 |  |  | 4,000 |  | 5,000 |
| 4 | Rhode Island College of Agriculture and Mechanic Arts. |  |  | 174 | $\because 0$ |  |  | 7,830 | 7,500 | 12,302 |
| 35 | Soutli Carolina Military Academy .............. |  |  |  |  |  |  | 5, 009 | 400 | 5,000 |
| 36 | Clemson Agricaltural College .... |  |  | 100 |  | , |  | 3,500 | 1,000 | 5,000 |
| 37 | South Dakota Agricultural Colleg | 12 |  | 145 | 200 | 0 | 0 | 5, 900 | 10,000 | 10,000 |
| 38 | (South Dakota) State School of Mines |  |  | 150 | 250 |  |  | 500 | 200 | 800 |
| 39 | Agricultural and Mechanical College of Texas. |  |  | 135 |  |  |  | 5,009 | 3,500 | 5,500 |
| 40 | Utah Agricultural College |  |  |  | 90 |  |  | 6,941 | 4,310 | 8,000 |
| 41 | Virginia Ampiculturaland Machanical College |  |  | 165 | 200 |  | 200 | 3, 100 | 1,000 | 4, 000 |
| 42 |  |  |  | 125 | 125 |  |  | 9, 914 | 3,997 | 25,000 |
| 43 | Washington Agricultural College |  |  |  |  |  |  | 3, 530 | 2,036 | 5,000 |

* Statistics of 1897-98.
of tecinnology-Continued.

|  | r <br> ๘ <br> 号 <br>  $$ |  | Income. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | - $\Delta!70$ npound mox | $\begin{gathered} \text { State or municipal ap- } \\ \text { propriations. } \end{gathered}$ |  |  | $\begin{aligned} & \text { تi } \\ & \text { Ti } \\ & \text { B } \end{aligned}$ |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 8 |  |  |  |
|  |  |  |  |  |  |  | $\begin{aligned} & 7 \\ & 0 \end{aligned}$ |  |  |  |
|  |  |  |  |  |  |  | $2$ |  |  |  |
|  |  |  |  |  |  |  | 和 |  |  |  |
|  |  |  |  |  |  |  | g |  |  |  |
|  |  |  |  |  |  |  | O |  |  |  |
|  |  |  |  |  |  |  | 4 |  |  |  |
| IR | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 23 |  |
| \$80,000 | 8140, 000 | \$253, 500 | 0 | \$30,280 | 80, 4.33 | 928, 384 | \$7, 683 | 862, 660 |  | 1 |
| 74,413 | 178,875 | 68, 612 | 0 | 3, 53: | 37, 966 | 39,000 | 5,950 | 86, 448 | 0 | 2 |
| 64, 000 | 123, 000 | 0 | 0 | 0 | 38,000 | 0 | 0 | 38,000 | ${ }^{\circ}$ | 3 |
| 7, 770 | 150, 000 | 135,000 | ${ }^{0}$ | 6, 750 | 15,000 | 81,500 | 60 | 53,310 | come 0 | 4 |
| 65, 000 | 150,000 | 0 | \$4,000 | 0 | 25,000 | 0 | - 0 | 29,000 | 827, 5090 | 5 |
|  | 1,500,000 |  | 30,000 |  |  |  | \%0, 000 | 100,000 | 750, 000 | 6 |
| 289,000 | 353, 000 | 340,000 | 16,788 | 17,000 | 61,525 | 39,000 | 23, 69 | 181,033 | 6,000 | \% |
| 100,000 | 200,000 | 600, 000 | 8,000 | 32,000 |  | 0 | 0 | 40,000 |  | 8 |
| 180,000 | 475,000 | 68: 833 | 3, 2f6 | 47, 178 | 30, 213 | 39,000 | 0 | 119,64\% | 0 | 9 |
| :230, 142 | 213,572 | 502, 813 |  | 27,640 | 15,750 | 39,000 | 15,91\% | 98, 397 |  | 10 |
| 100, 600 | \%95, 83 | 0 | 0 | 0 | 0 | 998, 171 | ${ }^{6}$ | 998, 171 |  | 11 |
| 9,613 | 259, 775 | 360,575 | 840 | 10,633 | 30, 900 | 81,000 | 3, e62 | 75, 54.4 |  | 12 |
| 200, 000 | 635,000 | $2,449,393$ |  |  | 25, 000 | 8,009 |  | 331,035 |  | 13 |
| 90, 000 | 500,000 | 610,000 | 28,000 | 34,000 | 3,000 | 0 | 0 | (00., 000 | 10,000 | 14 |
| 15\%, 3\%\% | 826, 80 | 694, 000 |  | 50,403 | 8,500 | 39,000 | 1\%, 8,99 | 115, 783 |  | 15 |
| 121, 683 | 190,496 | 0 | 7,787 | 0 | 42,000 | 0 | 0 | 49, 787 | 0 | 16 |
| 33, 243 | 1\%6,210 | 98,575 | 140 | 5,915 | 20,500 | 26, $15 \%$ | 12,308 | 65,616 |  | 17 |
| 65, 000 | 65,000 | 98,575 |  | 5,515 |  | 12, 847 |  |  |  | 18 |
| 40, 000 | 130,000 | 5,000 | 3, 000 |  | 12,000 | 39,000 | 0 | 51,000 |  | 19 |
| 50, 50¢ | 204,516 | 41,800 |  | 4, 800 | 5,500 | 39,000 | 239, 698 | 71,993 |  | 20 |
| 55, 000 | 2500,000 | 500, 000 | 32,000 | 20, 000 | 0 | 0 | 5,000 | 57,000 | 50,500 | 21 |
| 8,000 | 75, 000 | 0 | 615 | 0 | 10,000 | 0 | 0 | 10,615 | 1,000 | 28 |
| 35, 000 | 62,000 | 0 | 1,006 | 0 | 4,193 | 39, 000 | 328 | 44, 5:9 | 0 | 23 |
| 1,500 | 45,000 |  | 315 | 0 | 4,796 | 0 | 0 | 5,111 |  | 24 |
| 28,636 | 1*0, 189 | 300, 000 | 2,790 | 15,000 | 0 | 0 | 6 | 17, 700 | 96 | 23 |
| 20.911 | 185, 000 | 141,765 | 25,760 | 6,511 | 0 | (120 6 | 401 | 3.2,682 |  | - |
|  | - --. | 0 |  | 0 |  | 4.5, 689 | ${ }^{6}$ | 458.689 |  | 27 |
| 18,002 | 47,200 |  |  |  | 7,500 | 8, 414 | 241 | 16, 155 |  | 28 |
|  | 103, 054 | 125,000 |  | 7,500 | 10,000 | 15, 536 | 4. 131 | 37,220 |  | 29 |
| 18,000 | 117,000 | 0 | 338 | 0 | 27,700 | 39,002 | 4,608 | \%1, 646 | 0 | 30 |
| 200,000 | 500, 000 |  |  |  |  |  |  |  |  | 31 |
| 37,000 | 30, 64 |  |  |  | 7,504 | 39,000 | 2,243 | 48,743 |  | 32 |
| 17,500 | 106,509 | 137,306 |  | 4,090 | 26,584 | 39, 0in | 18,802 | 83,386 |  | 33 |
| 91, 230 | 182,650 | 50,000 | 0 | 2,500 | 10, 000 | 39,000 | 0 | 56, 500 |  | 34 |
| 5,000 | 85, 000 | 0 | 17,100 | 0 | 20,000 | () | 0 | 37,100 |  | 35 |
| 88, 713 | 232, 280 | 154.439 |  | 5, 754 | 5\%,000 | 2\%,000 | 5, 382 | 95, 2886 |  | 36 |
| 9,000 | 93, 000 | 0 |  | 0 | 8,500 | 33,000 | 8,278 | 55, 778 |  | 37 |
| 9,000 | 24,000 |  | 268 | 141 | 7, 700 | U | 145 | 8, 25 |  | 38 |
| 40,689 | 347,305 | 209,030 | 0 | 14,280 | 27, 500 | 33,000 | O | 74, 780 |  | 39 |
| 40, 869 | 167, 800 | 0 |  | 0 | 13,750 | 39,00 | 7, 55.3 | 60, 303 |  | 40 |
| 72,000 | 148,000 | 344, 312 | 9, 020 | 20, 659 | 15, 600 | 31,000 | 7,983 | 83, 592 |  | 41 |
| 50, 000 | 250, 100 | 20, 000 | 10, 0t0 | 1,200 | 30, 000 |  | 0 | 41, 200 |  | 4. |
| 55,000 | 115,000 | 0 |  |  | 118, 735 | 39, 000 | 2,554 | 155, $89:$ |  | 43 |

Table 44.-Technical, professional, and special courses of study maintained by miversities, colleges, and schools of technology.

| Iustitutions. | $\frac{0}{4}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 4 \end{aligned}$ | Civil engincering. | Electrical engineering. | Trechanical engineering. |  |  | $\stackrel{\dot{E}}{\stackrel{\rightharpoonup}{H}}$ | $\begin{aligned} & 6 \\ & \text { B } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  | Domestic science. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| alabina. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Alabama Polytechnic Institute | x |  | $\times$ | $x$ | $\times$ | $\times$ |  |  |  |  |  | $\times$ | $\times$ |  |  | $x$ |  |  |  |
| Howard College .......-...... |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  | x |  |  |  |
| Lafayette College |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | x |  | $\times$ |
| Lineville College. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |
| St. Bernard College |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  |  |  |  | $\times$ | $\times$ | $\times$ |
| Spring Hill College - .-. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  | $\times$ |
| University of Alabama |  |  | $\times$ |  |  | $\times$ | -- | $\times$ |  | $\times$ |  | $\times$ |  |  |  | $\times$ |  |  |  |
| ARIzONA. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| University of Arizo | x |  | $\times$ |  | $x$ | $x$ |  |  |  |  |  |  |  |  |  | x |  |  | x |
| AITKANSAS. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Arkaülp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |
| Ouachita College . |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  | $\times$ |  |  | $\times$ |
| Arkansas Coilege -..... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |
| Arrinsas Cumberland College |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hendrix College. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |
| University of Arkaisas | $\times$ |  | $x$ | x |  |  |  | $\times$ |  | $\times$ |  |  |  |  |  | $\times$ |  |  |  |
| Philander' Smith College ............. |  |  |  |  |  |  |  |  | x |  |  |  |  | $x$ | $\times$ |  | $\hat{x}$ |  | $\times$ |
| califorinia. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| University of California | $\times$ |  | x | $\times$ | $\times$ | $x$ | $\times$ | $\times$ |  | $\times$ | $\times$ | $\times$ | $\times$ | $\times$ |  | $\times$ |  |  | $\times$ |
| Pomona College . |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ |  |  |
| University of the Pacinio |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |
| Occidental College.. |  |  |  |  |  | - |  |  |  |  |  |  |  | $\times$ |  |  |  |  |  |
| Colifornie College |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |
| Throop Polytechnic Instituto |  |  |  | $\times$ |  |  |  |  |  |  |  |  |  | $\times$ | $x$ |  |  |  |  |
| Santa Clara College ........... |  | - |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ | ¢ | x |
| Pacifo Mothodist College.....-....- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  | $\times$ |
| Ieland Stanford Junior University University of Southerm California. |  |  |  | $\times$ | $\times$ | $\times$ | -- | $\times$ |  |  | $x$ |  |  |  |  |  |  | $\times$ |  |
| COLORADC. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | $\times$ | $\times$ |  |  | -- | $\times$ |  | $\times$ | $\times$ |  |  |  |  |  |  |  |  |
| Colorado College ....... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| College of the Sacred Heart |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |
| Colorado Agricultural Colleg | $\times$ |  | $\times$ |  | $\times$ |  |  |  |  |  |  |  |  |  | $\times$ | $\times$ |  |  | x |
| Colorado school of Mines. University of Denver..... |  |  | $\times$ | $\times$ |  | $\times$ |  | x | $x$ | $x$ | $x$ |  |  | x |  |  |  | X |  |
| Connecticut. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\times$ |  | $\times$ | $\times$ | $\times$ |  |  | $x$ | $\times$ | x |  |  |  |  |  |  |  | $x$ |  |
| Connecticut Agricultural College.- | $\times$ |  |  |  |  |  |  |  |  |  |  |  | x |  | ${ }^{-\times}$ | $\begin{aligned} & x \\ & x \end{aligned}$ | x |  |  |
| delamare. |  |  |  |  |  |  | - |  |  |  |  |  |  |  |  |  |  |  |  |
| State College for Colored Students | $\times$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| district of coivumbia. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Catholic University of America |  |  | $x$ | $\times$ | $\times$ |  |  | $x$ | $\times$ |  |  |  |  |  |  |  |  |  |  |
| Columbian University.- |  | $x$ | $\times$ | $\times$ | $\times$ |  | - | $\times$ | --. | $\times$ | $\times$ | --- | X | .- | -- |  |  | $\times$ | -- |
| Georgetown mill miversity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  | $\times$ |  |
| Howard University | $\times$ |  |  |  |  |  |  | $\times$ | X | $\times$ | $\times$ | $\times$ |  | x |  |  | $\times$ |  |  |
| St. John's College...-................... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |
| FLORIDA. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tohn B. Stetson University |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  |  |
| Florida Agricultural College... | $\times$ |  |  | x | $\times$ |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |  |
| Florida Conference College .-...... |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |
| St. Leo Military Collego-- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | $\times$ |  |  |
| Seminary West of the Suwance River |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rollins Colleg |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

TABLE 44.-Technical, professional, and special courses of study maintained by universities, colleges, and schools of technology-Continued.


Table 44．－Technical，professional，and special courses of study maintained by universities，colleges，and schools of technology－Continued．

| Institutions． | $\begin{gathered} 0 \\ 0 \\ 0 \\ = \\ 0 \\ 0 \\ 0 \\ 4 \end{gathered}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 4 \end{aligned}$ |  | 號 |  |  |  |  | $\stackrel{\stackrel{\rightharpoonup}{c}}{\underset{y}{\mid}}$ |  |  |  |  | Voterinary medicine. |  |  |  |  |  | ｜ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| mindan terkitory． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Indian Territory |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  | $\begin{aligned} & x \\ & x \end{aligned}$ |  |  |
| IOWA． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Iowa Agricultural College |  |  | x | $\times$ | $\times$ | x |  |  |  |  |  |  |  | x |  | x | $x$ | $\times$ |  |  |
| Coo College ．－－－．．．．．．．－．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ |  |  |
| Charles City Collego |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ |  |  |
| Amity College． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ | ＜ | K |
| Luther College |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |
| Des Moines Cullege |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |
| Drake University |  |  |  |  |  |  |  |  | $x$ | $\times$ | $\times$ |  | X |  | x |  |  | $\times$ | $\times$ |  |
| Parsons College |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |
| Upper Iowa Eniversity |  |  |  |  |  |  |  |  |  |  | － |  |  |  | $\times$ |  |  | $\times$ |  |  |
| Lenox College． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ |  |  |
| Iowa College． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ |  |  |
| Simpson College－．－－－．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ |  |  |
| State University of Iowa |  |  | $\times$ | $\times$ |  |  |  |  | $\times$ |  | 冫 | x | $\times$ |  | $\times$ |  |  |  |  |  |
| Graceland Collego |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ |  |  |
| Iowa Wesleyan University |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ | $\times$ |  |
| Cornell College． |  |  | X |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  | $\times$ | $\times$ |  | K |
| Pemn College |  |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  |  |  |  |  |  |  |
| Central College |  |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  | X |  |  | $\times$ |  |  |
| Morningside College |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  |  |
| Brena Vista Coilege． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  | $\times$ | $\times$ |  |  |
| Tabor College |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |
| Western College |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ |  |  |
| hanste． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Midand College |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ | x |  |
|  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  |  |  |  |  |  |  |
| Baker University |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $x$ |  | $\times$ | $\times$ | $\times$ |  |
| Soule College． Collece of Tmpor． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \hat{x} \\ & x \end{aligned}$ |  |  |  |  | －$\times$ |
| Highland University |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |
| Campbell University |  |  |  |  |  |  |  |  | X |  |  |  |  |  | X |  |  | x |  |  |
| Kansas City Unirersity |  |  |  |  |  |  |  |  |  | $\times$ | $\times$ |  |  |  | x |  |  | x |  |  |
| University of Kansas ．－ |  |  | $\times$ | $\times$ | － | $\times$ |  |  | － |  | $\times$ |  | $\times$ |  | X |  |  | ¢ | X |  |
| Lane University－． |  |  |  | $\chi$ | $\times$ | － |  |  |  | － | ， |  | x |  | $\times$ |  |  | x |  |  |
| Pethaņ College－－－－－－－－．－．－．－． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  |  |
| Kansas State Agricultural College | $\times$ |  |  | $\times$ | $\times$ |  |  |  |  |  |  |  |  |  |  | ＜ | $\times$ |  |  |  |
| Ottawa University－．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ |  |  |
| St．Mary＇s College－－－．．．－－－－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kansas Wesleyan University |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Cooper Memorial College． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  |  |
| Washburn Collego－．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Fairmount College－－．－．－．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |
| St．John＇s Iutieran College |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Southwest Kansas College．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ | $\times$ | －$\times$ |
| kentuchy． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Union College |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |
| Berea Coliege ． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ | － |  | $\times$ |  |  |
| Centre College－i．．． |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  |  |  |  |  |  |  |  |
| Georgetown College |  |  |  |  |  |  |  |  | X |  |  |  |  |  |  |  | X | X | 入 |  |
| Liberty College－．－．－．－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ | $\times$ |  |
| South Kentucky College |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  | $\times$ | $\times$ |  |
| Agricultural and Mechanical Col－ lege of Kentucky | $\times$ |  | X | $\times$ | $\times$ |  |  |  |  |  |  |  |  |  | X |  |  |  |  |  |
| Fentucky University－． |  |  |  |  |  |  |  |  |  | x | $\times$ |  |  |  | $\|x\|$ |  |  |  |  |  |
| Central University |  |  |  |  |  |  |  |  | $\times$ |  | $\times$ | $\times$ |  |  |  |  | $\times$ |  |  |  |
| St．Mary＇s College－．－－－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ | $\times$ | $\times$ |  |
| Kentucky Wesleyan College．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| louisiana． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Louisiana State University． <br> Jefferson College | $\times$ |  | $\times$ | －－ | $\times$ |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ |  |  |  |
| Keatchie College ．－．－．－．－－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |
| College of the Immaculate Concep－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 44.-Technical, professional, and special courses of study maintained by universities, colieges, and schools of technology-Continued.


Table 44.-Technical, professional, and special courses of study maintained by universities, colleges, and schools of technology-Continued.


TABLE 44.-Technical, professional, and special cousses of study maintained by universities, colleges, and schools of technology-Continued.


TAELE 44．－Tcchnical，professional，and special courses of study maintained by universities，colleges，and schools of technology－Continued．

| Institutions． |  |  |  |  |  | Mining enginecring. |  |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & E \end{aligned}$ |  | $\begin{gathered} 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{gathered}$ |  |  | $\begin{gathered} 80 \\ 0 \\ 0 \\ 0 \\ \text { O } \\ 0 \\ 0 \end{gathered}$ |  |  |  | a － － |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| omio－－continued． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Findlay Colloge |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  | x |  |  | 入 | $\times$ | $\times$ |
| Konyon College |  |  | $\times$ |  |  |  |  |  | $\times$ |  |  |  |  |  |  | K |  |  |  |
| Denison Universit |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | x | $\times$ | x |  |
| Hiram College． |  |  |  |  |  |  |  |  | $\times$ | $\times$ |  |  |  | X |  |  | $\times$ | $\chi$ | x |
| Lima College |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ |  | $\times$ |
| Marietta Colleg |  |  | $\times$ |  |  |  |  |  |  |  |  |  |  | $\chi$ |  |  | x | x |  |
| Franklin Colleg |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ | $\times$ | X |
| Muskingum Colleg |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ | $\times$ |  |
| Oberlin College |  |  |  |  |  |  |  |  | X |  |  |  |  | X |  |  | $\times$ | $\times$ |  |
| Richmond Colego |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ | x | $\times$ |
| Rio Cryande Collego |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  | $\times$ |  |  |
| Scio College－－． |  |  |  |  |  |  |  |  |  |  |  | x |  | $\times$ |  |  | $\times$ | ＜ | X |
| Wittenberg College |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  | $\times$ |  |  | $\times$ | × |  |
| Heidelbere University |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  | $\times$ |  |  | $\times$ | ＜ | × |
| Otterbein University |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ | $\times$ |  |
| Wilberforce University |  |  |  |  |  |  |  | $\times$ | $\times$ |  |  |  |  | $x$ | $\times$ | $x$ | x |  | $\times$ |
| Wilmington College－－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ | X |  |
| University of Wooster |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ | $\times$ |  |
| Antioch College．．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ | $\times$ | $\times$ |
| OKLAHOMA． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| University of Oirlahoma．．－．．．－ |  |  |  |  |  |  |  |  |  | X |  | X |  |  |  |  | $\times$ |  |  |
| Oklahoma Agricultural and Me－ chanical College | $\times$ |  |  |  | $\times$ |  |  |  |  |  |  |  | X |  |  |  |  |  |  |
| OREGON． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Albany College |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  | × | $\times$ |
| Oregon $\Lambda$ cricultural College | $\times$ |  | $\times$ | x | $\times$ | －－ | － |  |  |  |  | $\times$ | $\times$ |  | $\times$ | $\times$ | $\times$ |  |  |
| University of Oregon－－－－－－ |  |  | $\times$ | $\times$ |  | $\times$ |  | $\times$ |  | X |  |  |  |  |  |  | x |  |  |
| Pacific University－ |  |  |  |  | －－－ |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |
| Lafayetto Simmary |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  | $\times$ |
| McMinntille College |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ | $\times$ | －－ |
| Pacific College．－．．．－ |  |  |  |  |  |  |  |  | $x$ |  |  |  |  |  |  |  | $\times$ |  |  |
| Philomath Coliego．－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ | $\times$ | $\times$ |
| Willamette University－－－－－－－－－－－－ |  |  |  |  |  |  |  | $\times$ | $\times$ | $\times$ |  |  |  | $\times$ |  |  | ＜ | $\times$ | $\times$ |
| PENNSYLVANTA． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western University of Pennsyl－ rania |  |  | $\times$ | $\times$ | $\times$ | $\times$ |  | $\times$ |  | $\times$ | $\times$ | $\times$ |  |  |  |  |  |  |  |
| Mulur nberg Collega |  |  |  |  |  |  |  |  |  |  |  |  |  | ＜ |  |  |  |  |  |
| Lebanon Valley College |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  | X | $\times$ | －－ |
| St．Vincent College－－．－ |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  |  |  |  | $\times$ |  | $\times$ |
| Beaver College ．－．－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ | ＜ | $x$ |
| Geneva College． |  |  |  | －－ |  |  |  |  |  | －－ |  |  |  |  |  |  | $\times$ | $\times$ | －－ |
| Moravian College |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  | X |  |  | $\times$ |  |  |
| Bryn Mawr Collego |  |  |  |  |  |  |  |  |  |  |  |  |  | x |  |  |  |  |  |
| Dickinson Collego－－．－－－－－－－－－ |  |  |  |  |  |  |  | $\times$ |  |  |  |  |  | 入 |  |  |  |  |  |
| Pennsylvania Miliatary Collego |  |  | $\times$ |  |  |  |  | 入 |  |  |  |  |  | 入 |  | $\times$ |  |  |  |
| Ursinus College－－－－－－－－－－－．．．－ |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  | $\times$ |  |  | x | X |  |
| Lafayette College |  |  | $\times$ | $\times$ |  | $\times$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Pennsylvania College |  |  |  |  |  | －－ |  |  |  |  |  |  |  | $\times$ |  |  |  |  | $\times$ |
| Thiel College－．－．－． |  |  |  |  |  |  |  |  |  |  |  |  |  | X |  |  | $\times$ |  | $\times$ |
| Grove City College |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  | －－ | $\times$ | $\times$ | $\times$ |
| Haverford Coilege |  |  |  |  | $\times$ |  |  |  |  |  |  |  |  |  |  |  | 入 |  |  |
| Juniata College－－ |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  | $\times$ |  |  | $\times$ |  | x |
| Franklin and Marshall College |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  |  |  | $\times$ |  |  |  |
| Bucknell University |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ | X |  |
| Lincoln University |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  |  |  |  |  |  |  |
| Allegheny College． |  |  | $\times$ |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  | －－． |
| Albright College ．－ |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  | $\times$ | $\times$ | $\times$ |
| Central Pernsyivania Collego |  |  |  |  |  |  |  |  | $\times$ |  |  |  |  | $\times$ |  |  |  |  | $\times$ |
| Westminster College－－－－－－－－－－－－－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ | $\times$ | －－ |
| Central 1 ioh School（ Philadelphia） |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  |  |  | $\times$ | $\times$ |
| La Salle College－－－－－－－－－－－－－－－－－－－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |
| University of Pennsylvania |  | $\times$ | $\times$ | $\times$ | $\times$ |  |  | $\times$ |  | X | 次 |  | $\times$ | $\times$ |  |  | $\times$ | $\times$ | $\times$ |
| Holy Ghost College．－－．．．．－ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\times$ |  | $\times$ |
| Susquehanna University |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 44.-Technical, professional, and special courses of study maintained by universities, colleges, and schools of technology-Continued.

- |  |
| :---: |
| Institutions. |

Lehigh University
Pelmsylvania Stato College
Swarthmore College
Villanova College.
Volant College
Washincton and Jeferson College
Waynesburg College.
RHODE ISLAND.
Coilege of Agriculture and Mechanic Arts.
Brown University
south carolina.
Clemson Agricaltural College
Presbyterian College of South Carolina.

| Agriculture. |
| :--- |
| Architecture. |
| Civil engineering. |

Allen University
South Carolina College
Erskine College
Furman University
Clafin Unirersity.

## SOUTII DAKOTA.

South Dakota Agricultural College
Rlack Hills College
Huron College
Dakota University
South Dakota School of Mines
Redfield College.
University of South Dakota
Yankton College
TENNESSEE.
U. S. Grant University

King College
Southwestern Presbyterian University
American Temperance University.
Southwestern Baptist University .
Knoxville Coilege
University of Temnessee.
Cumberland University
Bethel College.
Maryville College
Christian Brothers College
Milligan College
Carson and Newman College
Central Tennessee College
Fisk University
Roger Williams University
University of Nashville
Vanderbilt Univer'sity.
University of the South
Burrite College
Sweetwater College.
Greeneville and Tuscrilum College
Washington College....................
TEXAS.
St. Edward's College
University of Texas.
Howard Payne College
Henry College.
Agricultural and Mechanical Col-
lege of Texas

Tabie 44.-Technical, professional, and special courses of study maintained by umiversities, colleges, and schools of technology-Continued.


## CHAPTER XXXVIH.

PROFESSIONAL SCHOOLS.

The number of theological students enrolled during the year 1898-99 was 8, 201 , a decrease of 110 since the previous year. During the last four years there has been an increase of only 211 in the number of theological situdents, or less than 3 per cent. During the same time the increase in the number of law students was nearly 33 per cent. The number of students in law was always less than the number in theology until the year 1891-93, but since that time the number of law students has increased rapidiy.
The number of medical students enrolled was 23,48 , an increase of 345 over the previous year, the students in regular schools numbering 21,401; in homeopathic schools, 1,802; in others, 575. All of the medical schools which give full courses of instruction report that they have courses of four years except in schools, and some of these are preparing to entor upon courses of four years. In 43 schools the annual session continues eight months or longer, 12 of these schools having sessions of nine months. In several medical schools the time of attendance now required in one year is equal to the whole time of attendancerequired for a degree twenty years ago.
Dental students numbered 9,354 , an increase of 580 , while strdents in pharmacy numbered 3,551 .
During the ten years from 1889 to 1809 the number of students in theology increased 18 per cent; in pharmacy, 26 per cent; in homeopathic medicine, 55 per cent; in regular medicine, 75 per cent; in law, 204 per cent; and in dentistry, 301 per cent.

Table 1.-General summary of statistics of professional and allied schools for 1898-99.

| Class of schools. | Schools. | Instruct- ors. | Students. | Increase $(+)$ or decrease (-) | Graduating. | Per cent gradtaating. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Theological | 163 | 995 | a 8, 201 | - 110 | 1, \%14 |  |
| Law.-... | 93 | 086 | b 11, 804 | + 259 | 3, 140 | 26 |
| Medical. | 151 | 4,389 | 20, 778 | + 315 | 4,911 | 21 |
| Derital.... | 50 | 948 | \%, 35 | + 580 | 1,987 | 27 |
| Pharmaceutical | 51 13 | 44, | 3, 315 | $-\quad 161$ $-\quad 10$ | 1,230 | 3.3 |
| Nurse training. | 393 |  | 10,018 | +1,213 | 3,182 | 31 |

TABLE 2.-Summairy of schools and students, by divisions.

| Division. | Theology. |  | Law. |  | Medicine. |  | Dentistry. |  | Phar' macy. |  | Veteri-narymedicine. |  | Nurse training. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \dot{n} \\ & \text { on } \\ & 0 \\ & \text { on } \\ & \text { in } \end{aligned}$ |  | $\begin{aligned} & \dot{3} \\ & \text { o } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \dot{N} \\ & \text { N } \\ & \text { H } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & \dot{\sim} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & H \end{aligned}$ | N + H 0 0 0 0 0 |  |  | $\dot{n}$ 0 0 0 0 0 0 | in in 0 0 0 0 0 0 | $\begin{aligned} & \dot{2} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \sim \end{aligned}$ |  | $\begin{aligned} & \text { n } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |
| North Atiantic. | 49 | 2,950 | 18 | 4,058 | 26 | 6,614 | 9 | 2,108 | 10 | 1,268 | 5 | 158 | 215 | 5,586 |
| South Atlantic. | $2 \%$ | 1,067 | E1) | 1,60\% | 22 | 2,971 | 9 | 909 | 8 | 283 | 1 | 16 | 31 | 522 |
| South Central. | 17 | 9508 | 17 | 720 | 21 | 3, 715 | 5 | $5: 9$ | 9 | 234 | 0 | 0 | 10 | 15 |
| North Central | 65 | 3,406 | 36 | 5,022 | 71 | 9,586 | 29 | 3, 339 | 20 | 1,639 | 5 | 136 | 114 | 3, 261 |
| Western. | 10 | 180 | 7 | 460 | 11 | 862 | 5 | 469 | 4 | 127 | 2 | 6 | 23 | 497 |
| United States | 163 | 8,261 | 96 | 11, 8.4 | 151 | 23, 778 | 50 | 7,354 | 51 | 8,551 | 19 | 316 | 393 | 10,018 |



Comparative number of sudents at different periods.

Increase in the number of clental students.-A diagram is given (p.1679) showing the rapid increase in number of dental students in the United States as compared with the number in other professions. In the report of the provost of the University of Pennsylvania this increase is mentioned, as well as the proposed methods of limiting admissions, and it is given as the opinion of the dean of the dental school that a course of four years in dentistry must be adopted. The provostsays:
Only two years have elapsed since the completion of the new building for this department. When the plans for this buiiding were studied, it was proposed to provide for instruction for a maximum number of 500 men. At the end of the first year the maximum capacity oif the school had been reacheci.

Three methods of limiting admissions are mentioned:
They involve higher entrance requirements, or the increase of the feo-now a very moderate one-or both. * \% \% It is the view of the dean that the curriculum of the school is at present too full to be fairly covered within three years; and that as all of the branches of study which are recognized as fundamental to the study of general medicine are fundamental subjects in dentistry, the dental curiculum must be so enlarged as to include such subjects. The only solution of this aim would be the establishment of a four years' course.

A literary degree required for admission to a law school. - At a meeting of the trustees of Columbia University, New York, held January 9, 1899, it was-

Resolved, That on and after June 30, 1903, admission to the law school be limited to students who have already taken their first degree.

Table 3.-Theological schools and studeuts, by denominations.

| Denomination. | Schools. | Students. | Value of grounds and buildings. | Enhowment funds. $a$ | $\begin{aligned} & \text { Volumes } \\ & \text { in } \\ & \text { libraries. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Catholic | 25 | 1,994 | \$0, $75.3,816$ | \% $8001,75 \%$ | 250, $5 \frac{4}{4}$ |
| Presbyterian | 29 | 1,448 | 3,019,283 | 6, 311,808 | 428,650 |
| Northern | 13 | 899 | $2,671,283$ | 4,974, 178 | 279.076 |
| Southern | 5 | 191 | 293,070 | 6\%5, 000 | 51,000 |
| United Presbyterian | 2 | 104 | 130,020 | 415, 000 | 10.503 |
| Associate Reformed | 1 |  |  | 35, 030 | 2,601 |
| Cumberan (Alleghenv Pa. | 1 | 20 | 30,000 | $8{ }^{82}, 000$ | 3, 503 |
| Reformed Church in United States- | 4 | 118 | 100, 000 | 195, 000 | 2\%, 50 |
| Reformed Church in America---.-- |  |  | 360,009 | 410,090 | 50.095 |
| Baptist | 14 | 1,186 | 1,461,921 |  | 189,608 |
| Methodist. | 25 | 1, 183 | 1,605,900 | 1,228,890 | 93, 32.5 |
| Methodist Episcopal | 19 | 970 | 1,545, 000 | 1,159, 800 | 90,625 |
| Methodist Protestant ---- | 3 | 74 | 10,009 | 4,000 | 3,000 |
| African Methodist Episcopal | 1 | 35 | 13,000 |  | 2,200 |
| United Brethren ${ }^{\text {b }}$ | 1 | 45 | 38,009 | 65,009 | 3-000 |
| Lutheran | 23 | 984 | 1,419,500 | 57, 628 | 79,609 |
| Congregational. | 12 | 499 | 1,446,000 | 8,372,909 | 175,080 |
| Protestant Episcopa | 13 | 409 | 2,392,887 | 2,373,090 | 132, 344 |
| Disciples | 5 | 238 | 15,000 | \%7,076 | 1,682 |
| Christian | $\stackrel{2}{2}$ | 81 | 27,000 | ¢87,990 | 2,984 |
| Jewish | $\stackrel{3}{2}$ | 113 | 48,000 | 31,098 | 16,789 |
| Universalist | 3 | 49 | 50,009 | 35.9,000 | 18,500 |
| Evangelical Associa | 1 | 24 | 59.700 | 888.006 | 28,609 |
| Moraviaa | 1 | 11 | 100, 000 | 110, 683 | 1,596 |
| Swedenborgian | 1 |  | 63,393 | 124,157 | 2,000 |
| Nonsectarian. | 3 | 113 |  | 40,000 | 30,410 |
| Total | 163 | 8,261 | 15,043,993 | 19, 230,086 | 1,400,658 |

$a$ So far as reported.
$b$ This is an indepondent body: according to the United States Census Feport of 1890 , however, "in doctrine, practice, and asage the United Brethren are Methodistic, and they send ropresentatives to the ecumenical Methodist conferences."

THE HARVARD MEDICAL SCHOOL.
The report of the president of Harvard University for 1898-97 mentions several gifts or lequests in which the medical school is either interested directly or is aided in the full accomplishment of its purposes. From the estate of Mrs. Caro-
line Brewer Croft was received a bequest of $\$ 100,000$, less $\$ 7,9 \pi 5$, the amount of the legacy taxes paid in England. The income is to be used in researches for the cure of cancer and other similar diseases.

Mr. James Stillman, of New York City, gave to the corporation $\$ 100,000$ wherewith to build an infirmary and purchase the land necessary therefor.

An interesting endowment came into the possession of the corporation from an anonymous source at the end of Jannary, 1899. Its object was the establishment. of a professorship of hygiene for the benefit of the students of Harvard College. The gift monnted to nearly $\$ 159,000$; but the whole income of this fund is not yet available. The object of the giver is to provide the students of Harvard College with a medical friend competent to give them the best advice, winning in his nature, and devoting himself chiofly to the physical and moral welfare of the undergraduates at Cambridge. * * *
The corporation also determined on another large use of the Pierce bequestnamely, for the promotion of instruction in comparative medicine-but in three separate sums; $\$ 100,000$ as the foundation of a new professorship to bear his name, $\$ 100,000$ for a medical labonatory building to bear his name, and $\$ 100,000$ as an ondowment for the laboratory.

Table 4.-Comparative statistics of professional and allied schools.

| Class. | $18 \% 0$. | $18 \%$. | 1880. | 1885. | 1890. | 1985. | 1300. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Theology: |  |  |  |  |  |  |  |
| Schools | $\begin{array}{r} 80 \\ 3,251 \end{array}$ | 5, ${ }_{\text {2 }} 123$ | 5, $\begin{aligned} & 142 \\ & 542\end{aligned}$ | 5 | 145 7.013 | 8149 |  |
| Graduates |  | \% ${ }^{\text {\% }}$ | $\checkmark 19$ | \% 90 | 1, 3 \% | 1, 598 | 1, 114 |
| Law: |  |  |  |  |  |  |  |
| Schools | $1, \stackrel{28}{633}$ | 43$\sim .67 \%$883 | 483,184 | 49 | $\begin{array}{r}54 \\ +518 \\ \hline\end{array}$ | 8, $\%$ \% | - $\begin{array}{r}96 \\ 11,84\end{array}$ |
| Students.- |  |  |  | 2,741 |  |  |  |
| Graduates |  |  | 1,059 | $\cdots$ | 1,421 | 2,417 | 8,140 |
|  |  |  |  |  |  |  |  |
| Sthons........... | -1919 | 8,580 | 11,029 | 11,003 | 15.489 | 21, 151 | 23, ${ }^{151}$ |
| Graduates |  | $\therefore 201$ | 3, 241 | 3, 6.9 | 4,556 | 4, ¢2. | 4,311 |
| Medicine (regular): |  |  |  |  |  |  |  |
| Sturasts | 5,0\% | \% $\%$ \% 518 | 0,8\% ${ }^{\text {m }}$ | 0,441 | 13,51 | 18,650 | 21,401 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Schools-- |  | 11 | 12 | 12 | 11 | 20 |  |
| Students. | 275 | 664 | 1,230 | 1,683 | 1,164 | 1,875 | 1, 003 |
| Dentistry: |  |  |  | 34. | 380 | 453 |  |
|  |  |  |  | 18 | $8 \%$ | 45 | 50 |
| Students. | 250 | 469 | 780 | 1,116 | 2,696 | 5, 34. | \%.3\% |
| Graduates |  | 151 | 236 | 458 | 443 | 1,28\% | 1,40\% |
| Pharmacy: |  |  |  |  |  |  |  |
| Schools - |  |  |  |  | ${ }^{30}$ | ${ }^{39}$ | 5 |
| Studeuts | 51. | $\stackrel{92}{20}{ }_{\sim 0}^{2}$ | 1,34? | 1, 413 | 2,871 | . 3,889 | 3, ${ }^{3}$ |
| Veterinary medicine: |  |  |  |  |  | 1,05، |  |
| Schools .-.-....... |  |  |  |  | 7 | 9 | 13 |
| Stucerits. |  |  |  |  | 463 | 42 | 315 |
| Graduates |  |  |  |  |  |  | 100 |
| Nurse training: |  |  |  |  |  |  |  |
| Schools .- |  |  |  |  |  | 731 | 333 |
| Students... |  |  | $3 \times 3$ | 793 | 1,51 | 3,985 | 10.013 |
| Graduates |  |  | $15 \%$ | 218 | 43 | 1,408 | 3,1c2 |

The Calvin Eltis bequest to Harvard medical school. ${ }^{1}$ - It has recently been mado known that the estate of the late Calvin Ellis has become available for medical purposes. The estate amounts to nearly $\$ 400,000$, and by the wish of the testator its income is to be devoted to the advancement of the departments of anatomy, physiology, and pathology at the Harvard medical school. Dr. Enlis was at one t'me dean of the Harvard medical school, and for many years one of its most distinguished clinical professors. He felt what others have also felt but been unable to express materially, that teachers of nonclinical subjects do not receive a just

[^35]reward for their services. The first provision of his bequest therefore was that the professors of the several departments mentioner be paid $\$ 5,000$ a year, which had already been done, and then the income remaining be made available for the development of the three fundamental branches of medicine-anatomy, physiology, and pathology.
Conld the benefactor have foressen the exact lines in which medicine was destined to develop he cou'd not have given more wisely, for the great need of the present, and it will be a constantly increasing need as time goes on, is endowment for the maintenance and growth of laboratories and the cultiration of research, which the existence of such Jaboratories implies. It is hardly possible that he could have fully realized the enthusiasm for research which was so soon to lead to the development of what we popularly call "scientific medicine," though it had already begun during the later years of his life. Be that as it may, the becuest is a most notable one, coming as it does from a man who, although himself personally interested in the clinical side of medicine, yet had the breadth of vision to see that the fature needs of medical education would requise that which money alone can give in the development of its more theoretic aspects. In President Eliot's words when the amouncement was made, "Could pecuniary resources possibly be more timely, and could there be a more delightful benefactor of the advancement of medical science than Calvin Ellis?"


Per cent of increase in uumber of students.
[Based on students' statements.]

| Items. | Low. | Average. | Liberal. |
| :---: | :---: | :---: | :---: |
| Matriculation fee (first year) | 55 | 95 | 85 |
| Tuition tee.---- | 20 | $\bigcirc 00$ | 200 |
| Books | 15 | 30 | $40+$ |
| Collego incidentals |  | 15 | $50+$ |
| Room (3) weeks) | 48 | 119 | $160+$ |
| Board ( ${ }^{\text {d }}$ weeks) | 112 | 128 | $192+$ |
| Clothes and washing | 35 | \% | $1 \%+$ |
| All other expenses. | 15 | 25 | $100+$ |
| Total | 430 | 590 | $872+$ |

${ }^{1}$ Taken from the announcement for 1892-1300 of the College of Physicians and Surgeons, Columbia University, in the city of New York.

No mention is made in the statement of traveling expenses in going to and from the stadent's home, at iten of considerable importance to many students. In most schools, to , there is an examination or diploma fee of $\$ 25$ or $\$ 30$.
In the medical department of the University of Michigan, ${ }^{1}$ located at Ann Arkor, " the totalamount of fees paid to the university during the whole four years' course, for matriculation, incidental expenses, material used, and diploma, is for Michigar students about $\$ 300$, and for others about $\$ 355$. " "Students obtain board and lodging in private families at from threo to five dollars a week."
In the announcement for 1899-1900 of the medical department of the University of Iowa, located at Iowa City, the necessary yearly expenses are given as follows:
Tuition fee, which includes all miversity charges except laboratory

Breakage -....................................................................................... 1 to 2
Room rent, six months ...................................................................... 12 to 48
Board, twenty-six weei-s .............................................................. 52 to 78

Boəks........................................................................................... 12 to 20

If we entimate tho other expenses at same figures as in first estimate we will have, in addit:on:

Clothes and washing - .................................................................... 85 to 125


It should be noted that the length of the session here is given at twenty-six weeks, while it is much longer in some schools.

AGE OF GRADUATES IN MEDICINE.
The dean of the meaical school of the University of Pennsylvania (Dr. John Marshall) comments on the length of time required for completion of a medical course:
The arerage age of those members of the class possessing collegiate degrees was 22.6. Adding four years, which is the duration of the course in medicine, the age would be brought up to 26.6 years, and assuming that after graduation the
graduate should spend at least a year or longer as resident physician in a hospital, the age would be brought up to at least $2 \% .6$, or practically 28 years. This, it seems to me, unduly defers the time when a man should begin his professional career. 'Ihree remedies have suggested themselves to me:

First. That the colleges granting academic degrees decrease their requirements for admission, so that students may begin their studies in college at an eariier age in life; or,

Second. Complete the college course for an academic degree in three years, and confer the degree at the end of three years; or

Third. Let colleges which grant academic degrees arrange so that a stadent who purposes studying medicine and who has spent the freshman, sophomore, and junior years in the college, may enter an approved medical school, and at the end of the course in medicine, when the candidate shall have received his degree in medicine, he be granted the bachelor's degree by the college in which he pursued his academic studies. In support of the suggestion that the collegiate course of those students who propose pursuing professional studies be limited to three years, I may cite the practice in Germany, where the certificate (zeugniss) of a gymnasium, which may be considered as certifying that the holder had pursued courses of study about equivalent to the first three years of the course in arts in an American college of stading, is accepted as evidence of the possessor having pursued a conese of stady to warrant his beginning courses of professional study leading to a degree in any university in Germany.

The president of Harvard says in his report for 1898-39, p. 10:
The common attainment of the degree of bachelor of arts in three years is certainly approaching. No specific legislation will be needed to accomplish this important change, for any yonng enan of fair abilities can now procure the degree in threo years without hurry or over work it he wishes to do so or if his parents wish to have him. That this wish is felt by an increasing number of students and paronts is demonstrated in the table repeated from the report of last year. In eight years the proportion of the graduates of the year who were credited in three years with sixteen or more courses (the number necessary for the degree in Harvard) has risen firom less than one-fourth of the whole number to very nearly two-fifths.

The president oif Columbia University, New York, says: ${ }^{1}$
The privilege of shortening the combined college and professional course by counting the first year in the professional schools as a partial fulfllment of the requirement for the bachelor of arts degree is not open to atudents who enter Columbia College later than the beginning of the junior year.

The New York Medical Record of March 10, 1300, says:
In response to an appeal by college presidents to admit to the second year of the medical course graduates qualified in the branches taught in the inst year of the course, the Pennsylvania State Medical Council adopted the following resolution:
"Resolved, That in the judgment of the council, when the medical course of a literary college, as proven by the examination of the student by the medical college, covers the entire worls of the first year of actual medical stuãy, such course may be accredited by the medical college as the first year of medical study required. by law."

FRAUDULENT DIPLOMAS.
The Journal of thẹ American Meảical Association, October, 1890, says:
The supreme court of Illinois, on the $16 t h$ instant, revoked the charter of the Independent Niedical College of Chicago. After obtaining further proof cf the wholesale sale of diplomas by this instimution, the attorney-general brought suit in the circuit court of Cook County to have the charter of the "college" revoked. After hearing the evidence the court, on February 15, 1899, entered a judgment of ouster. The "faculty" of the college made no defense, but took an appeal to the sapreme court simply to gain time. The decree of the circuit court has not apparently interfered with the sale of diplomas. Indeed, the "faculty" has earnestly endeavored to confer as many degrees as possible, and so "lowered the scale of prices" and gave degrees for practice in Michigan, Kansas, Texas, and elsewhere to all who applied and paid. The sale has continued to the present. Early in the month the state board of health purchased one in Fort Worth, Tex., for \$20. The transaction, however, was arranged in Champa"gn, Ill., through a
licensed physician, whom the board has since summoned to appear and show cause why his certificate should not be revoked for unprofessional and dishonorable conduct. The "physician" in this case, whom the college required to "show evidence of qualifications," was a young law student, of whom the sole requirement demanded was a tender of the necessary fee in advance. Recently the "faculty" began to see ahead the parting of the ways, and in August the institution became affiliated with the Metropolitan Medical College, another legally chartered medical coilege, the charter being issued by the secretary of state under the provisions of the act of 18i2. * * *
Under the provisione of a statute which became in force July 1, 1899, the attor-ney-general may file a bill in chancery in the name of the people of the State of illinois against any corporation authorized to confer degrees, diplomas, or other certificates of qualifications in the science of medicine, pharmacy, or dentistry which conducts a iraudulent business, or abuses, misuses, or violates the terms of its charter, in any court having jurisdiction of the corporation and subject-matter of such bill, for an injunction to restrain said corporation from conducting its business fraudulently or abusing, misusing, or violating the terms of its charter, and also for the dissointion of said corporation, "and therempon it shall be the duty of the court in which said bill is filed to grant such injunction and to hear and determine the same as in other cases in chancery. And provided further, that this act shall apply to schools, colleges, or universities which now or may hereafter be licensed in this State, notwithstanding any provisions that may exist in their charters."

The supreme court had no hesitation in saying thatit fully justified the finding and judgment of tho court below. In fact, it was sufficient to establish the guilt of the defendant, as charged in the information, beyond a reasonable doubt, and would have justifed not only the forfeiture of the charter, but the infliction of a fine on the parties guilty of the abuses. Therefore the judgment of the circuit court was affirmed.
In the same journal, July 8, 1899:
The business done by the Chicago diploma mills is well illustrated by the fact that the county clerk's official records of physicians in one Michigan town are found to include the names of 23 who claim as their alma mater the notorions Independent Medical College. This may be an extreme case; the diploma-mill graduates may have gravitated for some reason or other especially to that locality, but it is certainly suggestive of possibilities elsewhere.

There are still a few States and Territories in which, according to the wording of the law, anyone holding a diploma from "any legally chartered " school of medicine or dentistry, without regard to the character of its instruction, is allowed to practice his profession. It is this that gives value to the diplomas of fraudulent but legally chartered schools.
The following notice is taken from the Washington Post of June 5, 1900:
Chicago, June 4--Government officers to-day invaded the Metropolitan Medical College, an alleged "'diploma mill;" and arrested its officers. The men are charged with having used the mails to defraud, and it is said their receipts amount to many thousands of dollars. They were taken before United States Commissioner Humphrey and the hearing of the charges against them set for June 14. Failing to give suitable bonds, all four went to jail.

The institution with which the defendants are connected is also known as the IndependentMedical College and the NationalLaw School, and the evidence shows that its faculty has been selling degrees for the practice of medicine and law at prices ranging from $\$ 3$ to $\$ 200$, the compensation being determined by the amount the would-ke profess:onal men were willing to adrance.

Post-Office Inspector Gould, who made the arrest after accumulating a lot of documentary evidence, says the fraud is one of the largest the postal authorities have ever had to deal with, and that the "graduates" of the institution are practicing in every Stake, and even abroad. He says frequent complaints of malpractice have been made aga:nst the holders of the diplomas of the institution. Regular medical colleges and law institutions in all parts of the United States have been fighting the officers of the "diploma mill" for several years in vain, and up to the time the men were arrested it is said they were "graduating" their subscribers at the rate of a dozen each day.

Inspector Gould induced a friend to write to the Metropolitan Medical College for information. The institution offered to give a full course in medicine and a degree for $\$ 200$, and shorter terms of study for smaller amounts.

Inspector Gould has a bunch of unsigned certificates of practice for the State of Texas, and he says the name of the district clerk is forged to these for an extra compensation. Texas is said to have been the most fertile field for the "graduates" of the institution.

The British consul has made repeated efforts to run the Metropolitan fasulty out of business, as Great Britain is said to have been flooded with their diplomas. It is said that dozens of "graduates" of the institution are practicing in India and in all parts of the world. The diplomas bear the names of the who'e faculty, but two girls declared they were employed to write these on all the degrees isstied. by the college.

A Texas diploma mill, calling itself the "New York Nedical College," was organized and incorporated last November and has just been permanently closed by the State authorities. It appears to have been the project of an enterprising firm composed of a man and his wife, who associated with themselves certain other individuals-or at least their names-and proceeded to make M. D.'s, after the approved Armstrong \& Co. method. * * *

How many would-be M. D. s have been "decorated" by this concerm in its brief but enterprising career is unknown to us, but Texas anpears to have been a good field for the Chicago bogus diploma dealers. According to an editorial in the Texas Medical News, from which journal we take the above facts, there were registered in Tarrant County, Texas, alone, 20 diplomas from Chicago's "Independent Medical College," out of a total of 41 in 1898, 115 out of 149 in 1899, besides 14 from the "Metropolitan Medical College"-now in trouble-and 2 from the "International Health University." From fankary 1 till April 12, 1900, there were 29 diplomas registered altogether, and of these 20 were from the Metropolitan and 2 from the "Independent Medical College." 1

At the meeting of the National Association of Dental Faculties in 1898 it was -
Resolved, That the committee on foreign relations be instructed to use its utmost diligence in ferreting out frraudulent or irregular colleges, and the granting of degrees irregularly by recognized colleges, should this be done, and to leave undone nothing within their power to bring to justice institutions granting irregular degrees or degrees irregularly.

## VETERINARY MEDICINE.

The provost of the University of Pennsylvania says in his report as to the veterinary school:

There appears to be as yet very little public understanding of the importance of veterinary science, and without such understanding the necessary public financial support is entirely lacking. Veterinary science is usually considered as having for its sole object the cure of the diseases of animals. While this is a matter of humanitarian and economic ralue, and one to which most careful attention is and should be given, it is by no means of so much importance as some other parts of this science. The protection and improvement of the domestic animals are factors of veterinary work that are of far-reaching importance. * * *

Veterinary science stands between this enormous industry and epizootic disease. The magnitude of the losses occasioned by contagious diseases of animals, and the importance of providing thorough training in veterinary science, are illustrated by comparatively recent occurrences in England. It is conservatively estimated that the losses caused by epizootics among cattle in Great Britain during the thirty years ending in $18 \pi_{0}$ amounted to at least $\$ 450,584,270$ (Fleming), and in 1872 one disease alone caused losses amounting to $\$ 76,000,000$. All of these diseases (lung plague, cattle plague, foot and mouth disease) are now under control, and one has been completely eradicated. In this country hog cholera has caused losses amounting to $\$ 35,000,000$ in one year. Texas fever, by destroying cattle and impeding traffic in southern cattle, caused losses that are estimated at $\$ 25,000,000$ each year. Tuberculosis prevails extensively in the Eastern States, and causes annual losses aggregating many millions. It is believed that in Pennsylvania diseases that should be prevented destroy at least $\$ 6,000,000$ worth of live stock every year. * * *

In Germany the breeding interests are aided by experts, most of whom are veterinarians. This direction and assistance have resulted in many districts in making animals from 25 per cent to 50 per cent more productive and valuable without increased cost of production-solely by the application of the teaching of a part of veterinary science.

Table 5．－Summary of statistics of schoois of theology for 1838－99．

| States． | $\begin{aligned} & \dot{\sim} \\ & \stackrel{8}{8} \\ & \text { B } \\ & 0 \end{aligned}$ |  | Students． |  |  | Value of grounds and build－ ings．$a$ | Endow－ ment funds．$a$ | Benefac－ tions <br> received during the year． | Volumes in libra ries． |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | تِ |  |  |  |  |
| United States | 163 | 996 | b， 2601 | 1，\％14 | 2，669 | 315，043， 997 | \＄19，330，066 | \＄583，455 | 1，460，658 |
| North Atlantic Division | 49 | 882 | 2，950 | 694 | 1，423 | 7，967，048 | 12，042，030 | 338， 397 | 753， 674 |
| South Atlantic Division | 22 | 138 | 1，168 | 200 | 117 | 1，629，316 | 2，025，346 | 55， 108 | 191，100 |
| South Central Division． | 17 | 83 | 658 | 133 | 142 | 793，000 | $877.08{ }^{3}$ | 11， 550 | 67． 8 \％ 0 |
| North Central Division． |  | 318 | 3，406 | 664 | 939 | 4，232， 133 | 3，916， 607 | 156，651 | 342.057 |
| Western Division ．．．．．．． | 10 | 45 | 180 | 23 | 48 | 417，009 | 469， C 00 | 18，750 | 48,951 |
| North Atlantic Division： <br> Maine |  | 13 | 63 | 20 | 25 | 100，000 | 265， 000 |  | 24， $25 \%$ |
| Massachuset | 8 | 69 | 464 | 104 | 138 | 1，605，190 | 1， $730,9 \% 2$ | 50， 53.3 | 69， 993 |
| Conneoticat | 3 | 40 | 180 | 46 | 159 | 701， 877 | 1．170， 779 | 20，554 | 107， 090 |
| New Yurk | 14 | 114 | 978 | 168 | 395 | 3，012， 131 | 4，198， 537 | 158， 173 | 210，$\%$ 9 |
| New Jersey | 5 | 37 | 473 | 132 | 270 | 1，346， 150 | 2，124， 111 | 8，855 | 156，024 |
| Pennsylvania．．．．．．．．．．． South atlautic Division | 17 | 109 | 792 | 214 | 412 | 1，202，900 | 2，552， 681 | 100，28： | 186， 100 |
| Maryland．．．．．．．．． | 0 | 62 | 519 | 94 | 27 | 660， 000 | 42， 000 | 3，C00 | \％4，0：0 |
| District of Columbia | 4 | $\because 4$ | 167 | 33 | 16 | 450， 816 | 503， 750 | 25， 100 | 18， 700 |
| Virginia | ， | 19 | 196 | 36 | 16 | 192， 000 | 6：39，593 | 19，108 | 41，400 |
| North Carolina |  | 11 | 50 | 12 | 19 | 140，000 |  |  | 24，500 |
| South Carolin | 3 | 15 | 37 | 10 | 30 | 87， 000 | 275，009 | 5，000 | 23，500 |
| Georgia ．．．．－－－．．．．．．． | 2 | 7 | 98 | 15 | 9 | 100， 000 | 5\％0，000 | 3，060 | 12，000 |
| South Central Division： Kentucky | 3 | 21 | 305 | 80 | 42 | 381，000 | 759， 000 | 8， 900 |  |
| Tennessee | 8 | 44 | $2: 9$ | 49 | 98 | 333， 000 | 110，083 | 5，000 | 26，000 |
| Alabama | ， | 12 | 5 | 8 | 1 | 14， 000 | 8，000 | 650 | 9，000 |
| Lonisiana | 1 | 3 | $\stackrel{23}{18}$ | 1 | 1 |  |  |  | 400 |
| Arkansas | 1 | 2 | 24 |  |  |  |  |  | 200 |
| Texas <br> North Central Division： | 1 | 1 | 5 | 0 | 0 | 8，000 | 0 | 0 | $2 \% 0$ |
| Ohio | 18 | 61 | 462 | 102 | 186 | 472，， 0 00 | 823，902 | 38， 5 5̌8 | 114， 257 |
| Indiana |  | 20 | 101 | 15 | 1 | 80,000 | 3，000 | 2，000 | 16，700 |
| Illinois | 15 | 104 | 1，17\％ | 281 | 492 | 2，254，683 | 2， 388,529 | 66， 530 | 108，600 |
| Michigan | 4 | 13 | 109 | 14 | 20 | ：0， 000 | 52，400 | 2，000 | 6，500 |
| Wisconsin | 4 | 28 | 309 | $4 \%$ | 27 | 150，000 | 120， 000 | 8，300 | 32， 500 |
| Minnesota | 9 | 45 | 380 | 83 | 26 | 520.000 | $412, \mathrm{C66}$ | 10，000 | 21，600 |
| Iowa | 5 | 18 | 216 | 39 | 16 | \％（0，500 | 91， 110 | 10， 463 | 9，500 |
| Missouri | 7 | 35． | 567 | 122 | 186 | 600，000 | 25， 060 | 12， 500 | 29，300 |
| Nebraska | 3 | 13 | 53 | 14 |  | 15， 000 |  | 6，000 | 2， 200 |
| Kansas－－－－ | 2 | 8 | $3{ }^{3}$ | 1 | 5 |  |  |  | 300 |
| Colorado． | 2 | 10 | 82 | 11 | 13 | 105， 000 | 100，000 | 9，000 | 14，000 |
| Oregon． | 3 | 12 | 58 | 0 |  | 7，000 | 4，600 | 1，000 | 1． 682 |
| California | \％ | 23 | 90 | 17 | 35 | 305， 000 | 385， 000 | 8， 350 | 27.275 |

TAbLe 6.-Summary of statistics of schools of law for 1898-99.

b16\% women included.

Table 7.-Summary of statistics of schools of medicine, dentistry, pharmacy, and for nurses, and veterinurians for the year 1898-93.

| States and classes. | $\begin{aligned} & \dot{9} \\ & \stackrel{8}{8} \\ & \dot{4} \\ & \text { in } \end{aligned}$ |  | Students. |  |  |  |  | Value of grounds and buildings. a | Endotrment funds. a | Volumes in <br> libra- <br> ries. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |
| A.-EY Classes. |  |  |  |  |  |  |  |  |  |  |
| Regular medical | 120 | 3,522 | 20,338 | 1.063 | 21,401 | 4,314 | 1, 879 | \$11, 012,229 | \$1,019, 273 | 87, 864 |
| Homeopathic ... | 21 | 036 | 1,487 | 315 | 1,802 |  | 193 | 1, 931,500 | 400, 600 | 38,280 |
| Eclectic ... | 6 | 131 | 45 | 48 | 500 | 152 | 57 | 162, 800 | 3,000 | 4,5\%8 |
| Physiomedical | 2 | 60 | 65 | 10 | 75 | 12 | 14 | 15, 000 |  | 200 |
| Total medical | 131 | 4,889 | 29,342 | 1,436 | 23, 778 | 4,911 | 2, 143 | 13, 121, 529 | 1,42:2, 873 | 139, 929 |
| Dental | 50 | 918 | 7,185 | 169 | 7.354 | 1,98\% | 300 | 740,500 | 109,000 | 4.802 |
| Pharmaceu | 13 | $15 \%$ | -316 | 10. | $\bigcirc 316$ |  | 214 | 5196, 050 | 10,66 | 23, 538 |
| Nurse truining ............ | 393 |  | 1,1i1 | 8,907 | 10,018 | 3,132 |  |  |  |  |
| b.-by states andClasses. |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| New Hampshire -.......... | 2 | 32 | 167 |  | 167 |  | 9 | 28,000 |  | 3, 200 |
|  | 1 | 17 | 131 | 0 | 131 | 25 | 16 |  | 1,000 |  |
| Vermont --..............-- | $\frac{1}{3}$ | -250 | 210 | 70 | ${ }_{91}^{212}$ | 69 126 | 68 | 30,000 | 25000 | 4,404 |
| Connecticut..............---New YorkPennsylvania | 1 | 25 | 109 | 0 | 109 | , |  |  | 106,006 |  |
|  | 8 | 360 | 2, 188 | 128 | 2,215 | 576 | 409 | $3,119,2$ | 12\%, CL | 12, $2 \cdot \overline{7}$ |
|  | 5 | 201 | 2,08\% | 150 | 2, 23 | 59 | 250 | 1, 455, 000 | 3:6, 76 | 10, 253 |
| Maryland District of Columbia | 7 | 180 | 1,086 | 58 | 1,144 | 201 | 252 | 1, 039, 000 |  | 3,384 |
|  | 4 | 114 | 426 | 19 | 445 | 59 | 30 | 90, ¢Ю0 |  | 810 |
| Virginia -..........---...- | 3 | 73 | 624 | 0 | 6.24 | 146 | 55 | 1555, 000 | 100,000 | - 500 |
| North Carolina <br> Sonth Carolina <br> Georgia | 3 | 23 | 168 |  | 168 | 5 | 5 | 19,000 | ¢, 000 | 1,200 |
|  | 1 | 17 | 95 | 2 | 97 |  |  | 30, 000 | 0 |  |
|  | z |  | 389 | 0 | 389 | 111 |  | 50, 000 |  | 3,200 |
| Kentucky <br> Temmessee <br> Alabama <br> Louisiana <br> Texas <br> Arkansas | 5 | 109 | 792 |  | \%92 | $12 \%$ | 43 | 415,000 |  | 3, 500 |
|  | 8 | 161 | 1,858 | 13 | 1,871 | 451 | 73 | $2 \tilde{3}, 660$ | 12,000 | 1, ico |
|  |  | ${ }_{21}^{21}$ | 238 392 | 2 | 238 392 | 88 | 21 | 200000 | 11,000 | 3. i 00 |
|  | 2 | 32 | 2.9 | 11 | 290 | 68 | 1. | 330,000 | 11,000 | 3.060 |
|  | 1 | 13 | 107 | 1 | 108 |  | 0 | 16,000 |  |  |
| Ohio ....--.-.-............. | 10 | 263 | 960 | 63 | 1,083 | $10 \%$ | $11 \%$ | 755, 000 | 175, 000 | 9,300 |
| Indiana ...-.-.-.-............. | 3 | 104 | ${ }_{0}^{249}$ | 15 | ${ }_{2}^{264 t}$ | 28 | 15 | 20,060 |  | 3,500 |
|  | 5 | 359 | 2,137 | 209 | 2,316 | 451 | 109 | \%00, 000 | 61,000 | 6,669 |
| Minois | 5 | 177 | 815 | $\pi 1$ | 886 | $1 \% 3$ | 110 | 155, 336 |  | 3,000 |
| Wisconsin | $\stackrel{2}{2}$ | ${ }_{86} 6$ | 199 | $\bigcirc$ | 199 | 29 | 10 | 202,090 |  |  |
| Iowa.... | 2 | 86 79 | 3.9 | $\stackrel{28}{31}$ | $\frac{407}{565}$ | 11 | 53 46 | 130,000 | 3.500 | 2,18, |
| MissouriNebraska | 13 | 380 | 1,984 | 36 | 2,120 | 6:1 | 109 | (630, 000 | 10,000 | 5,-00 |
|  | 2 | co | 182 | 13 | 195 | 26 | 25 | 120,000 |  |  |
| Kansas .-.-.................. | 3 | 71 | 133 | 35 | 168 | 35 | 19 | 15,000 |  | 225 |
| Colorado .-................ | 3 | 92 | 168 | 19 | 18\% | 37 | 20 | 20,000 |  |  |
|  | 2 | 39 | 69 | 15 | 84 | 12 | 22 |  |  | 1,000 |
|  |  | 130 | 449 | 74 | 523 | 107 | 83 | 675, 000 | 56,000 | 5,200 |
| North Atlantic Division South Atlantic Division South Central Division North Central Division. Western Division ......... | 21 | 830 | 5,6:8 | 34 | 5,976 | 1,3:3 | 758 | 4, 632, 293 | 585, 773 | 31, 12土 |
|  | 20 | 446 | 2,788 | 79 | 2, 868 |  | 342 | 1, 383, 000 | 105,000 | 9,084 |
|  | 20 | ${ }_{1} 377$ | 3.664 | 507 | 3,691 | \% 763 | 149 | 1, 304, 690 | 23,000 | 11,980 |
|  | 52 | 1,648 | 7,572 | 511 108 | 8, 0794 | 1,589 | 505 | 2, 997, 6358 | 249,500 56,000 | $29,4 \% 0$ 6,200 |
| United States ......- | 129 | 3,662 | 20,338 | 1,0¢3 | 21,401 | 4,314 | 1,879 | 11,012, 290 | 1,019,273 | 87,864 |
| Homeopathic. |  |  |  |  |  |  |  |  |  |  |
| Massachusetts <br> New York. <br> Pennsylvania | 1. | 49 | 11.5 | 46 | 161 | 44 | 5 | 120,000 | 40, 0 co | 2,500 |
|  | 8 | 57 | 130 | 26 | 156 | 40 | 17 | 550,000 | 0 | 4,500 |
|  | 1 | 40 | 273 |  | 273 | 70 | 30 | 600, 0.0 | 250, 600 | 15.000 |
| Maryland | 1 | 24 | 29 | 10 | 39 | 8 | 0 | 30,000 | 0 | 600 |
| Kentucky | 1 |  | 14 | 10 | 24 |  | 11 |  |  | 0 |

[^36]Table 7.-Summary of statistics of schools of medicine, dentistry, rharmacy, and for nurses, and veterinarians for the year 1898-99-Continued.

| States and classes. |  |  | Students. |  |  |  |  | Value of grounds and buildings. | Endowment funds. | Volumes in <br> libraries. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \text { 守 } \\ & \text { d } \\ & \text { d } \\ & \text { d } \\ & \text { d } \\ & \text { Bu } \end{aligned}$ |  | $\begin{aligned} & \text { g } \\ & \text { g } \\ & \text { o } \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |
| $\begin{aligned} & \text { B.-BY STATES AND } \\ & \text { CLASSES-continued. } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |
| Ohio | 5 | $\begin{gathered} 61 \\ 190 \end{gathered}$ | $\begin{aligned} & 159 \\ & 489 \end{aligned}$ | 30 | 189 | $\begin{array}{r} 61 \\ 138 \end{array}$ | 21 | \$170,000 | $\$ 110,000$ | 4, $\begin{array}{r}0 \\ 40\end{array}$ |
| Illinois |  |  |  |  |  |  | 83 | 320,00060,000 |  |  |
| Michigan | 1 | 14 | 60 | 9 | 69 | 138 |  |  | \$110,000 | ${ }_{8}^{4,630}$ |
| Minnesota | 1 | 17 | 20 | , | 61 | 4 |  | 40,000 | --......-- | $\bigcirc$ |
| Iowa. | 1 | 14 | 55 |  |  | 8 | 10 |  |  |  |
| Missouri | 3 | $9 \pm$ | 9432 | 30 | 124 | 31 | 14 | 15,000 |  | 300 |
| Colorado | 1 | 23 |  | 11 | $\begin{array}{r} 43 \\ 20 \\ 20 \end{array}$ | $\begin{array}{r} 13 \\ 3 \end{array}$ |  | 5,50415,000 |  |  |
| California | 1 | 19 | 18 |  |  |  |  |  |  |  |
| North Atlantic Division. | 4 | 146 | 518 | 72 | $\begin{array}{r} 590 \\ 39 \\ 24 \\ 1,081 \\ 68 \end{array}$ | $\begin{array}{r} 154 \\ 8 \\ 5 \\ 20 \\ 16 \end{array}$ | $\begin{array}{r} 52 \\ 0 \\ 11 \\ 130 \end{array}$ | $\begin{array}{r} 1,2 \overline{270,000} \\ 30,000 \end{array}$ | 290,600 | $\begin{aligned} & 22,090 \\ & 600 \\ & 15,680 \end{aligned}$ |
| South Atlantic Division. | 1 | 21 | 29 | 10 |  |  |  |  |  |  |
| South Central Division-- | 1. | 22 | 14 | 10 |  |  |  |  |  |  |
| North Central Division.- | 18 | 396 | 876 | 205 |  |  |  | $\begin{array}{r} 611,000 \\ 20,500 \end{array}$ | 110,000 |  |
| Western Division........ | $\square$ | 48 | 50 | 18 |  |  |  |  |  |  |
| United States.... | 21 | 636 | 1,48\% | 315 | 1,802 | 433 | 193 | 1,981,500 | 400, 600 | 38, 880 |
| New York | 1 | 28 | 62 | 16 | \% | 14 | 15 | 40,000 |  | $2,2 \% 8$ |
| Georgia | 1 | 12 | 61 | 4 | 63 | $\bigcirc$ |  | 25, con | --->------ | 000 |
| Ohio | 1 | 15 | $\begin{array}{r}158 \\ 78 \\ 59 \\ \hline 8\end{array}$ | 5 | $15 \%$ | \%6 | 26 | 60,00025,004 |  | 500 |
| Mlinois | 1 | ${ }^{33}$ |  | 11 | 89 |  |  |  | 0 | 300300800 |
| Missouri | , | 13. |  | 9 | 68 | 2 | 10 | 2,8,0 |  |  |
| Nebraska | 1 | 24 | 40 | 3 | 43 | 4 | 1 | 10,000 | 3, 000 |  |
| North Atlantic Ditision South Atlantic DivisionNorth Central Division | 1 | 28181 | $\begin{array}{r} 62 \\ 61 \\ 3: 9 \end{array}$ | 16428 | $\begin{array}{r} 78 \\ 65 \\ 357 \end{array}$ | $\begin{gathered} 14 \\ 26 \\ 112 \end{gathered}$ | $\begin{gathered} 15 \\ 5 \\ 37 \end{gathered}$ | $\begin{aligned} & 40,000 \\ & 23, ~(160 \\ & 97,800 \end{aligned}$ | $3.000$ | $\begin{aligned} & 2,278 \\ & 1,000 \\ & 1,200 \end{aligned}$ |
|  | 1 |  |  |  |  |  |  |  |  |  |
|  | 4 |  |  |  |  |  |  |  |  |  |
| United States . .-. | 6 | 131 | 45.2 | 48 | 500 | 15. | 57 | 16: 800 | 3,000 | 4,5\%8 |
| Massachusetts New York <br> Pemnsylvania |  |  | 139 | 01138 | 189 | 36111 | 4...-----.-- |  |  |  |
|  | 135 | 3859 |  |  |  |  |  |  | 65, 000 | 200 |
|  |  |  |  |  |  |  | 0 | 42, 000 |  |  |
|  |  | 109 | 1,434 |  | 1,4\%2 | 438 |  |  | 35,000 | 100 |
| Maryland <br> District of Columbia <br> Virginia <br> Georgia | 3312 | 40091620 | 47912136 | 6 | $\begin{aligned} & 485 \\ & 122 \\ & 36 \end{aligned}$ | 142 | 21 |  |  | 200 |
|  |  |  |  |  |  | 21 |  |  |  |  |
|  |  |  |  |  |  | 7 | 0 | 20,000 | 9,009 | 300 |
|  |  |  | 256 |  | 236 |  |  |  |  |  |
| Kentucky <br> Tennessee <br> Alabama | 131 | 158111 | $\begin{aligned} & 198 \\ & 285 \\ & 43 \end{aligned}$ | ${ }^{0}$ | $\begin{aligned} & 198 \\ & \hdashline 88 \end{aligned}$ | 50-31-30 |  |  |  |  |
|  |  |  |  | 3 |  |  |  |  |  |  |
|  |  |  |  |  | 43 | , |  |  |  |  | 0 |
| Ohio -... | 5 | 80 | 59. | 14 | 569 | 163 | $\underset{\sim}{2}$ | 30,60 |  | 1,443 |
| Indiana | 2 | 27 | 2306 | 2 | 258 | 69 | 21 | 35, 00 |  |  |
| Michigan | 4 | 127 | 1,161 | 39 | 1,200 | 865 | 50 | 27,000 |  | 750 |
| W isconsin | 1 | $\begin{array}{lll}1 & 16 \\ 1 & 12\end{array}$ | 142 | 110 | 142 | 21 | 112 | 16, 060 | --------- |  |
| Minnesota | 1 |  | 110 | 0 | 110 | 18 |  |  |  | 200 |
| Iowa.. | 2 | 87 | 146 | 9 | 155 | 35 |  |  |  |  |
| Missouri | 4 | 93 | $4 \%$ | 12 | 487 | 131 |  | 12,500 |  | 100 |
| Nebraska | 1 | 31 | 76 | 3 | 79 | 14 |  |  |  |  |
| Colorado | 1 | 18 | 4 | 5 | 49 | 8 |  |  |  | 0 |
| Washington | 1 | 17 | 32 | 2 | 34 | 2 |  |  |  | 114 |
| California | 3 | 65 | 373 | 13 | 386 | 127 | 2 | 55, (i00 |  | 350 |
| North Atlantic Division South Atantic Division South Central Division.North Central Division.Western Division. | $\begin{array}{r} 9 \\ 9 \\ 5 \\ 29 \\ \hline 5 \end{array}$ | $\begin{gathered} 206 \\ 128 \\ 60 \\ 460 \\ 100 \end{gathered}$ | $\begin{array}{r} 2,059 \\ 908 \\ 52.0 \\ 3,249 \\ 449 \end{array}$ | $\begin{gathered} 40 \\ 7 \\ 3 \\ 90 \\ 20 \end{gathered}$ | $\begin{array}{r} 2,108 \\ 909 \\ 5,3: 9 \\ 3,330 \\ 3, \\ 469 \end{array}$ | 585 | 41 | 545,000 | 100, 000 | 800 |
|  |  |  |  |  |  | 213 | 27 | 20, 000 | 9, 00 | 590 |
|  |  |  |  |  |  | 129 |  |  |  |  |
|  |  |  |  |  |  | 893 | 196 | 120,500 |  | 3,038 |
|  |  |  |  |  |  | $13 \pi$ | 5 | 50.090 |  | $46 \frac{1}{4}$ |
| United States..... | 50 | 918 | 7,185 | 169 | \%,354 | 1,937 | 300 | 740,500 | 109, 000 | 4,802 |

Table i.-Summary of statistics of schools of medicine, dentisiry, pharmacy, and for nurses, and veterinarians for the year 1898-99-Continued.


Thble 7.-Shmmary of statistics of schools of medicine, dentistry, pharmacy, and for nurses, and veterinarians for the year $1898-99$-Continued.



[^37]$b$ This institution has real estate ralued at $\$ 100,000$ not at present income producing. $c \$ 10,400$ by legacy from Mrs. P. L. Moen, of Worcester.

## of theology for the year 1838－93．

| Session cioses－ |  |  |  |  |  |  | -Өs.inoo əपఫ u! s.ז飞ə | $\cdot \tau ษ ə \kappa \text { u! s } \mathrm{S} \partial \partial \mathrm{M}$ | Value of grounds and build－ ings． | Endow－ ment <br> funds． | Benefac－ tions re－ ceived during <br> the year＇． | $\begin{aligned} & \text { Volumes } \\ & \text { in li- } \\ & \text { brary. } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 6 |  | 8 | 4 | $1{ }^{10}$ | ［ ${ }^{\text {暑 }}$ | 128 | 14：3 | 宜 4 | 1080 | 16 | 且多 |  |
| Tune 20 <br> June 12 | 6 2 2 | 3 | 18 | 0 0 | $\underset{\underset{\sim}{2}}{\underset{\sim}{2}}$ | 0 1 | 5 3 | 40 35 | 88，000 | \＄8， 000 | 0 8550 | 4,000 2,000 | 1 |
| May 2\％ | 1 | 0 1 | 12 | 0 0 | 4 0 | 0 | 3 | $\begin{aligned} & 30 \\ & 32 \end{aligned}$ | 6， 000 | 0 |  | $\begin{array}{r} a 3,0 n 0 \\ 200 \end{array}$ | 3 4 |
| May 1 | 1 |  | 12 | 3 | 2 | 1 | 3 | 36 | 8，000 | －50， 600 | \％，250 | 0 | 5 |
| Apr． 25 | 6 6 | 1 | 20 31 | $\stackrel{2}{0}$ | $\stackrel{2}{8}$ | 9 | 3 3 | 36 | 65,000 220,000 | 275， 000 | 1，500 | \％ 18,950 18,000 | 6 7 |
| May 2 | 4 | 1 | 6 | 0 | 1 | 1 | 3 | 34 | 12，000 | 40，000 |  |  | 8 |
| June 12 | 3 | 0 | 21 | 3 | 4 |  | 3 | 36 |  |  |  | 2，025 | 9 |
| May 1 | 3 |  | 4 | 0 | 3 | 2 |  | 35 | 30,000 | （b） | 0 | c．10，000 | 10 |
| May 15 | 6 | 1 | 28 | 1 | 8 | 11 | 3 | 30 | 75， 009 | 100，000 | 9，000 | 4，000 | 11 |
| Way 27 | 12 | 6 | 64 | 7 | 16 | 62 | 3 | 32 | 265， 000 | 181， 600 | c 1\％，554 | \％1，000 | 12 |
| June 5 | $\stackrel{6}{\sim}$ | 3 | 20 | 0 | 8 | 10 | 3 | 37 | 85，8\％\％ | 340， $65 \%$ |  | 22，000 | 13 |
| Miay 20 | 7 | 6 | 96 | 0 | $2 \%$ | 87 | 3 | 32 | 35ั0， 000 | 649， 122 | 3， 000 | 14，000 | 14 |
| June \％ | 6 | 2 | $\% 4$ | 0 | 23 | 16 | －－－ | 32 | 400）， 816 | 463，$\% 50$ | cl 25，000 | 1\％，000 | 15 |
| May 2 ～ | 2 | 7 | 45 | 0 | 4 | 0 | 3 | 34 | （e） | 45，000 |  | 1，800 | 16 |
| May 30 | 5 |  | 12 | 0 | $\stackrel{2}{2}$ | 0 | 3 | 35 | 30，000 |  |  |  | 17 |
| May 28 | 1 | 1 | 85 | 0 | 4 | 0 | 2 | $3 \%$ |  | 0 | 0 | 500 | 18 |
| Apr． 30 | 1 | 1 | 15 | 0 | 1 | 0 | 3 | 24 |  | 0 | 500 | 1，000 | 19 |
| May 12 | 4 | 1 | 83 |  | 14 | 9 | 3 | 30 | 100，000 | 5\％0，000 | 2，5C0 | 11， 000 | 20 |
| June 20 | 4 | 2 | 30 | 0 | 6 | 12 | 3 | 38 | 20， 000 | 0 | 0 | 5， 000 | 21 |
| Apr． 27 | 3 | 6 | 43 | 0 | 19 | 32 | 4 | 30 | 1\％5，000 | 0 | 6，000 | 4，400 | 22 |
| May 10 | $1 \because$ | 3 | 139 | 0 | 49 | 98 | 3 | 20 | 300，000 | 1，150，000 | 50，000 | 19，000 | 23 |
| May 5 | 8 | 1 | 169 | 0 | 39 |  | 3 | 32 | 4\％6，633 | 534， 529 |  | 20，000 | 24 |
| June 83 | 22 | 3 | 336 | 25） | 22 | 294 | 3 | 36 | 640，000 | 400， 000 |  | 40，000 | 25 |
| May 24 | 4 | 1 | 22 | 0 | 5 | ＇ | 3 | 34 | 200， 000 | 250，000 | 0 | 4,500 | 26 |
| June 10 | 3 | 0 | 24 | 3 |  |  | 3 | 39 |  |  |  |  | 97 |
| May \％is | 9 | $\stackrel{\sim}{\sim}$ | 168 | $\because$ | 33 | 56 | 3 | 31 | （ 250,000 |  |  | 9，000 | 28 |
| May 5 | 1 | 1 | 10 | 0 | $\therefore$ | 0 | 4 | $\Sigma 0$ | 18，000 | 6，0c0 | 2，000 | 200 | 29 |
| June 5 | 4 |  | 11 | 2 | 1 | 0 | 4 | 37 | （e） |  |  | a 4，000 | 30 |
| June 7 | 2 |  | 9 | 2 | －－ | － | 3 | 40 |  |  |  |  | 31 |
| June 23 | 2 | 0 | 40 | 1 |  |  |  | 38 |  | 22，000 |  |  | 32 |
| May 26 | 4 |  | 63 | 0 | 19 | 63 | 3 | 30 |  | 25， 000 |  |  | 33 |
| June 2 \％ | 5 |  | 101 | 0 | 31 | 0 | 3 | 40 | 125， 000 | 2，000 | 8，530 | 2，500 | 34 |
| June 5 | 2 |  | 12 | 2 | 1 |  | 3 | 36 |  |  |  |  | 35 |
| June 14 | 3 | 2 | 21 | $\tau$ | 1 | 1 | 3 | 36 |  |  |  | 700 | 36 |
| June 21 | 7 | 2 | 42 | 0 | $\tau$ |  | 5 | 40 |  |  |  | a．14，000 | 36 |
| June 6 | 5 | 1 | 38 | 6 | 7 | 8 | 3 | 36 | $\varepsilon 0,000$ | 3，000 | 2，000 | 2，000 | 38 |

d One fellowship，$\$ 10,000$ ，by the Marquise de Merinville and the Baroness von Zedtwitz，Paris，
France；one scholarship，$\$ 5,000$ ，from Rev．Thomas Carroll，Oil City，Pa．：one scholarship，$\$ 5,000$ ，
from Mitcheil Memorial Committee，Brooklyn，N．Y．；one scholarship，容，000，from the Marquise de Merinville，Paris．
$e$ A department of the university．

Table 8.-Statistics of schooils of

|  | Location. | Name of institution. | $\begin{aligned} & \text { Year } \\ & \text { of } \\ & \text { first } \\ & \text { open- } \\ & \text { ing. } \end{aligned}$ | President or dean. |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | $\pm$ |
| 39 | Charles City, Iowa | Charles City College, Theological School (M.E.). | 1891 | J. F. Hirsch, A. M |
| 40 | Des Moines, Iowa. | Drake University, Bible College | 1891 | Harvey W.Eve |
| 41 | Dabuque, Iowa | German Presbyterian Theological School of the Northwest. | 1834 | Adam W. Ringland, D. D. |
| $\begin{aligned} & 42 \\ & 48 \end{aligned}$ |  | Wartburg Seminary (Ev. Luth.) | $185 i$ | S. Fritschel, D.D |
| 43 | Mount Pleasant. Iowa. | German College, Theological School (M. E.). | $\begin{aligned} & 1873 \\ & 1893 \end{aligned}$ | Edwin S. Havighorst, <br> A. M.. D. D. |
| 44 | Atchison, Kans .....- | Western Theological Seminary (Ev. Luth.). | 1893 | Frank D. Altman, D.D .- |
| 45 | Inansas City, Kans | College of Theologr, Kansas City University (Meth. Prot.). | 1893 | D.L.Stephens |
| 46 | Danville. Ky | Presbyterian Theological Seminary - | 185.3 | J. M. Worrall, D. D |
| 47 | Louisville, Ky | Louisville Presbyterian Theological Seminary. | 1893 | Wm. Hoge Marquess, D. D. |
| 48 | do | Southern Baptist Theological Semi- | 1859 |  |
| 49 | New Orleans, La | Straight University, Tinological Department (Cong.). | 1890 | George W. Henderson .- |
| 53 | Bangor, Me | Bangor Theological Seminary (Cong.). | 1816 | Clarence A. Beckwith, D. D., secretary. |
| 51 | Lewiston, Me | Cobb Divinity School, Department | 1840 | James A. Howe, |
| 53 | Baltimore, Md | St. Joseph's Seminary (R.C.) | 1888 | T. R. Slattery |
| 53 | ---do | St. Mary's Seminary (R.C.) | 1791 | A. L. Magnien, D |
| 54 | Ilchester, | Redemptorist College of Hlchester (R.C.). | 1867 | Ferdinand A.Litz |
| 55 | MountSt. Marys, Ma. | Merntst. Mary"s'Theological School (R. (1) | 1808 | Wm. L. O'Hara, A. M |
| 56 | Westminster, Md | Westminster Theological Seminary (Meth. Prot.). | 1882 | Hugh L. Elderdice, A. M., D. D. |
|  | Woodstock. 7 | Wooustock College (R.C.) | 1869 | Burchard Villige |
| 58 | Andover, Mass | Andover Theological Seminary (Cong.). | 1809 | George Harris, D. D ..... |
| 59 | Boston, Mass | Boston University, School of Theol- ogy (M. E.). | 1839 | Marcus D. Buell, A. M., D. D. |
| 60 |  | St. John's Boston Ecclesiastical Seminary (R.C.). | 1884 | J. B. Hogan, D. D. .-. .-... |
| 61 | Cambridge, Mass | Episcopal Theolegical School (P.E.) - | 1867 | George Hoages, D. D |
| 62 |  | Harvard University, Divinity School (nonsect.). | 1817 | Charles C. Everett, D. D., LL.D. |
| 63 | ----do ------------... | New Church Theological School | 1563 | Janes Reed |
| 64 | Newton Center, Mass | Newton Theological Institation (Bapt.). | 1825 | Alvah Hovey, D. D., LL.D. |
| 65 | Tufts College, Mass | Tufts College, Divinity School | 1869 | Charles H.Leonara, D.D. |
| 66 | Adrian, Mich | Adrian College, School of Theology, | 183, | David Jones, D |
| 67 | Hillsdale, Mich | Hillsdale College, Theological School | 1865 | D. B. Read, D. |
| 68 | Holland, Mici | Western Theological Seminary (Ref. | 1869 | John W. Beardslee, D. D. |
| 69 | Saginaw, Mich | German-English Lutheran Semi- | 1886 | W. Linserma |
| 70 | Collegeville, Minn | St. John's Seminary (R. C. | 1867 | Peter Engel, Ph. D.-.... |
| 71 | Faribault, Minn | Seabury Divinity SchrodTP. E) | 1860 | Henry B. Whipple, D. D., |
| 72 | Minneapolis, Minn | Augsburg Seminary (Ev. Luth.) | 1869 | Georg Sverdrup |
| 73 |  | United Church Seminary (Ev.Luth.) | 1890 | Marcus O. Bockman |
| 5 | Red Wing, Minn | Red Wing Seminary (Ev. Luth.).-.- | 1879 | M. G. Hanson |
| 76 | St. Paul, Minn | Luther Seminary (Ev. Luther Seminary (Norw. Ev.Luth.) | 1885 | H. Ernst, D. D |
| \% | -... do | St. Paul's College (M. E.) | 1889 | C. W. Hertzler -...--- |
| 78 |  | St. Paul's Seminary (R. C. | 1894 | Patrick R. Heffron, D.D., LL. D. |
| \%9 | Canton, Mo | Christian University (Disc.) | 1835 | Clinton Lockhart, A. M., |
| 80 | Florisant, 1 | Stanislaus Seminary (R) | $18: 3$ | Frederick P. Hagemann. |

theology for the year 1898-99-Continued.

| Session <br> closes- |  |  |  |  |  |  | -əs.nnoo өप7 UỊ s.ter |  | Value of grounds and building's. | Endow ment funds. | Benefactions received during the year. | $\begin{aligned} & \text { Volumes } \\ & \text { in li- } \\ & \text { beary. } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 6 | \% | 8 | 9 | 10 | H 1 | 18 | 13 | 12 | 15 | 16 | 17 |  |
| June 15 | 2 | 0 | 10 | 0 | 0 | 0 | 3 | 39 |  | \$10,000 | \$2,000 | 600 | 39 |
| d | 5 | 3 | 12 | 27 | 13 | 0 | 3 | $3 \pi$ | (a) | 23,6\%5 | . 0 |  | 40 |
| Apr. 27 | 2 | 0 | 16 | 0 | 6 |  | 3 | 32 | 628,500 | 18, 350 | 23,300 | b2,000 | 41 |
| Junedi | 3 | 0 | 4.9 | 0 | 17 | 13 | 3 | 40 | 30,000 | 11,885 | 5,163 | 6,000 | 42 |
| June 8 | 3 |  | 19 |  | 3 |  | 1 | 37 | 12,000 | 27,000 |  | 1,000 | 43 |
| June 1 | 2 | 1 | 9 | 0 | 1 | 5 | 3 | 35 |  |  |  | ( 3300 | 44 |
| June 8 | 2 | 3 | 23 |  |  |  | 3 | 38 | (a) |  |  |  | $4{ }^{4}$ |
| May ${ }^{\text {do }}$ | 3 6 | 吕 | 29 | 0 | 9 16 | 8 84 8 | 3 3 | 33 | 31,000 | 114,000 150,000 |  | b7, 000 64,000 | 46 |
| June 1 | 6 | 2 | 83 | 0 | 5.5 |  | 3 | 31 | 300, 000 | 495, 000 | 8,900 | 621,000 | 48 |
|  | 1 | 2 | 23 | 3 | 1 | 1 | 3 | 32 | (a) | 0 | 0 | a 400 | 49 |
| May 18 | 5. | 1 | 23 | 0 | 12 | 3 | 3 | 36 | 100, 600 | 203, 000 |  | 20,600 | 50 |
| do | 5 | 8 | 40 | 4 | 8 | 22 | 3 | 36 | (c) | (c) |  | 3, 65\% | 51 |
| Tune:3 | 3 |  | 2 |  | $\stackrel{7}{6}$ |  | 5 | 40 |  |  |  | 3,000 | 52 |
| June23 | 13 | 0 | $2 \% 3$ | 0 | 52 |  | 3 | 40 | 6200, 000 | b38,000 | 2, 000 | 639,004 | 53 |
| July 1 | 7 | 1 | $3:$ | 0 | 3 | 0 | 4 | 4 | 100,000 | 0 | 0 | 18, 000 | 54 |
| June』3 | 6 | 0 | 30 | 0 | 5 | $\because$ | 4 | 4.3 | 50, 000 | 0 | 0 | $\therefore 0,000$ | 55 |
| May 9 | 4 | 12 | 15 |  | 5 | 5 | 3 | 32 | 10, 0, 0 | 4,000 | 1, 000 | 3,000 | 56 |
| June 30 | 15 | 0 | 142 | 0 | 23 |  |  | 42 | 209, 006) |  |  |  | 57 |
| June 8 | $i$ |  | 39 | 0 | 11 | 38 | 3 | 25 | 200,060 | 700, 000 | 4, 300 |  | 58 |
| June 1 | 7 | $\because$ | $1 \% 8$ | 8 | 37 | --- | 3 | 33 | 145, 009 |  |  |  | 59 |
| June \% ${ }^{\text {t }}$ | 5 | 1 | 99 | 0 | 23 |  | 3 | 40 | 500, 000 | 0 |  |  | 60 |
| June ¢3 | 6 | 8 | 30 | 0 | 5 | 28 | 3 | $3 \pi$ | 500, 000 | 200, 060 | 12,000 | 10,000 | 61 |
| June 28 | 9 | 1 | 29 | 0 | : | $2]$ | 3 | 38 | ( 6 ) | ( $a^{\text {) }}$ |  | 23,710 | $6 \%$ |
| June 23 | 3 | 3 | 8 | 0 | 1 | 2 | 3 | 36 | 60,00 | 124,157 | 0 | b 2,000 | 63 |
| June S | 6 | 1 | 69 | 0 | 13 | 33 | 3 | 39 | 200, 190 | 506, 763 | 31, C33 | 22, 383 | 64 |
| June 23 | 6 | 5 | 18 | : | 6 | 5 | 3 | 40 | ( 1 ) | 200,100 | 0 | 6,500 | 65 |
| June 21 | 1 |  | 33 | 0 | 1 | 0 | 2 | 36 | 0 | 0 | 0 |  | 66 |
| June 15 | 3 |  | 44 | $?$ | 8 | 1 | 3 | 36 |  |  |  |  | 67 |
| Apr. 93 | 3 | 1 | $\therefore 2$ | 0 | 4 | 18 | 3 | 32 | 10,000 | -0, 00 |  | 6,000 | 68 |
| June 28 | 3 | 2 | $\%$ |  | 1 | 1 | 3 | 40 | 10, 009 | 2, 400 | 2,000 | 500 | 69 |
| June 25 | 4 |  | $4 \%$ | 0 |  |  |  | 40 |  |  |  |  | 80 |
| June 5 | 6 | 2 | 8.3 | 0 | 7 | 5 | 3 | 32 |  |  |  | 8,000 | 21 |
| May 31 | 2 | 1 | 34 | 0 | 11 |  | 3 | 30 | 50, 000 |  |  |  | 82 |
| June 3 | 3 | 0 | 55 | 0 | 18 | 21 | 3 | 30 | 0 | 103, 505 | 0 | 1,000 | 73 |
| May 27 | 3 | 0 | 13 | 0 | 5 |  | 3 | 36 | 15, 000 | 1,900 | 0 | 1,200 | \% 4 |
| June 15 | 3 | 0 | 31 | 0 | 6 | 0 | 3 | 40 | 30,000 |  |  | b 400 | 75 |
| June 20 | 4 | 0 | 41 | 0 | ? |  | 3 | 40 | 75, 0040 | 2, 880 | 10,000 | 1,000 | \% 6 |
| June 6 | 1 | 4 | 6 | 0 | 1 | 0 | 3 | 36 |  |  |  | - - - | 7 |
| June 15 | 8 | 4 | 123 | 0 | 23 | ----- | 4 | 38 | 400, 090 | 300, 000 | - | 10,000 | 78 |
| June \% | 3 | 1 | 47 | 0 | 2 |  | 3 | 89 | (a) |  |  | 1,000 | ¢9 |
| June:21 | 5 | 0 | 98 | 0 | 26 | ...... | 5 | 40 |  |  | ------ | --- | 80 |

$c$ In common with Bates College.

TABLE 8.-Statistics of schools of

|  | Location, | Name of institution. | Year of first opening. | President or dean. |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 |
| 81. | Finses City, Mo | Redemptorist Seminary of the St. Louis Province (R. (.). | 1887 | Ferreol Girarde |
| 83 | St. Louis, Mo | Concordia Theologieal Seminary | 1839 | Francis Pieper |
| 83 | d | Kenrick Theologicalseminary (R.C.) | 1893 | Francis V. Fug |
| 81. |  | Theological Seminary of the German Evangelical Synod of North America, or Eden College. | 1850 | Louis F. Haeber |
| 85 | Warrenton, M | Central Wesleyan College (M. E.) ... | 1854 | George B. Ad |
| 86 | Blair, Nebr | Trinity Seminary (Er. Luth.)* | 18881 | Peter S. Vig..... |
| 88 | Santee, Neb | Santee Normal Training School | $18 \% 0$ | Alfred C. Riggs . . . . . . - |
| 83 | Bloomfield, N. J. | German Theological School of New- | 1860 | Charles E. Knox, D. D |
| 90 | Madison, N. J. | Drew Theological Seminary (M.E.). | 186\% | Henry A. Buttz, D. D., |
| 91 | New Brunswick, N. J. | Theological Seminary of the Reformed (Dutch) Church in America. | 1784 | Samuel M. Woodbridge, D. D., LL. D. |
| 92 | Princeton, N. J...... | Princeton Theological Seminary | 1812 | Wim. Henry Green, D.D., |
| 93 | South Orange, N. J.- | Seminary of the Immaculate Con- | 1856 | John A. Stafio |
| 94 | Allegany | St. Bonavernires Seminary (R.C.) - | 1839 | Joseph F.Butler-...-...- |
| 9. |  | Auburn Theological Seminary (Presb.), | 18.21 | Willis J. Beecher, D. D., chairman. |
| 98 | Buffalo, N. Y | German Martin Luther Seminary | $185!$ | John A. Grabant --.-....- |
| 97 | Canton, N. Y | Canton Theological Seminary of St. | 1858 | Isaac M. Atwood, D. D. |
| 93 | Hamilton, N. Y | Hamilton Theological Seminary, | 1819 | George E. Merrill, D. D.. |
| 99 | Eiartwick Seminary, N. Y. | Harivick Seminary (Ev. Luth.) | 1797 | Alfred Hiller, D. D., chairman. |
| 100 | New York, N. Y | General Theological Seminary of the Protestant Episcopal Church. | 1817 | Eugene A. Hofman, |
| 101 | do | Jewish Theological Seminary (Hebrew). | 1886 | H.P. Mendes, acting |
| 102 |  | Union Theological Seminary (Presb.). | 1836 | Charles C. Hall, D. |
| 103 | Niagara University, N:Y. | Niagara Unjversity, Theological Department (R.C.). |  | J.P. Cribbins |
| $10\}$ | Rochester, N. Y | Rochester Theological Seminary (Bapt.). | 1850 | Augustủs H. Strong, <br> D.D., LL. D. |
| 1118 | Stanfordville | Christian Biblical Institutefenris. | 1888 | James B. Weston, |
| $110 \%$ | Yonkers, N | St. Josepl's Seminary (R.C.).- | 1896 | Edward R.Dy |
| 108 | Bemmont, N. ${ }^{\text {C }}$ | St. Mary's College ( H . C.) --.---. | 1886 | Leo Haid, D. D |
| 109 | Charlotte, N.C | Biddle University, School of Theology (Presb.). | 1867 | D.J. Sanders, D.D |
| 110 | Raleigh, N.C | Shaw University, Theological School (Bant.). |  | M. W.D. Norman, A. T |
| 111 | Berea, Ohio | German Wallace College, Theological Department (M H ) | 1865 | William Nast |
| 112 | Carthagena, Ohio | St. Charles Borromeo Theological | 1860 | Boniface Rus |
| 11.3 | Cincimmati, Ohio | Hebrew Union Cottege (Hebrew) | 1874 | Isaac M |
| 114 |  | Lane Theological Seminary (Presb.). | 1832 | David S. Schaff, D. D., clerk. |
| 115 | Cleveland, Ohio | St. Mary's Theological Seminary | 1818 | N. A. Moes |
| 116 | Columbus, Ohio | German Evangelical Lutheran | 1830 | F. W. Stellhorn, D. D |
| $11 \%$ | Dayton, Ohio | Union Biblical Seminary (U.Breth.) - | $18 \% 0$ | George A. Tunkhouser, D. D. |
| 118 | Gambier: Chio | Kenyon College, Divinity School (P. E.). | 1831 | Hosea W. Jones, D. D. |

theology for the year 1898-99-Continued.

| Session closes- | $\begin{aligned} & \text { Number of profess- } \\ & \text { ors. } \end{aligned}$ |  |  | Number of women included. | 668! uI pezunpury | $\begin{gathered} \text { Students haring A. } \\ \text { B. or B. S. } \end{gathered}$ |  | -ธชəК u!̣ sqุəəM | Value of grounds and build. ings. | Endowment funds. | Benefac tions re caved during the year. | $\begin{aligned} & \text { Volumes } \\ & \text { in li- } \\ & \text { brary. } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 6 | 7 | 8 | \% | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 18 |  |
| Juiy 19. | 4 | 0 | 34 | 0 | 4 |  | 4 | 44 | a \$50, 000 | 0 | 0 | u8, 200 | 81 |
| Juner | 6 | 0 | 186 | 0 | 55 | 186 | 3 | 40 | 300,000 | 0 | 0 | 15,000 | 82 |
| June - <br> June 15 | 10 3 | 1 | $8 \%$ 74 74 | 0 | 16 | 0 | 3 | 40 | 150,000 | 0 | \$18,500 | 4,300 | 83 |
| do. | 2 | 0 | 41 | 0 | 1 | 0 | 3 | 40 | 109,000 | \$2ŏ, 000 | 0 | 500 | 85 |
| June 1 | 3 |  | 11 | 0 | 4 | 0 | 3 | 33 | 15,000 |  |  | 200 | 86 |
| Apr. $2 \%$ | $\stackrel{6}{0}$ | ${ }_{0}^{0}$ | Pt | 0 | 9 | 11 | 3 | 3. |  |  | b6, 600 | 2,600 | 87 |
| June 13 | 2 | 2 | 15 | 4 | 1 | 0 | 3 | 30 | 0 | 0 | 0 | 0 | 88 |
| Hay 25 | 3 | 2 | 22 | 0 |  |  | 3 | 32 | * 20, 000 | * 59,000 |  |  | 89 |
| May 13 | 7 |  | $1 \% 3$ | 0 | 41 | 97 | 3 | 30 | 465, 000 | 412,000 |  | 49, 200 | 90 |
| .-. d | 5 | 2 | 38 | 0 | 1.3 |  | 3 | 33 | $+350,000$ | * 300, 000 |  | 44.036 | 91 |
| May 10 | 8 | 4 | 20 | 0 | 68 | 173 | 3 | 31 | 506, 150 | 1,293,111 | $c 8,805$ | 62.723 | 92 |
| Junc 18 | 5 | 1 | 31 |  | 7 |  |  |  |  |  |  |  | 93 |
| June 2t | 6 |  | 69 | 0 | 11 |  | 4 | 41 |  |  |  | 9,197 | 94 |
| May 5 | 6 | 1 | 105 | 0 | 2 | 78 | 3 | 33 | 300, 000 | 485, 751 | 4, 050 | 25,67! | 95 |
| June 23 | 1 | 2 | 12 | 0 | 0 | 0 | 3 | 40 | 12,500 | 0 | 941 | 1, 207 | 96 |
| June $\sim^{\sim}$ | 4 | - 1 | 20 | 3 | 3 | 3 | 3 | 39 | 59,000 | 155, 000 | 500 | 8,000 | 97 |
| June 21 | 6 | 2 | $5 \%$ | 0 | 10 | 9 | 3 | $3 \pi$ | (d) |  |  |  | 98 |
| -d | 2 | 0 | 9 | 0 | 2 | 1 | 3 | 39 | 10,000 | 4,000 | 600 | 2, 10\% | 99 |
| May 25 | 10 | 4 | $15 \frac{1}{4}$ | 0 | 33 | $9 \sim$ | 3 | 36 | 1,353, 000 | 1,351,837 | 88,278 | $e 29,844$ | 100 |
| June 15 | 4 | 2 | 32 | 0 | 2 | 4 |  | 40 | 28,000 | 1,700 | 8,030 | 3, 000 | 101 |
| May 15 | 9 | 5 | 124 | 2 | 28 | 99 | 3 | 30 | 500,000 | 1,500,000 |  | 68,619 | 109 |
|  | 7 |  | 59 | 0 |  |  | 3 |  |  |  |  |  | 103 |
| May 11 | 12 | 1 | 141 | 0 | 38 | 83 | 3 | 34 | 131,631 | 642,259 | 44,304 | 30,058 | 104 |
| Tune 13 | 10 | 0 | 72 | 0 | 4 |  | 6 | 40 | 600, 000 |  |  | a 10, 000 | 105 |
| May 10 | 6 | 3 | 10 |  | 0 | 0 | 3 | 34 | 27,000 | 5\% ,990 | 1,500 | 1,954 | 106 |
| June 18 | 10 | ------ | 119 | 0 | 16 |  | 4 | $3:$ | , |  | 10,000 | 22,000 | 117 |
| june 16 | \% |  | 14 |  | 3 | 10 |  | 33 |  |  |  | ( 14,000 | 108 |
| June 5 | 4. | 1 | 19 | 0 | 9 | 9 | 3 | $3:$ | 140,000 |  |  | 10, 500 | 109 |
|  | 1 |  | $1 \%$ | 0 |  |  |  |  |  |  |  |  | 110 |
|  | 2 |  | 27 | 0 |  |  |  |  |  |  |  |  | 111 |
| June 15 | 3 | 1 | 18 | 0 | 2 |  | 4 | 40 | 40,000 |  |  | 8,200 | 11: |
| ...do. | 6 | . 3 | 81 | 0 | 6 | 0 |  | 39 | 20,000 | 49,398 | 21,403 | 13, 789 | 113 |
| May 5 | 4 | : 2 | 35 |  | 9 | 30 | 3 | 33 | 16:2,000 | 290,000 |  | 18,000 | 114 |
| June 25 | 4 | 1 | 39 | 0 | 4 |  |  | 42 | 75,000 | 0 | 12,000 | 10,000 | 115 |
| June 28 | 3 |  | 33 | 0 | 10 | 31 | 3 | 40 |  |  |  |  | 116 |
| May 1 | 4 | 0 | 45 | 9 | 9 | 15 | 3 |  | 38,000 | 65, 000 |  | 3, 000 | 117 |
| June 21 | 4 | 2 | 18 | 0 | 5 | 11 | 3 | 38 | 30, 000 | 125, 000 | 1,000 | 14,000 | 118 |

$c$ From Mrs. Henry Winthrop, New York City, 50,500. d. A department of the unipersity.
$c$ The library has lately come into possession, by gift, of a fine copy of the Mazarin or Gutenberg Bible. It is reported that there are but six other copies in tho United States.

Table 8.-Statistics of schools of

theology for the year 1898－99－Continued．

| Session closes－ |  |  |  |  |  |  | -วs.moo өut uṭ s.tro |  | Value of grounds and build． ings． | Endow－ ment funds | Benefac－ tions re－ ceived during the year． | Volumes in li－ brary |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |  |
| May | 8 | 2 | 40 | 1 | 13 | 5 | 3 | 32 | \＄75， 000 | \＄143， $50 \frac{1}{2}$ | \＄3， 455 | 39，560 | 119 |
| May 5 | 3 | 1 | 33 | 0 | 15 | 33 | 3 | 32 | （b） |  |  |  | 120 |
| May 11 | 4 |  | 20 | 0 | 8 | 6 | 3 | 30 |  | 25，000 |  |  | 121 |
| June 15 | 2 | 1 | 35 | 4 | 4 | 3 | 3 | 36 | 12，000 |  |  | 2，200 | 12\％ |
| Apr． 28 | 4 |  | 36 | 0 | 17 | 32 | 3 | 34 | 20，000 | 125， 000 | 1，000 | 5，508 | 123 |
| June 7 | 2 | 2 | 26 | 9 | 0 | 0 | 4 | 34 | 7，090 | 4，000 | 1，000 | 682 | 124 |
| June 20 | 3 | －－ | 5 |  |  |  | 3 | 36 |  |  |  | 1，000 | 124 |
| June 6 | 5 |  | 27 |  |  |  | 3 | 36 |  |  |  |  | 126 |
| May 15 | 4 |  | 68 |  | 25 | 65 | 3 | 32 | 110， 000 | 290，000 | ac 30， 000 | 5，000 | 127 |
| May 3 | 2 | 1 | 20 | 0 | 13 | 18 | 3 | 32 | 25， 000 | 75， 630 |  | 3， 500 | 128 |
| May 10 | 6 | 2 | $\%$ | 0 | 28 | 68 | 3 | 32 | 250，000 | 542，331 | 18，446 | a 28,000 | 129 |
| June 20 | 5 | ， | 43 | 0 | 8 |  | 3 | 40 |  |  | 0 | a 500 | 130 |
| June 13 | ， | 2 | 11 | 0 | 0 | 0 | 3 | 40 | 100，000 | 115， 633 | 3，336 | C 1，500 | 131 |
| June 5 | 6 | 1 | 102 | 0 | 31 | 50 | 3 | 36 | 175， 000 | 46：3， 500 |  | 15，000 | 132 |
| May 5 | 5 | 2 | 21 | 0 | 4 | 16 | 3 | 32 | 0 |  | 2，500 | 1，500 | 133 |
| May 18 | 4 |  | 39 |  | 14 | 36 | 3 | 35 | 160， 000 | 201，68\％ |  | 14，000 | 134 |
| May 10 | 5 | 1 | 59 | 0 | 19 | 52 | 3 | 32 | 100，000 | 170，000 | e14，500 | 15，000 | 135 |
| Apr． 18 | 6 | 1 | 41 | 0 | 10 | 28 | 3 | 28 | 32， 000 | 136，900 |  | 15，950 | 136 |
| June 8 | 5 | 4 | 23 | 3 | 4 | 5 | 3 | 38 | 50，\％00 | 360， 000 |  | 28，000 | 137 |
| June 20 | 12 | 2 | \％6 | 0 | 16 | 34 | 4 | 42 |  | 0 | a 30，000 | 22，000 | 138 |
| June 28 | 5 | 3 | 42 | 0 | 3 |  |  | 40 |  | 0 | 0 |  | 139 |
| June 1 | 4 | 1 | 41 92 | 0 | $3{ }_{4}^{1}$ | $\stackrel{2}{59}$ | 5 3 | $\begin{aligned} & 30 \\ & 32 \\ & 32 \end{aligned}$ | 200，000 | 198， 000 | 1，500 | a 500 23,090 | 140 141 |
| June 8 | 3 | 3 | 15 | 0 | 4 | 9 | 3 | 38 |  |  |  |  | 142 |
|  | 5 |  | 21 | 0 |  |  |  |  |  |  |  |  | 143 |
| May 10 | 4 | 2 | 24 | 1 | 6 | 18 | 3 | 32 | 75，000 | （ 2225， 000 | 2，500 | 20，000 | 144 |
|  | 4 |  | \％ | 0 | 3 | 6 | 2 | 37 |  | 35，000 |  | a 2， 000 | 145 |
| June 1 | 1 | 4 | 6 | 0 | 1 | 6 | 3 | 35 | 12，000 | 15， 009 | 2，500 | 1，509 | 146 |
| May 15 | 3 | 3 | 35 | 0 | 11 | 0 | 3 | 32 | 150， 000 | f6， 800 |  | 6，000 | 147 |
| June 14 | 5 | 2 | 26 | 0 | 8 | 1．） | 2 | 40 | （b） |  |  | a 8，000 | 148 |
| June 5 | 8 | ．－． | 54 | 0 | 12 | 31 | 3 | 32 | 30， 003 | 82，000 |  | 5，000 | 14.9 |
| June 1 | 2 | 6 | 21 | 0 | 1 | 0 | 2 | 35 | （b） |  |  |  | 150 |
| do | 2 | 2 | 4 | 0 | 1 | 0 | 2，3 | 38 | 25， 000 | 1，233 | 0 | 1，000 | 151 |
| －June 15 | 5 | 1 | $\begin{aligned} & 16 \\ & 53 \end{aligned}$ | 0 | 11 | $40^{-1}$ | 3 | 31 | $\because 100,000$ | （b） |  | a 4，000 | 15 |
| Aug． 2 | 4 | 1 | 20 | 0 | 5 | 9 | 3 | 40 | 40，000 | 20，000 | 5，000 | 2，000 | 154 |

a Theological school of Ursinus College has been removed to Philadelphia，Pa．
$e$ Rev．I．I．Swander，D．D．，and wife，of Tiffin，Ohio，contributed $\$ 12,000$ ．
$f$ Also $\$ 9,000$ nonproductive at present．

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Table 8.-Statistics of schools of

|  | Location. | Name of institution. | Year of first open- ing. | President or dean. |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | $\frac{1}{2}$ |
| 135 | El Paso, Tex. | Rio Grande Congregational Training school. | 1893 | A. C. Wright.-...--------- |
| 156 | Petersburg, Va,--- | Bishop Payng Divinity School (P. E.). | 1888 |  |
| 157 | Richmond, Va------ | Richmond Theological Seminary (Bapt.). | 1803 | George F. Genung, D. D. |
| 188 | do | Union Theological Seminary (Presb.). | 18:4 | Thomas C. Johnson, D. D., chairman. |
| 159 | Theological Seminary, Va. | Episcopal Theological Seminary (P.E.). | $18: 81$ | A. Crawford, M. A., D.D. |
| 150 | Franklin, Wis -.----- | Nission House of the Reformed Church in the United States. | 1859 | H. A. Muchlmeier, D. D.- |
| 161 | Nashotah, Wis.-.... | Nashotah House (P.E.) | $\frac{1842}{182}$ | Wm. Walter Webl, D. D. |
| 108 | St. Francis, Wis ..... | Provincial Seminary of St. Francis of Sales (R.C.). | $185 \%$ | Joseph Rainer. |
| 163 | Wauwatosa, Wis ...- | Evangelicat Lutheran Theological Seminary. | 18.8 | Adoiph Ifoenecke ------ |

theology for the year 1898-99--Continued.

| Session closses- |  | $\begin{aligned} & \text { Special or assistant } \\ & \text { instructors. } \end{aligned}$ |  |  |  |  |  |  | Value of grounds and buildings. | Endowment funds. | Benefactions received during the year. | $\begin{gathered} \text { Volumes } \\ \text { in li- } \\ \text { brary. } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | $6^{6}$ | 7 | 8 | 9 | 10 | 11 | 12 | 18 | 14 | 15 | 16 | 17 |  |
| Ray 29 | 0 | 1 | 5 | 0 | 0 | 0 | 5 | 40 | \$8,000 | 0 | 0 | 270 | 155 |
| $\begin{aligned} & \text { June } 5 \\ & \text { Apr. }: 0 \end{aligned}$ | 2 4 | 0 | ${ }_{51}^{11}$ | 0 | 0 | ${ }_{16}^{0}$ | 3 | $\begin{aligned} & 39 \\ & 30 \end{aligned}$ | $\begin{aligned} & 12,050 \\ & 15,000 \end{aligned}$ | $\begin{array}{r} \$ 400 \\ 50,060 \end{array}$ | \% $\begin{array}{r}0 \\ \$ 1,108\end{array}$ | $\begin{array}{r} 400 \\ 5,000 \end{array}$ | 156 157 |
| June ${ }^{\text {c }}$ | 5 | 0 | $\varepsilon 8$ | 0 | 15 |  | 3 | $3!$ | 105, 000 | 250,000 | 18,0c0 | 16,000 | 158 |
| June 15 | 5 | 3 | 43 | 0 | 16 |  | 3 | 39 | ------ | 329,196 |  | 20,000 | 159 |
| May 17 | 3 | 1 | 16 | 0 | 5 | 4 | 3 | 38 |  |  |  | 6, c00 | 160 |
| May 28 <br> June : | $1 \frac{4}{4}$ | $\begin{aligned} & 2 \\ & 1 \end{aligned}$ | $\begin{array}{r} 33 \\ 230 \end{array}$ | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ | $\begin{array}{r} 7 \\ 25 \end{array}$ | 1. | 3 | $\begin{aligned} & 3: \\ & 40 \end{aligned}$ | a 100,000 | 120,000 | 8,300 | $\begin{aligned} & 13,000 \\ & 12,500 \end{aligned}$ | 161 162 |
| June 15 | 3 | 1 | 25 | 0 | 10 | 22 | 3 | 38 | 50,000 |  |  | 1,000 | 163 |

a Approximately.

Table 9.-Statistics of schools

of law for the year 1898-39.


|  | Location. | Name of institution. |  | President or dean. |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | $\frac{1}{4}$ |
| $4 i$ | Ann Arbor, Mich | University of Michigan, Law Depart- | 1859 | Harry B. Fiutchins, |
| .48 | Detroit, Mich | ment. |  | No report |
| $\begin{array}{r} 40 \\ 49 \end{array}$ | Minneapolis, Minn--- | University of Minnesota College of | 1888 | William S. Patee, İ. D- |
| 50 | Jackson. Miss | Millsaps College, Law Department..- | 1895 | Edward Mayes |
| 51 | University, Miss | University of Mississippi, Law De- | 1854 | G. D. Shands, Li |
| 52 | Columbia, Mo | University of Missouri, Law Depart- | 18\% | Alexander Miartin, Lİ.D |
| 53 | Kansas City, M | Kansas City School of Law --.-...... | 1895 | William P. Borla |
| 54 | St. Louis, MIo | St. Lonis Law school, Washington University. | $186 \%$ | William S. Curtis |
| 55 | Lincoln, Nebr | University of Nobraska College of | 1891 | II. B. Reese |
| 56 | Omaha, Nebr | Omaha School of Law, University of | $189 \%$ | T. J. MahoneJ |
| 57 | Albany, $\mathrm{T} . \mathrm{Y}$ | Albany Law School, Union Univer- | 1851 | J. Newton Fiero, LL. D.- |
| 58 | Bufîaio, N. | Buffalo Law School, University of | 188\% | Adelbert Moo |
| 59 | Ithaca, N. Y | Cornell University College of Law | 185\%' | Francis M. Finch, LL. D. |
| 60 | New York, N | Columbia University School of Law - |  | Wm. A. Keener |
| 61 | - | New York Law School | 1892 | George Chase. |
| 62 |  | New York University School of Law. | 1834 | ClarenceD.Ashley, LL. D. |
| 63 | Syractise, N. Y...-..-- | Syracuse University College of Law- | 1895 | James B. Brooks, A. M., |
| 64 | Chapel Eill, N. C .-.- | University of North Carolina Law | 1846 | J. E. Shephe |
| 65 | Raleigh, N. C | Shaw University Law School | 1888 | E. A. Johns |
| 66 | Wake Forest, N | Wake Torest Law School.... | 1894 | N. Y. Gulley |
| 67 | Ada, Ohio | Ohio Normal University Law School- | 1893 | S. P. Axline |
| 68 | Cincinnati, Ohio .-... | University of Cincinnati Law De- | 1833 | Wm. H. Taft, LL. |
| 69 | Cleveland, Ohio | Baldwin University Law School....- | $189 \%$ | Chrs. S. Bentley |
| 70 |  | Cleveland College of Law --.....-.....- | 189\% | Sherman Artei |
| 71 |  | Franklin T. Backus Lavy School of Western Reserve University. | 1892 | Evan H. Hopkin |
| \% | Columbus, Ohio | Ohio State University School of Law- | 1891 | W. F. Hunter |
| 73 | Lebancn, Ohio ------- | National Normal UUniversity Law |  | J. W. Withers |
| 74 | Portland, Oreg ...... | Unirersity of Ojegon, School of Law- | 1884 | Richard H. Thornto |
| 75 | Salem, Oreg --....... | Willamette University: Law Depart- | $188 \%$ | S. T. Richardson, |
| 76 | Carlisle, Pa | Dickinson School of Law | 1834 | William Triciett, LL.D |
| $7 \%$ | Philadelphia, Pa | Philadelphia Lav School of Temple | 1895 | Henry S. Bornem |
| 78 | do | University of Pemnsylvania, Law De- | $1 \% 0$ | Wm. Draper Lewis, |
| \%9 | Pittsburg, Pa | partment. <br> Pittsburg Law Schooi, Department | 1885 | John D. Shafe |
|  |  | of Western University of Pennsylvania. |  | J |
| 80 | Providence, R. I | Rhode Island Law School............. | 1898 | William G. Webst |
| 81 | Columbia, S. C - .-...- | South Carolina Colleye Law School - | 1870 | F. C. Woodward |
| 82 | Chattanooga, Tenn.- | U. S. Grant University, Department of Latr. | 1898 | Lewis Shepherd ....... |
| 83 | Harriman, Tenn | American Temperance University, | 1893 | S. C. Brown, A. M |
| 84 | Knoxrille, Tenn | University of Tennessee, Law De- | 1889 | Henry H. Ingersoll, |
| 85 | Lebanon, Tenu | Cumberland University Law School. | $184 \%$ | LL. D. <br> N. Green. chancello |
| 86 | Nashrille, Tem | Central Tennessee Coliege, Law De- | $18 \% 9$ | John W. Gran |
| 87 | do | Vanderbilt University, Law Depart- | $18 \%$ | Thomas H. Malone |
| 88 | Sewanee, Tenn | Sewanee Law School, University of | 1893 | B. J. Ramage, Ph. D |
| 89 | Austin, Tex..........- | the South. <br> Unirersity of Texas, Laty Department. | 1883 |  |

law for the year 1898-93-Continned.


Table 9.-Statistics of schools of

|  | Location. | Name of institution. |  | President or dean. |
| :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 |
| 90 | Fort Worth, Tex | Fort Worth University, Law Depart- | 1881 | Augustus J. Booty |
| 91 | Lexington, Va....... | Washington and Lee University School of Law. | 1849 | Henry St. George Tucker, M. A. |
| 92 | Richmond, Va | Richmond College School of Law .... | 1870 | F. W. Boatwright, A. M. |
| 93 94 | Charlottesville, Va.Morgantown, W. Va- | University of Virginia Law School. West Virginia University, Law De- | 1826 | P.B. Barringer Okey Johnson, A. M-..... |
| 95 | Madison, Wis .--.... | University of Wisconsin College of | 1868 | Edwin E. Bryant ........ |
| 96 | Milwaukee, Wis ....- | Milwaukee Law School * | 1893 | Edward R. Veech |

*In 1897-88.
law for the year 1999-99-Continued.

$a$ A department of the university.
b Approximately.

Table 10.-Statistics of schools of

|  | Location. | Name of institution. | -sิu!̣uedo qs.ty jo teot | President or dean. | Session closes- |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | \$ | $i$ | 息 | 5 |
| 1 |  | Birmingham Medical College | 1894 |  |  |
| 2 | Mobile, Ala ----.-- | Medical College of Alabama, University of Alabama. | 1859 | George A. Ketchum. | $\text { Apr. } 14$ |
| 3 | Little Rock, Ark. | Arkansas Industrial University, <br> Medical Department. | 18\%9 | James A. Dibrell | Apr. 13 |
| 4 | Los Angeles, Cal | University of Southern Califor- <br> 1ia Collere of Medicine | 1885 | Henry G. Brainerd.- | June 14 |
| 5 | San Francisco, Cal. | College of Physicians and Surgeons. | 1895 | Winslow Anderson.- | June 30 |
| 6 | do | Cooper Medical College ......---. | 1853 | Henly Gibbons, jr., A. M. | Apr. 14 |
| 7 | . do | University of California, Medical Department. | 186, | Arnold A. D'Ancona. | Apr. 30 |
| 8 | Boulder, Colo | University of Colorado, Medical Department. | 1883 | Lurnan M. Giffin | May 27 |
| 9 | Ienver', Colo. | Gross Medical College*.---...... | $188 \%$ | Thomas H. Hawkins, A. M., LL. D. | Apr. 1 |
| 10 | do | University of Denver, School of Medicine. | $18 \% 0$ | Edmund C. Rivers, A. M. | Apr. 25 |
| 11 | New Haven, Conn_ | Yale Unirersity, Medical Department. | 1814 | Herbert E. Smith .-. | June 27 |
| 12 | Washington, D. C. | Columbian University, Medical Department. | 1825) | Emil A. Le Schweinitz, A. M. . Ph. D. | June 1 |
| 13 | do | Georgetown University, School of Medicine. | 1850 | G. L.Magruder, A.M. | May 15 |
| 14 | do | Howard University, Medical Department. | 1867 | Thomas B.Hood, A. M | May 10 |
| 15 | do | National University, Medical Department.* | 1884 | John T. Winte | June 2 |
| 15 | Atlanta, Ga | Atlanta College of Physicians and Surgeons. | 1834 | W.S.Kendrick | Apr. 3 |
| $1 \%$ | Augusta, Ga | Medical College of Georgia, University of Georocia. | 1821 | Eugene Foster. | Apl' 1 |
| 18 | Chicago, Ill | American Medical Missionary College. | 1895 | John H. Kellogg..... | Sept. 27 |
| 19 | do | College of Physicians and Surgeons, University of Illinois. | 1882 | William E. Quine | Apr. 20 |
| 20 |  | Harvey Medical College | 1891 | J. Chase Stubbs | June 23 |
| 21 | do | Illinois Medical College | 1895 | Wm F. Waugh, A.M. | Aug. 31 |
| 22 | ---- - do.---.....---. | Jenner Medical College --.------ | 1893 | William Rittenhouse | June 22 |
| 23 |  | Northwestern University Medical Schoul, Chicago Medical College. | 1859 | Frank S. Johnson, A. M. | June 4 |
| 24 | do | Northwestern University, Woman's Medical School. | e18\%0 | Marie J. Mergler. | June 1t |
| 25 | do | Rush Medical College | 1843 | Henry M. Lyman, A. II. | May 25 |
| 26 | Fort Wayne, Ind | Forit Wayne College of Medi. cine, Taylor University. | 18\%9 | Christian B. Stemen, A. M., LL. D. | Mar. 16 |
| 27 | Indianapolis, Ind.. | Central College of Pliysicians and Surgeons. | 1879 | SamuelE. Earp, M.S. | Mar. 30 |
| 23 | - do | Medical College of Indiana, University of Indianapolis. | 1869 | Henry Jameson...... | Apr. 1 |
| 29 | Des Moines, Iowa.- | Io wa College of Physicians and Surgeons, Drake University. | 1882 | Lewis Schooler, LL. D. | Apr. 5 |
| 30 | Iowa City, Iowa -- | State University of Iowa, Medical Department. | 1870 | Wm. D. Middleton, A. M. | Mar. 28 |
| 31 | Keokuk, Iowa --.-- | Keokuk Medical College - .-..... | 1849 | Oliver D. Walker...- | Mar. 20 |
| 32 33 | Sioux City, Iowa-- Kansas City, Kans | Sioux City College of Medicine-- College of Physicians and Sur- | 1890 | H. A. Wheeler, A. M- | Apr. 5 |
| 33 | Kansas City, Kans | College of Physicians and Surgeons, Kansas City University. | 1894 | J. W. May - .-..-- - .-. - | Apr. 1 |
| 34 | Lawrence, Kans..- | University of Kansas, School of Medicine (preparatory). | 1850 | S. Williston, Ph. D .- | June 3 |
| 35 | Topeka, Kans | Kansas Medical College.--.....- | 1889 | John E.Minney, A.M. | Apr. - |
| 36 | Louisville, Ky | Hospital College of Medicine, Central University of Kentucky. | 1874 | P. Richard Taylor-.- | June 30 |

[^38]a Dr. W. A. Fendrix built and gave to the college a pathological laboratory, in memory of his wife. It will accommodate 75 students.
medicine for the year 1898-99.

d A department of the university.
$e$ Became a department of the university in 1892.
$f$ There are 4 terms of 12 weeks each in each calendar year.

Table 10.-Statistics of schools of

|  | Location. | Name of institution. | 'su!̣urto qs.xy jo .xeo 太 | President or dean. | Session closes |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 |
| 37 | Louisville, Ky | Kentucky School of Medicine. | 1859 | Wm. H. Wathen, |  |
| 38 |  | Kentucky University, Medical | 1899 | Thomas C. Eyan | June 30 |
| 39 |  | Louisville Medical College .....- | 1869 | C. W. Kelly |  |
| 40 |  | University of Louisville, Medical Department. | $183 \%$ | J. IV. Bodine | ...do |
| 41 | New Orleans, La | New Orleans University, Med ical College. | 1889 | L. G. Adkinson, A. M., D. D. | Mar. ${ }^{\text {a }}$ |
| 42 | -.-- do ---..-. -- | Tulane University of Louisiana, Medical Department. | 1834 | stanford E. Chaillé, A. M. | May - |
| 43 | Brunswick, Me | Medical School of Maine, Med ical Department of Bowdoin College. | 1830 | Alfied Mitchell, A. M. | June 20 |
| 44 | Portland, Me | Portland School for Medical Instruction (preparatory). | 1836 | Charles D. Smith. | Dec. 21 |
| 45 | Baltimore, Md. | Baltimore Medical College .-.... | 1881 | David Streett. A. M -- |  |
| 43 | Balt | Baltimore University School of Medicine. | $1884$ | Hampson H. Biedler, A. M. | Apr. 13 |
| 47 |  | College of Physicians and Surgeons. | 18\% | Thomas Opie | Apr. 18 |
| 48 | do | Johns Hopkins Medical School. - | 1893 | William Osler, LL.D. | June 15 |
| 4.3 |  | Maryland Medical College -..... | 1898 |  | $\text { May } 0$ |
| 5 |  | University of Maryland, School of Medicine. | 1807 | Charles W. Mitchell, M. A. | $\text { Ap1. } 20$ |
| 51 |  | Womans Medical College of Baltimore. | 188\% | Joseph T. Smith..... | May 18 |
| 53 | Boston, Mass | College of Physicians and Surgeons.* | 1880 | Augustus P. Clarke, A. M. | June : 0 |
| 33 | --...do | Harvard University, Medical School. | 1788: | Wm.L. Richardson.. | June 28 |
| 54 |  | Tufts College, Merical School | $1893$ |  |  |
| 53 | Ann Arbor, Mich. | University of Michigan, Department of Medicine and | $1850$ | Victor C. Vaughn, Ph. D., Sc. D. | June 20 |
| 58 | Detroit, Mich | Detroit College of Medicine | 1867 | Theodore A.Mcuraw | May 11 |
| 57 | .... do -........ | Michigan College of Medicine | 1888 | Hal C. Wyman -..... | Mar. 28 |
| 58 | Grand Rapids Mich | Grand Rurgery Medical College. | 1897 | William Fuller | May 12 |
| 59 | Saginaw, Mich.... | Saginaw Valley Medical College. | 1896 | L. W. Bliss - ......... | May 20 |
| 60 | Minneapolis, Minn. | Minneapolis Co!lege of Physicians and Surgeons, HamlineUniversity. | 1883 | Leo M. Crafts. A. M. | June 8 |
| 01 | do | University of Minnesota, College of Medicine and Surgery. | 1888 | Parks Ritchie | June 3 |
| 62 | Columbia, Mo. | University of Missouri, Medical Department. | 1873 | A. W. McAlester, A. M. LL. D. | Apr. 7 |
| 63 | Kansas City, Mo | Kansas City Medical College.... | $1869$ | Franklin E. Murphy - |  |
| 64 | .....do | Medico-Chirurgical College .... University Medical Colleme | $\begin{aligned} & 1897 \\ & 1881 \end{aligned}$ | George O. Cofin C F Waineicht | Apr. 15 |
| 65 |  | Woman's Medical College | 1885 | Dora G.Wilson | Apr. <br> Apri |
| 67 | St. Joseph, Mo | Central Medical College of Missouri. | 1894 | T. E. Potter. | Mar. 1 |
| 68 | do | Ensworth Medical College | 1878 | Hiram Christopler | Mar. 15 |
| ${ }_{9}^{69}$ | St. Loutis, Mo | Barnes Medical College -...-..-- | 1892 | C. H. Hughes -...... | ${ }_{\text {Apr }}{ }^{\text {apr }}$. 20 |
| 70 | do | Bearmont Hospital Medical College. | 1880 | Frank J. Latz, A. M. | Apr. 20 |
| 71 | do | Marion Sims College of Medicine | 1890 1840 | $\underset{\text { Young H. Bond, A.M }}{\text { R }}$ | $\text { Apr. } 28$ |
| 2 |  | Missour' Medical College e...... | 1840 | P. G. Robinson, <br> LL. D. |  |
| 73 | do | St. Lounis College of Physicians and surgeons. | $18 \% 9$ | Waldo Briggs .-.... | Apr. 10 |
| 74 | Omaba - ${ }^{\text {Nebr }}$ | St. Louis Medical College e - .i. | $\begin{aligned} & 1842 \\ & 1892 \end{aligned}$ | Henry H. Mudd <br> D. C Bryant 4 Mr $^{-}$ |  |
| \% 5 | Omaha, Nebr | John A. Creighton Medical College. | 1892 | D. C. Bryant, A. M.. | May 4 |
| 76 | -..- -do . | Omaha Medical College, Uni- | 1881 | A. F. Jonas | Apr. 20 |
| 78 | Hanover, N. H. .-. | Dartmouth Medical College | 1798 | Wm. T. Smith, LL. D | Feb. 27 |

[^39]medicine for the year 1838-99-Continued.

$e$ Missouri Medical College and St. Louis Medical College were consolidated in 1899, under name of Medical Department of Washington University.

Table 10.--Statistics of schools of

|  | Location. | Name of institution. |  | President or dean. | Session closes- |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 |
| \% | Albany, M. Y. .-.... | Albany Medical College, Union | 1835 | W.G.Tucker, Ph. D., | Apr. 10 |
| 79 | Buffalo, N. Y | University of Buffalo, Miedical | 1845 | Matthew D. Ma | Apr. 2\%) |
| 80 | New York (Brools- | Department. Island College Fospital | 1860 |  |  |
| 80 | lyn), N. Y. | Medical School. | 1860 | A. M.. LLL. D. |  |
| 81 | New York, N. Y. | Columbia University, College | $180 \%$ | James W. McLaue | June 13 |
| 82 | do | Cornell University Niedical School. | 1598 | Wm. MI. Polk, LL. D. | June 6 |
| 83 | do | University and Bellerue Kospital Medical College. | 1841 | Edward G. Janeway - | May 16 |
| 84 | -d | Woman's Medical College of the New York Infirmary. | 1866 | Emily Blackwell | May |
| 85 | Syracuse, N. Y.... | Syracuse University, Coilege of Medicine. | 1839 | Henry D. Didama, LL. D. | June \% |
| 86 | Chapel Hill, N. C.- | University of North Carolina, School of Medicine (preparatory). | 1591 | R. H. Whitehead .... | May 15 |
| 87 83 | Davidson.N. | North Carolina Medical College | 1898 | J. P. Munroe --.....- | Mas 1 |
|  | Raleigh, N. C | Leonard Medical School of Shaw University. | 188\% | James Mckee....... |  |
| 89 | Cincinnati, Ohio. | Cincinnati College of Medicine and Surgery. | 1851 | W. E. Kiely | May 10 |
| 90 | do | Laura Memorial Woman's Medical College. | 1890 | Jom M. Withrow, | Apr. 15 |
| 91 | do | Medical College of Ohio, University of Cincinnati. | 1519 | W. W. See | Tay 2 |
| 93 | ----do ------- | Miami Medical College | 1800 | N. P. Dandridge, A. M. | May 2 |
| 93 | Cleveland, Ohio | Cleveland College of Plyssicians and surgeons, Department of Ohio Wesleran University. | 1863 | Charles B. Parker, M. R.C.S., Eng. | May 3 |
| 94 | ..do | Western Reserve University, Medical College. | 1843 | Eunter H. Powell, A. M. | June 15 |
| 95 | Columbus, Ohio | Ohio Medical University | 1892 | Georrge II. Waters, | Apr. 18 |
| 93 | do | Starling Medical College | 184\% | Starling Loving, LL. D. | Apr. 13 |
| 97 | Lebanon, Ohio. | National Normal University, College of Medicine (preparatory). | 1889 | Selden S. Scoville, A. $M$. | Miar. 1\% |
| 98 | Toledo, Ohio. | Toledo Meaical College ---...-- | 1881 | Daniel E. Haag | Apr. $2 \pi$ |
| 99 | Portland, Oreg | University of Oregon, Medical Department | 1887 | S. E. Tosephi. | Apr. 1 |
| 100 | Salem, Oreg | Willamette University, Medical | 1865 | W. H. Byrd | Apr. 4 |
| 101 | Philadeìphia, Pa | Jefferson Medical Colle g e of Philadelphia. | 1825 | James IV. Holland. | May 15 |
| 102 | .do | Medico-Chirurgical College of | 1880 | Seneca Egbert, A. MI- | May 90 |
| 103 | do | University of Pennsylvania, De- | 1:63 | John Marshall, Nat. | Juno 12 |
| 104 |  | Wartment of Mecicine. | 1850 |  | May 17 |
| 105 | Pittsburg, Pa--...- | Western Pennsylvania Medical College, University of West- | 1885 | J. C. Lange | May ご" |
| 106 | Charleston, S. C...- | Mern Pennsylvania. | 18\%8 | Francis L. Parker... | Apr. 1 |
| 107 | Chattanooga, Tenn | Chattanooga Medical College, | 1889 | E. A. Cobleigh | Apr. 21 |
| 108 | Knoxville, Tenn... | U.S. Grant University. | 1887 | Charles P. MicNabb.- | Oct. 2 |
| 109 | Memphis, Temn.... | Memphis Hospital Medical Col- | 1880 | William B. Rogers | Apr. 27 |
| 110 | Nashville, Tenn ... | Central Tennessee Collerse, Me- | 18\%6 | G. W. Hubbard ...... | Feb. 1 |
| 111 | do | harl'y Medical Department. <br> University of Nashville, Med- | 1859 | William G. Ewing-.- | Apr. is |

medicine for the year 1895-99-Continued.

|  |  | Students. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 雹 | $\begin{aligned} & \dot{\ddot{\theta}} \\ & \text { \# } \\ & \text { B } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $6^{6}$ | 7 | 3 | ! | 10 | 11 | 12 | 13 | 14 | 15 | 118 | 17 | 18 | 19 | 20 | 21 |  |
| 1.1 | 11 | 154 | 0 | 67 |  | 4 | 29 | 3100 | 82\% | a 340 | \$100, 000 | \$12,500 |  |  | Day . | 78 |
| 7 | 62 | 209 | 80 | 46 | 14 | 4 | 30 | 100 | 10 | 540 | 1\%3,509 | 4,510 | \$5,000 | 6,552 | Day .- | 79 |
| 20 | 97 | 211 |  | 60 | 16 | 4 | 32 |  |  |  |  |  |  | 0 | Da | 80 |
| 20 | 30 | 738 | 0 | 140 | $2 \%$ | 4 | 32 | $\therefore 00$ | 25 | 836 | 2, 000, 000 | (c) | (c) |  | Das | 81 |
| 26 | 23 | 2 an | 25 | $6 \%$ | 48 | 4 | 32 | 150 | 30 |  | 150, 000 | 0 | d195,000 |  | Day | 82 |
| 13 | : 3 | 412 | 0 | $17 \%$ | 30 | 4. | 32 | 150 | 2 | \% 70 | 500, 000 | 110,000 |  | 325 | D | 83 |
| 17 | 18 | 0 | \% 5 | 17 | 16 | 4 | $3 \pm$ | 130 | 30 | 535 | 103,000 |  |  | 935 | Day | 84 |
| 15 | 18 | 81 | $\tau$ | 2. | 8 | 4 | 32 | 125 |  | 520 | 93, 793 |  |  | 4,455 | Day . | 85 |
| 5 | 1 | 44 | 0 |  | 4 | (b) | 32 | 50 |  |  |  |  |  | 1,000 | Day . | 85 |
| 5 | 2 | 46 |  | 1 | 1 | 4 | 32 | 75 | 25 |  | 4,000 |  |  | 200 | Day .. | 87 |
| 8 | 1 | \% |  | 4 |  | 4 | 24 | 75 | 10 | 310 | 15, 000 | 5,000 | 1,365 |  | Day | 88 |
| 13 | 4 | 85 | $\tau$ | 11 | 8 | 4 | 32 | \% 5 | 25 | 325 | 75, 000 |  |  |  | Day | 89 |
| 20 | 1 | 0 | 30 | ${ }_{5}$ | 10 | 4 | 28 | 50 | 25 | 285 | 30, 100 |  |  | 0 | Day -- | 90 |
| 14 | $\because 0$ | 218 |  | 40 | 11 | 4 | 28 | 100 | 25 |  | 70, 030 |  |  |  | Day .- | 91 |
| 15 | 10 | 98 |  | 16 |  | 4 | 30 | 100 | 25 | a 450 | 20,000 |  |  | 0 | Day . | 92 |
| 22 | \% | $8 \pi$ | 8 | 21 | 17 | 4 | 32 | 100 | 30 | a 500 | 110,000 | 0 | 30,000 | 500 | Day -- | 93 |
| 18 | 6 | 108 |  | $\gamma$ | 21 | 4 | 32 | 125 |  |  | 275, 000 | 175, 000 | 5,000 | 2,500 | Day .- | 94 |
| 31 | 8 | 178 | 9 | 4 | 27 | 4 | 28 | 50 | 10 | 271 | 50,000 |  | 0 | a 800 | Da | 93 |
| 15 | 15 | 122 |  | 2 | 20 | 4 | 25 | 50 | 25 | 284 | 100, 000 |  | 0 | 3, 500 | Day | 96 |
| 8 | 2 | 23 | 4 |  | 2 | $b$ 吕 | 28 | 60 |  |  | (c) |  |  |  | Day | 97 |
| 16 | 18 | 41 | 5 | 1 | 1 | , | 28 |  |  | a,230 | 25,000 |  |  |  |  | 98 |
| 14 | 9 | 49 | 15 | 10 | 12 | 1 | 26 | $130$ | 30 |  | 0 | 0 | 0 | a 1,000 | Day .- | 99 |
| 16 |  | 20 |  | 2 | 10 | 4 | 24 | a 75 | 30 | 335 |  |  |  | 0 | Day .-- | 100 |
| 29 | 13 | 554 |  | 85 | 52 | 4 | 30 | 150 |  | 620 | 600, 000 |  | 40,000 | 800 | Day .- | 10 |
| 24 | 20 | 419 |  | 144 | 30 | 4 | 32 | 130 | 25 | 526 | 5\%5, 000 |  |  | a 1,500 | Day .. | 102 |
| 20 | 30 | 835 | 0 | 211 | 148 | 4 | 34 | 200 | 0 | 815 |  | 50,000 | 0 | 6,090 | Day -- | 103 |
| 10 | 21 | 0 | 148 | 31 | 20 | 4 | 33 | 125 | .-- | 516 | 130,000 | $2 \% 6,7 \% 3$ | 0 | 2,053 | Day .- | 04 |
| 20 | 24 | $2 \pi 4$ | 2 | 49 |  | 4 | 32 | 100 |  |  | 150, 000 | 0 | 0 | 400 | Day -. | 105 |
| 8 | 9 | 95 | 2 | 21 |  | 3 | 28 | 100 |  | 300 | 30,000 | 0 | 0 |  | Day .- | 106 |
| 14 | 10 | 168 | 0 | 31 |  | 3 | 28 | 50 | 30 | 300 | 50,000 | 0 | 0 |  | Day .. | $10 \%$ |
| 15 | $\stackrel{\square}{\square}$ | 91 |  | 18 | 3 | 4 | 23 | 50 | 23 | a 280 | 0 | 0 | 0 | 0 | Day .- | 108 |
| 10 | 15 | 541 | 0 | 112 | 23 | 4 | 23 | 50 | 25 | 240 | 60,000 | 0 | 0 | 480 | Day -- | 109 |
| 10 | 6 | 159 | 6 | 38 | 18 | 4 | 20 | 30 | 10 | 160 | 30,000 | 12,000 |  | 800 | Day .- | 110 |
| 11 | $\tau$ | 301 | \% | 68 | 2 | 4 | 25 | 5 | 25 | a 325 | 40,000 |  |  | 560 | Day .- | 111 |


|  | Location. | Name of institution. |  | President or dean. | Session closes- |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | $\pm$ | $\overline{5}$ |
| 112 | Nashville, Tenn | University of Tennessee, Med- | 18:6 | Paul F. Eve | Ap |
| 113 |  | ical Department. | 18\% | William L. Dudley -- | Apr. 5 |
|  |  | ical Department. |  |  |  |
|  | Sewanee, Tenn | Sewanee Medical College, University of the South. | 1892 | Joln S. Cain | 20 |
| 115 | Fort Worth, Tex .. | Fort Worth University, Medical | 1894 | Bacon Saunders | Apr. 6 |
| 116 | Galveston, Tex...- | University of Texas, Medical | 1891 | Henry P. Cooke | May 15 |
| $11 \%$ | Burlington, Vt | University of Vermont, Med- | 1823 | A. P. Grinnell | June 30 |
| 118 | Richmond, Va | Medical College of Virginia*.... | 1838 | Christopher Tomp- | May 4 |
| 119 | do | University Coliege of Medicine. | 1893 | J. Allison Hodges.... |  |
| 120 | Charlottesville, Va. | University of Virginia, Medical Department. | 18:5 | Paul B. Barringer -.. | Sept. 15 |
| 121 | Milwaukee, Wis... | Milwaukee Medical College ..... | 1894 | William H. Earles | Apr. 3 |
| 12: | ...-do ........... ...- | Wisconsin College of Physicians and Surgeons* | 1893 | W. H. Washburn .... | Apr. 27 |
|  |  | eclectic |  |  |  |
| 123 | Atlanta, G | Georgia College of Eclectic Medicine and Surgery. | 1839 | A. G. Thomas, A. Mr., LL. D. | Apr. 1 |
| 124 | Chicago, Ill | Medicine and Surgery. <br> Bennett College of Eclectic <br> Medicine and Surgery. | 1868 | Anson L. Clark, A. M. | May 10 |
| 125 | St. Lours, Mo | American | 1873 | Edwin Younkin | Apr. 10 |
| 125 | Lincoln, Nebr | Lincoln Medical College of Cotner University. | 1889 | W. S. Latta | Mar. 17 |
| 127 | New York, N. Y | Eclectic Medical College of the City of New York. | 1885 | George W. Boskowitz, A. M. | May - |
| 123 | Cincinnati, Ohio | Eclectic Medical Institute ...... | 1845 | Frederick J. Locko-- | Apr. 10 |
|  |  | homeopa |  |  |  |
| 129 130 | San Francisco, Cal Denver, Colo | Hahnemann Hospital College... Denver Homeopathic Medical | 1884 | A. C. Peterson_..... Samuel S. Smythe.. | $\text { May }=$ $\text { Apr. } 15$ |
| 130 | Denver, Colo .- | Denver Homeopathic Medical College.* | 1891 | Samuel S. Smythe... | Apr. 15 |
| 131 | Chicago, Il | Chicago Homeopathic Medical college | 18\%6 | J. R. Kippax -.....-. | Mar. 21 |
| 132 | d | Dunham Medical Collega | 1895 | C. S. Fahnestock | Apr. - |
| 133 |  | Hahnemann Medrcal College | 1860 | C. H. Vilas. | Mar. 25 |
| 134 |  | Hering Medical College | 1891 | Henry C. Allen --.... | Apr. 10 |
| 135 |  | National Medical College | 1891 | T. C. Duncan, Ph. D., LL. D. | Apr. 1 |
| 136 | Iowa City, Iowa | State University of Iowa, Homeopathic Medical Depart- | 18\%\% |  | Mar. 30 |
| 137 | Louisville, Ky | Southwestern Homeopathic | 1893 | A. Leight Monroe | Apr. 4 |
| 138 | Baltimore, | Southern Homeopathic Med- | 1891 | Henry Chandle | 5 |
| 139 | Boston, Mass | Boston University, School of | $18 \% 3$ | I. Tisdale Talbot | une 5 |
| 140 | Ann Arbor, Mich | University of Michigan, Home- | 1875 | Wilbert B. Eins- | June 27 |
| 141 | Minneapolis, Minn. | opathic Medical College. lege of Homeopathic Medicine | 1888 | daie, A. M. <br> A. P. Wiliiamson... | June 1 |
| 142 | Kansas City, Mo... | and Surgery. <br> Coilege of Homeopathic Medicine and Surgery, Kansas | 1836 | W. H. Jenney | Mar. 21 |
| 143 | do | Kansas City Homeopathic Medical Colleqe: | 1888 | Peter Deiderich. | Mar. 25 |
| 141 | St. Leouis, Mo.-...- | Homeopathic Medical Coilege | $185 \%$ | Wm. C. Richardson. | Apr. 7 |
| 145 | New York, N. Y... | New York Homeopathic Medical College. | 1880 | Wm. Tod Helmath, LL. D. | May 5 |

medicine, for the year 1898-99-Continued.

| in |  |  | Stud | ents. |  | ${ }_{0}^{\circ}$ |  |  | 白 | ${ }_{8}^{8}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\underset{\underset{A}{\text { g }}}{\substack{\text { d }}}$ | $\begin{aligned} & \text { घं } \\ & \text { äd } \\ & \text { B } \end{aligned}$ |  |  |  |  |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & g \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |  |
| 13 | 6 | 226 | 0 | 58 | 18 | 4 | 26 | \$100 | \$25 |  | \$3,600 | 0 | 0 | 0 |  | 112 |
| 13 | 8 | 249 |  | 76 | -- | 4 | 26 | 100 | 25 |  | 90, 000 |  | 0 |  | Day .- | 113 |
| 13 | 7 | 120 | 0 | 50 | 10 | 4 | 30 | 50 | 25 | c\$200 | (b) |  |  |  | Day .. | 114 |
| 15 | 5 | 138 | 4 | 18 | 5 | 4 | 26 | 75 | 25 | 325 | 30,000 | 0 | 0 | 0 | Day .- | 115 |
| 12 |  | 141 | 7 | 45 | 7 | 4 | 30 | 0 | 0 | 90 | 300,000 |  |  | 3,000 | Day .- | 116 |
| 7 | 18 | 210 |  | * 69 |  |  |  |  |  |  |  |  |  |  |  | 117 |
| 12 | 12 | 189 | 0 | 41 |  | 3 | 28 | 90 | 30 | -... | 100,000 |  |  |  | Day .- | 118 |
| 17 | 20 | 252 | 0 | 68 | 24 | 4 | 30 | 85 | 30 | 370 | 55, 000 |  |  | 500 | Day .- | 119 |
| 7 | 5 | 183 |  | 37 | 31 | 4 | 35 | a 90 | 0 |  |  | \$100,000 | \$10,000 |  | Day .- | 120 |
| 24 | 11 | 150 | 0 | 5 | 10 | 4 | 28 | 1 CO | 0 | 440 | 150,000 | 0 | 0 | 0 | Day .- | 121 |
| 21 | 13 | 49 | 0 | 20 |  | 4 | 27 | 100 | 0 | 377 | 52, 000 |  |  |  | Day .- |  |
| 9 | 3 | 61 | 4 | 26 | 5 | 3 | 26 | 70 | 25 |  | 25, 000 |  |  | 1,000 | Day .- | 123 |
| 20 | 7 | 78 | 11 | 7 |  | 4 | 32 | 100 | 0 | 405 | 25,000 |  |  | a 300 | Day | 124 |
| 15 | 2 | 59 | 9 | 25 | 10 | 4 | 28 | 75 | 25 |  | 2,800 |  | 0 | 300 | Day .- | 125 |
| 18 | 6 | 40 | 3 | 4 | 1 | 4 | 24 | 50 | 25 | 225 | 10,000 | 3,000 |  | 200 | Day | 126 |
| 14 | 14 | 63 | 16 | 14 | 15 | 4 | 26 | 100 | 30 | 500 | 40, 000 |  |  | 2,278 | Day .- | $12 \%$ |
| 14 | 3 | 152 | 5 | 76 | 25 | 4 | 27 | 75 | 25 | 250 | 60,000 | 0 | 0 | 500 | Day | 128 |
| 15 | ${ }_{9}^{4}$ | 18 | ${ }^{7}$ | 3 | --- | 4 | 28 | 75 | 40 | 345 | 15, 060 |  |  |  | Day .- | 129 |
| 20 | 9 | 32 | 11 | 13 |  | 4 | 26 | 100 | 0 | 405 | 5, 500 |  |  |  | Day .- | 130 |
| 22 | 20 | 165 | -- | 40 | 43 | 4 | 26 | 65 | 30 | 345 | 59, 000 | 0 | 0 | 850 | Day . | 131 |
| 16 | 10 | 47 | 14 | 2 | 15 | 4 | 26 | 100 | 0 | 415 | 45, 000 | 0 | 0 | 500 | Day .- | 132 |
| 19 | 24 | 140 | 58 | 56 | 15 | 4 | 26 | 70 | 30 | 380 | 195, 000 | 110,009 | 30,000 | 2,000 | Day .- | 133 |
| 20 | 10 | ${ }^{35}$ | 25 | 18 | 10 | 4 | 28 | 100 | 0 | 250 | 30, 000 | 0 | c | ${ }_{6}^{600}$ | Day .- | 134 |
| 40 | 13 | 101 | 31 | 22 |  | 4 |  |  |  |  |  |  |  |  | Day -- | 135 |
| 10 | 4 | 55 | 6 | 8 | 10 | 4 | 25 | 65 | 0 | 0 | 40,000 | 0 | 0 | 600 | Day .- | 136 |
| 16 | 6 | 14 | 10 | 5 | 11 | 4 | 26 | 75 | 0 |  | 0 |  |  | 0 | Day .- | $13 \%$ |
| 14 | 10 | 29 | 10 | 8 | 0 | 4 | 24 | 100 | 30 | 445 | 30,000 | 0 | 0 | a 600 | Day .- | 138 |
| 26 | 23 | 115 | 46 | - 44 | 5 | 4 | 32 | 125 | 30 | 483 | 120,000 | 40,000 | 1,000 | 2,500 | Day .- | 189 |
| 5 | 9 | 60 | 9 | 8 | 1 | 4 | 36 | 35 | 10 | 240 | 60,000 |  |  | 8,630 | Day .- | 140 |
| 15 | 2 | 20 | 2 | 4 | 1 | 4 | 32 | a 90 | 0 | 380 | (b) |  |  | 2,000 | Day .- | 141 |
| 14 | 16 | 20 | 6 | 4 | 12 | 4 | 26 | 50 | 30 |  |  |  |  | 3 (i) | Day .- | 142 |
| 32 |  | 24 | 12 | 14 |  | 4 | 24 | 80 | 25 |  |  |  |  |  | Day .- | 143 |
| 22 | 10 | 50 | 12 | 13 | 2 | 4 | 26 | 50 | 25 |  | 15,000 | 0 | 0 |  | Day | 144 |
| 24 | 12 | 130 | -- | 36 | 17 | 4 | 30 | 125 | 39 | 530 | 550, 000 | 0 |  | a 4,000 | Day .. | 145 |

a Approximately.
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TABLE 10.-Statistics of schools cj

|  | Location. | Name of institution. |  | President or dean. | Session closes- |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | : ${ }^{\text {d }}$ | 4 | 5 |
| 146 | New York, N. Y ... | HOMEOPATHIC-continued. <br> New York Medical College and Hospital for Women.* | 1863 | J. de la M. Lozier ... | Мау 3 |
| 147 148 | Cincinnati, Ohio-.- <br> Cleveland, Ohio ... | Pulte Medical College --.-.-.-- | 1819 | $\stackrel{\text { J. }}{\text { W. }}$ A. Brek- Philips. | Apr. 4 |
| 149 | Philadelphia, Pa.. | Hahnemann Medical College...phystomedical. | 1848 | Pemberton Dudley.- | May 10 |
| $\begin{aligned} & 150 \\ & 151 \end{aligned}$ | Chicago, Ind -....... | Chicago Physiomedical College. Physiomedical College of Indiana. <br> postgraduate and special (not included in summary). | $\begin{aligned} & 1891 \\ & 18 \pi 3 \end{aligned}$ | H. P. Nelson. <br> N. D. Woodard-...... | $\begin{aligned} & \text { Apr. } 20 \\ & \operatorname{Mar} . \\ & 2: 2 \end{aligned}$ |
| 158 153 | Chicago, Ill ......... <br> New Orleans, La. | Postgraduate Medical School... New Orleans Polyclinic. | $\begin{aligned} & 1888 \\ & 1887 \end{aligned}$ | W. Firanklin Coleman Isadore Dyer |  |
| 154 | New York, N. Y... | New York Postgraduato Medical School. |  | D. B. St. John Roosa- |  |
| 155 | do | New York School of Clinical Medicine. |  |  |  |
| 156 | Philadelphia, Pa .- | Philadelphia Polyclinic...... |  | Francis R. Packard |  |
| 157 | ..... do .-............. | Philadelphia Postgraduate School of Homeopathics. | -...-. | James T. Kent |  |

* In 189\%-98.
medicine，for the year 1898－99－Continued．

| － |  | Students． |  |  |  |  |  | © |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\underset{\text { E. }}{\underset{y}{\mid g}}$ | $\begin{aligned} & \text { 关 } \\ & \text { g } \\ & \text { ह } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | \％ | 8 | 9 | 11 | 囯 1 | 18 | 13 | 14 | 15 | 16 | 县年 | 18 | 19 | 10 | ${ }_{\text {1 }}$ 且 |  |
| 20 | 1 | 0 | 26 | 4 |  | 4 | 26 | \＄100 | \＄30 | \＄160 |  |  |  | 500 | Day－－ | 146 |
| 128 | $\begin{array}{r}5 \\ 1+ \\ \hline\end{array}$ | 39 120 | $\begin{aligned} & 10 \\ & 20 \end{aligned}$ | 10 51 | $\begin{array}{r} 9 \\ 12 \end{array}$ | $\begin{aligned} & 4 \\ & 4 \end{aligned}$ | 27 | $\begin{array}{r} 75 \\ 100 \end{array}$ | $\begin{aligned} & 25 \\ & 25 \\ & 25 \end{aligned}$ | $\begin{aligned} & 330 \\ & 430 \end{aligned}$ | $\begin{aligned} & \$ 20,000 \\ & 150,000 \end{aligned}$ | 0 | \＄7\％1 ${ }^{0}$ | 0 | $\begin{aligned} & \text { Day }--1 \\ & \text { Day -- } \end{aligned}$ | 148 |
| － 8 | 32 | $2 \% 3$ |  | 70 | 30 | 4 | 32 | 125 | 30 | 550 | 600，000 | 8250， 600 |  | 15，000 | Day ．－ | 149 |
| $\begin{aligned} & 32 \\ & 17 \end{aligned}$ | $\begin{array}{r} 10 \\ 1 \end{array}$ | $\begin{aligned} & 30 \\ & 30 \end{aligned}$ | $\begin{aligned} & 7 \\ & 3 \end{aligned}$ | 5 | $\begin{aligned} & 8 \\ & 6 \end{aligned}$ | $\begin{aligned} & 4 \\ & 4 \end{aligned}$ | $\begin{array}{\|l\|} 26 \\ 26 \end{array}$ | $\begin{aligned} & 65 \\ & 65 \end{aligned}$ | 0 | $\begin{aligned} & 295 \\ & : 290 \end{aligned}$ | $\begin{array}{r} 0 \\ 15,000 \end{array}$ | 0 | 0 | a 200 | $\begin{aligned} & \text { Day -- } \\ & \text { Day } \end{aligned}$ | $\begin{aligned} & 150 \\ & 151 \end{aligned}$ |
| $\begin{aligned} & 51 \\ & 11 \\ & 51 \end{aligned}$ | $\begin{array}{r} 37 \\ 9 \\ 51 \end{array}$ | $\begin{array}{r} 320 \\ 86 \\ 514 \end{array}$ | 8 1 9 |  |  |  | 2 |  |  |  |  |  |  |  |  | 159 153 154 |
| 11 | 25 | 53 | 0 |  |  |  |  |  |  |  |  |  |  |  |  | 155 |
| $\stackrel{22}{4}$ | $\begin{array}{r} 11 \\ \hline \end{array}$ | 108 9 | $13$ |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & 156 \\ & 157 \end{aligned}$ |


dentistry for the year 1898-99.


TABLE 11.-Siatistics of schools of

| Location. |  | Name of institution. |  |
| :--- | :---: | :---: | :---: | :---: | :---: |

dentistry for the year 1898-99-Continued.

| Session closes- |  |  | Students. |  |  |  |  | $\begin{gathered} \dot{0} \\ 0 \\ \tilde{0} \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ \tilde{Z} \\ . \\ 0 \\ 0 \\ \tilde{U} \\ 0 \\ 0 \end{gathered}$ |  |  |  | 000$\vdots$0000$\vdots$$\square$00000000 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 邑 | $\begin{aligned} & \text { gi } \\ & \text { d } \\ & 0 \\ & B \end{aligned}$ | $\begin{aligned} & \dot{\vdots} \\ & \text { D } \\ & \text { a } \\ & \ddot{a} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 118 | $1{ }^{1}$ | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| June 15 | 0 | 5 | 504 |  | 504 |  | 158 | 3 | 37 | 18100 | \$30 | \$345 | \$245,000 | 0 |  | Day |
| May 1 | 8 | 8 | 180 | 3 | 183 | 23 | 54 | 3 | 28 | 100 | 30 | 350 |  |  | 100 | D |
| Feb. 1 | 5 | 3 | $1 \%$ | 2 | 19 | 1 | 2 | 4 | 20 | 30 | 10 | 140 | ( $\alpha$ ) | (a) |  | ) |
| June 1 | 9 | 5 | 104 |  | 104 | 23 | 29 | 4 | 28 | 105 | 25 |  |  |  |  | Day |
| Mar. 30 | 7 | 5 | 164 | 1 | 165 | 2 | 39 | 3 | 24 | 100 | 25 | 350 | (a) | (a) |  | Da |
| May 11 | 10 | 6 | 36 | 0 | 35 | 0 | 5 | 3 | 32 | 100 | 30 |  |  | 0 |  | Day |
| $\begin{array}{ll} \text { Apr. } & 6 \\ \text { Apr. } & 3 \end{array}$ | 11 | $\stackrel{8}{5}$ | $\begin{array}{r} 32 \\ 142 \end{array}$ | $\stackrel{2}{0}$ | $\begin{array}{r} 34 \\ 142 \end{array}$ | 3 | $2{ }_{2}^{2}$ | 3 | $\begin{aligned} & 28 \\ & 88 \\ & \hline 8 \end{aligned}$ | $\begin{aligned} & 100 \\ & 110 \end{aligned}$ | 20 | $\begin{aligned} & 3: 55 \\ & 330 \end{aligned}$ |  | 0 | 114 | Day - |

$a$ In common with the university at large.

Table 12.—Statistics of schools of

of pharmacy for the year 1898-93.

| , |  | Students. |  |  |  |  | ©00000D\#I |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 豆 | $\begin{array}{\|l} \text { gin } \\ \text { g } \\ \text { B } \\ \hline \end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 | 118 | 18 | 18 | 16 | 18 | $1{ }^{1} 9$ | 19 | 80 | 12 | 22 |  |
| 1 | 3 | 27 | 0 | 27 |  |  | 2 | 36 |  | 0 | 0 | 924 | \$1,000 |  |  | Day . | 1 |
| 3 | 1 | 17 |  | 17 |  | 1 | 2 | 26 | 0 | 850 | \$10 | 120 |  |  |  | Day . | 2 |
| 4 | 5 | 67 | 3 | 70 | 1 | 18 | 2 | 31 | 4 | 100 | 20 | 205 | 60, 000 | 0 | a 300 | Day . | 3 |
| 4 | 2 | 17 | 1 | 18 | 1 | 6 | 2 | 28 | 4 | 60 |  |  |  |  |  | Eve - | 4 |
| $\underset{2}{4}$ | 1 | 52 31 | 2 | 51 |  | 11 | 3 | 24 | 4 | 60 | 0 | 185 | 18,000 | 0 |  | Eve - | 5 |
| ${ }_{3}$ | 4 | 148 | $\ddot{7}$ | 155 |  | 41 | 2 | 28 | 4 | 75 | 15 | 155 |  |  | 2,000 | Day. | ${ }_{7}$ |
| 6 | 2 | 134 | 8 | 142 |  | 83 |  | 40 | 0 |  | 5 |  | a 75,000 |  | a 550 | Day | 8 |
| 3 | 8 | 79 | 0 | 79 | 0 | 35 | 2 | 26 | 0 | 15 | 5 | a 100 |  |  |  | Day | 9 |
| 8 | 3 | 88 | 2 | 90 |  | *48 | 2 | 25 | 0 | 43 | 0 | 66 | 20,000 |  |  | Day. | 10 |
| 8 | 5 | 184 | 15 | 199 |  | 65 | 2 | 24 | 0 | 50 | 10 | 136 |  |  |  | Day . | 11 |
| 5 |  | 19 | 1 | 20 |  |  | 2 |  |  | 40 | 20 | 138 |  |  |  | Day.. | 12 |
| 5 | 5 | 44 | 2 | 46 | 0 | 14 | 2 | 23 | 0 | 75 | . 0 | 150 |  |  |  | Day | 13 |
| 6 | 6 | 43 | 8 | 51 | 0 | 14 | 2 | 40 | 2 | 0 | 5 | 76 |  |  |  | Day | 14 |
| 5 | 3 | 55 | 0 | 56 |  | 15 | 2 | 26 | 4 | 80 |  | 160 |  |  |  | Day | 15 |
| 3 | 3 | 15 | 3 | 18 | 0 | 11 | 2 | 26 | 2 | 70 | 0 | 155 |  | 0 |  | Day - | 16 |
| 12 | 6 | 11 | 0 | 11 | 0 | 3 | \|2, 4 | 36 | 3 | 30 |  |  |  |  |  | Day . | 17 |
| 3 | 3 | 101 | 0 | 101 |  | *35 | 2 | 33 | 0 | 90 | 15 | 180 | 37,000 |  |  | Day | 18 |
| 5 | 5 | 158 | 15 | 173 | 1 | 26 | , | $3 \pm$ | 4 | 100 | 10 | 215 | 68, 850 | \$13, 67\% | a 5, 132 | Day - | 19 |
| 12 | 4 | 74 | 7 | 81 | 3 | 19 | 2,4 | 38 | 0 | 35 | 10 | 170 | (b) |  | (b) | Day | 20 |
| 5 | 2 | 47 | 2 | 49 |  | 9 | 2 | 28 | 0 | 40 | 10 | 110 |  | 0 |  | Ere | 21 |
| 6 | 7 | 58 | 4 | 62 | 2 | 25 | 2.3 | 32 | 0 | 75 | 10 | 165 | (b) |  | (b) | Day | 22 |
| 5 | 7 | 28 | 1 | 29 |  | 7 | 2 | 26 | 4 | 65 | 10 | 140 |  | 0 |  | Eve - | 23 |
| 5 | 5 | 145 | 3 | 148 | 0 | 50 | ${ }_{2}^{2}$ | 28 | 4 | 66 | 10 | a 150 | 35, 000 | 0 | a 225 | Eve - | 24 |
| 4 | 2 | 26 | 0 | 26 |  | 13 | 2 | 30 | 3 | 75 | 15 | 165 |  |  | 230 | (c) | 25 |
| 3 | 8 | 68 | 0 | 68 |  | 21 | 2 | 23 | 4 | 64 | 10 | 138 |  |  |  | Eve - | 26 |
| 5 | 8 | 101 | ${ }_{5}^{6}$ | 107 | ${ }_{2}^{0}$ | 51 | 2 | 31 | 4 | 65 | 10 | 145 | 0 | 0 | 1,265 | Day - |  |
| 5 <br> 8 | 13 5 | 69 288 | 5 | $\begin{array}{r}74 \\ 288 \\ \hline\end{array}$ | 2 | 33 $* 148$ | ${ }_{2}^{2}$ | 25 | 0 4 | 100 | 10 | 139 | 0 | 0 | 100 | Day - | 28 |
| 5 | 2 | 22 | 0 | 22 | 0 | 4 | 2 | 36 | 4 | 75 |  | 170 |  | 0 | (b) | Day . | 30 |
| 1 |  | 8 |  | 8 |  |  | 3 | 24 | 3 | 32 | 10 | 108 | 1,500 |  |  | Day. | 31 |
| 4 | 2 | 214 | 1 | 215 |  | 76 | 1,2 | 40 | 0 | 60 | 4 |  |  |  |  | Day - | 32 |
| 6 | 1 | 32 | 7 | 39 | 0 | 25 |  | 34 |  |  | 10 |  | 30,000 |  | a 500 | Day . | 33 |
| 4 | , | 54 | 2 | 56 | 2 | 9 | 3 | 28 | 0 | 60 | 10 | 190 |  | 0 | a 500 | Day . |  |
| 6 | 6 | 36 | 2 | 38 | 0 | 12 | 2,4 | 37 | 0 | 0 | 5 | a 50 | (b) | (b) | (b) | Day . | -35 |
| 5 | 3 | 53 | 1 | 54 |  | 34 | 1,2 | 40 | 0 | 75 |  |  |  |  | 800 | Day | 36 |
| 2 | 1 | 20 | 2 | 22 | 0 | 5 | 2 | 38 | 1 | 0 | 5 |  |  |  | (b) | Day | 37 |
| 9 | 3 | 22 | 4 | 26 | 0 | 0 | 4 | 40 | 0 | 0 | 0 | 24 |  |  | 400 | Day. | 38 |
| 5 | 6 | 27 | 0 | 27 | 0 | 5 | 2 | 30 | 4 | 75 | 10 | 165 |  |  |  | Ero | 39 |

Table 12.-Statistics of schools of

|  | Location. | Name of institution. | Year of first open ing. | President or dean. | Session closes- |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 |
| 40 | Philadelphia, Pa-.- | Philadelphia College of Phar- | 1821 | Joseph P. Remington | Apr. 15 |
| $41$ | Pittsburg, Pa. | macy. <br> Pittsburg College of Pharmacy | 1878 | Julius A. Koch .-...- | $\text { Apr. } 5$ |
| $\begin{aligned} & 12 \\ & 42 \end{aligned}$ | Charleston, S. C... | Medical College of South Carolina, Department of Pharmacy. | 1893 | Francis L. Parker... | $\text { Apr. } 1$ |
| 43 | Brookings, S. Dak- | South Dakota Agricultural College, Departmentof Pharmacy. | 1888 | B.T.Whitehead, prof | June 28 |
| 44 | Knoxville, Temn... | University of Tennessee, Department of Pharmacy. | 1888 | Charles O. Hill, prof | June 11 |
| 45 | Nashville, Teñ --- | Central Tennessee College, Department of Pharmacy. | $18 \% 9$ | G. W. Hubbard.----- | Feb. 1 |
| 46 | do | partment of Pharmacy. <br> Vanderbilt University, Depart- | 1898 | James M. Saftord .-. | June 1o |
| $4 \%$ | Galveston, Tex | ment of Pharmacy. University of Texas, School of | 1893 | Henry P. Cooke ...-. | May 15 |
| 48 | Richmond, Va | University College of Medicine, | 1893 | T. A. Miller | May 11 |
| 49 | Pullman, Wash...- | Washington Agricultural Col- | 1896 | George H. Watt | June 20 |
| 50 | Seattle, Wash .....- | lege, School of Pharmacy. <br> University of Washington, | 1895 | Frank P. Graves ...- | June 1 |
| 51 | Madison, Wis.-...- | University of Wisconsin, School of Pharmacy. | 1883 | Edward Kremers . | June 22 |

[^40]a For degree of Doctor in Pharmacy.
pharmacy for the year 1898-99-Continued.

$b$ In common with the university at large.
$c$ Afternoon and evening.
Table 13.-Statistics of veterinary schools for the year 1398-99.

TABLE 14. -Statistics of training schools for nurses for the year 1898-99.

TABLE 14.-Statistics of training schools for murses for the year 1898-99-Continued.

|  |  | $\stackrel{3}{10}$ |  |
| :---: | :---: | :---: | :---: |
|  |  | $\stackrel{0}{-1}$ |  |
|  | -ırə^ puoses | $\stackrel{\square}{\square}$ |  |
|  |  | $\theta$ |  |
| -əs.nnoo әप7 प!̣ sxeə |  | 今 | A2 0200220000020202020282020202020200 a2 02020200002202020002 |
| $\begin{aligned} & \dot{\ddot{Z}} \\ & \stackrel{n}{z} \\ & \dot{Z} \end{aligned}$ | '668I U! pequnprin | so |  |
|  | -әтъидя | $\bigcirc$ |  |
|  | 'ə[3] | $\stackrel{ }{ }$ |  |
|  |  | 4 |  |
|  |  | - |  |
|  |  | $\because$ |  |
|  |  | 58 |  |
|  |  | - | $\begin{aligned} & \text { O } \\ & \text { O } \end{aligned} \text { O }$ |

 of


Wifene
웅웅



|  | West side Hospital |
| :---: | :---: |
|  | Woman's Hospital |
| gin, Ill | Sherman Hospital |
| Galesburg | Galesburg Hospital |
| Hospital, | Illinois Eastern Hospital for |
| Peoria, 11 | Cottage Hospital |
| Quincy, Ill | Blessing Hospital |
| Rockford, 11 | Rockford Hospital |
| Evansville, Ind | Evansville Sanitarium |
| do | Southern Indiana Hospital for Insane |
| do | St. Mary's Hos |
| Fort Wayne, Ind | Hope Hospital |
| Indianapolis, Ind | Indianapolis City Hospital |
| Logansport, Ind | Northern Indiana Hospital for the Insane |
| South Bend, Ind | Epworth Hospital |
| Cedar Rapids, Iowa | St. Luke's Hospital |
| Clarinda, Iowa | State Hospital lor the Insane |
| Council Bluffs, Iowa | Women's Christian Association Hospita |
| Davenport, Iowa . | St. Luke's Hospital |
| Independence, Iowa | Hospital for the Insane |
| Iowa City, Iowa .... | Homeopathic Hospital of State University |
| Mount Pleasant, | Iowa State University Hospita Iowa Hospital for the Insane. |
|  |  |
| Kansas City, Kans | Bethany Hospital |
| Leavenworth, Kans | Cushing Hospital |
| Topeka, Kans. | Christ's Hospital |
|  | Jane C. Stormont Hosp |
| Wichita, Kans | Wichita Hospital |
| Louisville, Ky | John N. Norton Memorial |
| New Orleans, La | Louisville City Hos |
| New Orleans, La | Charity Hospital --.-------------- |
| do | Phyllis Wheatley Training School, New Orleans University. |
| do |  |
| Augusta, Me | Augusta City Hospital |
| Bangor, Me | Eastern Maine General Hospital |
| Lewiston, Me | Central Memorial General Hospital |
| Portland, Me | Maine General Hospital |
| Baltimore, MId | Good Samaritan Hospital |
|  | Johns Hopkins Hospital |
|  | Maryland General Hospital |
| do | Maryland Homeopathic Hospital |
|  | Robert Garrett Hospital for Chil |
|  | St. Agnes Hospita |
|  | University of Maryland H |
| Cumberland, M | Western Maryland Hospita |

Wesley Fospital.-.
West Side Hospital
TABLE 14.—Statistics of training schools for nurses for the year 1898-99-Continued.

|  | Location. | Name of school. | Yearoffirstopen-ing. | Superintendent of school. | Session closes- | Pupils. |  |  |  | Monthly allowance to pupil. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 岳 |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
| 104 | Beverly, Mass | Beverly Hospital Training School | 1893 | Mary H. Paterson. |  | 0 |  |  |  | *8 | \$12 |  | , |
| 105 | Boston, Mass | Boston Almshouse and Hospital, Long Island | 1897 | Mary A. Morris |  | : | 30 | 17 | 2 | 10 | 12 |  | 273 |
| 106 | ....-do | Boston City Hospita | 1878 | Lucy L. Drown | (a) | 0 | 156 | 39 | 2 |  | 10 |  | 828 |
| 107 |  | Carney Hospital -- | 1893 | Sr.M.Lucia - | June 15 | 0 | 36 | 7 | 3 | 8 |  | \$8 | 200 |
| 108 | do | Deaconess Hospital. | 1896 | M. E. Booker |  |  | 5 | 3 | $\stackrel{2}{3}$ | ${ }_{6}$ | 8 |  | 15 |
| 110 | do | Children's Hospital..-- $M$ - | 1884 | F.A. Baugh.... | June ${ }^{\text {June }} 3$ | 0 | 24 | 5 36 | 3 | 4 10 | 14 | 4 | 10 |
| 111 | do | Massachusetts Homeopathic Hospital | 1886 | Alice A. Griswold |  | 0 | 55 | 18 | 3 | 6 |  | 14 | 295 |
| 112 |  | New England Baptist Hospital | 1895 | Emma A. Anderson | (a) | 0 | 8 |  | 2 | 6 | 10 |  | 30 |
| 113 | .... do | St. Elizabeth's Hospital. | 1895 | Anna Clune. | June - | 0 | 20 | 5 | 3 | 8 | 8 | 10 | 24 |
| 114 | -..do do..-........... | Woman's Charity Club Hospital.-.------7i-.... | 1896 | Elizabeth Lyons | Jan. - |  | 15 | 9 | 2 | 8 | 10 |  | 28 |
| 115 | $\begin{aligned} & \text { Boston, Mass. (Rox- } \\ & \text { bury). } \end{aligned}$ | New England Hospital for Women and Children | 1873 | Clara D. Noyes. | June 1 | 0 | 20 |  | $\stackrel{3}{3}$ | 10 | 10 |  | 100 |
| 116 | Boston, Mass. (Somerville). | Somerville Hospital | 1893 | Fanny C. Hartwell .....- |  |  | 18 | 10 | 2 | 9 | 12 |  | 45 |
| 117 | Brockton, Mass..... | Brockton Hospital. | 1896 | Grace B. Beattie. | June 15 |  | 6 |  | 2 | 10 | 12 |  | 29 |
| 118 | Clinton, Mass... | Clinton Hospital. | 1893 | Ella Freeze | Mar. 31 | 0 | 13 | 6 |  | 3 | 12 |  | $2 \%$ |
| 119 | Danrers, Mass - | Danvers Lunatic Hospital | 1889 | Graco G. Pillsbury ----- | June 9 |  | 5 | 12 | 2 | 16 | 18 |  | 900 |
| 120 | Everett, Mass... | Whidden Memorial Hospital | 1897 | Alice M. Hodgson --.-.-- | (a) |  | 9 | 1 |  | 9 | 12 |  | 15 |
| 121 | Fall River, Mass.. | Fall River Hospital .-.-............-. --.-...- | 1888 | Elizabeth M. Smith ---..- | ( ${ }^{\text {a }}$ ) | 0 | 12 | ${ }^{6}$ | $\stackrel{2}{2}$ | 10 | 10 |  | 30 |
| $12 \%$ | Fitchburg Mass | Home Training School, Emergency Hospital | 1894 | J. Augusta Briggs ------ | May 31 | 0 | 33 | 11 | $\stackrel{\sim}{2}$ | 6 | 8 |  | 1.2 |
| 124 | Gloucester, Mass. | Addison Gilbert Hospital ${ }^{\text {² }}$ | 1897 | Eornma J. Gordon ... | Juneso | 0 | 12 | 6 0 | \% | 6 | 10 |  | 26 |
| 125 | Greenfield, Mass | Franklin County Foospital. | 1895 | Mrs. M. H. Laurance | June- | 0 | 10 | 0 | \% | ${ }_{7}$ | 10 |  | \% |
| 126 | Holyoke, Mass..- | Holyoke City Hospital | 1893 | Maria Daniels ...-.-- | ( ) | 0 | 18 | 8 | 名 | 10 | $1 t$ |  | 40 |
| 127 | Lawrence, Mass | General Hospital | 1882 | Florence E. Redwood | June - |  | 10 | 7 | , | 10 | 10 |  | 30 |
| 128 | Luwell, Mass | Lowell General Hospital | 1893 | Helen M. Garratt .- | June - |  | 9 | 4 | : | 7 | 10 |  | 40 |
| 129 | -....do | Lowell Hospital | 1887 | E. E. Etherington |  | 0 | 10 | - | 2 | 10 | 14 |  | 55 |
| 130 | --.do | St. John's Hospital | 1893 | Camilla Campbell | June 15 | 2 | 13 | 10 | 3 | 5 | 5 | 5 | 100 |
| 131 | Lynn, Mass | Lynn Hospital | 1883 | Rose L. Brainerd |  |  | 13 | 7 | 2 | 9 | 12 |  | 54 |
| 132 | Malden, Mass | Malden Hospital | 1891 | Jeanie E. Whitmore | June 1 |  | 16 | 12 | 21 | 8 | 12 |  | 40 |




[^41]| Melrose, Mass .-...-. | Melrose Hospital |
| :---: | :---: |
| New Bedford, Mass . | St. Luke's Fiospital |
| Newburyport, Mass. | Anna Jacques Hospital |
| Newton, Mass | Newton Hospital .- |
| North Adams, Mass. | North Adams Hospital |
| Northampton, Mass. | Northampton Lunatic Eiospital |
| Pittsfield, Mass.-.--- | Pishop Training School of Mercy Hospital. |
| Quincy, Mass | City Hospital |
| Salem, Mass | Salem Hospital |
| South Framingham, Mass. | Framingham Hospital |
| Springfield, Mass.-- | Springfield Hospital |
| Taunton, Mass | Morton Hospital |
| do | Taunton Insane Hospital |
| Tewkesbury, Mass .- | State Almshouse Hospital |
| Waltham, Mass | Waltham Hospital |
| Waverley, Mass | MeLean Hospital (for the insane) |
| Worcester, Mass | Memorial Hospital |
|  | Worcester City Hospital |
| Ann Arbor, Mic | Homeopathic Hospital of University of Michigan. University Hospital |
| Battlecreek, Mich .- | Battlecreek Sanitarium |
| Detroit, Mich | Emergency Hospital |
|  | Farrand Training School, Harper Hospital |
| d | Grace Mospital |
| do | St. Mary's Hospital |
| Grand Rapids, Mich. | Butterworth Hospital |
|  | Union Benevolent Association Home and Hospital |
| Kalamazoo, Mich | Michigan Asylum for the Insane |
| Lake Linden, Mich | Lake Superior General Hospital. |
| Pontiac, Mich. | Eastern Michigan Asylum for the Insan |
| Saginaw, Micl | St. Mary's Hospital |
|  | Woman's Hospital |
| Duluth, Minn | St. Luke's Hospital. |
| Fergus Falls, Minn | Fergus Falls S'ate Hospital for the Insane |
| Minneapolis, Minn. | Asoury Methodist Hospital. |
| ----do -----.-.-- --... | City Hospital. .-- |
| do | Northwestern Hospital |
| do | Noswegian Lutheran Deaconess Institute |
| ---do ---------- | St. Barnabas Hospital |
| Rochester, Minn | Rochester State Hospital |
| St. Panl, Minn | City and County Hospital |
| do | St. Joseph's Hospital |
| do | St. Luke's Hospital |
| t. Peter, Min | St. Peter Bospital |
| Winona, Minn | Winona General Hospital |
| Kansas City, M | Agnew Hospital. |
| do | Scarritt Hospital Training School |
| * In 1897-98. |  |

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TABLE 14．—Statistics of training schools for nutrses for the year 1S98－99—Continued．

| Location． | Name of school． | $\begin{gathered} \text { Year } \\ \text { of } \\ \text { first } \\ \text { open- } \\ \text { ing. } \end{gathered}$ | Suporintendent of school． | Session closes－ | Pupils． |  |  |  | Monthly allowance to pupil． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 3 | $1{ }^{1}$ | 111 | 1 1 | 13 |
| Kansas City，Mo | University Medical College Training School， | 1895 | Helena Roe－－－－－－－－－－．．．－ | Api． 1 |  | $1:$ | \％ | $\therefore$ | 0 | 0 | （b） | 33 |
| St．Joseph，Mo |  | 1505 | Sr．M．Agatha | June 15 | 0 | 13 | 4 | 3 | 8.4 | \＄\％ | S | 50 |
| －－－－do | Hospital for the Insano | 1898 | Effie E．Evans | $\begin{cases}\text { Sept. } & 1 \\ \text { Apr. } & 1\end{cases}$ | $\} 55$ | 45 | 0 | 3 | 品， | ： | $2 \sim$ | 1，000 |
| St．Lomis，M | Evangelical Deaconess Home and Hospital | 1889 | Magdalene Gorhold ．．．．－ | （a） | 0 | 5 | 3 | \％ | 3 | 3 |  | 50 |
| do | Missouri Baptist Sanitarium | 1895 | Frankie Shouse | Apr．5 |  | 䊅 | 9 | 芯 | 1 | 8 |  | 110 |
|  | Proteistant Hospital | 1890 | Josephine B．Rice－．．－－－－ | Nov． 15 | 0 | 8 | 4. | \％ | 8 | 10 |  | 10 |
| do | Rebekah Hospital．．． | 1893 | Mary I．Forbes．．．．．－－－－－－ | （a） | （） | 9 | 4 | \％ | 8 | 10 |  | 35 |
| do | St．Louis Baptist Hospital | 1893 | A．Jenette Whitney－－－－－ | Apr．－ | 0 | 1\％ | 1 | 吕 | 8 | 8 |  | 50 |
| do | St．Louis Mullanphy Hospital | 1894 | Mayme McGinty－－－－－－－ | June 15 |  | $1 \%$ | 19 | 3 | 5 | 5 | 5 | $: 50$ |
| do | St．Luke＇s Mospital | 1896） | Gertrude M．Gibson．－－－ | May－ | 0 | （2） | 6 | \％ | 0 | 5 |  | 5 |
|  | Woman＇s Hospital | 1892 | Janet Macchonachi，．－．－－ | （a） |  | 16 | 4 | ＊ | 0 | 8 |  | \％ |
| Claremont， N. | Claremont Fospital | 189\％ | Mary Eckert．－－－－－．．－－－－－ | June 30 | 0 | 6 | 0 | $\%$ | 8 | 10 |  | 15 |
| Concord，N．H | Margaret Pillsbury General Hospital | 1888 | Ellen Smith＿－－－－－－－－－－－－－ |  | 0 | ${ }^{7}$ | ： 3 | ＂ | 10 | 11 |  | 41 |
| －$\sim$－do ．－．－ | New Hampshire Asylum for the Insane | 1888 | Millie C．Godfrey | May－ | 0 | 19 | is | ： |  |  |  | 430 |
| Hanover， $\mathrm{N} . \mathrm{I}$ | Mary Hitcheock Memorial Hospital－－－－ | 1893 | Theresa G．Leach | May 只 | 0 | 15， | （ | $\stackrel{3}{3}$ | 10 | $1:$ |  | ： 6 |
| Keene，N．H． | Elliott Ćity Hospital－－－－－－－－－－－－－－－ | 1893 | Ella McCoib－－－－－－－－－－． | Oct． 1 | 0 | 恕 | 2 | \％ | 8 | 10 |  | 15 |
| Manchestor， N |  | 1890 | Mary E．Barr－－－－－－－－－． | June 1 | 1 | 10 | 3 | \％ | 8 | 10 |  | 36 |
| Camden，N．J |  | 1890 | Rachel Bourke－－－－－－－－－－ |  |  | 9 | 8 | ： | 9 | $1:$ |  | 50 |
| －－－－do | West Jersey Institute for Training Nurses， Homeopathic Hospital． | 1891 | Emma J．Morgan－－－－－－－ | May 15 | $1)$ | 9 | 3 | 3 | 5 | 6 | ： | 21） |
| Elizabeth，N．J | General Hospital Training School ．－－－－．－．－－．．．．．．－－ | 1890 | H．E．Dodge－－．－－－－－－－－－ |  | 0 | 20 | 6 | 3 | S | 10 | $1:$ | 11.5 |
| Englewood，N．J |  | 1896 | Helen A．Lord，M．D．－．．． |  |  | 8 | $\stackrel{4}{4}$ | $:$ | ${ }_{5}^{6}$ | 3 |  | （1） |
| Hackensack，N． | Hackensack Hospital－－－－－－－－－－－－－－－－－－－－－－－－－－－－－－－－－ | 1888 | Emma E．Crunn－－－－－－． | June 1 | 1 | 6 | 3 | 吕 | 5 | 10 |  | 41 |
| Jersey City，N．J | Christ Hospital | 1890 | Katharine Johnston．－．－－ | （a） | 18 | 15 | 6 | \％ | 6,8 | 10，12 |  | 60 |
| Montclair，N．J | Mountainside Mospital | 1893 | Laura B．Illick－－－－－－－－－－ | Jan．－ | 0 | 11 | $\cdots$ | $\because$ | 10 | 103 |  | 40 |
| Morris Plains， N | State Hospital for the Insane | 1894 | Mary R．Keegan．．．－－－－－－－ | June－ | 9 | \％ | ${ }^{6}$ | \％ | 16， 20 | 18，2： |  | 1，3ik |
| Newarls，N．J－－－ | City Fospital－－．－－－－－－－－－－－ | 1885 | Clara Horrigan－－－－－－－－－－ | June－ |  | \％ | 11 | $\%$ | 119 | 17.13 |  | 130 |
| --- do | Essex County Hospital for the İmsan | 1886 | L．J．Hinckley | May ${ }^{0}$ | 9 | 14 | $\stackrel{5}{4}$ | 2 | 14．20 | 17， $2 \cdot \frac{1}{2}$ |  | 598 |
| －－．－do | German Hospital－－－ | 1892 | P．M．Deheck－－－－－－－－－－ |  | 0 | 16 | ${ }_{3}^{7}$ | \％ | （ 5 | 5 |  | 7\％ |
| do | St．Barnavas Hospital | 1896 | Annie E．Kirchhoff．－．－．－． | （a） | 0 | 15 | 3 | \％ | 9 | 11 |  | 70 |








Table 14．—Statistics of training schools for nurses for the year 1898－99－Continued．

|  | Location． | Name of school． | Year of first open－ ing． | Superintendent of school． | Session closes－ | Pupils． |  |  |  | Monthly allowance to punil． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & \text { 采 } \\ & \text { 品 } \end{aligned}$ |  |  |  |  | む 0 0 0 0 0 0 0 |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 3 | 9 | 10 | 11 | 12 | 13 |
| 255 | New York，N．Y | Bellevue Hospital Training School for Women－－ | 18\％3 | Agnes S．Brennan．． | （a） | 0 | 75 | 30 | $\stackrel{2}{2}$ | \＄ | \＄1， |  | 900 |
| 256 | －－－－－do－－－－－－－ | Beth Israel Lospital ．．．．－．．．．．－．－．．．．．．．．．．．．．－ | 1896 |  | June 1 | $\stackrel{2}{2}$ |  |  | $\stackrel{3}{2}$ | 10， 1.3 | 12，15 |  | $\stackrel{28}{*}$ |
| 207 | －do | City Hospital Training School for Male Nurses．－ | ${ }_{1887}^{1887}$ | Charlotte Enrlicher | June－ |  | 4．） | 10 | \％ | 11 | 15 |  |  |
| 259 | －do | Hahnemann Hoswital | 1894 | Elizabeth C．Telford | （a） | 0 | 2 | 13 | \％ | ， | $1:$ | （b） | 130 |
| 260 | －do | Lebanon Hospital | 1894 | Addie E．Bates |  |  | 18 | 7 | 2 |  | 10 |  | 65 |
| 261 | －do | Manhattan State Hospital（for tho insane）－．．．．－ | 1896 |  | May－－ | 99 | 158 | 108 | 2 | 14，$\because 0$ | 16，$\sim 2$ |  | 5，45\％ |
| 262 | －do |  | 1881 | M．F．Dean |  | 0 | 70 | 29 | $\ddot{\sim}$ |  | 12 |  | $\bigcirc$ |
| 233 | do | New York City Training School（for women） | 1875 | Mary S．Gilmour | June－ | 0 | 80 | 33 | $\ddot{3}$ | 10 | 15 |  | $5 \%$ |
| 264 | do | New York Hospital ．－．．．－．．．．．－．．．．－． | 1877 | Irene H．Sutliffe | （a） | 0 | 83 | 15 | 3 | 19 | 13 | \＄16 | 175 |
| 265 | do | New York Infirmary for Women and Children－－ | 1886 |  |  |  | 21 | ${ }^{9}$ | ${ }^{2}$ | ${ }^{6}$ | 8 | 8 | 141 |
| 206 | do | Postgraduate Hospital | 1880 | Annie W．Goodrich |  | 0 | 60 | $3:$ | 3 | 8 | 8 | 9 | 180 |
| 268 |  | Presbyterian Mospital | 1892 | Anna C．Maxwe |  | 0 | 48 | 21 | 3 | $\stackrel{8}{\sim}$ | 8 | 8 | 235 |
| 268 | do | Red Cross Hospital | 1894 |  | Oct． 1 | 0 | 8 | 4 | $\because$ | $\cdots$ | 10 |  | 30 |
| 269 | －do | Rooseveit Hospital | 1896 | Mary A．Samuel <br> Lily W．Quintard | （a） | 0 0 | 43 | ${ }^{12}$ | 3 | 30 | 10 | 10 | 239 |
| 20 | do | St．Luke＇s Hospital． | 1888 | Lily W．Quintard <br> Anna M．Troll． | $\left\{\begin{array}{l}\text { Apr }{ }^{(a)} 30 \\ \text { Spri }\end{array}\right.$ | 0 | 68 | 31 10 | 2 | 10 | 10 5 | （b）${ }^{10}$ | 260 81 |
|  |  | St．Vincent＇s Hospital | 1893 | Katharine Sanborn ．－．．． | July 1 |  | 33 | 8 | $\stackrel{2}{2}$ | 0 |  |  |  |
| T3 | Ogdensburg， N | St．Lawrence State Hospital（for the insane） | 1891 | William Mabon，M．D．－－ | May 15 | －1 | 30 | 13 | \％ | 14，20 | －16， 2 |  | 1，480 |
| 274 | Poughkeepsie，${ }^{\text {N }}$ | Hudson River State Hospital for the Insane． | 1886 | Charles W．Pilgrim ．－ | May 10 | 8 | 28 | 10 | ， | 14， | 16， 20 |  | 2，040 |
| $2 \%$ | Rochester，N．Y | Rochester City Hospital－－．．．．－． | 1881 | Sophia F．Palmer－－． |  |  | 36 | 21 | $\stackrel{2}{2}$ | 10 | 12 |  | 150 |
| \％ | －－do | Rochester Homeopathic Hospital | 1889 | Eva Allerton | June－ |  | 34 | 21 | 3 | 7 | 7 | 8 | 109 |
| 2 | do | St．Mary＇s Hospital | 1892 | Dr．Turner | June 15 |  | 30 | 8 | 3 |  |  |  | 30 |
| 278 | Sony－－テ－ | State Hospital for the Insan | 1881 | Mary E．May | May 10 | ${ }_{1}$ | 5 | ${ }^{0}$ | $\stackrel{\%}{2}$ | 14－21 | 16－23 |  | 540 |
| 279 280 | Sonyea，N．Y | Craig Colony for Epileptics | 1897 |  | June 1 | 12 | 14 | 11 | $\stackrel{2}{3}$ |  |  |  | $37 \%$ |
| 280 | Syracuse，N．Y | House of the Good Shepherd | 1885 |  | －．．．do ．－． | 0 | 3 | 4 | $\stackrel{3}{3}$ | 8 | 9 | 10 | ＋70） |
| 28. | do | St．Joseph＇s Hospital．－．．．－－－－ | 1893 | Amy A．Higgin | Dec．－ |  | 19 |  | $\stackrel{2}{2}$ | 5 | 7 |  | $1: 0$ |
| 288 |  | Women and Children＇s Hospital Samaritan Hospital |  | Laura A．Slee－－－－－．－．－－－ | May 1 |  |  | 12 | 3 | 5 | 5 |  |  |
| 283 | Troy，N．V <br> Utica，N．Y | Samaritan Hospital Faxton Hospital | 1899 1892 | Eva P．Pennewill．－．－．－．－－ |  | 0 | 12 | 0 4 | 3 3 3 | 7 | 88 | 9 14 | 75 45 |
| 285 | Utica，N．${ }^{\text {a }}$ ．．．． | St．Luke＇s Hospital． | 1892 | Katharine Newman－－．－－ Harriet A．Sutherland | $\begin{aligned} & \text { June } 25 \\ & \text { Oct. } \end{aligned}$ |  | 15. | 4 | 3 | 10 | 10 | 10 | 45 50 |


| $\begin{aligned} & \text { 엉 } \\ & \text { न } \\ & \text { Tign } \end{aligned}$ |  |
| :---: | :---: |
|  |  |
|  © |  か: |
| $\begin{aligned} & \overrightarrow{6} \overrightarrow{6} \infty+\infty, 00 \\ & \text { Hat } \end{aligned}$ |  |
| 02020202020202 |  |
| $\infty \infty \infty$ |  |




Table 14．—Statisties of training schools for nurses for the year 189S－99－Continned．

|  |  |  |  |  |  |  | upils |  |  | Month | allow upil． | ce to |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Location． | Name of school． | Year of first open－ ing． | Superintendent of school． | Session closes－ | $\begin{aligned} & \dot{9} \\ & \text { 豆 } \end{aligned}$ | $\begin{aligned} & \text { 导 } \\ & \text { 岕 } \\ & \text { En } \end{aligned}$ |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | J | 6 | ＂ | 3 | （1） | 10 | 11 | 12 | 13 |
| 335 | Philadelphia，Pa | Jewish Hospital． | 1892 | Elizabeth Hanson． | June 30 |  | 12 | 5 | ： | \＄3， 10 | \＄12 |  | 63 |
| 336 | －－－－do－－－－．．．．．．．．． | Jewish Maternity Home | 1894 | Sarah Vasen，M．D．．．．．．． | May 10 | ${ }^{-}$ | 8 | 6 | 1. |  |  |  | ： 4 |
| 337 |  | Kensington Hospital for Women | 1884 | Margaret J．Maloney－－－ |  | 0 | 12 | 6 | 1 | ${ }_{6}$ |  |  | 42 |
| 333 339 | －．．do | Medico－Chirurgical Hospital | 1891 | Katharine A．Taydor－ | Apr. - | 1 | 39 | 11 | 3 | ${ }_{6}$ | 0 | 810 | 150 |
|  |  | Methodist Episcopal Hospital． |  | Alice M．Seabrook，M．D． | （a） |  | \％ 6 | $\ddot{\sim}$ | 3 | 6 | 6 | \＄10 | 80 |
| 310 | －do | Orthopedic Hospital and Infirmary for Nervous Diseases． | 1887 | Mary Belle Swain．．．．．．． |  | 1 | 20 | 10 | $:$ | 6 | $0_{0}$ |  | 84 |
| 341 | ．．－－do | Pennsylvania Hospital | 1873 | Lucy Walker． | MNay - - |  | 51 | 8 | 3 | 10 | $1:$ | 14 | 310 |
| 312 | ．．do | Philadelphia Hospital | 1885 | Marion E．Smith | June 1 | 0 | 90 | 23 | 3 | 9 | 9 | 9 | 1，200 |
| 343 | do | Philadelphia Lying－in，Charity，and Nurse School | 1828 | Jennie M．Shaw | May 1 | － | 5 | 29 | 1 | 5 |  |  | 1， $3 \overline{5}$ |
| 344 | do |  | 1891 | Maud Banfield． | May 31 | $1)$ | 21 | 3 | 3 | 5 | 5 | 13 | 67 |
| 345 | do | Presby terian Hospital | 1889 | Caroline I．Milne | May－ | 0 | 46 | 15 | 3 | $\tau$ | ， | $b 12$ | 217 |
| 316 | －do | Protestant Episcopal Hospital | 1888 | Mary S．Littlefield | June－ | 0 | 58 | 18 | 3 | 8 | 10 | 12 | 350 |
| 34.7 | do | St．Agnes Hospital | 1896 | Sr．Mary Maura | May 31 | ， | 11 | 3 | 3 | 6 | 6 | 6 | 200 |
| 348 | －do | St．Joseph＇s Hospital | 1894 | Sr ．Angeline Davis | June 15 | 0 | $3{ }^{3}$ | 11 | 3 | 5 | 5 | 5 | 177 |
| 349 | do | Samaritan Hospital | 1893 | Katharine Brown－ | May 31 |  | 14 | 5 | 3 | 5 | 5 | 5 | 50 |
| 3วัด | do | West Philadelphia Hospital for Women | 1890 | Mary A．Edwards ．－．－．－． | June－ | 0 | 沙 | 9 |  | 5 | 10 |  | 35 |
| 331 | －－do ．－．．－－ | Woman＇s Hospital－－－－－－－－－－－－－－－－－－－－－－ | 1861 | Edith May 11. | May－ | 0 | 99 | 24 | 3 | 4 | 4 | 10 | 130 |
| $3{ }^{30 \%}$ | Pittsburg，Pa | Homeopathic Hospital | 1885 | Ida F．Giles | Apr．－ | ${ }^{0} 1$. | 36 | 14 | 3 | 5 | 8 | 12 | 15. |
| 304 | Reading，Pa | City Hospital | 1892 | Helen G．Hill－－－ | （a） | 12 | 36 | $1!$ | ， | 6 | 8 | 10 | 225 |
| 305 | Scranton，Pa | Hahuemann Hospital | 1897 | Grace E．M．Smith－－ | June－－ |  | 1.9 | 1 | 2 | 5 | 5 |  | 83 |
| 350 | －－do | Lackawanna Hospital | 1893 | Elin K．Kraemer－－－－－－－－－ | －do ．－ |  | 16 | \％ | \％ | \％ | 3 |  | 58 |
| 3 3ว้7 | －．do | Moses Taylor Hospital | 1593 | Agnes S．Gladding |  | ， | 30 | － | \％ | 5 | 8 |  | 81 |
| 358 | South Bethelem，Pa． | St．Linke＇s Hospital． | 1884 | Victoria White．． |  | 0 | 11 | ＇ | ． | 11 | 1 |  | 63 |
| 359 | West Chester，Pa．．． | Chester County Hospital | 1894 | Julie King ． | May－ | 0 | 14 | 4 | \％ | 8 | 10 |  | 45 |
| 300 | Wilkesbarre，Pa | City Hospital | 1588 | Roherta M．West | June 15 | $1)$ | ：0 | 7 | ： | 1 | 0 |  | 100 |
| 361 | Williamsport， Pa | Williamsport Hospital | 1884 | Daisy B．Mann．． | June 1 | 0 | 19 | ， | \％ | 3 | 19 |  | 719 |
| $3{ }^{3} \mathrm{O}$ | Yorls：Pa | York Hospital． | 1892 | Eunica W．Hughes |  |  | \％ | 3 | 3 | 7 | 7 | 7 | 23 |
| 363 | Newport，R．I． | Newport Hospital | 1885 | Lucy V．Pickett． | $\left\{\begin{array}{l} \text { Apr. - } \\ \text { Oct. - } \end{array}\right.$ | 0 | 只 | 8 | 21 | 8 | 10 | 10 | 50 |




## CHAPTER XXXIX.

## AgRICULTURAL AND MECHANICAI COLIEGES.

## I.-STATISTICS FOR 1898-99.

The usual statistics for the year ended June 30, 1899, of the institutions endowed Dy the acts of Congress of July 2,1862 , and August 30,1890 , required by the latter mentioned act to be made to the Secretary of the Interior, have been collected and compiled, and are given in the following pages. Of the 64 institutions endowed by these acts, 14 are for the education of colored students.

## Summary of statistics.

|  | Men. | Women. |
| :---: | :---: | :---: |
| Professors and instructors: |  |  |
| In departments of agriculture and mechanic arts | 1,705 | 2.33 |
| In all departments. | 2,655 | 312 |
| Students: |  |  |
| In departments of agriculture and mechanic arts: |  |  |
| Preparatory ...... | 1,281 | 1,967 |
| Collegiate | 12,491 | :1,593 |
| Graduate. | 460 | 128 |
| In other departments | 8,989 | 4,74\% |
| Total | 26,121 | 9,337 |

## DISTRIBUTION OF STUDENTS IN COURSES OF STUDY.



Engineering:
Mechanical......................................................................... 3, 335



6, 780





PROPERTY。
Libraries:

Pamphlets .............................................................................. 300, 454


PROPERTY-continued.
Land:
Total number of acres ..... 23, 944
Acres under cultivation ..... 10, 780
Acres used for experiments ..... 3,904
Value ..... $\$ 2,454,656$

- Talue of buildings:
Total ..... \$16, 822, 「99
Used for instruction in subjects specified in act of August 30, 1890. ..... $\$ 12,347,193$
Valne of equipment:
Total ..... \$6, 851, 13 t
Used for instruction in subjects specified in act of August 30, 1890. ..... \&5, $946,3 \% 7$ ..... \&5, $946,3 \% 7$
INCOME.
Federal aid:
From land grant of 1862 ..... \$617, 716
From act of August 30, 1890 ..... 1,152, 000
Total Federal aid ..... 1,769, 716
State aid ..... 2,570,427
Fees and other receipts ..... 1,852, 873
Total ..... $6,193,016$
EXPENDITURES.
For instruction in subjects mentioned in act of August 30, 1890 ..... \$2, 449, 588
For instruction in other subjects and administrative expenses ..... 2, 094,788
Statistics for 1898－99 of institutions endowed by the acts of Congress approved July 2，1862，and August 30，1890，with public lands，or a part of the proceeds arising from the sale thereof，or both．

| Institution． | President． | Professors and instructors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | College of agriculture and mechanic arts． |  |  |  |  |  | All other depart－ ments． |  | In all depart－ ments． |  |  | Pursuing courses in－ |  |  |  |  |  |  |  |
|  |  |  |  | In all depart ments． |  | Pre－ para－ toiry． |  | Col－ legiate． |  | $\begin{gathered} \text { Gradu- } \\ \text { ate. } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | $\left\lvert\, \begin{aligned} & \dot{0} \\ & \text { B } \end{aligned}\right.$ | a d a \％ | $\begin{aligned} & \text { 首 } \\ & \hline \end{aligned}$ |  | $\underset{\text { gi }}{\underset{\text { g }}{\text { g }}}$ | $\begin{aligned} & \text { 苟 } \\ & \text { 号 } \\ & 0 \end{aligned}$ |  |  |  | $\begin{aligned} & \text { 良 } \\ & \text { g } \\ & \text { 令 } \end{aligned}$ | 㤩 | $\begin{aligned} & \text { gं } \\ & \text { g̈ } \\ & \text { g. } \end{aligned}$ |  |  |  |  |  |  |  |  |  | 霜 | g 号 0 |
| Alabama Polytechnic Institute，Au－ | William Le Roy Broun， | 30 | 0 | 30 | 0 | 38 | 0 | 283 | 17 | 16 | $\ddot{\sim}$ | 0 | 0 | $33 \%$ | 19 | 108 | 45 | 9 | 47 | 1 |  |  | 35 | 301 |
| burn，Ala． Agricultural and Mechanical Col－ | LL．D． <br> W．H．Councill，Ph．D．－． | 4 | 10 | 10 | 13 | 133 | 57 | 38 | 13 | 0 | 0 | 15 | 166 | 186 | 236 | 99 |  |  |  |  | 15 | 220 |  | 81 |
| Agricultural and Mechanical Col－ lege for Negroes，Normal，Ala． |  |  | 10 | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| University of Arizona，Tucson，Ariz－ | MI．M．Parker，A．M J．L．Buchanan，LL．D ．．． | $\begin{aligned} & 12 \\ & 21 \end{aligned}$ | 4 10 | $\begin{aligned} & 12 \\ & 24 \end{aligned}$ | $\begin{gathered} 4 \\ 10 \end{gathered}$ | $\begin{array}{\|c} 20 \\ 01 \end{array}$ | $\begin{array}{r} 20 \\ 0 \end{array}$ | $\begin{aligned} & 53 \\ & 18 \end{aligned}$ | $\begin{aligned} & 38 \\ & 27 \end{aligned}$ | $\begin{aligned} & 0 \\ & 1 \end{aligned}$ | $\begin{aligned} & 2 \\ & 0 \\ & 0 \end{aligned}$ | $\begin{gathered} 0 \\ 2 \pi \end{gathered}$ | $\begin{array}{r} 0 \\ 110 \end{array}$ | $\begin{array}{r} 73 \\ 353 \end{array}$ | $\begin{array}{r} 60 \\ 137 \end{array}$ | 7 | 7 | ${ }^{7}$ | 20 | 12 |  |  | 1 | 829 |
| University of Arkansas，Fayette－ ville，Ark． | J．L．Buchanan，LL．D ．．． |  |  | $\because 4$ |  |  |  |  |  | 1 | $0$ | $213$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Branch Normal College，Pine Blufi， | J．C．Corbin，A．M | 5 | 2 | 5 | 2 |  |  | 4 | 45 | 2 | 0 | 65 | 22 | 111 | 67 |  |  |  |  |  |  | 25 |  |  |
| Aniversity of California，Berkeley， | B．I．Wheeler，Ph．D．， | \％ 5 | 0 | 363 | 10 | 0 | 0 | 428 | 16 | $\because 1$ | 1 | 1，081 | 991 | 1，530 | 1，008 | 324 | 23. | 5 | 12 | 58 |  |  | 5 | 630 |
| Cal． | LI．D． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 23 | 50 | 47 | 0 | 0 | 0 | 64 | 0 | 245 |
| Colorado Agricultural College，Fort Collins，Colo． | Alston Ellis，Ph．D．， LL．D．a | 29 | 3 | 29 | $\stackrel{3}{2}$ | 31 | 11 | 171 | 64 | 0 | 0 | 48 0 | 17 | 200 | 95 27 | 23 | 50 | 4 | 0 | 0 | 0 | 27 | 13 | 64 |
| Connecticut Agricultural College， | George W．Flint，A．M．－． | 10 | $\because$ | 10 | 2 | 9 | 3 | 55 | 24 | 0 | 0 | 0 | 0 | 61 | 27 | 68 |  |  |  |  |  | 27 | 13 | 64 |
| Delaware College，Newark，Del | G．A．Harter，Ph．D ．．．．．． | 13 | 0 | 14 | 0 | ${ }^{0}$ | 0 | 84 | ${ }^{0}$ | ${ }^{6}$ | 0 | 0 | 0 | 90 | 0 | ${ }_{6}^{6}$ | 5 | 11 | 11 |  |  |  | 6 | 73 |
| State College for Colored Students， Dover，Del． | Rev．W．C．Jason，A．M．， B．D． | 5 | 1 | 5 | 1 |  |  | 11 | 7 | 0 | 0 | 0 | 0 | 26 | 16 | $\stackrel{\square}{2}$ |  |  |  |  |  | 14 |  |  |
| Florida Agricultural College，Lake | W．F．Yocum，D．D．．．．．．－ | 12 | 4 | 12 | 4 | 26 | 10 | 116 | $6 \%$ | 5 | 2 |  |  | 147 | 79 | 6 | 12 |  | 2 |  |  |  |  | 147 |
| State Normal and Industrial Col－ | T．D．Tucker，A．M | 7 | 6 | 7 | 6 | 57 | 93 |  |  |  |  |  |  | 57 | 93 | 2 |  |  |  |  |  | 41 | 22 | 4. |
| Iege，Tallahassee，Fla． |  | 19 | 0 | 19 | 0 | i |  | 91 | 0 | 4 | 0 | 0 | 0 | 9. | 0 | 10 |  | 19 | $\because 0$ |  | 15 |  |  | 91 |
| Mechanic Arts，Athens，Ga． | H．${ }^{\text {C．White，PR．}}$－－－－．－－ |  | 0 | 19 | 0 |  |  |  | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Statistics for $159 S-39$ of instiutions endored by the acts of Congress approved July in，1S6．，and Angust 30，1S30－Continued．

| Institution． | President． | Professors and instructors． |  |  |  | Stucients． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Collego of agriculture and mechanic arts． |  |  |  |  |  | All other depart－ ments． |  | In all depart－ ments． |  |  | Pursuing courses in－ |  |  |  |  |  |  |  |
|  |  | ซึ承要妾茾券 E呺品登 － |  | In all depart－ ments． |  | Pre－ para－ tor＇y． |  | Col－ legiate． |  | Gradu－ ate． |  |  |  |  |  |  |  |  |  |  |  | 苞 |
|  |  | $\underset{\text { E }}{\underset{\sim}{\text { E }}}$ | $\begin{aligned} & \text { घं } \\ & \text { घ } \\ & \text { B } \end{aligned}$ | $\underset{\substack{\text { g } \\ \text { g }}}{\text { d }}$ | $\begin{aligned} & \text { 邑 } \\ & \text { है } \\ & 0 \end{aligned}$ | 总 |  | 密 |  | $\underset{-1}{9}$ |  | 总 | 碰 |  |  | 留 | $\begin{aligned} & \dot{\vec{D}} \\ & \text { ह } \\ & \text { O } \end{aligned}$ |  | $\begin{aligned} & \text { E0 } \\ & \underset{\sim}{E} \\ & \underset{0}{2} \end{aligned}$ |  |  | $$ | $$ |  |  |
| Georgia Industrial College for Col－ ored Youths，College，Ga． | R．R．Wright，LL．D ．－． | 13 | 1 | 1.3 | 1 | $5 \%$ | 58 | 20 | 2 | 0 | 0 | 0 | 0 | 77 | 60 |  |  |  |  |  | －－ |  |  |  |  |
| University of idaho，Moscow，Idano． | Joseph P．Blanton，LL．D | 13 | 5 | 13 | ${ }^{6}$ | $6 \%$ | 42 | 44 | 31 | 1 | 3 |  |  | 107 | 76 | 5 |  |  |  | 10 |  |  |  | 107 |
| University of Illinois，Champaign， Ill． | A．S．Draper，LL．D ．．．．．． | 91 | 18 | $1 \%$ | ：1 | 13： | 47 | 280 | 2er | 49 | 9 | 785 | 44 | 1，436 | $3: \%$ | 52 | 75 | 82 | 86 |  | 63 |  | 32 | 319 |
| Puraue University，Lafayette，Ind．． | James H．Smart，LIt．D a | 58 | \％ | 5 | ${ }^{6}$ | 0 | 0 | 618 | 69 | 40 | 沙 | 0 | 0 | 658 | 91 | 92 | 185 | 95 | 126 |  | 95 |  | 92 |  |
| Iowa Agricultural College，Ames， Iowa． | W．M．Beardshear，LL．D | 50 | 17 | 50 | 17 | 95 | 32 | 480 | $1: 0$ | 13 | $\because$ | 0 | 0 | 588 | 158 | 109 | 33 | 34 | 98 | 1 |  | 91 | 31 | 339 |
| Kansas State Agricultural College， | T．E．Will，A．M．$b$ | 33 | $1:$ | ； 3 | $1 ;$ | 90 | 20 | 469 | 2：1 | 24 | 16 | 0 | 0 | 544 | 297 | 89 | 101 |  |  |  |  | 78 |  |  |
| Kentucky Agricultural and Me－ | James K．Patterson， | 18 | 0 | 24 | 1 | 85 | 14 | 210 | 50 | 8 | $\because$ | 6\％ | 44 | 370 | 110 | 7 | 73 | 22 | 0 | 0 | 0 | 0 | 0 | 370 |
| chanical College，Lexington，Ky． | Ph．D． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| State Normal School for Colored Persons，Franktort，Ky． | James E．Givens－－－－－－－－ | 5 | 4 | 5 | 4 | 淕 | ： | 53 | 54 | 0 | 0 | 0 | 0 | 76 | 76 | 23 | 38 |  | 23 |  |  | 76 |  |  |
| Louisiana State University and Ag－ ricultural and Mechanical College， Baton Rouge，Ia． | Thomas D．Boyd，LL．D． | 19 | 0 | 19 | 0 | 98 | 0 | 183 | 0 | 3 | 0 | 0 | 0 | 287 | 0 | 42 | 23 | 29 |  |  |  |  | 15 | 229 |
| Southern University，New Orleans， La． | H．A．Fill．－ | 8 | 7 | 8 | 7 | 129 | $\because 12$ | 121 | 140 | 0 | 0 | 0 | 0 | 155 | 259 | 50 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| University of Maine，Orono，Mo ．．．． | A．W．Harris，Sc．D | 46 | 0 | 46 | 0 | 0 | 0 | 281 | 14 | 35 | 1 | 0 | 0 | 314 | 15 | 4 | 34 | 52 | 75 |  |  |  | 4 | 250 |
| Maryland Agricultural College，Col－ lege Park，Md． | R．W．Silvester | 20 | 0 | 20 | 0 | 18 | 0 | 22 | 0 | 4 | 0 | 58 | 0 | 102 | 0 | 31 | 22 |  |  |  |  |  | 1 | 102 |
| Massachnsetts Agricultural Col－ lege，Amherst，Mass． | Henry R．Goodell，LL．D | 19 | 0 | 19 | 0 | 0 | 0 | 1：3 | 0 | 11 | 0 | 0 | 0 | 140 | 0 | 129 |  | 3 | －－－ |  | ．．． |  | 3 | 130 |


Siatistics for 189S－30 of institutions endowed by the acts of Congress approved July 9，1862，and August 30，1830－Continued．

| Institution． | President． | Professors and instructors． |  |  |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | College of agriculture and mechanic arts． |  |  |  |  |  | All other depart－ ments． |  | In all depart－ ments． |  |  | Pursuing courses in－ |  |  |  |  |  |  |  |
|  |  |  |  | In all depart－ ments． |  | Pre－ para－ tory |  | Col- |  | $\begin{gathered} \text { Gradu- } \\ \text { ate. } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 公 | 免 | 热 | 苞 | 豆 | $\begin{aligned} & \text { a } \\ & \text { d } \\ & \text { o } \end{aligned}$ | $\underset{\sim}{\text { yig }}$ | a a O － | 㤩 | $\begin{aligned} & \text { 白 } \\ & \text { a } \\ & \text { a } \\ & \hline \end{aligned}$ | 营 | 島 |  |  |  |  |  |  |  |  |  | 音 |  |
| Rhode island College of Agriculcure and Mechanic Arts，Kingston，R．I． | John H．Washburn， Ph．D． | 16 | \％ | 16 | $\because$ | 28 |  | 84 | 36 | 1 | 4 | 0 | 0 | 11.3 | 4！） | 33 | 65 | 10 | 43 |  |  |  |  | \％ |
| Clemson Agricultural College， | H．S．Hartzog，LL．D ．－． | $: 2$ | 0 | 29 | 0 | 188 | 0 |  | 0 | 3 | 0 | 0 | 0 | 446 | 0 | 12： | 135 | ： | 5 |  |  |  | 30 | 446 |
| Clemson College，S．C． <br> Colored Normal，Industrial，Agri－ cultural and Mechanical College， Orangeburg，S．C． | Thomas E．Miller，A．M | 9 | 4 | 21 | 4 | 251 | 186 | 49 | 23 | 0 | 0 | 598 | 438 | 8.98 | 6.50 | 85 | 60 | 0 | （） | 0 | 6） | （60 | 0 | 20 |
| South Dakota Agricultural College， Brookings，S．Dak． | $\begin{aligned} & \text { John W. Heston, Pl. D., } \\ & \text { LL.D. } \end{aligned}$ | 16 | 4 | 16 | 4 | 91 | 35 | 230 | 75 | 9 | 4 | 0 | 0 | 3：0 | 114 | 68 | 147 | 0 | 0 | 0 | 5 | 5 | 0 | 2 |
| University of Tennessee，Knoxville， Tenn | Charles W．Dabney， <br> Ph．D．，LL．D． | 27 | 1 | 64 | 1 | 0 | 0 | 228 | 73 | 4 | 2 | $36{ }^{\circ}$ | 0 | 599 | $\%$ | 29） | 57 | 43 | 6 | 9 | （1） | 0 | 0 | 14： |
| Agricultural and Mechanical Col－ lege of Texas，College Station， Tex． | Hon．L．L．L．Foster ．－．－．－． | 21 | 0 | $\because 1$ | 0 | 0 | 0 | 35 | 0 | 4 | 0 | 0 | 0 | 336 | 0 | $17 \%$ | 273 | 43 |  |  |  |  | 5 | 3\％9 |
| Prairie View Normal College，Prai－ rie View，Tex． | E．L．Blackshear．－．－．－－－ | 7 | 3 | 7 | 3 |  | 29 |  | 51 |  |  |  |  | 114 | $\%$ | 40 |  |  |  |  |  |  |  |  |
| Agricultural College of Utah，Lo－ ran，Utah． | J．M．Tanner | 20 | 3 | 20 | 3 | 248 | 91 | 90 | 47 | 2 | 1 | 0 | 0 | 310 | 139 | 1 | 3 | 9 |  |  |  | 4 |  | $\because 10$ |
| University of Vermont and State Agricultural College，Burlington， Vt ． | M．I．Buckham，LL．D－－ | 27 | 0 | 60 | 0 | 0 | 0 | 146 | 0 | 0 | 0 | 345 | 63 | 491 | 63 | 21 | 21 | 呮 | 2 | 0 | 0 | 0 | 19 | 215 |
| Virginia Agricultural and Mechan－ ical College，Blacksburg，Va． | J．M．McEryde，LL．D．．． | 29 | 0 |  | 0 |  |  |  | 0 | 7 | 0 | 0 | 0 | 203 | 0 | （3） | S＊ | 20 | 64 |  |  |  | 10 |  |
| Hampton Normal and Agricultural Institute，Hampton，Va． | H．B．Frissell，D．D．．．．．． | 31 | 41 | 34 | 44 | $4 \pi$ |  | 76 | 70 | 4 | 4 | 0 | 0 | 55 | 445 |  |  |  |  |  |  |  |  | $3 \%$ |




| Institution. | Library. |  | Amount of endowment funds. | Land. |  |  |  | Value of buildings. |  | Value of other equipment. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Volumes. | Pamphlets. |  |  |  |  | Value. | Total. | Used for instruction in sub jects specified in act of Aug. 30, 1880. | Total. | Used for instiruction in subjects specified in act of Aug. 30, 1890. |
| Alabama Poljtechnic Institute | 13,767 | 1,706 | \$253,500 | 226 | 75 | 30 | \$2,500 | \$140,000 | \$126,000 | \$74,000 | \$66,600 |
| Agricultural and Mechanical College for Negroes (Alabama) | 2,500 | 500 |  | 182 | 130 | 12 | 10,000 | 26,383 | 16,958 | 9,443 | 9,443 |
| University of Arizona | 4,000 |  |  | 80 | 40 | 40 | 3,000 | 86, 600 | 48, 100 | 40,600 | 40, 600 |
| University of Arkansas | 8,118 | 6,688 | 130,000 | 160 | 50 | 40 | 9,600 | 230,000 | 180,000 | 37, 644 | 29,144 |
| Branch Normal College (Arkansas) | 2,969 | 811 |  | :0 | $: 20$ | 20 | 500 | 18,000 | 18,000 | 122,506 | 12,500 |
| University of California | 88.607 | 80,000 | 2,843,006 | 411 | 18.3 | $18 ;$ | 193, 125 | \%02, 111 | 702, 111 | 370,000 | 370, 000 |
| Colorado Agricultural College | 10,060 | 1,000 | 68,612 | 240 | 225 | 180 | 32, 900 | 145,975 | 145,975 | \%4,431 | 74, 481 |
| Connecticut Agricultural Colleg | 6,55\% |  | 135, 000 | 300 | 123 | 10 | 16,000 | 75, 000 | 45,000 | 7, 79 | 3, 760 |
| Delaware College | 10,600 | 8,000 | 83, 000 | 14 | 4 | 4 | 3,000 | 79, 700 | 68,300 | 52,000 | 48,000 |
| State College for Colored Students (Delaware) | 400 | 300 |  | 97 | 90 |  | $\stackrel{6,000}{7}$ | 12, 800 | 12, 200 | 9,000 | 9,000 |
| Florida Agricultural College --.....-.-.-.-.-. | 2,650 | 2,600 | 153,800 | 100 | 70 | 70 | 7,590 | 31,245 | 31,845 | 21,017 | 21,017 |
| State Normal and Industrial College (Florida) | 758 | 600 |  | 137 | 11.6 | 4 | 8,805 | 20,500 | 20,540 |  |  |
| Georgia State College of Agriculture and Mechanic Arts | 29,68; | 8,350 | 242,202 | 120 | 100 |  | 10,000 | 300, 000 | 200,000 | 500,000 | 400, 000 |
| Georgia Industrial College for Colored Yo | 509 | 300 |  | 86 | 30 |  |  | 25, 000 | 25,000 | $\because 2,000$ | 2,000 |
| University of Idaho | 4,000 | 1,500 | 49,000 | 11\% | 110 | 98 | 6,090 | 155,000 | 153,500 | 45,000 | 89,000 |
| University of Illinois | 47,090 | 18,500 | 475,444 | 665 | 600 | 100 | 100,000 | 500,000 | 785,060 | 250, 000 | 225,000 |
| Purdue University (Indiana) | 8,950 | 3,000 | 340,000 | 190 | 149 | 90 | (60, 000 | 353,000 | 313,090 | 289,000 | 279, 000 |
| Iowa Agricultural College | 12, 450 | 2,000 | 682, 833 | 855 | 300 | 80 | 45,090 | 430, 060 | 355, C00 | 180, 060 | 150, 000 |
| Kansas State Agricultural College | 19,425 | 14,600 | 502, 813 | 83 | 250 | $200{ }^{\circ}$ | 29,100 | 204,472 | 179, 472 | 230, 42 | 221, 64\% |
| Kentucky Agricultural and Mechanical College.-- | 3,688 | 5, 309 | 165,000 | 170 | ${ }_{6} 6$ | 61 | 40, 000 | 127,000 | 127,000 | $6{ }^{65,000}$ | 65, 000 |
| State Normal School for Colored Persons (Kentucky) | 830 | 700 |  | $2 \% 5$ | 230 | 40 | 16,500 | 22, 093 | 11,468 | 9,4\% | 7, 736 |
| Louisiana State University and Agricultural and Mechanical College $\qquad$ | 21,000 | 2,000 | 318,313 | 583 | 310 | 200 | 33,300 | 150,000 | 150,000 | 50,000 | 50,000 |
| Southern University (Louisiana) | ${ }^{7 \% 9}$ | ${ }^{8} 86$ | 818,313 | 104 | 40 | 20 | 6,000 | 45,3:0 | 45, 3:20 | 10,315 | 10,315 |
| University of Maine. | 15,500 | 6,500 | 219,900 | 373 | 120 | 20 | 9,325 | 182, 241 | 120,494 | 35, 000 | 18,44\% |
| Miaryland Agricultural College | 2,500 | 1,000 | 105,000 | :86 | 140 | 40 | 28,600 | 85,000 | 72, 040 | 30,000 | 16,000 |
| Massacliusetts Agricultural Colleg | 19,300 |  | 360,575 | 404 | 260 | 75 | 45,000 | 211,275 | 129,500 | 83,090 | 60, 685 |
| Massachusetts Institute of Teclnnolog | 46, 711 | 14, $1: 21$ | 2,449,393 | 3 | 0 | 0 |  | 6336,000 | 447,083 | 200,000 | 200,000 |
| Michigan Agricultural College | 21,000 | 5,000 | 694,000 | 676 | 500 | 60 | 47,320 | 289,482 | 289, 482 | 152, 377 | 152, 377 |
| University of Minnesota..--- | 55,000 |  | 1,307,219 | 250 | 210 | 160 | 300,500 | 1,000,000 | 780, 000 | 275,000 | 200,000 |
| Mississippi Agricultural and Mechanical College --...- | 6,719 | \%,893 | -98,575 | 1,960 | 450 | 50 | 42,605 | 133,605 | 38,605 | 133,216 | 33, 216 |
| Alcorn Agricultural and Mechanical Coilege (Mississippi) | 3,000 | 5,000 | 98,575 | 300 | 130 | 8 | 5,000 | 60,000 | 57,500 | 65, 000 | 64,100 |
| University of the State of Missouri | 30,000 | 35,000 | 1,235, 839 | 694 | 390 | 90 | 141,106 | 935, 600 | 1\%5,000 | 158,000 | 71,000 |
| Missouri School of Mines and Metallurg | 3,650 | 500 |  | 20 | 0 | 0 | 0 | 68, 500 | 68,500 | З36,880 | 36,880 |


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Statistics for 1898-99 of institutions endowed by acts of Congress approved July : , 1862, and Augusi 30, 1890—Continued.

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## II. - NEW BUILDINGS AND CHANGES IN THE COURSE OR IN THE METHODS OF INSTRUCTION.

Alabama Polytechnic Institute, Auburn, Ala.-The last State legislature, on application of the trustees, changed the name of the college to the Alabama Polytechnic Institute, thereby showing its comprehensive and general scientific character, including not only agriculture and the mechanic arts, but also physics, electricity, chemistry, etc., in their varied applications to the industrial arts. Much attention is paid to laboratory work on the part of the students. Additions were made to the equipment in mechanical and electrical engineering, and a new residence for the professor of horticulture was constructed at a cost of $\$ 1,950$. At present a special chemical laboratory for work in the experiment station is being constructed, and the foundry and forge room in the mechanical department is being enlarged. (President William Le Roy Broun.)
Agricultural and Mechanical College for Negroes, Normal, Ala.-One year has been added to the normal course, making it four years instead of three years. All the literary and industrial courses hare been strengthened very materially. Sick nursing, cooking, and agriculture have been greatly improved. One of the two-story frame mechanic-arts buildings was destroyed by fire January 28, 1899. It was occupied by the departments in shoemaking, blacksmithing, carpentry, wheelwright, mattress, and broom factory and paint shop. The school being unable to restore the building, it was replaced by a brick building paid for by voluntary subscriptions of the teachers of the school. A new brick wing, 40 by 70 feet, three stories, was added during the year. This contains recitation rooms and laboratories on the first and second floors, and a dormitory for girls on the third floor. (President W. H. Councill.)

University of Arizona, Tucson, Ariz.-The principal change in our course of instruction has been the development of manual-training featares, including freehand and induscrial drawing. The shop has been fitted with power and facilities for woodworking, so that we have given courses in carpentry, joinery, woodturning, and inlaying during the year.
Our requirements for admission have been increased, a fact which tends to lessen our patronage. Almost our only sources of supply for our college classes are our subcollegiate department and the high schools of the Territory, of which there are but few, so that our classes must remain small until our population increases and fitting schools multiply.

While there have been no radical changes to record, the year has shown substantial progress in all lines of work. (President M. M. Parker.)

University of Arkansas, Fcyetteville, Ark.-The financial condition of the university is perfectly sound, its educational worik vigorous and progressive. The department of history and pedagogy have been separated, history made an independent department, and philosophy and pedagogy mited, forming also an independent department. The courses of study have been materially modified, electives being limited to the junior and senicr classes, the courses for the freshman and sophmore classes more definitely prescribed, some options, however, allowed among related subjects. Greek required for the B. A. degree, and a course, including Latin but not Greek, arranged leading to the degree of B. Ph. Repairs and minor improvements have been made on the buildings, but no new buildings erected.

By act of the general assembly of Arkansas, approved March 8, 1899, the name of the university has been changed from Arkansas Industrial University to the University of Arkansas. (President John L. Buchanan.)

University of California, Berkeley, Cal.-Paid to complete buildings in San Francisco for use of the professional departments during last fiscal year, $\$ 41,000$.

The college of commerce began instruction, and instruction in the new departmentof geography was begun by Prof. George Davidson. Instructionin Cantonese Chinese was provided by the addition of Dr. John E. Gardner to the staff of the department of oriental languages and literatures. (President Benjamin Ide Wheeler.)
Delaware College, Newark, Del.-No changes in the courses of study liave been made during the year except to effect a better correlation of work, through several transpositions of subjects, and to enlarge somewhat the freedom of election in the junior and senior years of some courses. The library and reading room, opened in September, 1896, at once began to tell upon the instruction in the departments of English language, history, and economics. The library is steadily growing and is exercising an increasing influence upon the work of the college. (President George A. Harter.)

Florida Agricultural College, Lake City, Fla.-Requirements for admission to the freshman class have been raised by the introduction of elementary botany, elementary physics, and concrete geometry into the preparatory course. The new catalogue outlines for the next year an entirely new course of study, in which agricultural subjects are to receive greater attention and be obligatory on freshman and sophomore classes. (President W. F. Yocum.)

Florida State Normal and Industrial College, Tallahassee, Fla. -In the session of 1897-98, owing to the increasing numbers in the boys' hall, the board of trustees set aside $\$ 000$ out of the State appropriation for the year to add an extension to that builiding. An adaition of two stories, 32 by 50 feet, containing 16 rooms, each 101 by $10 \frac{1}{2}$ feet, was projected. The boys of the mechanical department, 14 in number, working for seven months at an average of two and two-thirds hours a day, after the close of the literury work, under the superintendence of their instructor, erected this building, which is quite an evidence of the brightness and efficiency of the young men, especiaily when it is noted that most of them had never handied a carpenter's tool until after entering this institution; this comes in as practice work. Had the building been erected by contractors it would have cost the State at least $\$ 1,800$. During the past summer the girls' hall has been completed by the construction of the west wing at an expense of nearly $\$ 4,000$ from the State appropriation of the present year, The finished building is 122 feet in length; the east wing is 20 by 54 feef; the west wing, 20 by 90 feet, and the main loody is 36 by 80 feet. (President T. D. Trucker.)

Georgia State College of Agriculture and Mechanic Arts, Athens, Gt.-The condition of the college is good, and its progress for the year has been satisfactory. The faculty have given much consideration to systematizing the curricula and courses of instruction, with special view to strengthening and popularizing the courses in agriculture. By authority of the board of trustees all degrees given by the college have been abolished except one, that of bachelor of science. To obtain this degree four courses are offered, each with a certain degree of elasticity in the matter of options, and, in the special course, permitting the substitution of appropriate technical stradies for those in the higher branches of pure science and others as follows: (a) General course; (b) civil engineering; (c) electrical engineering; ( $d$ ) agriculture. The courses are essentially the same for the freshman year, which includes botany, drawing, and elementary agriculture. In each of the courses certain fundamental, liberal studies are required, and it is believed they are of equal pedagogic value, and also equal in this particular, to the courses for bachelor of arts offered in another department of the University. The courso of instruction offered in the school of agriculture is essentially that proposed by the committee of the Association of American Agricultural Colleges and Experiment Stations. We believe this step will have a vast influence in establishing the course of instruction in agriculture in its proper place in the college curriculum.

The board of trustees of the university at its lastsession (June, 1899) also authorized the general faculty to requiro of all students in the university attendance upon courses of lectures upon agriculture or topics directly related thereto. (President H. C. White.)

University of Idaho, Moscou", Idaho. - We have enlarged the courses of instruction in the preparatory department, giving greater emphasis to scientific instruction and increasing laboratory facilities for the same. Fifteen additional rooms have been finished and furnished in the administration building at a cost of $\$ 14,000$. These rooms are for laboratory and recitation purposes. In addition to these an auditorium capable of seating rou has been finished and furnished. A farmhouse has been erected on the experimentai farm and a greenhouse on the horticultural grounds. (President Joseph P. Blanton.)

University of Illinois, Champaign, Ill.-The university has enjoyed a year of unprecedented prosperity. In the year we completed and occupied a new electrical buiding and steam laboratory, and the lesislature made an appropriation of $\$ 150,000$ for a new agricultural building. (President A. S. Draper.)

Purdue University, Lafayette, Ind.-We hare made a one-story brick addition to our chemical laboratory; erected a substantial wooden parilion, 30 by 50 feet, for lecture purposes, particularly for the use of students in agriculture: a twostory piggery, built in accordance with the most improved modern plans; an eatensive addition to the dairy; remodeled and made a substantial addition to the engineer's residence; remodeled the central heating plant, putting in new boilers, erecting two new coal houses, etc.; and improved our campus by laying cement walks to the extent of over 25,000 feet. In addition to these improvements, we hare added to our equipment to the extent of about $\$ 10,000$, making the total cost of improvements for the year 1898-90 about 920,000 .

While the total emrollment for the year was 749, oneless than the provious year, the number of graduates, 158 (regular four-year courses, 103; pharmacy, 33 ; adranced degrees, 22 ), was the largest in the history of the miversity; the freshman class, numbering 180, the largest sore one, and the number of students taking the short course in agriculture was 50 per cent in advance of any previous year. During the year 1898-99 there have been published \& regular station bulletins, 10 newspaper bulletins, 1 pamphlet on civil engineering, and an address by Governor Mount on "The Need for Higher Education in Agriculture and the Industrial Arts." The professors have delivered abonit 100 lectures on scientific subjects and 92 farmers' institutes have been held, areraging two days each. (President James H. Smart.)
Iowa State College of Agriculture and the Alechanic Arts, Ames, Iowa.-The growth of the attendance of students still keeps up. The college year hereafter will bogin about September first instead of the last of July or first of August. We have fitted up new laboratories for pathology and histology. Our professor of zoology is now State entomologist. Our course for young women has been strengthened to a course in philosophy and letters and the degree of bachelor of philosophy given to the young women of this course instead of the degree of bachelor of letters, as hitherto. A number of the prominent buildings hare been painted. this summer. We have put in 25 shower baths for young men. We have added two new teachers to our department of English and greatiy strengthened the quality and quantity of the work done in this department. (President W. M. Beardshear.)
Fansas State Agricultural College, Manhatian, Kans.-A four-years' course in civil engineering has been established; also a short course of one winter term in dairying. In addition to this three other short courses have been prepared to go into effect next year. They are respectively a domestic-science course of two terms, an agricultural mechanics' course of two terms, and a horticultural mechanics' course of two terms. The domestic-science course will be given in fall termas, the agricultural mechanics and the horticultural mechanics' courses in
winter terms. All these short courses are open without examination to students of geod character and 18 years of age. These courses are highly practical and are desigued to meet the needs of students who can attend college but a short term.

By systematic effort, continued through a considerable portion of the year, the college has secured the largest legislative appropriation in its history, amounting to $\$ 111,600$. Of this sum, $\$ 25,000$ was appropriated to the erection of an agricultural and dairy building, and $\$ 9,000$ more to the equipment of this building, the purchase of a dairy herd, and the provision of shelter for the herd; 89,000 was appropriated to the erection of an addition to the mechanical engineering building, while $\$ 12,000$ more was allowed for equipment and additional boilers, boiler house, and engine; $\$ 5,200$ was appropriated to the college library for completion of room and book stacks and for firnishing, heating, and lighting an addition to the library. (President Thomas E. Will.)

Agricultural and IHechanical College of Kentucky, Lexington, Ky.-Wemay confidently say that the last year was the most prosperous that the college has ever known. The attendance was larger, the college classes consisted in the main of good material, and the average numbers maintained were better than in former years.

The greatest japrovement is along the engineering lines. The graduates from these courses of study ind no diffculty in getting remunerative employment of a high order. Indeed, their services are not infrequently engaged in advance of talking their degrees. Experts who visit our shops and examine our lines of work speak uniformly of our grood equipment and of the scope and character of work done by engineering students.

In natural science notable advancement has also been made. Our laboratories are well equipped for doing good work, and good work is done.

The removal of the State Geological Museum from Frankfort to Leaington, with the inspector of mines and his assistant, has added to the prestige of the college, and will by the act of removal establish a school of mines in the year 1900. The coal and iron interests of Kentucky will be materially benefited by a course of mining engineering in Kentucky.
The organization of farmers institutes last winter bids fair to bring the faciities aflorded by the college for agricultural instruction before tle farming community. These institates have been liberaily attended by our professors of botany, zoology, geology, horticulture, dairying, engineering, and agriculture. We had one or two representatives at every institute held.

In conclusion, we are able to report progress along every line of work. (Eresident James K. Patterson.)

State Normal School for Colored Persons, Frankfort, Ky.-We have purchased a farm of 265 acres, with a two-story brick dormitory, which we use for the boys' dormitory. This purchase increases the value and interest of our agricultural feature very much. The farm cost $\$ 18,500$. It has outbuildings valued at $\$ 2,000$. This year 80 acres are in grass, 40 acres in wheat, 12 acres in rye, 30 acres in corn, 10 acres in oats, and 3 acres in garden. (President James E. Givens.)
Loutisiana State Unirersity and Agricultural and Mechanical College, Baion Rouge, La.-No buildings were erected during the year except a wooden storehouse for implements, tools, etc. A two-story addition to the mechanical workshop, 100 by 30 feet, is now being built. During the session of 1898-99 the course in sugar engineering was extended and perfected and full courses in mechanical engineering and civil engineering were substituted for the old one course in the two combined. A commercial course of four years has been arranged for the next session. (President Thomas D. Boyd.)

Southern University and Agricultural and Mrechanical. College. New Orleans, La.-There have been no changes in course or methods of instruction during the
session. A course in printing and one in bookkeeping and typewriting have been added during the past session. A printing press was purchased, with type and all necessary accompaniments, and a room was fitted up and a teacher for the same was employed. Classes have been taught in both sections during the session.

The school has just passed through a prosperous session. The total number of graduates this session from all the departments of the school was 23-12 from the literary and il from the industrial. Two of the lowest sections were removed. This reduced the total attendance from 443 of last year to 414 this year. We had, however, more applications for admission this session than last. Up to date, during thirteen years past, the number of graduations from the school are as follows: In the literary department, 100; girls` industrial, 27; agricultural, 19; mechanical, 2; making 100 literary and 48 industrial graduates. The agricuitural and mechanical feature, however, is of more recent date.

It has been almost impossible to find pupils outside of this school far enough advanced to enter the lowest year of the high-school department. We have been obliged for years to maintain a grammar school to prepare material for the higher grades. The 148 pupils graduated have been brought out, almost without exception, from the raw material, most of them very raw. They have been, nearly all, through one or all of our grammar grades. The New Orleans public colored schools have taken our noimal students for teachers about as soon as they graduated, and have picked out a number of our high-school graduates also. As most of these pupils are poor the temptation to secure a position for themselves is too great for them to resist. In making a list of our graduates we could not find one unemployed. (President H. A. Hill.)

University of MLaine, Orono, MLe.-During the year ending June 30, 1899, the school of law of the university has been opened with a very encouraging attendance. Professors of Latin and Greek have been elected in preparation for the inauguration of the classical course in the fall of 1890.

A dormitory for women has been completed at a cost of about $\$ 5,000$. About $\$ 8,000$ has been spent for the equipment of the departments, the largest amount going to the agricultural departments.

The faculty and number of students are the largest in the history of the university. (President A. W. Harris.)

Maryland Agricultural College, Collegepark, Md.-All courses have been materially advanced, the natural science section particularly. The trend of the institution's work is along the line of more technological work. Morrill Hall has been constructed during the past year, at a cost of $\$ 12,000$. This is devoted to agriculture and allied branches. An annex to the main building for sanitary purposes has been constructed at a cost of $\$ 4,500$. University extension work is being pushed. Nature studies in the public schools is a feature in which the college is much interested. (President R. W. Silvester.)

Massachusetts Agricultural College, Amherst, Mass.-The elective studies of senior year have been grouped according to their proper relations into 11 courses, and the courses have been made elective. A wooden building with small dairy plant has been erected for the special study of problems in the dairy, at a cost of $\$ 2,000$. A veterinary laboratory and hospital stable have been erected and equipped at a cost of $\$ 25,000$. The buildings are of brick. The walls of the laboratories, class rooms, and dissecting pit have the bricks covered with white glaze enamel to facilitate disinfection. The buildings are furnished with the latest apparatus and labor-saving devices.

The most notable piece of work has been working out and describing the life history of the nematodes affecting very seriously the crops of cucumbers, tomatoes, lettuce, etc., grown under glass, and making public a cheap and effective remedy for the same. (President Henry H. Goodell.)

Massachusetts Institute of Technology, Boston, Mass.-Last year's report contained a brief description of the new building named in honor of Henry L. Pierce, which since then has been practically finished. It is valued at about $\$ 130,000$. In that part of it devoted to the engineering laboratory new pieces of apparatus have been placed to the amount of about $\$ 3,500$. Additions have been made to the boiler house and electric plant; cost, $\$ 23,000$. (President J. M. Crafts.)

Michigan Agricultural College, Agricultural College, Mict.-The past year has been a very successful one in the history of this college. The attendance was much larger than during any previons year, and good work was done in all departments. Our State legislature dealt liberally with the college during its last session, making the following appropriations:
For the erection and equipment of a woman's building . ...................... $\$ 95,000$
Dairy building .............................-.-.............................................. 15,000
Farm barn .-....................................................................................... 4,000
Replacing heating apparatus in Wiliiams and Wells halls ......-........... 2, 500
Fire escapes for these halls................................................................... 500
Student labor.......................................................................................... 5,000
Repairs to buildings .......................................................................... 10,000
Printing experiment station bulletins ................................................-. - 8,000
The increase in attendance has not been brought about by giving up any of the industrial features of the institntion. Every student entering is required to tako industrial work; young men in either the agricultural or mechanical departments, and the young women in domestic science. Farmers' institutes, experiment station bulletins, and summer excursions to the college have had much to do in bringing this institution into closer touch with the people for whose benefit it was established. (Presicient J. L. Snyder.)

University of Minnesota, Alinneapolis, Mim. -The work in mechanical engineering has been materially strengthened during the past year by the introduction of a systematic course in machine design. This has brought about some changes in the general work of drawing and kindred subjects, which also affect and benefit the students in civil and electrical engineering. The administration of the work in shop practice has been somewhat modified, and now includes a course of lectures supplemented by shop visits which bring the student in closer touch with practical methods of construction. Much attention has been given to the development of the courses in railroad engineering, and the facilities for better instruction have been increased by material additions to the equipment. An air compressor for use on the Westinghouse airbrake has been set up in the mechanical laboratory, and special investigations will be carried out with this apparatus.

The college of agriculture and the school of agriculture continue to grow in infuence and popularity. The college course has been strengthened in the sciences. The work during the past year has been most satisfactory. The last legislature appropriated $\$ 35,000$ for a new horticultural and physics building, which is now being erected. The size is 50 by 80 feet, three stories in height. The first story is of pink Kasota stone; the rest of the building is finished in red brick on the outside; the inside walls are of buff brick, no plaster; floors are of hard pine, mill construction; roof of slate. The first story is to be used for a botanical laboratory, the second floor for the horticultural department, the third floor for the department of physics. There is to be a greenhouse laboratory annex 25 by 50 feet, built of brick, one story in height, which will accommodate 30 students. The greenhouse covers 4,500 square feet, one-half of which is designed especially for students. There is a machine and tool exhibition room 20 by 80 feet, and there are storage cellars 20 by 50 feet. This will greatly increase the facilities for instruction in horticulture and physics, and at the same time relieve
the congestion that has existed in the departments of entomology and chemistry. The last legislature appropriated $\$ 10 ; 000$ to enlarge our heating and lighting plant. (President Cyrus Northrop.)

Mississippi Agricultural and Mechanical College, Agricultural College, Miss.The course of instruction in agriculture has been enlarged in the freshman class by adding a course in chemistry of agriculture and a course in elementary veterinary science, the two important sciences so closely connected with agriculture. All freshmen receivo instruction in agriculture, horticulture, chemistry of agriculture, veterinary scionce, and botany, besides the usual studies, giving a general or liberal education. The estabishment and partial equipment of physical and electrical laboratories, an electric-light plant, and additional instruction and systematic laboratory work in both physics and electricity lave been material improvements to the course of instruction in mechanic arts. Good progress has been made during the present year. The course of study is now well arranged and coordinated in the different departments. (President J. M. Stone.)
Alcom Agricultural and Mechanical College, Westside, Miss.-The following improvements have been made: A new barn, costing $\$ 1,000$; a shoe shop, costing $\$ 1,000$; and repairs on eight dwelling houses for professors, costing $\$ 1,200$. Improvement of old lands has been carried on systematically and 40 acres of new lands have been cleared and improved. An increased quantity of Indian corn, pease, Irish and sweet potatoes, pumpkins, cotton, clover, hay, and numerous grasses, hogs, cattle, and butter were produced and realized from the farm. (President W. H. Lanier.)

Missouri School of Mines and Mietallurgy, Rolla, Mo.-Began a new course in general science, four years, leading to the degree of B. S. in general science. This differs from the other courses in being mach more largely elective. Enlargement of wood-working shops and dynamo laboratory begun; new system of waterworks completed; bathroom, with shower baths, etc., and lockers for student use added; physical laboratory enlarged by addition of one room. Several new advanced subjects have been added to the graduate courses. The grounds have been improved by planting trees and vines. A new chair, full professorship, was provided for this past year. (Director Geo. E. Ladd.)

Lincoln Institute, Jefferson City, Mo.-In addition to manual training in our shop, as heretofore, we have decided for the coming year to give to our stadents complete trades in carpentry, blacksmithing, and machine-shop work. For the coming year, also, in addition to dressmaking, we shall give the girls instruction in cooking and laundry work. While we erected no new buildings during the past year, we have repaired and improved our present ones. (President John H. Jackson.)

MIontana College of Agriculture and Mechanic Arts, Bozeman, Mont.-No changes of any importance have taken place during the year in methods of instruction. A biological department has been organized in which opportunity will be given students to specialize in the direction of either zoology or botany. A short course in agriculture, covering three years of six months each, has been arranged. The standard for matriculation in college courses has been raised, and the common branches have been thrown out, making it necessary for students to prepare in these subjects in the public schools. (President James Reid.)

University of Nebraska, Lincoln, Nebr.-Many changes in the courses of study have gone into effect during the year. A complete revision of the curricula in the College of Literature, Science, and Arts and in the Industrial College was made after careful and prolonged investigation by a committee of the general faculty. It was found during the past few years, in which a pretty free elective system prevailed, that the great majority of students in both colleges took what may be called general rather than special lines of work. Accordingly the faculty brought
together three "groups" of studies, viz, (1) classical; (2) literary; (3) scientific, with approximately equal entrance requirements, each of which is intended to give a general training. In each of these 130 hours of worl are required for graduation, of which 36 hours are elective. The classical and literary groups are in the College of Literature, Science, and Arte, while the scientific group is in the Industrial College. In the College of Literature, Science, and Arts there are 18 special groups of studies, intended to supply all reasonable demands in the way of combinations and electives. Here also are found the teachers' course and course preparatory to law and journalism. In the Industrial College there are seven special groups having the same purpose and four technical groups, in which the purpose is to give a thorongh professional and practical training in a particular kind of work. In the Industrial College are also the practical courses of one, two, or three years' length, in which those with less preparation are admitted to the study of agriculture, mechanic arts, domestic science, eic.

The growing demand for opportunities for study during the summer has resulted in the development of the summer school, which had littile relation to proper university work, into a summer session ( 6 weelzs in length), limited almost entirely to cortain lines of university work.

The relations of these several groups of studies and lines of work are shown in the following synopsis:
I. General groups (requiring 130 hours, of which 36 are elective):
(a) College of Literature, Science, and Arts-

1. General classical group (including classical strudies, 24 hours; modern language, 14; English, 14; science, 12; history and political science, 12).
2. General literary group (including history and polivical science, 34 hours; ancient or modern language, 16; English, 14; science, 12). (b) Industrial College-
3. General scientific group (including science, 36 hours; English, 16; history and political science, 16; modern language, 8).
4. General agricultural group (including agricultural subjects, 28 hours; science, 20; English, 16; modern language, 8; political science, 6).
II. Special and technical groups (requiring 130 hours, of which at least 40 hours must be in the special or technical line, and usuaily permitting less than 36 hours of electives), with some practical groups (with lower requirements):
(ci) College of Litorature, Science, and Arts-
5. Eighteen special groups, as follows: (1) American history and political science; (2) English and history; (3) English and philosophy; (4) English and political science; (5) Germanic and Romancelanguages; (6) Greek and English literature; (7) Greek and Germanic languages; (8) Greek and Latin; (9) Greek and Romance languages; (10) history and philosophy; (11) history and political science; (12) Latin and English; (13) Latin and Germanic languages; (14) Latin and history; (15) Latin and Romance languages; (16) mathematics and political science; (16) philosophy and political science; (18) philosophy and zoology.
6. Law and journalism group (with the same conditions for admission as for other groups, but requiring 66 hours; in history and political science, 42 hours; Engiish, 19 hours, and philosophy, 5 hours).
7. Teachers' course (may be elected by juniors and seniors, and includes 65 hours of prescribed work, of which 25 must be devoted to special, 12 to professional, and 22 to general knowledge).
(b) Industrial College-
8. Seven special groups, as follows: (1) Agriculture and chemistry; (2) botany and agriculture; (3) botany and zoology; (4) chemistry and physics; (5) horticulture and botany; (6) mathematics and physics; (7) zoology and philosophy.
9. Five technical groups: (1) Technical agriculture; (2) civil engineering; (3) electrical engineering; (4) mechanical enginearing; (5) municipal engineering.
10. School of agriculture (including a 3 -year course and a "short course ").
11. Sugar school (including a 1-year course).
12. School of mechanic arts (including a 2 -year course).
13. School of domestic science (including a 2 -year course).
\%. Preparatory medical group (including a 2 -year course).
In addition to the foregoing the following is an elective group for students in either college: Course in physical education (may be elected by sophomores, juniors, and seniors, and including 36 hours of prescribed work).
III. Summer session (of 6 weeks, including courses in science, English, history, Latin, mathematics, pedagogy, and modern language).
The north wing of mechanic arts hall, erected at a cost of $\$ 00,000$, was formally dedicated October 27, 1898. It is a substantial brick building, 65 by 120 feet on the ground and three stories in height, containing roums for shops, laboratories, lecture rooms, etc., for the departments of mechanical, electrical, and civil engineering, and temporarily for agriculture, mathematics, entomology, and domestic science. (Acting Chanceilor C. E. Bessey.)

Newada Siate University, Reno, Nev.-The organization of the university comprises the following schools of instruction and training: (a) The school of agriculture; (b) the school of liberal arts; (c) the school of mines; (d) the school of civil engineering; (e) the school of mechanical engineering; $(f)$ the State normal school; ( $g$ ) a course in the theory and application of electricity. The school of mechanics has become the school of mechanical engineering. The course in the theory and application of electricity is a new course. It is not designed to be a fuil course in electrical engineering, but rather a supplement, and strengthens the work in all the tecnnical schools. The courses of stady in history and political science have been enlarged. The faculty have given careful consideration to improvement in all their subjects of instruction. The college needs larger library resources and better library facilities.
The legislature of the State at the session of 1898 did not feel able to purchase land for the Experiment Station and Agricultural and Mechanical College. The county of Washoe, in which the university is located, purchased a valuable piece of land near the university and gave the land to the State for the use of the college and station. The cost of the land was $\$ 12,000$. (President J. E. Stubbs.)
New Hampshire College of Agriculture and Mechanic Arts, Durham, N. H.No important change has heen made during the year except such as naturally followed from the decision indicated in the preceding report to adopt a schedule of entrance requirements not lower in grade than those recommended by the Association of American Agricultural Colleges and Experiment Stations.

The preparatory course, adopted as a temporary expedient and incident to the change indicated above, has been continued and will be a necessary burden for one or two years at least.

The two years' course in agriculture required by the legislature of New Hampshire and supported in part by State appropriation is so related with the four years' course in agriculture as to give a theoretical and practical training not too
far removed from collegiate standards. Its permanence, however, is not yet established. (President C. S. Murkland.)

Rutgers Scientific School, New Brunswick, N. J.-The year opened with an increased attendance of students, the entering class being considerably larger than for several previous years and nearly every member of the three upper classes returning for the continuation of study.

The five courses of study leading to the first degree in science (B. Sc.) have been maintained throughout the year.

The course in agriculture still continues to attract attention, and reports from various preparatory institutions in New Jersey indicate that this course is likely to have an increased number of students.

The course in civil engineering and mechanics maintains its high standard as well as its popularity and influence among the students. To this course has been added a plan, now in successful operation, for practical field work under the personal direction of the professor of graphics and mathematics, whose class-rcom instruction in surveying and in railroad curves is thus happily supplemented.

A professor, two associate professors, and a well-equipped laboratory make the facilities for instruction in the course in chemistry of a superior order.

Those students who are preparing for post-graduate courses in technical schools or for electrical pursuits which do not require, at the outset, a complete professional training find the course in electricity most wsefol. The physical laboratory has received recent additions of wireless-telegraphy apparatus, an 8 -inch spark coil and a Reichsanstalt photometer.

In preparing for advanced studies in medical schools the course in biology has proved most helpful and has received a large number of elections.

The arrangement of the recitation schedule has made it possible for the members of the senior class in the scientific school to attend the lectures in pedagogy given regularly to the members of this class in the classical schooi.

The plan of instruction and examination in municipal hygiene introduced in Rutgers Scientific School last year and for the first, it is believed, in any American institution, has been continued during the present year. At the examination held in May, 1899, two persons approved themselves as qualified to act in the execution of the health laws of New Jersey-one as an executive health officer and one as a sanitary inspector.

In the general work of the extension department three half courses of six lectures each and two half courses of seven lectures each have been given, as follo ws: One half course each on the eastern question and modern history and three have courses on the Victorian poets. The total attendance at the 82 lectures was 735 persons, and the average attendance 525. The total attendance at the class hours following each lecture was 303 persons, and the average attendance 230. Ordinary half-course certificates were awarded to four persons, and an honor certificate to one person.

In special work 18 lectures were given, at which the total attendance was 946 persons, and the average attendance 681. The total attendance at the class hours was 600 persons, and the average attendance 425.

The total number of catalogned and classified volumes in the library is 40,000 , of which 3,438 volumes were added during the past year.

During the year the membership of the faculty has been $2 \tilde{r}$, and ali but 3 of this number have given instruction in the scientific school.

The enrollment of students for the year was 116-graduate students, 2; seniors, 19; juniors, 21; sophomores, 21; freshmen, 4i, and special students, not candidates for a degree, 6. There were also 53 students in the classical school and 138 pupils in attendance at the preparatory scheol. The degree of bachelor of science was
conferred upon 19 graduates in June, 1899. Of these graduates, 10 had pursued the course in civil engineering and mechanics, 4 the course in chemistry, 2 the course in electricity, and 3 the course in biology.

The results of the work of the New Jersey State Agricultural Experiment Station and of the New Jersey Agricultural College Experiment Station are published in the form of bulletins and annual reports. One hundred and thirty-sixbulletins, 18 special bulletins, and 19 annual reports were issued by these two stations prior to June 30, 1839. The particular work of the Agricultural College Experiment Station is inciuded in 44 of these bulletins, 13 of the special bulletins, and 11 of the annual reports.

The special work of the year has been a continuation of the investigation of bovine tuberculosis and other diseases of animals, the fungous diseases of plants, the injurious insects found in New Jersey, and of the experiments in irrigation. (President Austin Ścott.)

New Mexico College of Agriculture and Mechanic Arts, Mesilla Park, N. Mex.The courses of stady in the college have not been materially changed, but in minor details have been strengthened. A frame building has been erected on the college grounds and has been used as a club house for young men. This has only partially met the demand for better dormitory accommodations, yet it has been fully occupied throughout the year. Improvements have also been made in the basement of the main college building. The equipment of the various departments of the college has been added to, the electrical equipment receiving numerous additions. Satisfactory worls has been done in all departments of instruction. The enrollment has been about the same as for the year previous. A class of three men was graduated with the degree of bachelor of science at the close of the year, and the degree of master of science was conferred upon one postgraduate.
The work of the experiment station has progressed satistactorily during the past year. Investigations in sugar-beet culture and soil moisture have been continued. The station has adopted the plan of issuing press bulletins weekly in addition to the regrilar printed balletins. (President Frederic W. Sanders.)
Agriculturd and Mechanical College for the Colored Race, Greensboro, N. C.An architertural course has been added to the curriculum, (President James B. Dudley.)

North Carolina College of Agniculture and Mfechanic Arts, West Raleigh, N. C.No thaterial changes have been made in methods of instruction. The scope of ipistruction has been extended by tine addition of a course in veterinary science "under the direction of Prof. Cooper Curtice, B. S., D. V. S., M. D. Additional electrical apparatus has been purchased to the value of $\$ 1,000$. Two additional rooms have been added to the mechanical building, (President Alexander Q. Holladay.)

North Dakota Agriculitural College, Agricultural College, N. Dak.-A combined sheep and pig frame barn, 96 by 48 feet, one and one-half stories, has been contracted for and is about completed, as is also an addition to the mechanical building, 22 by 36 feet, for instruction in blacksmithing. A department of steam engineering has been established in conmection with the mechanical course, intended more particularly to accommodate young men desirous of operating steam traction engines.

The boys' dormitory has been abandoned, rechristéned Erancis Hall, and remodeled and converted into class rooms and laboratories, affording accommodations for the departments of household economics, agriculture, horticulture, veterinary, and a museum.

A brick walk, some 900 feet in length, is about completed, extending from the
main college building to Francis Hall, and a wooden one from there to the barn, some 600 feet distant, is already completed.

The poultry yards have been materially enlarged and the barn, implement shed, poultry house, farm house, and dairy building have been newly painted.

No material change in course of study or methods of instruction, except one years work has been added to the preparatory course. Several additions have been made to the faculty. During July and August a four weeks' summer training school for teachers was conducted the same as last year, with 180 in attondance. (President J. E. Worst.)

Ohlahoma Agpicuitural and Fechanical College, Stillwater, Okla.-The character and manner of instruction was the same as that followed in former years. A two-story building of native stone, 80 by 35 feet, was erected during the year and fitted for instruction in mechanic arts: cost, $\$ 3,553$. This increase in facilities permitted of the establishment of a course in mechanic arts. Facilities for instruction in printing have aiso been provided. The courses of study for the coming year have been revised and mranged so as to permit of elective courses instead of elective studies making up a course. There will be offered courses in general science and literature, agriculture, mechanical engineering, and special science, with (a) chemistry or (b) biology as majors. (President Angelo C. Scott.)

Oregon Staie Agricutiural College, Corvallis, Oreg.-An armory has been built costing $\$ 10,000$. It is devoted primarily to military training. It is 70 by 120 feet, two stories. The basement story is of stone and has a commandant's room, a plys-ical-culture room for young ladies, and one for young men, and a bowling alley for both sexes. The second story is of wood and contains a drill hall with armory rooms and a running gallery. The main drill room will be fitted for a gymnasium also. A mechanical hall, to be known as the Morrill Mechanical Hall, 120 by 80 feet, has been completed-two stories, stone. It contains a woodworking room or shop, machine shop, printing office, drawing rooms for both free-hand and mechanical drawing, physical laboratories, and botanical rooms. The cost is $\$ 21,000$. A power house, including a blacksmith shop, one story, brick, costing $\$ 2,000$, has been built. The engine rooms are supplied with boiler, engine, and dynamos for furnishing power to the mechanical hall and printing office and for lighting the various buildings. A steam heating plant has been contracted for and will be ready for the fall opening. It will cost about \$16,000. (President Thomas M. Gatch.)

Pennsylvania State College, State College, Pa.-The only important fact in relation to the college during the year has been the steady strengthening of the work in the several departments, and the corresponding fact that nearly every member of the graduating class had secured a position for employment in the line of his chosen profession before commencement day. (President G. W. Atherton.)

IRhode Istand College of Agricultrive and Ifechanic Arts, Kingston, R. I.—The institution has continued its usefulness during the past year. In the agricultural. department the pouitry school has had an increased number of students. The preparatory department has proved itself of great value in fitting country boys and girls for the college course. The biological department has had charge of a summer school for nature study for the teachers of Rhode Island. Over 70 teachers were in attendance, and 40 applications were refused, as our number was limited for lack of accommodations and facilities. (President J. H. Washburn.)

Colored Nomal, Industrial, Agricultural and IHechanical College, Orangeburg, S. C.-There has been no change in the course of instruction. Besides Bradham Hall-a building three and one-half stories high, 62 by 126 feet, containing dormitories and class rooms-and a dining hall 36 by 75 feet, with an altitude of 18 feet, we have erected a new college building, 90 by 154 feet, containing chapel, library,
reading room, laboratory, two literary auditoriums, gymnasium, commercial department, 8 class rooms, and 50 sleeping rooms, to be heated by steam, with waterworks on each floor. This building will be ready for use September 20, 1899, and will cost not less than $\$ 27,000$ when completed. We have purchased opera chairs for the chapel, at a cost of $\$ 1,000$, and chairs for the new dormitory, at a cost of $\$ 200$. (President Thomas E. Miller.)

South Dakota Agricultural College, Broolings, S. Dak.-There has been a steady growth all through the year. Nore than 400 students have been in actual attendance. Every department in the institution has been taxed to its utmost. The legislature has increased State aid materially for the future and will hereafter furnish about the same amount for running expenses that is provided by the national funds (Hatch and Morrill). It has in addition provided money for two new buildings to be erected this summer-one for armory and gymnasium purposes and another for the use of dairy and animal husbandry work. No changes whatever occurred during the year in the facalty. The new departments mentioned in my last report have proven highly popular and helpful and have been well patronized. The changes in courses of instruction announced last year were carried out, and in the main were found helpful. The freedom offered students in choosing majois is highly satisfactory and will be developed more fully in the future. Our courses are so arranged that they articulate well with the work of the common schools. This we regard as very important, because it brings our advantages within the reach of the masses, for whom they are especiaily provided. (President John W. Heston.)

University of Tennessee, Knoxville, Tenn.-Courses of study and methods continue the same.

A new experimental barn has been erected at the farm especially for work in dairying. It is frame over brick basement, cement floor, iron stall fittings, etc.; $\operatorname{cost}, \$ 4,200$.
The school of agriculture has been reorganized and several assistants added in this department of the station, viz, a dairyman, an assistant for plat experiments, and a foreman of the farm. This school is being fully equipped.

Much new equipment has been added during the year to the mechanical department, a new building for which (costing about $\$ 13,000$ ) was completed last autumn. (President Charles W. Dabney.)

Agricultural and Mechanical College of Texas, College Station, Tex.-A department of entomology was established during the year. The standard for entrance has been raised. A student must be able to stand examination in arithmetic and begin witl algebra to enter our fourth (freshman) class. The State legislature just adjourned (July, 1899) made the following appropriations for buildings and improvements to be completed the coming year: For agricultural and horticultural building and equipment, $\$ 31,000$; dormitory and equipment, $\$ 28,000$; dwelling, $\$ 6,500$; well and equipment, $\$ 2,500$; sewerage system, $\$ 5,000$; repairs, $\$ 5,000$. When the above-mentioned dormitory is completed, it will furnish room for about 200 additional students at the college. (President L. L. Foster.)

Agricultural College of Utah, Logan, Utah.-The last legislature made provision for a new greenhouse, which is at present erected, at an expense of $\$ 2,800$. The most noticeable progress in the college is the increased percentage of students who remain throughout the entire school year of nine months. For the benefit of students who can not leave the farm before November 1, provision was made by the last legislature for a five months' course, extending from November 1 to March 31. (President J. M. Tanner.)

Virginia Agricultural and Mechanical College, Blacksburg, Va.-A new four years' course preparatory for stndy of medicine has been added, and two years' instruction in Spanish, and two years' in Latin provided. Improvements: Coldr
storage plant, cost $\$ 4,336$; dwelling house and lot, cost $\$ 2.000$; two laborers' cottages, cost $\$ 500$. (President J. Mi. McBryde.)

Hampton Normal and Agricultural Institute, Hampion, Va.-The general condition of the institute is good in all of its lines of worls. The standard of excellence in the academic department is being raised each year. The departments of agriculture and mechanic arts have been strengtiened by the equipment of new physical and chemical laboratories. The courses in the trade school have been enriched, and the entrance requirements to these courses have been raised. In the agricultural department a dairy course has been started, the elementary course in agriculture has been opened to all the girls of the academic department, and the special course in asricuiture, leading to a certificate, bas been made a postgraduate course. The work in domestic science has been greatly advanced by the addition of new and commodious sewing rooms and a well-equipped kitchen. The effort in each department is to keep in touch with every-day life and to make its work as concrete and practical as possible. (Principal H. B. Frissell.)

Washington Agricultural College and School of Science, Pullman, Wash.-One hundred thousand dollars have been appropriated for the construction of Science Hail for the departments of botany, zoology, bacteriology, agriculture, horticulture, veterinary science, and geology, and museum; also forge shop and foundry and rebuilding Ferry Hall (the boys' dormitory). These buildings are under construction. (President E. A. Bryan.)

West Virginia University, Morgantown, W. Va.-A department of domestic science has been established, and our premedical course has been made to cover two years. Fellowships in chemistry, Latin, mathematics, agriculture, economics, elocution, English literature, Romance languages, and German have been established. Three new buildings are to be erected: A library building, to cost about $\$ 50,000$; mechanic arts building, to cost about $\$ 30,000$, and an armory, to cost about $\$ 12,000$. (President Jerome H. Raymond.)

West Virginia Colored Institute, Institute, W. Va.--Since the last report our English course has been materially broadened. Our mechanical course has been strengthened by the appointment of two new teachers and the purchase of additional mechanical appliances. We have now in course of erection one brick dormitory which will accommodate 100 boys, and we are also making a much-needed and substantial brick and stone addition to our main building. The boys' new dormitory, when completed, will cost $\$ 15,000$, and the addition to the main building $\$ \$, 000$. We have also added a new electric plant and engine, at a cost of $\$ 3,000$. (President J. McFienry Jones.)

University of Wisconsin, Madison, Wis.-During the year a dairy barn and stock-judging building has been completed at a cost of $\$ 18,000$. In this structure the latest ideas relative to the economic healthful housing of dairy stock has been incorporated. The building is lighted by electricity and three electric motors furnish the required power. A large room is provided for stock-judging purposes. This room, which is 40 by 70 feet in area, is warmed by steam heat and is lighted from above by means of skylights. (President C. K. Adams.)

University of Wyoming, Laramie, Wyo.-During the past year an addition to our greenhouse has been built at a cost of $\$ 900$. In our military department we have been without a regular officer from the United States Army and one of our professors has taken charge of the department. On the whole, he has been a great success and shown himself surprisingly competent for that line of work. Our normal department will be greatly strengthened the coming year; a business college will be added to the courses of study and some minor changes will be made in our work generally. We have an appropriation from the last legislature also for a new science hall, which will be erected another summer. (President Elmer E. Smiley.)

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## III.-INSTRUCTION IN DAIRYING.

Prior to the passage by the Congress of the United States of the act of July 2, 1862, donating lands to the several States for the purpose of establishing institutions in which the leading object should be instraction in agriculture and the mechanic arts, very little had been done in this country for the scientific education of the farmer. The passage of the said act and of the act of August 30, 1890, for the more complete endowment and support of the institutions established under the provisions of the act of July 2, 1862, resulted in the establishment of what are generally known as "agricultural and mechanical colleges" in each State and Territory of the country. The courses of study provided for the farmer or for those who wished to prepare themselves as such were intended to cover the entire field of agriculture as well as to furnish a good general education. Thus, while general instruction in dairying as it should be carried on by the fiarmer was included in the agricultural course, no provision was made until a comparatively recent date for the education of persons who were to devote themselves to the making of butter and cheese.

On account of the lack of such instruction creamery men were compelled to rely upon their own efforts for any improvements in the methods of manufacturing dairy products, and as a result could not compete successfully with the butter and cheese makers of countries where instruction in dairying and investigations into the subject were carried on. In order that the dairy interests of the country might be fostered as much as possible it was considered necessary to provide the needed instruction, and thas special schools of dairying were established in connection with the agricultaral colleges of the country. The establishment of experiment stations in connection with these institutions, under an act of Congress of March 2,1887 , undoubtedly assisted in the founding of dairy schools, as it opened the way for investigation of the subjects to be taught therein.
The Wisconsin Dairy School of the University of Wisconsin was established in January, 1890, and in 1891 the legislature of that State appropriated $\$ 25,000$ for the erection of a dairy building in connection with the dairy school. These steps were quickly followed by other States. The popularity of these schools and the demand for the services of persons who have received instruction therein are proofs of the wisdom of their establishment.
In his report for the years $1896-57$ and $189 \%-98$ to the board of regents of the University of Wisconsin, President C. K. Adams says: "Our dairy department has now sent out more than 700 trained stridents, and still the demand is far more than we can supply. There are now about 2,000 creameries and checse factories in the State. * * * The importance of the work of the school is indicated by a single fact. Only a few years ago Wisconsin cheese was worth in the market from 2 to 5 cents a pound less than the cheese of New York, but at present, chiefiydirectly or indirectiy-through the teachings of the dairy school, the relations of the products of these States in the market, as well as in the opinions of experts, have been reversed."

In the tenth biennial report of the board of regents of the University of Minnesota the influence of the dairy school of that institution upon the dairy industry is stated as follows: "Since the establishment of this school dairy industry has made such remarkable growth that Minnesota is now recognized as one of the leading dairy States of the Union. * * *
"During the past two years some 200 new creameries have been built, equipped, and are being successfully operated, bringing the number of creameries in the State up to 650. When the last biennial report was made it was estimated that half of the dairy products in the State was manufactured in creameries. Now the product of the creameries is about 50 per cent greater than that of the home dairy. A careful estimate of the annual amount received by patrons of the cream-
eries in this State is $\$ 10,000,000$, and the receipts from the home dairy $\$ 0,500,000$. During the seven years that the school has been established, 484 students have been in attendance."

Probably the most importantinvention as an aid to the dairying interests of the country is the Babcock milk test, invented by Dr. S. M. Babcock of the University of Wisconsin, by means of which it is possible to determine the amount of fat in milk. This method of testing milk is taught in the dainy schoo's of the country, and is in almost universal use eren in home dairies. As the quantity and quality of butter that may be made out of a certain amount of milk do ends upon the amount of fat contained therein, the price paid for milk by some creameries is regulated by the amount of fat it contains as determined by means of the milk test. In tive report of the University of Wisconsin, quoted abore, President Adams calls attention to another aid to the dairying interests. He says: "Probably nexi in importance to the invention of the Babcock milk test has been the Wisconsin curd test, also devised at this station. This is a simple method of treating a sample of milk so that it will show to the operator whether or not mills is contaminated or tainted in any way so as to unfit it for use in the dairy, especially for use in cheese making. Not infrequently the product of our cheese factories is depreciated in ralue from $\$ 5$ to $\$ 15$ per day for weeks at a time because of bad milk. It has been calculated that $\$ 100,000$ a year is not too small an estimate for losses to our dairymen from this source. The experiment station is now teaching the dairy pupils the use of this test, and its introduction over the State is spreading rapidly. The Wisconsin Dairymen's Association for 1898 and the Quebec Dairymen's Association for 1897 have both warmly commended the test as having already greatly increased the value of dairy products."

The special dairy schools are not conducted throughout the entire scholastic year, but are opened, as a rule, in December or January, and continue for from four to twelre weeks, the length of the course varying in the several States. These special courses, keing intended especially for persons who have had some experience in creameries or cheese factories, are giren in the winter season, ats that is the most convenient time for creamery men to leare their work, the summer months always being the busiest in creameries. In some of the schools one of the requirements for admission is that the applicant shall have had practical experience in creameries. Owing to the large amount of practical worl included in the courses of these schocls the number of students admitted at any one time is necessarily limited to such number as can be accommodated at the machinery and other apparatus of the depariment.

In the following pages are given outlines of the instruction in dairying offered by the various agricultural colleges with special reference to instruction in butter and cheese making. The special courses in dairying are given in full, so far as they are published in the annual catalogues, together with a description of the equipment for instruction in practical dairying. As may be seen, some of the States do not provide special courses for the instruction of butter and cheese makers, but the only instruction offered in dairying is thatincluded in the regular agricuitural courses.

## Alabania Politechicic Institute.

Dairying is taught in the first term of the sophomore year by practical work in the dairy-butter making, determination of fat in mills by the Babcock metbod, etc.-as well as by instruction in the lecture room. (Catalogue, 1898-99.)

## Colorado Agricultural College.

Dairying is taught the first term of the senior year by means of lectures and recitations in the forenoon. The exercises of the afternoon relate to butter making, mik testing, and the handling of dairy apparatus. (Catalogue, 1898-99.)

## Connecticut Agricultural College.

1. A short winter course in dairying is given for the benefit of those who can take but little time for the subject, including composition of milk, conditions of creaming, milking for market, butter making, washing, salting, packing, etc. Breeding, feeding, and diseases of dairy cattle are subjects also treated in this course, with such texts as "Milk and its products" (Wing), "Bacteriology " (Russell), and "Feeds and feeding" (Henry).
2. In the regular course the junior class is instructed four and one-half hours a week, with practice in feeding and dairy work and keeping records of the herd. (Catalogue, 1898-99.)

## Delaware College.

A course of lectures on the handling and care of milk and its products is given in the winter term of the sophomore year. This includes work in the determination of fat in milk by the Babcock tester and special attention to the commercial handling of milk.

In the short course in agriculture, extending from the first Tuesday in January to the last Friday in March, there are given 12 lectures on the chemistry of milk in general, treatment of milk, creamery machines and methods, testing of milk, and the commercial side of the dairy. One hour per week is devoted to lectures on agricultural bacteriology. Among the subjects treated are: The general characters and methods of study of bacteria and their relations to health and disease; methods of destroying bacteria; antiseptics and disinfectants; the relation of bacteria to milk: ( $u$ ) milk and human disease; (b) fermentations of milk and their prevention: preservation of milk: special diseases of milk; (c) the relation of bacteria to good and bad butter; (d) the relation of bacteria to cheese making. (Catalogue, 1898-99.)

Florid. Agricultural College.
Instruction in dairying is given two hours per weak during the second term of the senior year. (Catalogue, 1898-99.)

## Georgia State College of Agriculiture and Mechanid Arts.

Instruction in dairying, including butter and cheese making, is given in the second term of the senior year.

A dairy school is conducted for two weeks in March, in which instruction is given in the best methods of making butter and cheese and of preserving them for home consumption and for market. (Catalogue, 1898-99.)

## University of Idaho.

Equipment.-The dairy consists of a butter-making room, a cheese room, a laboratory for milk testing, an engine room, and a cheese-curing room.

Dairying.-This course consists of laboratory instruction in modern dairy methods and appliances. Students taking the course are required to perform at least two hours a week of practical work in the creamery, two hours per week of instruction, and two hours' practicum. (Junior year, second semester.) (Catalogue, 1898-99.)

## University of Illinois.

Equipment.-The dairy department is equipped with a plant for laboratory work in testing, pasteurizing, separating, creaming, and churning, and for investigation in dairy bacteriology.

Duiry management.-Origin and development of the various breeds of dairy cattle; noted families and jndividuals in the different breeds; judging best breeds for grading purposes; improvement of a herd by testing; care and selection; methods of management of a dairy herd; best feeds for the economical production of thilk; construction and care of dairy barns. (First semester, once a week.).
General dairying.-Secretion of milk; its composition as determined by chemical analysis and by microscopic examination; general facts concerning bacteria in their special relation to milk, butter, and cheese; methods of preventing contamination; development of acid and the acid test; pasteurization; different methods of testing for fat contents, total solids, and adulterations; variations in milk and their causes; economical production of milk; use and care of cream separators;
comprison of different systems of creaming and the making of butter by the most approved methods. (Second semester, iirst half.)

Butier making.-Operation of and studies in efficiency of different separators in comparison with gravity methods of creaming under a variety of conditions; infiuence of character of milk and its handling upon the quality of butter; different methods of ripening cream and the effect upon charning and upon butter, together with an extended practice in the manufacture and in scoring of butter. (Second semester, second half, two periods.) (Catalogue, 1898-99.)

## Purdue University.

Equipment.--The dairy contains five rooms, viz: General workroom, milk-setting and churn room, separator room, testing laboratory, and ice house. This building is fitted with a complete set of tools suited for farm dairy instruction, as separators, creamers, churns, cheese-making tools, butter workers, pressers, etc.

Dairying.-Junior year, spring term, eleven weeks, eight hours per week. Stwidy of milk, butter, cheese, methods of handling, etc., including practical dairy instruction. (Catalogre, 1898-99.)

## Iowa State College of Agriculture and Mechanic Arts.

Equipment.--The dairy is a practical working creamery and cheese factory in operation every week in the year, and is conducted on a practical and commercial scale, as well as for scientific investigation and instruction. During the summer season from 15,000 to 20,000 pounds of mill are taken in daily and manufactured into butter and cheese. Five different kinds of separators are used in the building and the most approved machinery is used.

Courses of study. - In addition to the work done in dairying by the students of the regular four-year course in agriculture, there are provided a one-year course in dairying, two summer schools in dairying, each extending through sixteen weeks, and a winter school in dairying continuing four weeks.

ONE-YEAR COURSE.
First term.
Dairy practice, six days per week.
Milk and its products, 16 lectures.
Milk testing, 16 lectures.
Bookkeeping, 16 lectures.
Bacteriology of milk, 16 lectures.
Dairy stock, 16 lectures.

## Second term.

Dairy practice, six days per week.
Cheese making, 16 lectures.
Pasteurization. 16 lectures and laboratory work.
Dairying machinery, 16 lectures.
Dairy feeding. 16 lectures.
Dairy chemistry, 16 lectures.
SUMMER SCHOOLS。
Dairy practice, half day per week.
Bacteriology of milk, 16 lectures per term.
Bookkeeping. 16 lectures per term.
Darry machinery, 16 lectures per term.
Milk testing, 16 lectures.
Milk and its products, 16 lectures.

## WINTER SCHOOL IN DAIRYING。

Work in dairy building, six half days per week.
Butter making, 20 lectures, or cheese making, 16 lectures.
Dairy chemistry, 15 lectures.
Bacteriology of milk, 10 lectures.
Bookkeeping, 10 lectures.
Milk testing, 10 lectures.

## INSTRUCTION.

I. Dairy practice.-This includes from five to seven hours of practical work in the first term of the year's course, the two summer courses, and the winter course. It includes butter making and laboratory work in milk testing. In the second term of the year course it includes cheese making and pasteurization.
II. Nith and its products.-Instruction on the composition of milk and dairy products, the theory of centrifugal separation, and the construction of the rarious kinds of separators. Special attention is given to the effect of varying conditions of the milk on separation. It includes a consideration of the principles of cream ripening, churning, and the preparation of the batter for market.
III. Nille testing.-A thorough study of the Babcock test for dairy products, with special instruction for orercoming the difficulties from varying conditions. The tests for determining acidity of cream and milk and the use of the lactometer for detecting adulterations are included; also composite sampling and testing of individual cows.
IV. Dairy machinery.-Instruction for firing boilers by the most economical methods, the construction and operation of engines and pumps, and the placing of machinery and shafting.
T. Bookkeeping.-This course is designed to inform the student as to the best system of bookkeeping for the business of the factory.

TI. Bacteriology of milh.- Lectures on the nature of bacteria, distribution, and thef conditions necessary for their growth. The effects produced by various bacteria commonly found in milk are shown by lectures and demonstrations. The methods of handling which cause contamination of milk are considered in detail. That the quality of dairy products depends mostly upon the fermentations which hare taken place in these preparations is shown with detailed attention to the use and value of starters in butter and cheese making. The principles of cream ripening and pasteurization are also included.
VII. Dairy stock. -The judging of dairy stock with the score card and by comparison is made a leading feature, while the lectures relate mostly to the principles, methods, and practices of breeding dairy stock and their management.
VIII. Cheese making. - In the winter term this consists of six le tures on chedder cheese, including a study of the kind of cheese demanded by different markets, etc. In the second term of the one-year course the same work is taken un as during the winter term, but with the addition of 10 lectures on fancy brands of cheese, including Limburger, Brick, Swiss, Roquefort, Sage, Stilton, Pineapple, and Gonda.
IX. Pusteurization. -The relation of the milk supply to the public health, the principles of pasteurization, and apparatus adopted for various purposes, with the practical operation of the nore common machines. The production and sale of "sanitary" milk is taken up, together with a general consideration of the market milk business, the use of preservatives, and allied topics. (Second term, one-year course.)
X. Dairy fecting. -The principles of feeding animals for the most economical production, with a study of the composition and use of various feeding materials and the feeding of dairy cows. Henry's Feeds and Feeding is used as a teat book. (Second term, one-year course.)
XI. Dairy chemistry. -The chemical composition of dairy products is considered in a general manner. The alkali test, both in theory and practice, is given in order that it can be used by the stadent. The adulteration of butter, cheese, and milk as it relates to the dairy industry is also taken up in the lectures. (Catalogue, 1898-99.)

## Kingas Agricultural College.

Equipment. - A dairy-school buildincs, two stories and basement, 100 by 10 j feet, with butter, cheese, milk, and testing rooms, cheese-ripening cellars, refrigerating plant, and cold-storage rooms; all apparatus needed for millz testing and for handling mill from the cow through the creamery to the butter tub or cheese room.

Dairy school: One winter term, twelve weeks.
Principles of agriculture.-Treating of soils, crops, tillage, and maures: the selection, laying out, equipping, and management of Kansas dairy farms. Textbook, Baileys Principles of Agriculture.
Dairy bookkeeping.-Practice in bookkeeping that will enable the student to understand the underlying principles, followed by training in keeping books for farm, dairy, and creamery accounts.

Dairying.-Milk;-its secretion, natrue, and composition; causes and conditions infuencing the quality and quantity of the milk; handling of milk for the mar-
ket and for butter making, including milking, straining, aerating, cooling, preserving, and shipping; creaming of milk by the separator; cream ripenins and butter making. Text-book, Wing's Milk and Its Products. Lectures. All students will study dairying together for the first half of the term. This class will then be divided, creamery men taking lectures on creamery butter making, the cheese makers on fiactory cheese making, and the dairymen on private butter making.

Feeds and feeding.-Properties of common feed stuffs, their effect on character and yield orf milk and butter, and their adaptability to Kansas conditions of dairying. The compounding of dairy rations to secure good yields at least cost with products having desired qualities. Careful strady of the feeding of the college dairy herd will also be required. Text-book, Henry's Feeds and Teeding.

Breeds and breeding.-Characteristics of leading breeds of cattle, and their adaptability to Kansas dairy farming; dairy farm, and the selection of dairy animals; care and management of the dairy herd; principles of stock breediug. Lectures.

Bacteriology。-Relations of bacteria to methods of keeping milk, ripening cream and cheese, and flavoring butter; diseases of milk, their relations to the health of man and animals; principles of disinfection. Test-book, Russell's Bacteriology. Lectures.

Diseases of dairy cattle. - The common ailments of calves and dairy cows are discussed and their causes and symptoms explained, remedies and preventives suggested, all from a practical farmer's standpoint. During the dairy school the college herd will be tested with tuberculin and the students taught how to make the test. Students will also inoculate hogs against cholera and swine plague. Lectures.

Boilers and engines.-Lectures and practice in the firing of boilers, care and running of̂ engines, pumps, etc. Care and attendance of refrigerating machinery, practice in shops.

Butter making and milh testing。-Practice in handling milk and its products from the time it leaves the cow until it is marketed as butter, cheese, or sanitary milk. Students may choose either creamery butter making, cheese making, or private dairying. Thorough instruction and practice will be given in all three of these lines. The dairy rooms will be fully equipped with hand and power separators, Babcock tests, churns, and butter workers, aerators, heaters, sterilizers, refrigerating machinery milk and cream vats, factory cheese apparatus, Mann's acid tests, and other needed apparatus. (Catalogue, 1898-99.)

## Unifersity of Maine.

Equipment.-The dairy building, 50 by 42 feet, contains a milk room, a butter room, a cheese room, a cold-storage room, a cheese-curing room, a lecture room, the office of the professor of animal industry, and a laboratory. It is supplied with all necessary appliances for teaching the most approved methods of handling milk, cream, butter, and cheese. The building is heated with steam and supplied with hot and cold water. Power is furnished by a 6 -horsepower engine and by a baby tread horsepower.

Dairying.-Lectures upon the formation and composition of milk; sources of infection; bacteria and their relation to dairying; ferments and their effects. Text-books: Grotenfelt and Woll's Principles of Modern Dairy Practice; Stewart's Dairyman's Manual. (Spring term, five hours a fortnight for nine weeks.)

Dairy practice. -The treatment and handling of milik and cream; milk testing for fat and other solids; aeration, pasteurization, and sterilization of milk and cream; the application of acid tests and ferments to butter and cheese making; operating and caring for the boiler, engine, gravity creamers, centrifugal separators, churis, workers, vats, presses, and the making, curing, and judging of butter and cheese, together with the business management of factories and creameries. (Spring term, seven hours a week for twelve weeks.)

Short winter course in dairying.--This course begins on the first Tuesday in January and continues six weeks. The subjects taken up are as follows: First winter-Plant and animal nutrition; diseases of dairy animals; milk, butter, and cheese; cows, breeding, handling, and judging; building and furnishings; barns, creameries, etc.; accounts. Second winter-Milk, butier, and cheese; bacteriology of the dairy; veterinary science; boilor and engine; business law; carpentry; feeding of cows. (Catalogue, 1898-99.)

## Maryland Agricultural College.

Dairying.-Offers a creamery course of six wetks and a private dairy course of six weels.

Equipment.--The creamery of the experiment station, which is supplied with every modern appliance for dairying, is used for the practical work of students. (Catalogue, 1898-99.)

## Massachusetts Agricultural College.

Equipment.-Connecting with the barn is a wing providing accomnodation for practical and educational work in dairying. The wing contains one room for heavy dairy machinery, another for lighter machinery, both large enough to accommodate various styles of all prominent machines: a large ice nouse, a coldstorage room, and a room for raising crean by gravity methods, a ciass room, and a laboratory. The power used is an electric motor. This department is steam heated and piped for hot and cold water and steam. In this department has been placed a full line of modern dairy machinery to illustrate all the various processes connected with the creaming of milk, its preparation for market, and the manufacture of butter. Special instruction in such work is offered in the dairy course.

Short winter course in dairying (first Wednesday in January to third Wednesday in March). -The soil and crops, 22 hours; dairy breeds and cattle breeding, 22 hours; stable construction and sanitation, care of cattle, 11 hours; common diseases of stock, their prevention and treatment, 11 hours; foods and feeding, 11 hours; bookkeeping for the dairy farm and butter factory, $2: 2$ hours: pasteurization and preparation of milk on physicians' prescriptions, 11 hours; composition and physical pecaliarities of milk, conditions which effect creaming, churning, methods of testing and preservation, 22 hours; milk testing, 6 hours: butter making, 12 hours; practice in aeration, pasteurization, 6 hours. (Thirty-sisth Annual Report.)

## Michigan Agricultural College.

Equipment.-By means of actual work in the dairy room instruction in butter making is given to all students in the agricultural course. Emphasis is laid on the methods of cleaning and keeping clean the dairy room and dairy implements. The dairy loom is equipped with various styles of creamers, separators, ripening vats, churns, and workers, with the use of which young men become acquainted by daily experience. The Babcock test is in constant use. and the subjects of pasteurization and sterilization receive attention. Later, if the student so elects, special work along dairy lines is given in the senior year, embracing a more thorough training in the art of butter making, along with a short course, at least, in dairy lacteriology and dairy chemistry.

Special shor't courses beginning with the opening of the winter term in the first week in January have been arranged as follows: Courses of six weeks each in darry husbandry and creamery, and a course of four weeks in cheese making.
I.-DAIRY HUSBANDRY.

1. Selection of dairy hard.-The college is well equipped with the highest types of dairy cows belonging to various breeds. Using the members of this herd as a model, the class goes over the various points of the typical dairy animal, score card in hand, until the significance of every variation in form is well understood. Since the records of all the cows are kept it is possible to verify or correct the judgment of the student.
2. Feeding catile.-An howr a day for the first two weeke of the termas given to the study of the theory of cattle feeding, definition of terms, discussion of feeding stuffs in the markets of the State or grown on the farm, calculation of rations, the use of table of analysis, the nutritive ratio, and the balanced ratio. A discussion of economical methods of storing feed and the general care of the dairy herd follows. Such topics as stall fittings, stable construction, preparation of feeding stuffs, quantities of feed to be given under different circumstances, exercising and watering dairy cows, and general stable management are taken up in turn and as fully dealt with as time will allow.
3. Veterinary science.-A series of 30 lectures on bovine anatomy, hygiene, and medicine forms a very important feature in the course.
4. Butter making.-Along with a course of lectures on the physical properties of milk and its constituents there is given practical work in the butter room in the
handing of milk, cream, and batter, and in all the details of manipulation from the time the milk leaves the udder of the cow until it is made up into a first-class article of butter and the skim milk prepared for feeding calves and pigs. Among. the topics upon which special emphasis is laid the following may be mentioned: Aeration and aerators, cleanliness both in milking and in the washing and care of utensils, the use of varions styles of creamers and separators, ripening cream with and without commerrial starters, preparation of home-made starters, ripening cream, churning temperatures, styles of churns. washing butter, and the various methods of printing and packing for market. Special work in pasteurizing milk and cream for market or for home use is given.
5. A course of lectures is given on the physical properties of milk and its constituents, explaining the reasons for the consecutive steps in the progress of the milk through the butter room on its way to the completed product. The object of this course is to do away with empiricism in the work and to give the student a coherent and logical view of butter making as a whole, and the relation of each process recommended to the success of the undertaking.
6. The Babcock test and lactometer.-These modern instrments are in daily use in the butter room, but special work is given with them that the students may become accurate and at the same time acquire a correct idea of the physical and chemical composition of milk and its products.
7. Dairy bacteriology.-A short course in elementary bacteriology is given that the student may understand how closely the quality of the butter is related to the cultivation of the right kind of bacterial life in the milk and cream and the exclusion of foes by scrupulous cleanliness and proper regulation of temperature.

## iI.--The creamery course.

1. Creamery methods.-Lectures and exercises will be given in the methods of keeping books, illustrated daily by the business operations of the college dairy. Payments are calculated on the basis of fat content. Methods of conducting the regular business of the creamery, accounts with patrons, with consignees, business forms and routine business, are subjects upon which daily instruction is given. A course of lectures will be given on the playsics and chemistry of millk and its products, explaining the reasons for each operation performed in the factory and the chemical and physical facts upon which it depends. The several constituents of milk are separately examined and the relation of each to the various operations in butter making is explained. The separator and churn are studied and the natural laws governing their work are outlined.
2. Daily work in the butter room.-The daily practical work in butter making is the dominant feature of the course, to which all others are subordinated. Separators are unpacked, sot up, run, and tested; milk is separated at diferent temperatures and under different conditions, until the student is thoroughly versed in all the details of handling milk and operating separators. Cream is ripened in various ways and with different kinds of vats and apparatus. The churning is done as in an ordinary creamery and repeated until the class is familiar with all the steps in the operation. The Babcock test is in constant use.
3. Creamery mechanics.-As thorough arill as possible is given in the care and operation of boilers and engines and the general principles of construction and operation of mechanical appliances used in creameries. The arrangement, size. and speed of shailting, belts, and pulleys will receive attention. The student will be qualified to do all necessary pipe fitting and to care for the machinery of the creamery intelligently.
4. Milk testing.--Thorough drill is given in the laboratory in the testing of milk. This work includes the calibration of glassware to determine whether or not the test bottles and pipettes in use are correct, the determination of the strength of acid, and the testing of milk uuder all the varying conditions met with in the daily operations of a factory. The use of preservatives for keeping milk in condition for testing and the handling of composite samples is also studied. In addition to teaching the use of the Babcock test, practice is given in detecting adulteration in milk by the use of the lactometer in connection with the Babcock test. The use of the various tests for acidity of cream are also strudied and the different methods put into practice in the work in the creamery room.
5. Dairy bacteriology.-This subject is taught by a course of lectures and demonstrations, though little more is attempted than to give the student an appreciative idea of what bacteria are and their relation to the art of butter making. The reasons for cleanliness in every dairy operation are pointed out. The manufacture and use of the several kinds of starters and their relative merits are explained.
6. Mill production.-The creamery manager should be posted not only on mat-
ters relating to the care of the milk prior to its delivery to the factory, but on the essential principles of stock feeding, bovine anatomy and medicine, and treatment of the cows to prodace the greatest flow of milk as well, that he may be competent to give adrice to patrons on these subjects.
\% Butter judging.-Daily work is given that the strdent may acquire an accurate taste and smell, and be able to discriminate between good and poor butter, and to recognize faults in the products of his own factory when such occur.
III.-COURSE IN CHEESE MAKING.

Practical work at the cheese vat followed out along scientific lines, with a reason for every detail of the operation, is a feature of this course. The use of the rennet tests for determining the ripeness of milk, the use of starter to aid in the control of fermentation, the ase of the cara test for the detection of impurities in the milk, and the use of the Babcock test to determine the loss of butter fat are among the points given especial attention in the daily operations in the cheese room. Work will be given in the laboratory in testing miliz. The use of the lactometer and Babcock test for the detection of watering and skimming milk will be taught and the practical application of the fest to everyday cheese-factory operations will be emphasized. Lectures and demonstrations in bacteriology, showing the relation of bacteria to the different changes taking place in miliz, how to combat harmful agencies and cultivate the helpfal ones, are given. Tha subject of chemistry of milk and its care upon the farm receives attention. (Catalogne, 1898-99.)

## University of Minnesota.

I.-COLLEGE OF AGRICULTURE.

1. Dairystock and dairy farmmanagement.-Breeding. rearing, and management of dairy stock, the points and characteristics essential in animals intended for the dairy, practice work in judging dairy stock, the management of the dairy farm. (Lectures three hours per week and practice work one hour per week, fall term of junior year.)
2. Dairy feeding. - Lectures covering both the scientific and practical questions underlying the principles of feeding. Practice in compounding rations, estimating comparative value of foodstuffs, and other problems. (Lectures, two terms, two hours per week.).
3. Farm dairying.-Lectures on milk, its care, the various methods of creaming it, care of the cream, and the manufacture of butter and sweet-curd cheese. Greater portion of time is devoted to practice in the farm dairy room. (Lectures and practice work, one term, two hours per week.)
4. Factory course in butter and cheese. -Two lectures a day, one in butter and one in cheese, and practice work two afternoons a week in butter making and two afternoons in cheese making. (Offered in January.)

## II.-SCHOOL OF AGRICULTURE.

1. Detiry stock.-During the last month of the first term stadents receive instructions in regard to characteristics of the various breeds of dairy cattle, their origin and comparative adaptability for the dairy. During the last term instruction is given in breeding, rearing, feeding, and handling dairy stock, with practice in judging stock and formulating rations.
2. Farm daiming.-During the first term a course of lectures is given in farm dairying, giving instruction in the care of milk and utensils, explaining the principles involved in creaming milk by the gravity and centritugal processes and giving full instruction in regard to running farm separators and the manufacture of butter and cheese in the farm dairy. Students also receive practical training in the most advanced methods of creaming milk, ripening cream, churning, working and packing butter, and measuring the value of milk by the Babcock test and lactometer. The practice work begins the third week of the first term and continues through the school year.
III.-DATRY SCHOOL.

Instruction in the dairy school continues four weeks and is divided into six courses.

1. Lectures. - The course of 60 lectures furnishes in a plain and concise form the most valuable information for those who are interested in any branch of agricul-
ture, covering as it does the most important points in the breeding, rearing, fceaing, and general management of dairy stock, the economical production of milk. growing and preserving of forage and grain crops, the management of meadows and pastures, management of barns, stables, and yards, constrtiction of silos, cooperative dairying, creamery and cheese-factory management, judging and marketing dairy products, the chemistry of milk, dairy bacterio'ogy, engineering, animal hygiene, and treatment of the common diseases of the dairy cow.
2. Butter making.-The running of separators: ripening and churning of cream; the proper acidity of cream to secure best flavor; how to churn, wash, and salt butter so as to avoid specks and mottles; to secure good grain and best methods of preparing for market; scoring butter by the score card.
3. Chezse making. -The work in the cheese room is conducted on a large scale, including the manufacture of several brands of fancy cheese. A complete record of every step taken is required of each student.
4. Mille testing. - The chemist gives a general outline of the work: brat in order that each student may have practice in milk testing, daily exercise is given. Steam, turbine, and hand-power inachinery and other apparatus are provided and operated in the laboratory. A milk and cream pasteurizing apparatus has been manufactured specially for the dairy school and a few advanced students are given instruction in the process.
5. Motive power.-The work in engineering consists of practical talks on the construction, care, and management of creamery engines and boilers, pumps, injectors, heaters, etc., and work in the practice room. In this room are provided an $\varepsilon$-horsepower, simp'e, slide-valve engine, three types of boiler feed pumps, two types of deep-well pumps, one injector, two mill pumps, and a steam garge, which the students have the privilege of examining and operating. Instruction is also given in pipe fitting, placing shaiting, babbitting bearings, soldering, etc.
6. Factory bookleeping. - All the essential features of factory accounting, from the receipt of the milk to the returns in net proceeds, are thoronghly considered. Paying for the milk according to the fat content or otherwise is fully explained. The students do, in books provided, the actual one month's accounting of a creamery. (Catalogue, 1898-99.)

## University of the State of Missouri.

Equipment.-The dairy is equipped with several Babcock milk testers, aerators, improved milk and cream vats, various styles of separators, churns, and butter workers, and with a complete sterilizing outfit for pasteurizing milk and cream on a large scale.
Dairying.-Selection, breeding, and feeding of dairy cows; modern methods of butter and cheese making. Fifty hours of practical werk in the dairy building are devoted to separating and testing milk, ripening cream, churning, working, salting, coloring, and packing butter for market. (Second semester in short winter course.)

Dairying.-Breeding and improvement of the herd; management and ocuipment of the farm dairy. One-half of the student's time is devoted to practical work in the college dairy. (Second semester, elective to seniors in regular conrse in agriculture.) (Catalogue, 1898-99.)

Montana College of Agriculture and Megeanic Arts.
Dairy husbandry,-Adaptability to certain sections; small dairies and creameries: testing of milk; butter and cheese making; breeds of dairy animals; rearing, feeding, and management. (Senior year, fall term, lectures three hours per week, practicum nine hours per week.) (Catalogue, 1898-99.)

## Untversity of Nebraska.

Dairying.-The principles of dairy operations; practice and instruction in the handling and ripening of cream, and in churning, washing, salting, working, printing, coloring, judging, and packing of butter'; practice in the use of hand separators and in the deep setting of milk; practice in the manipulation of the Babcock and other milk tests in testing whole milk, skimmed milk, buttermilk, and cream. (Two lectures each week and one afternoon in the dairy from 1 to 6, second semester.) (Catalogue 1898-99.)

## Nevada State University.

Dairying.-The instruction consists of lectures upon the formation and composition of milk; ferments and their action; testing for purity and value; methods of mauufacture of cheese and butter. The lectures are supplemented by practical work with different testing apparatus and by the inspection of dairies and creameries fitted with modern apparatus. (Senior year, first term, five hours per week.) (Catalogue, 1897-98.)

## New Hampshire College of Agriculture and Mechanic Arts.

Equipment.-The creamery is equipped with separator, milk tester, pasteurizer, and all toois required in making butter and preparing milk and cream for market.

Dairfing (20 exercises).-Practical and theoretical instruction in methods of modern dairying, including the general management of the dairy, the methods of milk analysis. the bacteriology of the dairy, the use of separators. the making of butter, and preparation of milk for the city market. (References: Wing's Milk and Its Products; Gurler's American Dairying.)

In addition to the instruction in the regular course, there is offered during the winter a four weeks' course in dairying, during which all the time is devoted to butter making, milk testing, pasteurizing milk and cream, dairy bacteriology, and dairy husbandry. (Catalogue, 1897-98.)

## Cornell University.

Equipment. -The dairy building, a two-story stone structure 45 by 90 feet, was b iilt from an anpropriation of $\$ 50,000$ by the legislature of 1893 . It provides lecture rooms, laboratories, and offices, besides two large rooms for butter and cheese making, both of which are fully equipped with modern machinery and appliances. Automatic electrical apparatus for controlling the temperature in cheese-curing rooms, refrigerator rooms, lockers, and bath rooms are also provided. The whole bailding is thoroughly heated and ventilated, and power is furnished by a 60 -horsepower boiler and a 25 -horsepower Westinghouse engine.

Animal industry.-Principles of breeding, history and development, improvement and creation of dairy and beef breeds of cattle; principles of feeding, care, selection, and management of dairy and beef cattle. (Lectures, winter and spring terms, twice a week; practice, one hour.)
Dairy husbandry.-Milk and butter. (Lectures, fall term, twice a week; practice, two afternoons.)

Dairy husbandry.-Cheese. (Winter term. practice, two days per week from 10 to 1.).

Dairy husbandry.-Laboratory work on special problems. (Fall and spring terms, one to three hours.)

Animal industry and dairy husbandry (for winter-course students).-Principles of breeding, feeding, and selection, cart and management of dairy cattle. (Daily practice, one afternoon.)

Animal industry and dairy lusbandry (for dairy-course students).-irectures on milk and its products, breeding and feeding, daily, one hour; lecture on subects related to dairy husbandry, one hour daily; practice in butter and cheese making and in dairy laboratory, six and one-half hours daily (winter).

The winter course in dairy husbandry begins the first week in January and extends through one university term of eleven weeks. The instruction is given largely with the view of fitting students for conducting butter and cheese factories, and is partly by lectures and recitations, but largely by actual practice in the creamery, cheese factory, and dairy laboratory as follows: Lectures on milk and its products, two hours per week; lectures on subjects related to dairying, ten hours per week; cheese-room practice. twice weekly, four to six hours each; but-ter-room practice, twice weekly, four to six hours each; dairy laboratory practice, twice weekly, two to four hours each; problems and bookkeeping, two hours per week. (Register, 1898-99.)

## North Carolina College of Agriculture and Mechanic Arts.

Equipment. -The dairy is a frame building, 20 by 40 feet and two stories high. It is supplied with a De Laval separator, Babcock tester, rectangular churn, butter worker, cheap heating apparatus, etc. The cellar is cemented and has a cemented trough on one side through which flows water from a spring situated above the dairy.

Dairying.-Lectures. (Junior year, second term, three hours.) Practical work. (Sophomore, junior, and senior years.)
Dairy bacteriology,-Russell's Dairy Bacteriology. (Junior year, third term, three hours.) (Catalogue, 1897-98.)

Agricultural and Mechanical College for the Colored Race (North Carolina).
Equipment.-The dairy is equipped with modern apparatus for butter making, such as a United States cream separator. 6 Acme bail churns. 1 Davis sw ng churn, 6 lever butter workers, 1 Eclipse refrigerator, a Boyd cream-ripening vat, a Babcock milk-test machine, etc.

Dairying. - The work in dairying is begun with lectures on elementary dairy bacteriology and chemistry, and completed in the dairy with practical work in butter and cheese making, milk testing, detection of adulterants in milk. butter, and cheese. (Lectures, sophomore year, winter term, five hours per week, and dariry practice in spring term, seven hours per week.) (Catalogue, 1898-99.)

## North Dakota Agricultural College.

Equipment.-The dairy building is well equipped with separators, testers, churns, workers, and all necessary dairy utensils, and the student is thoroughly instructed in their use and handling.

Dairying.-The subject of dairy husbandry is taught in the regular four-year course in agriculture, in the two-year course in agriculture, and in the short winter course of twelve weeks.

In the four-year course the first term of the senior year is set apart for the study of dairying and each student devotes two hours per day to practical dairy work in addition to five hours per week in text-book and lecture work on dairy science.

The first term, second year, of the two year course is devoted to this subject and same plan pursued as in the longer agricultural course. In the winter course the subject of dairying alternates with that of horticulture in recitation and lecture work, and those students who elect the dairy laboratory. yerform two hours' practical work each afternoon.

The theoretical instruction will consist of lectures and recitations upon the composition, care, and handling of milk; the influences affecting its secretion; the testing of milk and its products; the fermentations of milk and prevention of the same; the separation of cream by gravity and centrifugal process; the ripening of cream, and the churning, washing, salting, working, and packing of the product. Students of dairying are required to spend their afternoons in practical work in the dairy building. (Text-book, Wing's Milk and Its Products.) (Circular of Information, 1899.)

## Ohio State University.

Equipment. -The dairy department consists of a receiving room, a pasteurizing room, a storeroom, a refrigerator room, a lavatory, butter-making room, cheesemaking room, two cheese-curing rooms, and an instructor's room.

The course in dairying begins each year on the Weanesday following the 1st day of January and continues during the entire term. Butter making, as practiced in the farm dairy and in the creamery, is thoroughly taught, The student performs all necessary operations in the manufacture of butter by these two methods, under the guidance of the instructors. In cheese making the principles are tanght, with elementary practice. The instruction is as follows:

Dairy farming.-Lectures and recitations on breeds, breeding, feeding, selection and judging of dairy stock, equipment and management of dairy farms (three hours each week).

Butier and cheese making.-Laboratory practice in ranning separator, churning, working butter, making cheese, milk testing, etc. (four half days each week), Lectures and recitations (two hours each week).

Milk chemistry and mill, testing.-Lectures and laboratory practice (two hours each week).

Bacteriology.-Bacteria in their relation to milk, butter, and cheese. Lectures and laboratory practice (two hours each week).

Veterinary medicine.-Diseases of the cow (three hours each week).
Machinery.--Care of the boiler and engine (one lecture per week for six weeks).
In addition to the course in dairying there is offered instruction in butter and cheese making to the students in the regular agricultural course. It consists of recitations twice a week and laboratory practice two half days each week during the second term in running separators, churning and working butter making cheese, and testing and pasteurizing milk. (Catalogue, 1897-98.)

## Oregon State Agricultural College.

Equipment. - A new building has been prepared for the dairy department, and is fitted up with all the necessary machinery for carrying on the work in both butter and cheese making.

Theoretical dairying will be taught in the class room one hour each day in sophomore year. Instruction is given by use of text-books and lectures.

Practical work in the dairy in the junior year. (Catalogue, 1898-99.)

## Pennsylfania State College.

The creamery course opens with the beginning of the winter session and confinues six weelks. The instruction is as follows:
Dairy Musbandry.-The composition of milk, influence of breed and feed upon milk, selecting milk for retail and cream trade, the construction and care of separators, making and use of starters, various methods of ripening cream, conditions affecting churning, working and packing butter for market, scoring milk and butter.
Dairy chemistry. - Different methods of mills testing, use and detection of adul. terations, and preservatives.

Dairy feeding.-Composition and digestibility of feeding stuffs, feeding standards, calculating rations. infuence of food upon products.

Ice cream. -The manufacture of ice cream, mixing of flavors, making of individual bricks, packing cream for retail and wholesale trade.

Daim arithmetic and bochkeenng.-Practical examples in dairy problems, including dairy machinery, making creamery divideads, and keeping a set of creamery books.

Dairy breeds and breeding. -The selection, care, and management of dairy cattle.
Dairy machinery.-Study of the steam engine, care of boilers, valves, belts, pulleys, lubrication, fuel, etc.
The cheese-making course follows the creamery course and continues six weeks. The instruction is as follows:

Dairy husbandry. -The composition of milk, infuence of feeding, breed, and environment under which the milk is produced upon mill designed for the manufacture of cheese, advantages and use of the remnet test, advantages and use of natural and pure cultures for ripening milk, treatment of gassy milk, different processes used in the manufacture of export and home trade cheese, construction and management of the curing room, and the scoring of cheese.

Dairy chemistry.-Different methods of milk testing, including the use of the lactometer, the testing of whey and cheese, and the detection of adulterations and preservatives.

Dairy feeding, dairy arithmetic and bookkeeping.-Same as in creamery course.
In the regular course in agriculture instruction in dairy husbandry is given throughout the junior year. In the fall session, lectures on milk and butter one hour and practical work six homrs per week; winter session, lectures on dairy bacteriology, care of milk and its products one lour and practical work four hours per week; spring session, lectures on cheese and its manulacture one hour and practical work six hours per week. (Catalogue, 1898-92.)

## Rhodr Istand College of Agriculture and Mechanic Arts.

Dairy husbandry.-Breeds and breeding of dairy cattle; Darns and dairy buildings; milk production, composition; management, aeration, pasteurization, sterilization, testing, transportation, and marketing; creaming; butter making; cheese making; milk preservation, condensed milk, milk sugar, etc.; milk preparation for infants and invaijds; dairy bacteriology. (Elective in senior year, winter. term; 3 exercises per week.) (Eleventh annual report.)

## Clemson Agricultural College.

Equipment. - The dairy building is a wooden structure of modern design, constructed especially to illustrate the most approved methods of dairy practice. It has an independent steam plant and waterworlss, and is supplied with the leading makes of cream separators, churns, butter workers, milk testers, etc.

Instruction in dairying is given to the students of the sophomore and junior classes who take the agricultural course. Wing's Milk and Its Products is used as a text book. Instruction is also given in the breeding, feeding, and handling of dairy cattle. (Catalogue, 1898-99.)

## South Dakota Agricultural College.

Domestic dairying.-Care and manipulation of mills, manufacture of butter, approved dairy methods in care of utensils, proper regulations of herds, stable methods, fancy butter making discussed and practiced. Wing's Milk and Its Products, Gunters American Dairying. (Ten hours per week, laboratory.)

The course in dairy science begins with the opening of the winter term and extends through twelve weeks. The following work is offered:
General agriculture and care of dairy cows, five hours per week.
Dairy lectures, five hours per week.
Dairy arithmetic, three hours per week.
Dairy engineering, two hours per week.
Lectures in botany, entomology, and zoology, three hours per week.
Bookkeeping, three hours per week.
Creamery practice, daily. (Catalogue, 189S-99.)

## Agricultural and Mechanical College of Texas.

Equipment.-The creamery is in a substantial building, supplied with a complete outfit of the latest improved apparatus for making butter: The machinery is driven by a 6 -horse power steam engine and by a 4 -horse power gasoline engine. Practice in both butter and cheese making forms part of the agricultural course.
Dairying is taught in the junior year. Thirty-two lectures are de ivered on the subject during the year. The properties and composition of mill, the variations due to breed, feed. and fermentation of milk; creaining, churning, cheese making, testing for fat and for adulterations, and the subject of bacteriology are all discussed in order. Students use the creamery equipment freely in performing the practical work and in the dairy practice required. The proper care of fresli milk, the operation of hand and power separators and chorn, the care of creamers, and testing for acidity and for butter fat in milk and cream can be most thoroughly learned by combining this work with the theory taught in the class room. All of the labor of a large machine dairy is performed by students. (Catalogue, 1888-99).

## State Agricultural College of Utaif.

Equipment.-The dairy rooms are in the basement of the main building and are equipped with the best apparatus for the manufacture of butter and cheese on scientific principles.
Dairying is taught in the senior year of the regular course in agriculture. The instruction is as follows:

1. Milk.- The elaboration, composition, and fermentation of milk; the testing of milk, with a description of the methods used in paying for milk by test and in determining the worth of milk. A brief outline is also given of the fermentation of milk, or bacteriology as applied to milk and dairy products.
2. Butter maling. - The different methods of creaming milk and getting the best results are described; the handling and ripening of the cream, charning, salting, working, packing, and marketing the butter.
3. Cheese making.-Cheddar cheese making is described; the making of a uniform productand dealing with practical diffeulies are fully illustrated; a brief description is also given of the manufacture of other kinds of cheese, particularly of such kinds as may be made in a home dairy.
4. Factories.-Factory organization; the building, equipment, and management of factories are fully treated.
5. Practical dairying.-The college dairy is equipped with the best modern apparatus for practical dairy work, and irom 1,303 to 3,000 pounds of milk are handled daily; factory and farm dairy methods are illustrated, and the strdent becomes familiar with all phases of dairy work by actual practice in the dairy, the aim being to familiarize him with the best methods of practice as discussed in the class room. (Catalogre, 1898-99.)

## University of Vermont and State Agricultural College.

The dairy school opens at the beginning of January and continues four weeks. It is designed to teach in a practical manner the manufacture of butter with the latest and most approved apparatus. Three courses, aggregating about 50 lectures, are given on the constitution and production of milk, its creaming and churning, best methods of handling, testing, etc. Text-books, with quizzes, are used as far as practicable. Sevenhours of actual work with dairy machinery are given each day. (Catalogtie, 1898-99.)

## Hampton Normal and Agriculltural Institute.

The course in dairying extends through one year. The instruction is as follows:
Duiry stock.-Breeding, care, management.
Dairy bacteriology.
Mill.-Composition, sterilization, pasteurization, care, testing, creaming.
Butter.-Ripening the creain, churning, working, packing, and marketing.
Cheesemaking.
Dairy apparatus.-Separator, churn. butter workers, cream vats, etc. (Catalogue, 1898-99.)

## Virginia Agricultural and Mechanical College.

Equipment.-A large and conveniently arranged building has been erected for the purposes of a creamery and cheese factory, with a cold storage and ice plant attached. It is equipped with a cream separator with a capacity of separating 1,300 pounds of milk per hour, one churn with capacity of churning $7 \overline{0}$ gallons of crean at a time, one power butter worker, vats, and complete appliances for manufacturing 200 pounds of butter a day. The creamery is in operation thioughout the year. Complete plant for the manufacture of cheddar cheese, with a capacity of from 30 to 40 pounds a day.

Dairying.-Cream: Composition and peculiar properties of; how influenced by food, climate, exposure to air, foul odors, etc. Butter: Color, texture, and character of good article; methods of coloring, working, packing, and marketing. The process is followed from the growing of crops until same are converted into the marketable products. Discussion is also made of the merits of the cooperative system, the various methods adopted, and the different equipments in the way of separators, extractors, and creameries. (Third year, first term, three times per week.) (Catalogue, 1898-99.)

## Washington Agricultural College.

The school of dairying opens in January and continues for ten weeks. The period from 8 to 9 o'clock a. m . is devoted to lectures on dairy subjects. Students are then divided into three sections, one section going to the butter-making department, one to the cheese-making department, and one to the testing room, where about five hours are spent in practical work. After the work of the day is finished in these departments the students spend one hour in the recitation room, where methods of keeping dairy accounts is the principal theme for consideration.

Equipment.-The creamery is provided with a full equipment for butter and cheese making and for testing milk both for butter fat and for solids mot fat. The capacity of the creamery is sufficient to enable it to handle the milk from 300 cows.

Lectures.-Fifteen lectures on milk, the various phases of butter and cheese making, milk testing, selection and management of dairy cows, etc.; 10 lectures on stable hygiene and common diseases of dairy cows; 10 lectures on the care of machinery, speeding of pulleys, etc.; 5 lectures on bacteriology, with microscopic demonstrations; 15 lectures on composition and adulteration of dairy products and fermentative changes in butter and cheese.

Instruction in dairying is also given four times a week during the second semester of the junior year to students in the agricultural course. (Catalogue, 1897-98.)

## University of Wisconsin

Equipmont.-Hiram Smith Hall is devoted entirely to dairying. This structure of brick and stone has a frontage of 95 feet by 48 feet in depth and is three stories in height. It contains an office, lecture room, reading room, dairy laboratory. and rooms devoted to creamery practice, cheese making, farm dairying, pasteurizing, cheese curing, etc.

The dairy course opens the 1st of December of each year and lasts twelve weeks. The class is divided into three sections, one of which is assigned daily to the laboratory, a second to the creamery, and a third to the cheese factory. The sections alternate, so that each student receives instruction twice a week in each of the three departments. The courses are arranged as follows:

1. Lectures and class-room work.-Twenty-four lectures on the constitution of milk, the conditions which affect creaming and churning, methods of milk testing
and preservation of milk, etc.; 16 lectures, with demonstrations, on the influence of bacteria in the dairy; 8 lectures on heating, ventilation, and other physical problems directly connected with dairy practice; 10 lectures and demonstrations on the care and management of the boiler and engine; 10 lectures on the common diseases of the dairy cow; 8lectures on the feeding and management of dairy stock; 8 lectares on breeding and selection of dairy stock; 12 lectures on creanery management and accounts; 12 lectures on practical cheese making.
2. Milk testing.- This embraces instruction in the laboratory in estimating the fat in milk, budter, and cheese by methods adapted to the factory and factory operators (six hours per week).
3. Butter making.--Butter making is carried on daily on the creamery plan. The student learns to operate the several forms of power centrifugal separators on the market. They attend to the ripening of the cream, churing and packing butter, carrying on all the operations as they would be conducted in a creamery (twelve hours per week).
4. Cheese mating.-Daily instruction in the manufacture of cheddar cheese, the operations being carried on as in a regular factory, the students being required to take careful notes and make reports of the process (gixteen hours per week).
Stradents who have had much experience in factory work and can pass satisfactory examinations in the practical work of the creamery or cheese factory will be advanced early in the term to the experimental dairy section, where problems connected with this branch will be studied. Advanced dairy instruction will consist of the following courses:
Instraction on milk and its products; experimental investigations in butter maling; investigations in cheese production; dairy bacteriology as follows: (a) A special course in the preservation of milk and cream for commercial purposes; (b) students familiar with the use of the microscope will be admitted to the bacteriological laboratory for experimental work in dairy bacteriology.

In the regular course in agriculture the instruction in dairying is as follows: The chemistry of the dairy; the composition and physical properties of milk and its manufactured products; the principles involved in modern dairy practice; detection of adulteration, etc. (Lecturez and laboratory practice; first semester; five times a week.) Dairy bwctoriology. (Labovatory, with conferences; second semester.) (Catalogue, 1898-99.)

## IV.-INSTRUCTION IN DOMESTIC OR HOUSEHOLD ECONONY AND ART.

Instruction in household economy is now being given by a mumber of the institutions endowed by the acts of Congress of July 2, 1852, and August 30, 1890. The object of such instruction is to provide for the young women attending the iastiontions the training that will enable them to understand and to perform properly the duties of tho household, such as preparing, cooking, and serving good and wholesome food economically, arrangement and decoration of the interior of the house, sewing, dressmaking, millinery, etc. The importance of such instraction is being recognized more and more, and in several States special buildings for the department of domestic economy have been provided.

The instruction in household economy and art offered by the agrienltural and mechanical colleges is as follows:

## Agricultural and Mechanical College for Negroes, Normal, Ala.

Sewing-First year. fall term: Running, basting, felling hemming, stitching; back stitching, notes and lectures on sewing; winter term: Fiemstitching, gathering, overcasting, tacking, buttonhole making, notes and lectures on sewing; spring term: Drawing, herring-boning, feather stitching, quilting garments by hand, machine stitching, notes and lectures on sewing. Second year, fail term: Taking measures for garments, cutting by pattern and chart; winter term: Basting and heting resses, eressmaking; spring erm: Finishing andtrimining dresses. Third year, fall term: shirt making, cutting coats, wraps, etc. ; winter term: Cutting and making men's clothing; spring term: Fancy needlework and stitching, embroidering on plush, satin, relt, etc.

Milinery.-First year, fall term: Names of hat braids, names of hat shapes, putting on hat bands, putting in bat linings; winter term: Wiring and binding brims, making and putting on bows of ribbon, silk, velvet, etc., lectures and notes on milinery; spring term: Combining shades of ribbons for trimming, combining ribbons, flowers, laces, etc.. shaping lats, lectures and notes on millinery.

Cooking.-First year, fall term: Making and care of fire, fuel and heat, kitchen
and appointments, dishwashing, measuring and weighing; winter term: Boiling, steaming. baking, and broiling, cooking of vegetables, marketing, bread making, batters (muffins, etc.), doughs. doughuuts, pastry, cakes, and biscuits; spring term: Desserts. puddings, suaces, selection of foods, soups, roasting of meat and fowl, frying (fish, meat, etc.). Sacond year, fall term: Preserving, beverages, pickling, chemistry of food, study of the yeast plant; winter term: Salads, mayonnaise and French dressing, croquettes, entrées and siuces, game, eggs, and cheese, desserts; spring terin: Fancy cakes, frozen creams, ices, sheroets, etc., Eerving a luncheon or a d nner, invalid cookery, use of chafing dish.

Laundry. - First year: Equipment of private and steam laundries; care of furniture, machines, flatirons; furnishing of ironing boards; receiving. marking, and assorting linen; plain washing and rroning; chemical features of disinfectants; methods of disinfecting; water and water softeners: hard water; tests for minerais and acids in water; vegetable and mineral alkalis; removing stains. Second year: Liquid and solid bines: use of acids; starches; starch glazes; making soap; preservation of colors; washing flannels; bleaches. (Catalogue, 1898-09.)

## Branch Normal College, Pine Bluff, Ark.

The female students have daily training in housekeeping, plain sewing, and art needlewori, under the superintendence of Miss Louisa II. Corbin, a graduate of Ann Arbor, Mich. The lepartment is equipped with a sufficient number of sewing machines and a liberal supply of all necessary accessories. (Catalogue, 1898-49.)

## Colorado Agricultural College.

The work in domestic science covers the preparation which the proper care of the home requires. There are three terms of text-book work, two terms of lectures, and nine terms of practical exercises. The subject of home hygiene is taken up in the second term of the sophomore year. The text-book used is Public Health, a series of prize essays relating to health in the home, healthy foods, school sanitation, disinfection, prevention of disease, etc. Lectures on houselnold science are given in the third term of the sophomore year. In the first term of the junior year the subject considered is the chemistry of cooking. The text-book used is the work of Mrs. Rilen H. Richards. The second term of the year Atkinson's Science of Nutrition is used as a basis for class exercise and lecture work. The bulletins of the United States Department of Agriculture are helpfal in this work. The work of the third term, junior year, include lectures on aursing, energencies, etc. The afternoon work in sewing consists of drafting patterns, cutting out garments, plain sewing, plain and fancy stitches, embroidery, and millinery. Special attention is given to dressmaking. The work in the kitchen laboratory includes the study of foods, with practice in all kinds of cooking and landering. A lecture is given each Friday afternoon on some topic relating to the care of the house, clothing, and persou, social duties, customs of good society, and anything that will aid in the development of a perfect womanhood. (Catalogue, 1838-99.)

## Connecticut Agricultural College.

Cookery, sewing, laundering, and dressmaking, theoretical and practical; preserving fruits and jellies. making pickles, setting and serving tables, home hygiene and sanitation, home nursing, prevention and care of contag ous diseases, chemistry of toods and economic value of common foods are subjects taught in the institution. (Catalogue, 1898-99.)

## Florida State Normal and Industrial College.

Sewing.-The course in sewing includes eacational sewing, darning, household mending, underwear and dress making (tailor syst m ). The complete course is divided into three parts, each of which covers a school year. The first year comprises inst"uction in all the different stitches used in hand sewing, including patching and darning. Practice is given in all the various stitches upon small pieces of various materials. In the second year sewing by machine is introduced, and the pupil is taught the use aud care of sewing machines. making underwear, drafting, cutting, and fitting a waist of washable material without lining, or a shirct waist. In the third year the student is taught drafting, fitting, and making dresses.

Cooking. - The cookery course, extending through three years, comprises the following subjects: A general knowledge of the nature, ase, and preparation of various kinds of meats, vegetables, cereals, fish, soup, bread, food for invalids, etc., with practice in the best and most essential methods of cooking them. The
pupils are taught to prepare and clean everything and leave all in nice order when finished.
Laundering.-Laundry work embraces notes regarding location and care of laundry appointments; classification of arsicles to be laundered, talks upon different kinds of water, sodas, soaps, bleaching powders, bluings, sealding, rinsing; drying, folding, and ironing; practice work in removing stains, starching, cold and boiled starch; washing of thite linens, prints, flannels, and fancy articles, silks, lices, etc. The school laundry is fitted with approved appliances, stationary tubs, hot and cold water pipes, sanitary drainage, ete. (Catalogue, 18s8-49.)

## Iowa State College of Agriculture and Mechanic Arts.

Fucilities:-Domestic Wconomy Rall includes, besides the general office, tho sewing room, drossmaking room, bedroom, kitchen, dining room, and storerooms, all conveniently furnished and ecruiped for recitations and for demonstration and practice work. The means of instruction include toxt-bookstudy, lectures on the allied topics, demonstration lessons, and laboratory practice. supplemented by incidental taiks, research, and essay writing on assigned subjects, and visits for observation and criticism. The plan followed in arranging the courses combines the actual doing with the study of how and why to do, that nanual dexterity may be developed at the same time that study promotes an understanding of the principies underlying directions and rules.

Course $\overline{1}$.-Plain sewing.-During the first term of the freshman year young women meet once a week for instruction in sewing, with three hours of practice. Each pupil makes for herself a set of models, including the various stitches, seams, hems, fasterings, plackets, etc., with their several applications in garment making and houschold sewing and mending. Accompanying tho models a series of notes is prepared from lectures by the instructor unon the fabrics, tools, and other manufactures employed, and upon the making and use of each model.

Course II.-Cooking cind hygiene. During the second term of the freshman year cooking is tanght to classes meeting each week for a one-hour recitation or lecture and a three-howr period in laboratory practice. During this term the various food stuffs, separate and combined, are stradied in connection with the cooking processes and principles. Pany simple and substantial dishes are prepared by the pupils, who at the same time receive instruction in generai kitchen management.

Course III.-Cooking and hygiene.-Students who have completed Course II continue, during the first term of the sonhomore year, the same subjects. In comection with cooking, special attention is given to the combining of foods and the serving of foods in comection with general dining-room work. Table setting, the selection and care of table turnishings, the duties of the hostess and waitress, and kindred subjects are discussed, with object lessons and practice. One hour a week is devo ed to domestic hygiene or home sanitation. This includes such topics as the location and constraction of the house; its arrangement, lighting, plumbing, ventilation, heating, furnishing, and cleaning. The principles of cieaning and disinfection are also applied to the processes of laundey work.

Course IV.-Sewing.-Students who have completed Course I continue their sewing in garment work. Wach one chooses her materials for a suit of rnderwear which she designs, cuts, fits, and finishes for herself under the direction of the instructor. (Sophomore, second term.)

Course V.-Dressmoking.-Each young woman is expected to purchase design, and make one unlined cotton dress and one of woolen or other material with a lining. (Junior, first term.)

Course VI.-Cooking. - For the second term of the junior year opportunity is offered for such students as have comp'oted Courses II and III to have more instruction and practice in the art of cookery. The food preparation for this term is somewhat more difficult and elaborate than in the previons terms, and includes soups, roasts, bread and rolls. sances, salads, and desserts of different kinds. which have not been made before, the particular assignment depending largely upon the individual need of the student.

Course VII.-Seoing. - A fourth term of sewing is also provided for the second term of the junor year for those wishing to study the drafting of patterns to measure in connection with more of designing and dressmaking.

Course VIII.-Cooking. - The last term in domestic economy (senior year, second term) is devoted principally to the study of foods from the hygienie and economic standpoints: and the practice is designed to demonstrate the proper combination and economical preparation of the common materials. Study of cooking and serving for the invalid occupies several weeks of this course, and is supplemented by general consideration of the duties of the nurse in the home and the desirablo conditions and care for the bedroom in sickness and health.

During the first term of the senior year no work was offered in this department, as provision is made in the dairy course for young women who desire instruction in home dairying; and at the same time the department of chemistry offers a series of lectures in domestic chemistry.
Course IX.-To graduates who have completed the undergraduate courses outlined above, instruction and opportunity for advanced work $1 s$ offered. Study and investigation along the line of the chemistry and physiology of foods, practical dietetics, home sanitation, cooking. and the other household arts, is pursued in connection with work elected in the departments of botany, chemistry, and other sciences. (Catalogue, 1898-99.)

## Kansas State Agriculfural College.

Equipment.-Domestic Science Hall, 84 by ro feet, contains two stories and basement. The first story and basement are occupied by the department of household economics, lunches to the students and members of the faculty being served in the basement. The second floor is occupied in part by the department of music and in part by that of sewing.
The purpose of the course of domestic science is to afford training in the special subjects which must be considered in the daily administration of every home.

1. Hygiene. - The course of lectures in elementary hygiene is given to both young men and young women. The instruction of the young women is under the drection of the professor of domestic science. The general principles of wholesome living and the general care of the human body will be the leading subjects considered. (First year, fall term.)
In the following courses the work is arranged on educational as well as technical lines, and offers both theoretical and practical instruction, and is given in a well-equipped domestic science laboratory. The student is required to keep a set of notebooks, namely: A permanent notebook. a daily class record of class and personal work, and a recipe book. This plan enables the student to keep a clear, systematic, and concise record of every detail and objective point in the work. The lectures and practical work in cooking are presented in four courses and two special professional courses on the following lines:
2. Household economics.-First year, winter term. Lectures, with weekly laboratory practice. The objective poinis, neatness, order, economy, and accuracy will be observed. The subject of cookery, its origin, purpose, etc., table of measurements and weights, directions in measuring, definitions pertaining to manipulations, methods of cookery, etc.. the general care of utensils, the kitchen and its adjoining apartments, the general sanitation of the home, general household management, and home ethics constitute the leading subjects of practice and lecture work.
3. Chemistry of coolery.-Third year, fall term. Text-books, Mathieu Williams's Chemistry of Cookery, and Ellen H. Richardss Chemistry of Cooking and Cleaning.
4. Domestic science.-Third year. Lectures, recitations, and laboratory instruction are combined throughont the year, Fail term: A course in fruit cookery; plain honsehold cookery; lectures upon the food principles; classification, elementary composition of the human body; study of fuels; heat and its effect; cooking temperatures, etc. Winter term: Plain household cookery continued; advanced houschold cookery the latter half of the term. Spring term: Advanced household cookery the first half of the term; high-class cookery the second half of the term; standard menus and general lectures in the science of nutrition with parallel readings are required. Instruction in general serving and entertaining is given.
5. Therapeutic coolery.- Fourth year, fall term. Special cookery for the sick and its application to the home and for hospital nurses in training.
C. Emergency lectures and special physiology.-Fourth year, winter term. First aids to the injured; lectures on home nursing.
\%. Demonstratoons. - Fourth year, spring term. Lecture work in scientific and practical cookery. Each student is required to give a demonstration lecture in cooking before the class and give approved recipes, observing all the educational, scientific, technical, and practical points involved in each method demonstrated. The student lecturer may select one assistant from the class to assist in the general details of the work. In connection with this lecture work each student is required to give a complete lesson outline and conduct one class in practical work according to the best approved methods in laboratory practice. The two profesfessional courses are designed to meet the demand for sore thoroughly and broadly trained young women who go out as graduates. The work of the fourth year is planned so as to give the professional training that a complete course of domestic science should involve.

All young women take sewing the first year, and in the domestic-science course dressmaking is required in the winter term of the second year.

1. Sewing.-Industrial work: The course of work has been carefully graded, with the idea of developing habits of accuracy and self-reliance. Each pupil is required to keep a notebook, in which she records a description of the workaccomplished. A written examination is held at the end of each term. During the first ferm the pupil makes a book of models covering the full course in hand sewing, and consisting of basting, hemmiug, gathering, darning, patching, eic. Second term: Machine practice; drafting, cutting, and making underskirt and drawers. Third term: Drafting, fitting, and making dress without lining. Fourth term: Cutting and making corset cover and nightdress.
2. Dressmaking.-Five hours a week will be devoted to class-room work. Pupils will be taught to adapt and use patterns taken from pattern sheets, also the use of a dress-cutting system. Five hours a week will bo devoted to industrial work. Each pupil will be required to furnish the material and draft, cut, and make a woolen dress for herself. (Catalogue, 1898-99.)

## Micmgan Agricultural College.

A. Cookery.-Freshman year, inist term: Making and care of fire; care of kitchen and dining room and appointments; dish washing; measuring; the food principles are discussed and foods are studied with reference to their source, composition, cooking, nutritive value. and cost; the principles of boiling, steaming, stewing, baking, broiling, and frying are illustrated in the preparation of soups, vegetables, cereals, eggs, milk, meat, bread, and biscuit. Second term: The principles already explained are elaborated by the preparation of batters, mufins, soups, bread, pastry, cake, desserts, puddings, sauces, fish, and roast meats. Third term: In this term more difficult dishes are prepared, such as salads, mayonuaise and French dressings, croquettes, entrées and sauces, desserts, frozen creams, ices, sherbets, fancy cakes; luncheons and dinners are prepared and served. Lectures are given throaghout the course. In the spring term, junior year, a course in cookery for the sici is given four hours a week. Lectures are given discussing the effect of foods in maintaining and restoring a condition of health; diseases especially affected by diet are considered and foods are prepared for the sick. An eloctive course in advanced cookery is offered in the fall term of the senior year, five hours a week. This course is intended for students who are familiar with the general principles of cookery. Special attention is given to canning and preserving fruits, and to making jellies, jams, and pickles. Fancy dishes suitable for course luncheons and dinners are made.
B. Household economy. - The course in household economy is given to sophomore women two hours a week through the year. Lectures are given and reference reading and papers are required. The subject is treated broadly under the following divisions:
I. The house.-Its site, construction, sanitation; heating, ventilating, lighting; water supply and drainage; disposal of waste; furnishing: cleaning, and general care; administration of household atiairs; the keeping of honsehold accounts; the relation of income to expenditare; the significance of the "home"-its relation to the municipality.
II. Foods. --Their nature, composition, and nutritive value; discrimination in purchasing; preparation and physiological effects; foods for the sick; foods for the well; foods for growing people, for adults.
III. The preservation of health.-The functions of the body; the care of the body; diets for different periods and conditions of life; work and rest; sleep.
IV. Clothing.-Features of healthy gaments; sanitary considerations; night clothes; clothing for children and infants; dress materials; principles of construction of dress; artistic considerations of dress.
V. Emergencies.-A cousse of lessons in the application of the facts of anatomy and physiology, intended to fit one to render that "first aid" so otten indispensable in cases of accident or sudden illness when there may be delay in summoning a physician.

Sewing.-Sophomore year, first term: Varieties of stitches used in hand sewing; patching, buttonholes, and hemstitching; application upon samples and simple articles. Second term: Care and use of the sewing machine and machine sewing; taking measures and dratting patterns by systems; cutting and making unlined skirts, yokes, and drawers. Third term: Advanced machine work and instruction in the use of attachments; drafting, cutting, and making a shirt waist; advanced drafting and cutting and making a corset cover; practice on fulled cloth; putting in pockets, making tailor buttonholes, etc. Junior year, first term:

Cutting, fitting, and making a lined dress; finer hand needlework in sewing on and grafting in lace, rolling hews, and appliquea hemming. Second term: Art needlework; a variety of embroidery stitches, and prartice on flamnel; Spanish laid work and ecclesiastical embroidery; Keusington ard soliã embroidery; study and practice in color; linowledge thus acquired appied to begun articles of utility. Third term: Millinery; practical and artistic principles; study of texture and quality of materials; care and renovation of materials; practice in making various bows; making and trimming covered hats and bonnets. (Catalogne, 1898-93.)

## UNIVERSITY OF MINNESOTA (SCHOOL OE AGRICULTURE).

Cooking. - First year. second term: Kitchen management; care of couking utensils, glass, china, and silver ware; measuring and invoicing; cooking vegetables, cereals, and bread. Second year, first term: Canning, preserving, picking, and jelly making; somps, eggs, and meats. Seconc year, second term: Marketing, care of foods, and cold storage; fruits, salads, hashes, crocuettes, "save all" dishes, and lunch baskets; equipment of dining room and table service. Third year, first term: Mixed soups; desserts of various fruits harmonionsiy combined; proper combination of fiavors and colorsingarnishing food; mixing and seasoning foods; carving and serving meats. Third year, second term: Foodrations, dietaries, and bills of fare; invalid cooking, beverages, frozen dishes, pastiy, and cake; food economics, table duties of host and hostess. and essays on houseleeping.
Domestic chemisiry.-Third year, second term: Instruction is given in the chemistry and economy of human foods. Simple tests for the detection of the adulteration of foods are given. The chemistry of cleaning material and the composition of various household articles are considered. The instruction is given in the form of laboratory practice.
Home economy.-Second year, second term: This work is taught as the just proportion between income and expenditure; the distinction of econumy, frugality, and parsimony are considered with reference to a definite proportion in the experditures which are made for existence, comfort, cuiture, and philanthropy. Astudy is made of the sources of income, especially of the income from the farm in the form of house, food, and luxuries. The purchase of clothing, household stores, and furnishings is considered from the standpoint of the suitable. Therelation of cash and credit to cost is also considered. Attention is given to savings and forms of investment, a bank account and the use of a check book. Each student in this class is required to submit at the close of the term a paper setting forth in detail the use of $a$ certain named income for one year, embracing not only every item of necessary home expense but also an ontlay made for travel, luxuries, accident, sickness, and other emergencies. The habit of keeping a honsehold account is calculated to strengthen the judgment in making a wise use of money, therefore an analysis and study of expenditures as here indicated serves to bring clearly before the students mind the relative importance of the different things which money will procure.

Home management.-First year, second term: This includes both honsekeeping and home making, and the teaching of the subject haturally falls into three divisions, household worls, sanitation, and family life. The instruction is based upon the belief that housekeeping is as important as it is difficult, and that home making is the noblest form of human endeavor. The points in detail in the preparation of food, the making of clothing, the care of the house and household belongings, and the ordering of the family life are considered in their relation to an adequate plan for home management. To start the student in the correct way of becoming mistress of the business of housekeeping is the end sought. It is believed that for one who knows the reason for the doing there is no drudgery; thereforestudents are taught the specific danger that lurks in dust and dirt, in order that they may understand the dignity of the unceasing war which the housekeeper makes upon these forces. The practical benefit to be derjved from the knowledge students have gained in the cooking, sewing, laundering, and dairy classes is emphasized and shown in its relation to an adequate planfor the daily programme for the home. While the science of family life has not been formulated, yet some of its fundamental principles are recognized and may be taught.

Household art.-Second year, first term: This is taught by a series of lectures treating of the adornment of the house and grounds, noting the distinctive character of the country home and opportunity for embellishment found in the surroundings. The intention is to show that thought and energy can accomplish as much or more than money in making a farm home attractive; also to show the importance of acquiring correct knowledge and correct taste in order to secure every possible convenience, combined with harmonious forms, colors, and styles
in walls, draperies, and forniture. The true relation of beatro, use, and influence of surroundings upon life and character are considered in connection with the possibilities for improvement that may be found in simple and inexpensive methods.

Hygiene.-Third year. second term: Hygiene as a special study for women con. siders the health of the family as dependent upon pure food, pure water, personal cleanliness, and proper habits, as well as upon heredity. The aim is to show how a correct knowledge of the laws of nature is essential not only to the restoration but to the preservation of health. Several lectares by a physician will be given upon maidenhood, maternity, motherhood, infancy, and related subjecis. These special lectures will be supplemented by the regular lectures in class, thas extentiing and simplifying the subjects in plain and easily understood terms.

Laundering-- First year, first term: Several lectures are given and practice work is provided in washing, ironing, starching, polishing, cleaning, and pressing clothing.

Sewing. -Drring the first year (first term) students receive instruction in the elements of sewing; different stiches, such as basting, seaming, hemming, darning, buttonholing, and patching are taaght, and practice is given in the use of all the implements belonging to the sewing basket. The second year's work consists of cutting and making plain garments, such as underwear, childuen's clothing, shirt waists, and cotton dresses. In the third year the more difficult work of dressmaking is taken up. The cutting and fitting of dresses and jackets are taught by a very simple system; carefu! attention is given to quality of materials and harmony of colors. The course is designed to make each graduate capaile of doing all kinds of cowing needed in the home. (Catalogue, 1898-99.)

## Montana Coliege of Agriculture and Mechanic Arts.

Sewing.-All the ordinary forms of sewing are tanght, including garment making, dressmaking, and embroidery. The work is carefully graded according to the capabilities of the student, and may be utilized by her in the making of her own clothing. A straight-line system of cutting and fitting is taught, and systems are furnished at cost. The sewing room is furnished with a large eutting table, small sewing tables, three sewing machines, and cases for worl.

Household economy.-Lectures embracing such subjects as food stuffs and their nutritive value; marleting, neatness, and order in houselkeeping; preparation and serving of foods; food for the well, food for the sick, and talls on etiquette.

Household santutation.-Lectures pertaining to the proper care of the home and its inmatez.

Fygiene and emergencies.-Lectures treating of the laws of health and home nursing.

Cooking. - The object of the work in cooking is to familiarize the student with the most economical, healthful, and attractive methods of preparing and serving foods. Special attention is given to hygienic cookery. The economic valme of the Aladdin oven is demonstrated, and a short course is given with the chafing dish. Special attention is paid to table laying and decoration and to serving meals. The kitchen laboratory is a large room provided with cupboards, and conveniently furnished with tables, sinks, range, an Aladdin oven, and a good supply of cooking utensils of all kinds. Individual worktables are provided for the use of each student. These tables have a full equipment of cooking utensils. Opening. from the Kitchen is a dining room, with sideboard well supplied with table linen, dishes, and silver. (Catalogue, 1898-92.)

## University of Nebraska.

Food economics.-Ntudy of food principles, comparison of nutricive and money values of food materials, marketing, values of fuels. General cookery of cereals, vegetables, meats, soups, breads, desserts, etc.

Household economics.-Location of house, plans for the construction of a house, application of chemical principles in cleaning and disinfection, study of light, heat, ventilation, water supply, plumbing, sewerage, etc. in their relation to the home. Keeping of household accounts. Advanced course in coorery, including the premaration of salads, croquettes, pastry, calkes, etc., the preservation of food materials by canning, preserving, picking, etc. Invalid cookery; serving of mea!s; preparation of dietaries. (Calendas, 1898-99.)

## Agricultural and Mechanical College for the Colored Race, Greensboro, N. C.

Sewing. -This course begins with the first year in the preparatory department and continues throughout the entire course of six years. Special attention is given to the various stitches, buttonholes, cutting and making childrens' and ladies' garments, the use of the sewing machine and attachments, and the art of fancy needlework.
Cookinf.-This course begins with the first year in the preparatory department and continues throughout the entire course of six years. Special attention is given to food economics, the selection of foods with regard to cost and quality. (Catalogtie, 1898-99.)

## North Dakota Agricultural Collegr.

Cooking. - There are two courses of cookery; one aims to give the students who have but a limited time the work that will be of most value to them, and includes plain cooking, dealing with soups, meats, vegetables, breads, invalid cookery and plain desserts; also the care and management of different rooms of a house, order and arrangement of household duties and practical experience in planning and sering meals. The regular course begins with the first term of the ireshman year, one hour each day, in the study ot the home, its proper construction and location, its sanitation and hygiene, including the heating, plumbing, etc., also how to furnish the home artistically as well as economically and hygienically; also the proper care of the body with regard to clothing, diet, exercise, and rest. Much help is ganed from the class study of houses in the process of construction, different types of homes, interior decorations, etc.

Sewing.-The course in sewing is very complete, beginning with plain neadlework. One term is required to be devoted to the making of a nodel book, which is composed of different samples of hemming, running, felling, darning, patching, etc.; these when mounted in the book with full explanation are very helpful for reference. The next work is the drafting and making of cotton and linen garments, which is followed by work in dressmaking. This includes the drafting, cutting, fitting, and finishing of dresses. A study of color combination and work in embroidery is taken uplater in the course.

Equipment. -The department has four rooms. The lecture room is well furnished and is used for office purposes, lectures, and recitations. Large doors opening from the room on one side connect with the sewing room and on the other with the kitchen laboratory. The sewing room is provided with nachines, sewing tables, cutting and pressing tables with gas connection, chiffonier for materials, blackboard, mirror, and other necessary turniture. The kitchen laboratory is equipped with work desks at which each student has her place and keeps her utensils. The work desks are suppied with gas for cooking, but the students are given experienco in the management and care of the kitchen range, which is used when the meals are prepared. Other appliances available for use or illustration are the Aladdin oven, small electrical stove, balances for practical and experimental use, food museum showing the composition and nutritive value of some of the principal foods, food charts, and microscope. It is also aimed to use those kitchen conveniences that tend to simplify and economize household labor. The dining room is supplied with diningroom furnishings, and makes a home-like place in which the practice meals prepared by the students are served. (Circular of Information, 1899.)

## Ohio State University.

1. One lecture (demonstrated when necessary) and three laboratory perioris a week. (First term.) Lectures on (a) principles of combustion, utility and cost of fuels, construction of ordinary stoves and ranges and of the Aladdin oven; practice in building, regulating, and caring for a fire; the consideration of ancient and nodern methods ofí cooling. (b) Food economics: Study and classification of food principles, water, salts, carbo-hydrates, proteids, fats; comparative nutritive vaiues of foods; a vegetable diet considered; baking powders, food adjuncts. beverages, filtration, laws regulating adulteration of foods and inspection of meats; the various methods of preserving foods. (c) Study of cuts of meats (demonstrated) and of carving. Laboratory work: General cooking; preparation of cereals, vegetables, soups, stews, fish, meats, and breads.
2. One lecture, three laboratory periods a week. (Second term.) Lectures on (a) general marketing; (b) comparative nutritive values and money values of vari-
eus foods, study of cherts and dietetic tables, preparation of dietaries; (c) the chomistry of the human body, (1) its composition, (2) the chemistry of digestion; (d) the effect of cooking upon the digestibility of foods, necessity for a mixed diet; (e) waiting-maids' course (four weeks). Laboratory work: General cookery; preparation of entrees, croauettes, calads, pastry, puddings, and sauces.
3. One lecture and three laboratory periods a week. (Third term.) Lectures on first aids to the injured and on general nursing. Laboratory work: (a) General cookery (four weeks): lncluding cakes, desserts, irozen dishes, etc., and the ordering, preparation, and serving of a dinner to guests; (b) invalia cookery (six weeks), inciuding the preparation of such dishes as may be healthful and appetizing during illness or convalescence.
4. One lecture, three laboratory periods a week. (First term.) Lectures on household economics: (a) The situation of a house, the planning and construction of a house from attic to cellar, light, heat, ventilation, water supply, plumbing. sewerage, disinfection. (b) The ordering of house work. (c) Simple household accounts and bookkeeping. (d) Lamdry work. Laboratory work: (a) Canning, jellying, preserving, picking, etc. (four weeks). (b) Chafing dish (three weeks). (c) Launary work (five weeks): Washing, ironing, and general care of underclothing (silik, flamel, and merino), linens, starched clothes, laces, and embroideries.
5. One lecture, with two practice periods in sewing and one in millinery a week (second term). Lectures on production and manufacture of cotton, wool, flax, silk, ctc., the choice and treatment of various materials, study of line, form, color, and testrure as applied to dressmaking and millinery; artistic and hygienic dress considered. Practice work. (a) Plain sewing: Practice in the different stitches, drafting and making white goods by hand and by machine. (b) Millinery: Malzing bows, facing, and finishing brims, trimming simple hats.
6. One lecture, with two practice periods in sewing and one in milinery a week. (Third term.) Lectures on historic costumes ilinstrated. Practice work. (1) Sewing: Drafting and making an unlined dress, drafting and making a cloth skirt, drating, matching, and making a striped house jacket. (b) Millinery: Making and trimming coverea hats and bonnets, making a, shirred hat.
7. One lecture, with two practice periods in sewing and one in millinery a week. (First term.) Lectures on art and its applications. Practice work. (a) Sewing: Drafting and fitting waist linings, drafting and making close-fitting waist, drafting and making princess gown. (b) Milinery: Designing and making an evening hat or bonnet; work with fancy straws and mourning goods.
8. One lecture, with two practice periods in dressmaking and one in art needle work weekly. (Secondterm.) Lectures on history of domestic art. Practice work. (a) Dressmaking: Designing, drafting, fitting, and making an evening gown and fancy waist. (b) Artneedle work: Drawn work, lace woik, and simple embroidery.
9. One lecture, with three practice periods in tailoring weekly. (Third term.) Lectures on art in the howsehold. Practice work: Designing, drafting, and making of a tailor suit and lined jacket. (Catalogue, 1897-38.)

## Grigon Agricultural College.

Freshman gear.--Firsis term: Four sewing lectures and practice work, one hour a day, on sewing samples. Second term: Sewing continued; lecteres and talks on social forms and usages, the arb of entertaining, readings on the art of conversation. Third term: Sewing, the mating of simple garments; readings, conversation.

Sophomore year.-First term: Drafting and making simple skirt, cutting. fitting, mad making lined waist from pattern; a study of the texture of goods, five hours. Third term: Drafting and making lined waists, matching stripes and plaids, study of woolen textures, ten hours.

Sunior yect.-First term: Cookery (canning of iruits, one-half term); three lectures; one hour a day practice work in the kitchen laboratory; technolorical cookery; preparatory work in chemistry of foods, one-half term. Second term: Practice work in cookery, four hours per week. Third term: Practice work in cookery, three hows per week

Senion feur-Dirst term: Special hygiene, three hours; æsthetics, four hours; needlework, five hours. Second term: Sanitary science, one hour; æsthetics, four hours. Third term: Home-furnishing course, three hours; emergenoy lectures, one howr. (Catalogae, 1898-99.)

## South Dakota Agricultural College.

1. Plain seuing.-Practice upon samples of the stitches in every-day use, including button-hole making, preparing a model book, and making at least two pieces of a suit of maderwear. (Winter term, two hours three times a week.)
2. Household economy.-Lectures on foods and the preparation of same and mpon the general care of dining room and kitchen. (Winter term, one hour five times a week.)
3. Cocking.-Bread making, cooking of meats, pudding, cakes, and plain cookery in general. (Spring term, two hours three times a week.)
4. Seuing. -The making of the remainder of the suit of underwear, an unlined dress, and a shirt waist. (Spring term, two hours twice a week.)
5. Sewing.-Drafting, criting and fitting, and plain dressmaking. (Fall term, two hours three times a week.)
6. Sewing.-Continuation of 5 , general dressmaking. (Winter term, two hours five times a week.)
7. Seuing.-Art needlework, as embroidery and hemstitching. (Winter term, two hours five times a week.)
8. Cooking.-Especial attention given to preserring, pickling, and the preparation of entrees. (Fall term, two hours twice a week.)
9. Cooking.-Fancy cooking, menus, dainty methods of serving food, and invalid cookery. (Spring term, two hours five times a week.)
10. Cooking.-Each girl will take up some special line of cookery which will give material for the preparation of her disquisition, if her major study is in domestic science. (Winter term. two hours five times a week.)
11. Household sanitation.-Lectures on proper house planning, ventilation and plumbing. care of sleeping rooms, arrangements for sickness, and care of invalids. (Fall term, one hour twice a week.)
12. Conking.-Continuation of 10. (Spring term, two hours five times a week.) (Catalogue, 1598-99.)

Utah Agricultural College.

## I. HOUSEHOLD ECONOMY.

1. Laundering occupies the fall term, and consists of practical work alternating with lectures. The practice includes plain white washing and remoring stains, clear starching, best methods of doing up fine mull, of ironing shirts, cuffs, and collars, washing flamnels, and cleaning silk and fine woolon goods. The lectures treat of the chemistry of the various materials used and of hard waters and the process of softening them. Soaps, washing fuids. Dleaching powders, bluings, and starch are discussed in their scientific and practical relations to laundry work.
ㅅ. Fruit uort includes caming by various methods and making all kinds of preserves and mamalades: difierent methods of making jellies, and experiments with green and ripe fruits; the making of all kinds of catchups, spiced fruits, sweet and sour pickles, tabe sances, and meat relishes; the preparing of truit inices, cordials, and sirups. The latter part of the term's work is a course of lectures on the chemical nature of fruit, its acids and sugars; the ralue of fruit as food and its action on the human system; the causes of fruit fermentation, and a stady of antiseptics.
2. Cooking lectures treat of marketing and the selection of food; general rules of measuring and mixing; best methods of baking and boiling: deep and shallow

- frying: the general chemistry of cooking: carving and serving of food.

4. Cooking practice includes all kinds of plain and some fancy cooking, covering in a general way all the subjects with which a housekeeper in moderate circumstances needs to be familiar. Demonstration lessons are given at various times throughout the term on subjects difficult of treatment in the general practice. A three-course lunch is served daily during the winter term. Niembers of the class take turns in presidng as hostess at the table, carving and serving plates and looking after the needs of the guests. They also take turns in waiting upon the table.
5. Science of mutrition is a study of foods, their chemical composition, characteristics, digestibility; the way in which they nourish the body; the best foods to be given in certain diseases; the best food for young ch ldren; effect of age, climate, and occupation on amount and kind of food required. In connection with these lectures about 40 lessons are given in preparing food for the sick.
6. Hygiene treats of sanitary conditions about the home; dangers from damp and unclean cellars, foul drains and sinks; ventilation, heatmg, and lighting;
instructions especially necessary to women on the care of personal health; home nursing, with illustrative lessons on changing beds for the sick.
$\%$ Household management consists of lectures on the convenient arrangement and economical furnishing of rooms; the best methods of doing all izinds of housework, with a view to economy of time and strength; duties of mistress and servants; entercainment of guests, and many other subjects of interest to the home maker.
7. Asthetics is the science of taste and beauty. The course incledes talks on fine china, pictures, furniture, decorations for the home, harmony of colozs, taste in diress, and kindred subjects.
I.-SEWING.
8. Piece sewing.-Practice is given first in the various hand stitches used in muslin and woolen goods; overhanging, runing, hemming, hemstitching, overcasting, felling, gathering and stroking gathers, buttonholes, gusset, patching and darning, French hem on damask, etc.
9. Dressmaking. - At least two muslin garments are made. A gown is cnt out, basted, and entirely made by the studont.
10. Designing, cutting, and fitting. -Instruction is given by talks on grace in design of costume and harmony of colors. Sipecial attention is given to hygienic modes of dress. The student is taught to make drawings of the costumes which sho designs. She also learns to draft patterns from measurements. Further practice is given in cutting and fitting.
11. Fancy work. - This course includes Kensington embroidery. Roman cut work, Spanish laid work, drawn work, jeweled embroidery, and modern lace making. (Catalogue, 1898-99.)

## Hampton Normal and Agriculitural Institute, Fampton, Va.

Cooking.--Three and one-half months, four hours a week. Naking and care of fires, dish washing and care of kitchen; talks on fuels and foods; baking apples, potatoes, etc.; boiling vegettoles and eggs; steaming; lessons in buying nieat; cooking of meats; warmed-over dishes, soups, broiling and stewing; simple and invalid cooking; biscuits and cookies; bread; plain cake; plain pastry; cooking of poultry, fish, and eggs; tea, coffee, cocoa; setting table. These lessons are accompanied by instruction in the chencistry of cooking so far as it applies in the practical work.

Sewing.-Junior year, two periods a week: Basting. running, overcasting, backstitching, overhanding, hemming, felling. blind stitching, cross-stitching. Each student makes for herself a book containing samples of the different kinds of work, and keens a notebook in which she sets down the verbal instruction given. Middle year: Continuation of the work of the junior year; each stadent cuts and makes for herself a full set of underclothes. Senior year: Students are given talks on colors aud material insed, and taught to draft and cut from patterns, and each girl makes for herself a dress. (Catalogue, 1898-99.)

## West Virginia Colored Institute.

> I.-PLAIN SEWING.

First yectr. - First term: Holding needle, use of thirible and tools; basting, overhanding, running, turning hem by measure, gathering and stroking gathering; putting on bands. Second term: Sewing on buttons, putting on gussets; herringbone stitched on fiannels; patching, hem stitching, and Erench fell; making of pillow cases; making bustonholes. Thirdterm: Darning on woolen goods; blind stitching; mending and darning; review of previous terms.

Second year.-First term: Names of sewing machines and parts; how to clean, oil. and operate the machines; how and when to use attachments; machine stiching, selection of material. Second term: Instruction in the use of the magic scalo system for cutting garments; cutting and making gentlemen's andershirts, colored shirts, and overalls. Third term: Taking measures, cutting skirts by measure; cutting underwaists from pattern; basting, stitching and trimming; cutting and making a plain dress by pattern; review.

> II.-DRESSMALING.

First year.-First term: Choice of material and talk on the manner of wearing goods; drafting and cutting foundation and outer skirts from measurements,

Second terin: Maiking, hanging, and trimming skirt; talking on forms, line, and proportion in relation to draping and trimming. Third term: Drafting, cutting, and fitting plain basques, and the general finish of these garments.
Second year.-First term: Drafting basques, sleeves, and the different accessories to the basque from measurement; drafting basque with extra seam for stout figures. Second term: Cutting and matching striped, plaid, and figured basques and skirts; talhs on artistic and hygienic principles of dress; talks on color and textiles appiied to dress. Third term: Appropriate selections for different individuals; advanced work in making complete dresses from different kinds of material.
Third year.-First term: Cutting, fitting, and pressing; practice in the use of colors; talk on the manufacture of cloth. Second term: Drafting jackets of various styles; making different styles of collars and trimmings; sewing on hooks; putting in whalebones. Third term: Draping garments of every kind; malking and finishing garments of every kind from different kinds of material. (Catalogue, 1897-93.)

## CHAPTER XL.

STATISTICS OF NORMAL SCHOOLS.

The number of persons engaged in teaching in the United States, from kindergarten to miveraity, exceeds 485,000. To recruit this vast army of teachers, there were 93,687 students in the scholastic year ending June, 1899, pursuing training courses for teachers in institutions of various grades. Of these strudents, $50,2 \% 9$ were being educated in 789 public institutions and 37,403 in 749 private institutions. About 48 per cent of the total number, or 44,808 , were in the 103 public
 normal studerts in 29 public universities and colleges numbered 2,541; in 206 private universities and colleges, 6,950 , in 544 public high schools, 8,930 , and in 378 private high schools and academies, 6,880 . The following table shows the number of institutions of each class and the number of normal students in each class for four scholastic years:

Nomal students reported for for gears.

| Classes of institutions. | 1895-96. |  | 1890-97. |  | 188\%-98. |  | 1593-99. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { In- } \\ & \text { stitu- } \\ & \text { tions. } \end{aligned}$ | Stu- | In-stitutions. | Students. | In-stitutions. | Students. | In- <br> stitutions. | Stadents. |
| Public normal schools | 160 | 40,421 | 164 | 43, 199 | 167 | 43,245 | 163 | 44, 808 |
| Private normal schools ---.-....- | 169 | 20,777 | 198 | 24, 181 | 178 | 21,293 | 163 | 23,572 |
| Public universities and colleges .. | 27 | 1,631 | 30 | 1,839 | . 3 | 2,255 | 29 | 2,541 |
| Private universities and colleges. | 166 | 5,3อั | 166 | 4,650 | 188 | 6, 105 | 206 | 6,950 |
| Public high schools | 447 | 8,248 | 507 | 9,001 | 494 | 7,378 | 544 | 8,930 |
| Private high schools | 439 | 7,930 | 423 | 7,051 | 32 | 5,989 | $3 \%$ | 6,386 |
| Grand total | 1,408 | 84, 400 | 1,48\% | 89, 034 | 1,376 | 89,225 | 1,488 | 93, 687 |
| In all public institations | 634 | 50,358 | 201 | 51,039 | 684 | 55,878 | 739 | 56, 279 |
| In all private institutions | 774 | 34, 020 | 783 | 35,895 | 692 | 33,347 | 749 | 37, 408 |

The 160 public normal schools had an average of 270 stadents to the school, and the 165 private normal schools an average of 142 to the school. The 29 public universities and colleges reporting normal students had an average of 84 to the institution, while 208 private universities and colleges had an average of nearly 34. The average number of normal stidents in 544 public high schools was 16 , and the average number in 878 private high schools 18 . These averages have reference only to students parsuing training courses for teachers. Students in other courses are enumerated elsewhere.
The number of students graduating from the teachers' training courses of the public and private normal schools in 1899 was $11,1 \%$. The normal graduates of other institutions were not reported to this office, but it may be estimated that the number of students graduating from normal cousses in all the institutions named, inciuding the normal schools, was not less than 15,303. But this number does not represent the entire number of recruits added to the teaching force of the country each year. Thousands leave the normal schools after one year's study and begin the work of teaching, while thousands more join the ranks from other institutions.

The distribution of normal students by States and Territories classified as in the above table is shown in Table 17 in this chapter. With two exceptions all the States and organized Territories make provision for the education of teachers in public normal schoo's. Nevada and Wyoming have no public normal schools, but their State universities have departments for the free education of teachers. Tennessee has not a normal school completely under State control, but the legislature makes an annual appropriation of $\$ 20,000$ to the Peabody Normal College of the University of Nashville, providing for a certain number of free State scholarships. The State board of education has also a voice in the management of the affairs of the college. The State makes still further provision for the education of teachers in the University of Tennessee, where tuition is free.

PUBLIC NORMAL SCHOOLS.
The summarized statistics of the 165 public normal schools will be found in Tables 1 to 8 , while detalled information concerning the schools will be found in Table 19.

The numer of public normal schools in each state is shown in the first column of Table 1. Fifteen States and Territories support only 1 school each. Massachrusetts has 10 schools, New York and Pennsylvania 15 each. These three States have nearly one fourth the public normal schools in the United States and more thon one-third of the normal students. In the 165 schools there were 2,05\% teachers employed in instructing stadents in normal departments and 693 engaged wholly in other departments. The North Atlantic Division had 899 of the teachers $f$ or normal stndents, the North Central Division 638, the two southern divisions 174 each. and the Western Division 1\%2. Of the 2,0 $2 \boldsymbol{0}$ teachers, 839 are men and 1,218 are women.

Tables 2 and 3 summarize the emrollment of stradeats in the public normal schools. Of the 44,808 students in the normal departments, there were 11,543 males and 33,265 females. The North Atlantic Division has 17,714 students, 15,085 of these being in Massachusetts, New York, and Pennsylvania. In the North Central Division the students in normal deparments numbered 16,325, quite evenly distributed. The Sorath Atlantic Division had 3,791, the South Central 3,2 2 , and the Western Division 3, 03. The public normal schools had 880 students in business courses, $4,80 \pm$ in secondary grades equivalent to high-school grades, and 24,030 pupils in elementary grades. The grand total, as shown in the first column of Table 3, was 75,163 . The number of colored normal students included was 1,138 , neariy all in the public normal schools for educating colored teachers in the Southern States.

Many of the public normal schools use their elementary departments as model schools, 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 1899 the mumber of teachers graduating from the public normal schools was 8,948 , the namber of male graduates being 1,035 and the number of female graduates 7,313 . The North Atlantic Division alone had more than hall of these graduates, or 4,653. The North Central Division had 2,530 Sraduates, the South Atiantic 480, the South Central 451, and the Western Division 821 . These schcols had 182 graduates from business courses and 654 from other courses.

The income of the public nomal schools for each Stato is shown in Table 5. The appropriations from States, counties, and cities for support for the 135 schools reporting this item aggregated $\$ 2,510,934$. The total income for the year from appropriations, tuition fees, productive funds, and from other sources reported by 141 schools was $\$ 3,484,10 \%$. Tuition fees received by 10 s schools aggregated $\$ 49,719$, and the greater part of this sum must have been paid by stu-
dents not in normal courses. The anomet received from productive funds by 15 schools was $\$ 87,859$. It is probable that the $\$ 408,601$ reported by 49 schools as receipts from "other sources and unclassinied" came directly or indirectly from public funds.

The value of buildings, grotnds, and other property of 142 of the public normal schools reporting to this office in 1898-99 was $\$ 20,836,010$. As shown in Table 6 , the number of volumes reported in the libraries of 148 of these schools was 501,728 , valued at $\$ 649,293$. Five schools received during the year beneíactions amounting to $\$ 141,2 \%$. Ten schools have endowments aggregating $\$ 1,880,529$. The aggregate of public appropriations for buildings and improvements received by 42 schools was $\$ 380,890$.

Table $\%$ shows the anount of public appropriations received each year for tho last six years by the public normal schcols for support, while Table 3 shows the public appropriations for buildings and improvements in the same period. The following table shows the aggregates of these appropriations for each year since 1889-90:

Public appropriations to public normal schools for ien years.

| Year. | For surport. | FOR building. | Year. | For support. | For building. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1889-90. | 1,312,419 | 903, 533 | 1894-95. | 1, 91\%,375 | 1,003,983 |
| 1890-91 | 1,285,700 | 409, 016 | 1855-96. | 2, 187, 375 | 1, 124,884 |
| 1891-92 | 1,567,082 | 394, 635 | 1896-97 | 2, 426, 185 | 743, 383 |
| 1892-93 | 1.452, 91.4 | - 816.826 | 1897-98 | 2,566, 132 | 417,866 |
| 1893-94. | 1,995,271 | 1,583,399 | 1898-93 | 2,510,934 | 560,890 |

PRIVATE NORMAE SCHOOLS.
The number of privats normal schools reporting to this office varies from year to year. There was a falling off of 13 in the number of schools from 1898 to 1899. A few of the weaker ones went out of existence, while others continue as private secondary schools. The remaining schools were considerably strengthened, the 16 reporting for $1898-99$ having 2,219 more normal students than the $1 i 8$ schools reporting for 1897-98.

Table 9 shows that the 165 schools had 1,036 teachers for normal students, an increase of 28 over the previous jear. The number of teachers wholly for other departments was 687 , a decrease of 49 from the preceding year.
Private iormal schools are not reported from 10 States and Teritories. Only 10 such schools are credited to the North Atiantic Division, where there are 57 public normai schools. In the North Central Division there are 2 private normal schools with 14,826 normal students, while the 41 public normail schools of that division have $16,32 \mathrm{~J}$ normal students. The two Southern divisions have together To private normal schools with 5,66 normal strdents, while the 51 public normal schools of that section have r,006 normal students.

From Table 10 it may be seen that 11,829 of the $23.5 \%$ normal students in the private normal schools were men and 11,743 were women. Of the total number 14,826, or nearly 63 per cent, are in the North Atantic Division.

The total enrollment in the private normal schools was 50,836 , including 5,549 in business courses, 8,191 in secondary grades, and 13,324 in elementary grades. It is shown in Table 11 that there were 2,140 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 2,227, as shown in Table 12 , the number of men being 1,129 and the number of women 1,098 . There were 1,629 graduates from business courses and 1,250 from other courses.

Table 13 shows that 28 private normal schools received State, county, or city aid aggregating $\$ 24,823$. The tuition fees of 105 schools amounted to $\$ 590,402$, while 14 schools received $\$ 47,997$ from productive funds. The aggregate income of 118 schools was $\$ 901,473$.

The value of grounds, buildings, and other property owned by 138 private normal schoois was reported as $\$ 5,831,785$, and 28 schools possessed endowments to the value of $\wp 2,505,744$, as shown in Table 14. During the year 24 schools received benefactions amounting to $\$ 423,755$. The libraries of 128 schools had 206,893 volumes, valued at $\$ 181,573$.

## DISTRIBUTION OF NORMAL STUDENTS.

It is shown in Table 15 that nearly 23 per cent of the normal students in public normal schools were men and over 74 per cent were women, while in the private normal schools the number of normal students was almost equally divided between the sexes. Nearly 20 per cent of the normal students attending public normal schools in 1898-99 graduated, while in the private normal schools less than 10 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 Stiates in Table 10. Table 17 is a summary of all the students in the five classes of institritions reported to this office as pursuing normal or teachers' training conrses in 1888-99.

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 statistics of public nommal schools in 1898-99.
SCHOOLS AND INSTRUCTORS.

| State or Territory. |  | Teachers for normal students. |  |  | Teachers wholly for other departments. |  |  | Total number teacher's employed. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | $\begin{aligned} & \mathrm{Fe}- \\ & \text { male. } \end{aligned}$ | Total. | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. | Male. | Fe . male. | Total. |
| United States. | 166 | 839 | 1,218 | 2,057 | 139 | 557 | 693 | 975 | 1,755 | 2, 750 |
| North Atlantic Division. | 57 | 320 | 579 | 899 | 27 | 242 | 239 | 347 | 821 | 1,168 |
| South Atlantic Division... | 25 | 71 | 103 | 174 | 55 | 110 | 165 | 126 | 213 | , 339 |
| South Central Division-..- | 26 | 78 | 93 | 174 | 25 | 44 | 69 | 103 | 140 | 243 |
| North Central Division... | 41 | 284 | 354 |  | 26 | 145 | 171 | 310 | 499 | 809 |
| Western Division.......... | 17 | 86 | 86 | $1{ }^{\text {\% }}$ | 3 | 16 | 19 | 89 | 102 | 191 |
| North Atlantic Division: | 5 | 9 | 22 | 31 | 0 | 8 | 8 | 9 |  |  |
| New Hamp | 1 | 4 | 4 | 8 | 0 | 5 | 5 | 4 | 30 9 | 13 |
| Vermont .... | 3 | 5 | 11 | 16 | 0 | 5 | 5 | $\stackrel{4}{5}$ | 16 | ${ }_{21}$ |
| Massachusetts | 10 | 44 | 78 | 12\% | 1 | 41 | 42 | 45 | 119 | 164 |
| Rhode Island |  | 4 | 16 | 20 | 0 | 8 | 8 | 4 | 24 | 28 |
| Connecticut. | 4 | 8 | 48 | 56 | 2 | 32 | 34 | 10 | 80 | 90 |
| New York. | 15 | 72 | 227 | 299 | 16 | 62 | 78 | 88 | 289 | 377 |
| New Jersey | 3 | 16 | 19 | 35 | 3 | 41 | 44 | 19 | 60 | 79 |
| Pennsylvania --........ | 15 | 158 | 154 | 312 | 5 | 40 | 45 | 163 | 194 | $35 \%$ |
| South Atlantic Division: Delaware |  | 0 | 2 |  | 0 | 8 | 8 | 0 | 10 | 10 |
| Maryland ------.......... | 1 | 4 | 8 | 12 | 0 | 4 | 4 | 4 | 12 | 16 |
| District of Columbia | 2 | 0 | 19 | 19 | 0 | 0 | 0 | 0 | 19 | 19 |
| Virginia --- |  | 7 | 15 | 22 | 34 | 47 | 81 | 41 | 62 | 103 |
| West Virginia.. | 7 | 26 | 17 | 43 | 8 | 8 | 16 | 34 | 25 | 59 |
| North Carolina | 1 | 13 | ${ }^{7}$ | $\stackrel{20}{31}$ | 7 | 28 | 35 | 20 | 35 | 55 |
| South Carolina. | 1 |  | $\stackrel{23}{9}$ | 16 | 0 | ${ }_{11}^{0}$ | 13 | 8 | 23 | 31 |
| Georgia | 2 | 7 6 | 9 3 | 16 9 | $\stackrel{2}{4}$ | 11 4 | 13 8 8 | 9 10 | 20 7 | 29 17 |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 6 | 10 | 1 | $1 \%$ | 3 | 4 | 7 | 13 | 11 | 24 |
| Tennessee | 1 | 15 | 11 | 26 | $\stackrel{2}{2}$ | 5 | 7 | 17 | 16 | 33 |
| Alabama | 5 | 16 | 35 | 51 | 13 | 17 | 30 | 29 | 52 | 81 |
| Mississippi | 7 | 12 | 3 | 15 | 5 | 13 | 18 | 17 | 16 | 33 |
| Louisiana | 2 | 5 | 20 | 25 | 0 | 4 | 1 | 5 | 24 | 29 |
| Texas -- | 3 | 7 | 13 | 20 | 2 | 1 | 3 | 9 | 14 | 23 |
| Arkansas | 1 | 8 | 3 | 11 | 0 | 0 | 0 | 8 | 3 | 11 |
| Oklahoma --..... | 1 | 5 | 4 | 9 | 0 | 0 | 0 | 5 | 4 | 9 |
| Indian Territory-.... |  |  |  |  |  |  |  |  |  |  |
| North Centrial Division: Ohio |  | 8 | 23 | 31 |  | 14 | 15 | 9 | 37 | 46 |
| Indiana-- | 2 | 27 | 19 | 46 | 0 | 5 | 5 | 27 | 24 | 51 |
| Illinois |  | 30 |  | 72 | 5 | 5 | 10 |  | $4 \%$ | 82 |
| Michigan | 3 | 29 | 48 | 77 | 0 | 14 | 14 | 29 | 62 | 91 |
| Wisconsin |  | 56 | 68 | 123 | 0 | 26 | 26 | 56 | 93 | 149 |
| Minnesota | 5 | 27 | 48 | 75 | 0 | 22 | 22 | 27 | 70 | 97 |
| Iowa.... | 5. | 34 | 28 | 62 | 0 | 10 | 10 | 34 | 38 | 72 |
| Missouri. |  | 32 | 26 | 58 | 19 | 40 | 59 | 51 | 66 | 117 |
| North Dakota | 2 | 8 | 10 | 18 | 0 | 0 | 0 | 8 | 10 | 18 |
| South Dakota | 3 | 7 | 20 | 27 | 0 | 2 | 2 | 7 | 22 | 29 |
| Nebraska | 1 | 10 | 8 | 18 | 0 | 3 | 3 | 10 | 11 | 21 |
| Kansas -....... | 1 | 16 | 15 | 31 | 1 | 4 | 5 | 17 | 19 | 36 |
| Western Division: Montana | 1 | 5 | 3 | 8 | 0 | 0 | 0 | 5 | 3 | 8 |
| W yoming --- |  |  |  |  |  |  |  |  |  |  |
| Colorado | 1 | 9 | 8 | 17 | 0 | 0 | 0 | 9 |  | 17 |
| New Mexico | 1 | 3 | 1 | 4 | 0 | 0 | 0 | 3 | 1 | 4 |
| Arizona | 1 | 3 | 3 | ${ }^{6}$ | ${ }_{0}^{0}$ | 0 | 0 | 3 | 3 | ${ }_{5}$ |
| Utah <br> Nevada | 1 | 2 | 0 | 2 | 2 | 1 | 3 | 4 | 1 |  |
| Idano - - |  |  | 5 | 10 | 0 | 0 | 0 | 5 | 5 | 10 |
| Washington | 2 | 7 | 10 | 17 | 0 | 1 | 1 | 7 | 11 | 18 |
| Oregon - | 4 | 19 | 12 | 31 | 1 | $\stackrel{2}{2}$ | ${ }_{10}^{3}$ | 20 | 14 | 34 |
| California. | 4 | 33 | 44 | 77 | 0 | 12 | 12 | 33 | 56 | 89 |

Table 2．－Summary of statistics of public nomal schools in 1898－93．
STUDENTS AND COURSES OF STUDE゙．

| State or Territory． | Students in normal depart． ment． |  |  | Students in business courses． |  |  | Other students in secondary grades． |  |  | Pupils in ele mentary grades． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\text { cis }}{\substack{\text { E. } \\ \hline}}$ |  | $\begin{aligned} & \text { 淢 } \end{aligned}$ | $\frac{0}{\text { By }}$ | － | $\begin{aligned} & \text { ت⿹\zh26灬 } \\ & 0 \\ & \text { B } \end{aligned}$ | $\underset{\sim}{\text { en }}$ |  |  |  |  | E00 |
| United States | 11， 543 | 33， 265 | 44，868 | 332 | 334 | 866 | 1，5\％ | 3， 23. | 4， 804 | 11， 4 \％${ }^{*}$ | 3，212 | 84.680 |
| North A tlantic Division． South Atlantic Division South Central Dirision | $\begin{aligned} & 4,242 \\ & 1,132 \\ & 1,150 \\ & 4,360 \\ & 20 \end{aligned}$ |  | $\begin{aligned} & 17,714 \\ & 3,794 \\ & 3,2,2 \\ & 16,23 \\ & 3 \end{aligned}$ | 84 <br> 78 <br> 24 <br> 140 | $\begin{array}{r} 66 \\ 304 \\ 2 \\ 158 \\ 1 \end{array}$ | $\begin{gathered} 150 \\ 370 \\ 30 \\ 298 \\ 10 \end{gathered}$ | 422 143 146 763 58 | $\begin{array}{r} 1.697 \\ 1.099 \\ 1.010 \\ 70 \end{array}$ | $\begin{array}{r}2,119 \\ 438 \\ 315 \\ 1,773 \\ \hline 120\end{array}$ | 5,220 <br> 880 <br> 1,188 <br> 3,706 | $6,0.55$ 1,075 1,082 4,292 | $\begin{aligned} & 11,2 \% 66 \\ & 1.8960 \\ & 2,208 \\ & 7.991 \end{aligned}$ |
| Western Division．．．－－．－－ | \％72 | 2， 331 | 3， 718 | 8 | 4 | 12 | 58 | 71 | 129 | 604 | 717 | 1，321 |
| North Atlantic Dirision： <br> Maine $\qquad$ | 92 | 608 | \％0 | 0 | 0 | 0 | 0 |  | 0 | 182 | 232 |  |
| New Hampsinipe－．．．． |  |  | 103 |  |  |  | 33 |  | 66 | 94 | 81 | $1 \% 8$ |
| Vermont． | 36 | 225 | 261 | 0 | 0 | 0 | 0 |  | 0 | 0 |  | 0 |
| Hrassachusetts | 56 | 1，355 | 1， 121 | 0 | 0 | 0 | 5 |  | 290 | 519 | 539 | 1，058 |
| Rhode Island |  | 1\％ | 12\％ |  |  |  |  |  |  |  |  |  |
| Connecticut <br> New York． | 1，153 | 4， 425 | 5，888 | 50 | 30 | 80 | 193 | 1，174 | 1，35 | 2，220 | 2，711 | 4，967 |
| New Jersey |  | 790 | －868 | ， |  | 0 | 0 |  | 0 | （352 | 1，013 | 1，965 |
| Pennsylvania | 2，822 | 4，904 | 7，726 | 31 | 36 | 70 | 8 |  | 321 | 945 | 1，240 | 2，185 |
| South Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Maryland | 13 | 393 | 496 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |  | 34 |
| District of Columbia－ | 14 | 156 | 170 | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Virginia－－ | 68 | 240 | 308 | 3 | 0 | 3 | 29 | 0 | 29 | 439 | 406 | 845 |
| West Virginia | 542 | 46 | 1，011 | 69 | 61 | 130 | 114 | 216 | 330 | 14 | 6 | 20 |
| North Carolina | 132 | 678 | 810 | 0 | 40 | 40 | 0 |  | 0 | 283 | 369 | 67.3 |
| South Carolina |  | 174 | 177 | 0 | 138 | 138 | 0 |  |  |  |  |  |
| Georgia | 220 | 549 | 769 | 0 | 65 | 65 | 0 | 50 | 50 |  | 165 | $1 \%$ |
| Florida <br> South Central Division： | 43 | 85 | 118 | 0 |  |  |  |  |  | $\pi$ | 102 | 173 |
| Kentucky | 171 | 211 | 38, | 23 |  |  | 91 | 63 | 1.58 | 191 | 163 | 358 |
| Tenuessee | 210 | 394 | 604 | 0 | 0 | 0 |  |  |  |  |  |  |
| Alabama | 290 | 59 | $81 \%$ | 0 | 0 | 0 | 35 | 39 | \％ | $14 \%$ | 220 | 307 |
| Mississippi | 94 | 90 | 184 | 5 | 0 | 5 | 12 | 20 | 32 | 474 | 430 | 904 |
| Louisiana | 66 | 379 | 445 | 0 | 0 | 0 | 0 | 0 | ， | 53 | 63 | 116 |
| Texas．．．． | 175 | 348 | $5 \%$ | 0 | 0 | 0 | 44 | 32 | 76 | 198 | 152 | 350 |
| Arkansas． Oklahoma | 111 | 26 |  |  |  |  | 4 | 1 | 5 | 65 | 40 | 105 |
| Oklahoma－－．．．．．． | 111 |  | 201 |  |  |  |  |  |  |  |  |  |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio－．．．－ | 12 | 575 | 587 | 0 | 0 | 0 | 43 | 50 | 93 | 350 | 384 | 744 |
| Indiana | 435 | 743 | 1，179 | 0 | 0 | 0 | 0 | 0 | ， | 0 | 0 |  |
| Illinois | 464 | 1，304 | 1，768 | 0 | ， | 0 | ． 97 | 60 | 157 | 458 | 503 | 961 |
| Michigan | 207 | 1992 | 1，199 | 0 | 0 | 0 | 0 | $\bigcirc$ | 0 | 775 | 899 | 1，674 |
| Visconsin | 278 | 1，931 | 吕，135 | 0 0 | 0 | 0 | 13 0 | 29 | 42 0 | 493 676 | 585 | 1,078 1,623 |
| Iowa | 50 | 1，582 | 2，097 | 36 | 24 | 60 | 77 | 60 | 137 | 460 | 434 | 1，894 |
| Missouri | $6: 9$ | 971 | 1，600 | 104 | 134 | 238 |  | 802 | 1，330 | $3: 5$ | 310 | 635 |
| North Dak | $10 \pm$ | 274 | 378 | 0 | ， |  | 0 | ， |  |  |  |  |
| South Daz | 1.5 | 411 | 568 | 0 | 0 | 0 | 5 | 9 | 14 | $\% 9$ | 123 | 202 |
| Nebraska <br> Kansas． | 175 | 482 | ，657 | 0 | 0 |  |  |  |  | 80 | $10 \%$ | 187 |
| Western Divis | 4.6 | 1，002 | 1，428 |  |  |  |  |  |  |  |  |  |
| Montana | 10 | 120 | 130 |  |  |  | 27 | 33 | 60 |  |  |  |
| Wvoming |  |  |  |  |  |  |  |  |  |  |  |  |
| Colorado－ | 49 |  | 323 |  |  |  |  |  |  | 86 | 87 | 173 |
| New Mexi | 10 | 25 | 35 | 3 |  | 7 | 25 | 31 | 56 |  |  |  |
| Arizona | 68 | 120 | 182 | 0 |  |  |  |  |  |  |  |  |
| Nevada | 85 |  | 154 |  |  | 0 |  |  |  |  |  |  |
| Idaho． | 59 |  | 15 |  |  |  |  |  | 0 | 46 | 7 | 12 |
| Washing | 69 | 253 | 3，22 | 0 |  | ， | 0 | 0 | 0 | 0 | 0 | 0 |
| Oregon－ | 214 |  | ${ }_{1}^{561}$ |  | 0 | 5 | 6 | 7 | 13 | 202 | 224 | 426 |
| Californ | 814 | 1，628 | 1，842 |  |  |  |  |  |  | $2 \% 0$ | 329 | 599 |

Table 3.-Summary of statistics of public nommal schools in 1s9S-93.
TOTAI ENROLLMENT OF STUDENTS.

| State or Territory. | Total eurollment in all departments. |  |  | Colored students inciuded in normal department. |  |  | Number of children in model school. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Fe. male. | Total. |
| United States | 21, 225 | 50, 213 | 75, 168 | 465 | 673 | 1,138 | 15,343 | 17,309 | 32,649 |
| North Atlantic Division South Atlantic Division South Central Division North Central Divisioll Western Division. | $\begin{aligned} & 9,908 \\ & 2,067 \\ & 2,490 \\ & 8,949 \\ & 1,440 \end{aligned}$ | $\begin{gathered} 21,230 \\ 1,487 \\ 3,348 \\ 17,445 \\ 3,793 \end{gathered}$ | $\begin{gathered} 31,258 \\ 6,504 \\ 5,847 \\ 26,391 \\ 5,165 \end{gathered}$ | $\begin{array}{r} 8 \\ 233 \\ 815 \\ 9 \\ 0 \\ \hline \end{array}$ | $\begin{gathered} 83 \\ 403 \\ 415 \\ 215 \\ 20 \\ 0 \end{gathered}$ | $\begin{array}{r} 41 \\ 633 \\ 438 \\ 41 \\ 31 \\ 60 \end{array}$ | $\begin{array}{r} 8,434 \\ 819 \\ 715 \\ 4,596 \\ 489 \\ \hline \end{array}$ | $\begin{aligned} & 9,193 \\ & 1,1.30 \\ & 5,804 \\ & 5,35 \\ & 941 \end{aligned}$ | $\begin{array}{r} 17,6 \% 7 \\ 1,909 \\ 1,419 \\ 9,931 \\ 1,733 \end{array}$ |
| North Atlantic Division: <br> Maine. $\qquad$ <br> New Hampsirice <br> Vermont <br> inassachusetts. $\qquad$ <br> Rhode Island <br> Connecticut $\qquad$ <br> New York $\qquad$ <br> New Jersey - $\qquad$ |  | 810 218 263 2,106 2046 808 8,650 1,803 6,363 |  | 0 0 0 0 6 0 8 | 2 0 0 0 1 1 14 14 | 2 0 0 0 2 1 2 2 0 4 10 | 119 127 1288 1,608 169 1,415 2,758 769 1,248 | 167 117 310 1,245 204 1,504 3,046 818 1,674 |  |
| South Atlantic Division: | 0 |  | - 25 | 0 | 0 | 0 | 185 | 100 |  |
| Maryland | 19 | 201 | $4 \pm 0$ | 0 | 0 | 0 | 6 | 28 | 31 |
| District of Colum | 11 | 123 | 170 | 13 | 57 | $\%$ | 348 | 378 | 726 |
| Tirginia. | 539 | 645 | 1,185 | 68 | \% | 142 | 123 | 310 | 433 |
| West Virgi | T39 | 752 | 1,491 | 41 | 59 | 100 |  |  | 10 |
| North Carolina | 415 | 1,087 | 1,50\% | 102 | 194 | 206 | 131 | 147 | 278 |
| South Carolina | 0 | 31 t | 1.344 | 0 | 0 | 0 | 51 | 78 | 129 |
| Georgia - | 297 | 889 $1 \sim 7$ | 1,056 | 0 | 0 19 | ${ }^{0}$ | 15 | 84 | 89 |
| South Cential Division: |  | 187 |  | 9 | 19 | 28 | 0 | 0 | 0 |
| Kentucky | $4 \% 6$ | $44^{7} 7$ | 023 | 53 | $5 \frac{1}{2}$ | 107 | 169 | 129 | 259 |
| Tenuessee | 210 | 394 | ${ }^{604}$ | 85 | 104 | 0 | 110 | 247 | 337 |
| Alabama | 585 | 786 540 | 1,125 | 36 | 104 31 | 190 | 245 | 244 | 490 |
| Louisiana | 119 | 442 | , 561 | 0 | 0 | 0 | $1 \%$ | T8 | 251 |
| Texas .- | 417 | 532 | 949 | 0 | 0 | 0 | 0 |  |  |
| Arlansas | 109 |  | 176 251 | 40 0 | 0 | 65 0 | 17 | ${ }_{15}^{0}$ | 38 |
| Indian Teritory |  |  |  |  |  |  |  |  | Sa |
| North Central Division: Ohio | 415 | 1,009 | 1,424 | 0 | 8 | 8 | 016 | ,098 |  |
| Indiana | $43{ }^{\circ}$ | 743 | 1,179 | 3 | 7 | 10 | 80 |  | 171 |
| Tllinois | 1,019 | 1,86\% | 2,886 | 0 | 0 |  | 458 | 532 | 990 |
| Michigan | 98\% | 1,891 | 2,873 | 1 | 0 | 1 | 962 | 1,111 | 2,073 |
| Wiscoilsin | 1,284 | 2,565 | 3,843 | 0 | 1 | 1 | 678 | 804 | 1,476 |
| MIinnesota | 1,113 | 2,645 | 3, 758 | 0 | 0 | 0 | 685 | 910 | 1,625 |
| Powa. | 1,038 |  | 3,188 | 0 | 0 | 0 | 289 | 275 | 564 |
| Missouri | 1,385 | 2,217 | 3, 803 | 0 | 0 | 0 | 136 | 163 | 299 |
| North Dakota | 104 | 274 | 378 | 0 | 0 | 0 | 9 | 21 | 30 |
| South Da | 241 | 543 | \%84 | 0 | 1 | 1 | 99 | 150 | 249 |
| Nebraska | 175 | ${ }^{480}$ |  | 5 | ${ }_{5}^{0}$ | ${ }_{10}$ | 110 | 113 | 283 |
| Kansas--...... | 503 | 1,103 | 1,615 | 5 | 5 | 10 | 80 | 107 | 187 |
| Montana. | 87 | 153 | 180 |  |  |  | 18 | 24 | 42 |
| Wyoming |  |  |  |  |  |  |  |  |  |
| Colorado | 133 | 361 | 436 |  |  |  | 86 |  | 173 |
| New Mexico | 38 | ${ }^{60}$ | 88 |  |  |  | 8 | 12 | 20 |
| Arizona | 62 | 120 | 182 | 0 | 0 | 0 | 32 | 38 | 70 |
| Ntah | 85 | 2 | 156 |  |  |  |  |  |  |
| Idaho | 10 | 169 | 274 |  | 0 | 0 | 0 | 0 | 0 |
| Washington | 69 | 233 | $32 \%$ | , | 0 | 0 | 68 | 95 | 163 |
| Oregon.-.- | 427 | \% 508 | 1,005 | 0 | 0 | 0 | 207 | 234 | 441 |
| Californiat | $48 \pm$ | 1,957 | 2,441 | 0 | 0 | 0 | 370 | 451 | 834 |

Table 4.-Shmmary of statistics of public normal schools in 189S-99.
NUMBER OF NORMAL AND OTHER GRADUATES.


INCOME FROM VARIOUS SOURCES.

| State or Territory. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | 135 | 2,510, 334 | 105 | 498, 719 | 15 | 67,853 | 49 | 406, 601 | 141 | 3, 484,107 |
| North Atlantic Division | 47 | 1,010.913 | 33 | 317, 120 | 3 | 745 | 15 | 112, 901 | 47 | 1,441,679 |
| South Atlantic Division. | 19 | 280,350 | 11 | 27,399 | 1 | 32,970 | 12 | 160,415 | 21 | -501, 134 |
| South Central Division.- | 23 | 13?, 715 | 18 | 28,251 | 3 | 2,163 | 14 | 86, 766 | 23 | 249,897 |
| North Central Division.- | $3 \stackrel{3}{ }$ | 779, 256 | 30 | 108,406 | 7 | 30,973 | 6 | 39.519 | $3{ }^{4}$ | 958,154 |
| Western Division........ | 14 | 307, 700 | 11 | 17,543 | 1 | 1,000 | 2 | 7,000 | 16 | 333,243 |
| North Atlantic Division: Maine | 5 | 31,020 | 5 | 2,343 |  | 0 | 1 | 500 | 5 | 33,863 |
| New Hampshire | 1 | 13,000 | 1 | 1,000 |  |  |  |  | 1 | 14,000 |
| Vermont-... | 3 | 17,000 | 3 | 40, | 2 | 700 | 1 | 75 | 3 | 18, 177 |
| Massachusett | 7 | 196, 668 | 2 | 3,165 | 1 | 45 |  |  | 7 | 199,878 |
| Rhode Island | 1 | 53, 000 |  |  |  |  |  |  | 1 | 55, 000 |
| Connecticut | 2 | 34, 303 |  |  |  |  | 1 | 7,500 | 2 | 41,803 |
| New York | 14 | 513, 507 | 11 | 25, 221 |  |  | 3 | 1,035 | 14 | 540, 763 |
| New Jersey | 1 | 45, 000 | 1 | 26, 000 |  |  |  |  | 1 | 71,000 |
| Pennsylvania .-...... | 13 | 105, 415 | 12 | 25\%,989 | -.. |  | 9 | 103,791 | 13 | 467, 195 |
| South Atlantic Division: <br> Delaware |  |  |  |  |  |  |  |  |  |  |
| Diaryland ------------- | 1 | 20,000 | $1-$ | 7,375 |  | 0 |  | 0 | 1 | 2\%\%3\% |
| District of Columbia. |  |  |  |  |  |  |  |  |  |  |
| Virginia - -- -----.-... | 2 | 30, $0 \times 0$ | 2 | 2,106 | 1 | 32,970 | 3 | 128,449 | 3 | 193,525 |
| West Virginia | 6 | 122,550 | 8 | 3, 854 |  |  | $\stackrel{2}{2}$ | 11,451 | 7 | 137,855 |
| North Carolina | 5 | 32, 800 | 1 | 10, 464 |  |  | 3 | 4,950 | 5 | 48,214 |
| South Carolina | 1 | 30,000 |  |  |  |  |  |  | 1 | 30, 000 |
| Georgia | 2 | 36,500 | 1 | 3, 600 |  |  | 2 | 3,500 | 2 | 43, 600 |
| Florida | 2 | 8,500 |  |  |  |  | 2 | 12,065 | 2 | 20,565 |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 4 | 4,325 | 4 | 2,865 | 1 | 1,255 | 2 | 3,780 | 4 | 12, 225 |
| Tennessee | $\frac{1}{5}$ | 20,000 | 5 | 8,000 | 1 | 800 | 5 | 39, 100 | 5 | 67, 900 |
| Mississippi | 7 | 6,890 | 4 | 1,999 |  |  | 2 | 711 | 7 | 8,900 |
| Louisiana | 1 | 16,000 | 1 | 3,151 |  |  | 1 | 2,000 | 1 | 21,151 |
| Texas. | 3 | 42,700 | 2 | 4,200 | 1 | 110 | 2 | 3,234 | 3 | 50, 244 |
| Arkansas | 1 | 5, 000 | 1 | 305 |  |  |  |  | 1 | 5,305 |
| Oklahoma | 1 | 16,000 |  |  |  |  | 1 | 3,000 | 1 | 19,000 |
| Indian Territory |  |  |  |  |  |  |  |  |  |  |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |
| Ohio . | 1 | 4,000 | 1 | 1,000 |  |  |  |  | 1 | 5,000 |
| Indiana | 1 | 65, 352 | 1 | 6,301 |  |  |  |  | 1 | 71,653 |
| Tllinois | 2 | 96, 000 | 2 | 9,321 |  | 0 | 2 | 37, 135 | 3 | 142.456 |
| Michigan | 3 | 88,700 | 3 | 9,742 | 1 | 4, 100 |  | 0 | 3 | 102.542 |
| Wisconsin | 6 | 198, 717 | 7 | 21, 168 | 1 | 9,500 | 1 | 700 | 7 | 230,085 |
| Minnesota | 5 | 125, 000 | 4 | 11,847 |  |  | 2 | 384 | 5 | 137,231 |
| Iowa | 4 | 55, 887 | 3 | 17,400 |  |  |  |  | 4 | 73, 287 |
| Missouri | 3 | 39, 750 | 3 | 21,419 |  |  |  |  | 3 | 61, 169 |
| North Dakota | 2 | 23,400 | 2 | 2,450 |  | 476 |  |  | 2 | 26, 326 |
| South Dak | 3 | 28,500 | 3 | 4,608 | 2 | 897 | 1 | 1,300 | 3 | 35, 305 |
| Nebraska | 1 | 25, 000 |  |  | 1 | 2,010 |  |  | 1 | 27, (00 |
| Kansas----. | 1 | 28,950 | 1 | 3,150 | 1 | 14,000 |  |  | 1 | 46, 100 |
| Western Division: Montana |  |  |  |  |  |  |  |  |  |  |
| Montana <br> Wyoming | 1 | 15,000 | 1 | 900 |  |  |  |  | 1 | 15, 900 |
| Colorado | 1 | 35,000 | 1 | 2,000 |  |  |  |  | 1 | 37,000 |
| New Mexico |  |  | 1 | 560 |  |  | 1 | 6,50k) | 1 | 7,060 |
| Arizona |  |  |  |  |  |  |  |  |  |  |
| Utah | 1 | 7,500 | 1 | 800 |  |  |  |  | 1 | 8,300 |
| Nevada |  |  |  |  |  |  |  |  |  |  |
| Idaho | 2 | 14,000 |  |  |  | 0 |  | 0 | 2 | 14,000 |
| Washingt | 2 | 29, 200 | 1 | 1,000 |  |  |  |  | 2 | 30, 200 |
| Oregon | 3 | 20, 500 | 4 | 10,200 | 1 | 1,000 | 1 | 500 | 4 | 32,200 |
| California | 4. | 186,500 | 2 | 2,083 |  |  |  |  | 4 | 188, 583 |

TiPLE 6.-Summary of statistics of public normal schoois in 1898-99.
VALUE OF BUILDINGS AND OTHER PROPERTX.


Table 7.-Review of public normal school statistics, 1893-1899.
APPROPRIATIONS FROM STATE, COUNTY, OR CITY FOR SUPPORT.

| State or Territory. | 1893-94. | 1894-95. | 1895-96. | 1896-97. | 1897-98. | 1883-89. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | \$1,993,271 | \$1.917,3\% | 92, 18\%, 8\% | \$2, 423, 185 | \$2, 568, 13: | \% ${ }^{3}, 510,934$ |
| North Atlantic Division | 907, 010 | 773, 035 | 887, 599 | 1,005, 972 | 1,035, 502 | 1,010,913 |
| Sonth Atlantic Division | 121,460 | 141,017 | 146,59? | 1, 2 25, 835 | (290, 328 | 280,350 |
| South Central Division. | 119,949 | 118, 460 | 106, 013 | 75, 940 | 131,185 | 132,715 |
| North Central Division | (631, 8221 | 648, 053 | 769,900 | 852, 787 | 881, 4.37 | 779,256 |
| Western Division ....... | 190, 028 | 221,800 | 2\%7, 750 | 233, 650 | 297, 70 | 307, 700 |
| North Atlantic Division: |  |  |  |  |  |  |
|  | 26, 4.50 | 23,600 | 27,350 | 25,900 | 26, 200 | 31,020 |
| New Hampshire | 12,000 | 12,000 | 10,000 | 13, 014 | 13,000 | 13,000 |
| Vermont | 13,029 | 7,264 | 13,032 | 13. 426 | 15, 000 | 17,000 |
| Massachusett | 122, 164 | 88,397 | 138, 294 | 168, 203 | 175,878 | 196,6f8 |
| Rhode Island | 16,900 | 18,000 |  | 20, 040 | 23,000 | 55, 000 |
| Connecticut | 79, 656 | \%2, 000 | 39,000 | 42,695 | 161,000 | 34,303 |
| New York | 397, $5: 23$ | 360, 111 | 441, 954 | 481, 801 | 517, 105 | 513, 507 |
| New Jersey | 34,083 | 40, 510 | 40,510 | 44,943 | 53, 061 | 45, 009 |
| Pennsylvania | 206,095 | 159,093 | 174,390 | 193,000 | 190,958 | 100,415 |
| South Atlantic Division: |  | 9, 100 | 9, 0 积 |  |  |  |
| Maryland | 10,500 | 10,500 | 10,500 | 12,500 | 12,-875 | 20,000 |
| District of Columbia |  |  |  |  |  |  |
| Virginia - | 27,950 | 30,200 | 31,000 | 38,333 | 47,996 | 30,000 |
| West Virginia- | 18,718 | 28,25\% | 35,100 | 42, 200 | 3ib, 400 | 12\%,550 |
| North Carolina | 29,233 | 19,800 | 20,250 | 41,316 | 37,657 | 32,800 |
| South Canolina | \%,200 | 5,230 |  | 62,289 | 30, 000 | 30,000 |
| Georgia | 23, 207 | 32, 900 | 23, 900 | 45, 400 | 45,400 | 33, 500 |
| Florida | 3,600 | 5,000 | 7,200 | 15,858 | 10, 000 | 8,500 |
| South Central Division: |  |  |  |  |  |  |
| Kentracky | 1,500 | 15,000 | 20,223 | 5, 6. | 20,050 | 20,000 |
| Alabama | 23, 411 | 18,525 | 22, 418 | 29,459 | 22,445 | 21, 800 |
| Mississippi | 3,950 | 8,425 | 6,350 | 6,615 | 6,820 | 6,880 |
| Louisiana | 12,500 | 13,750 | 13,750 | 15,000 | 15,000 | 16,000 |
| Texas | 33, 000 | 40, 500 | 28,000 | 1,600 | 42,500 | 42, 700 |
| Arkansas | 12, 500 | 8,080 | 4,950 | 5, 500 | 5,025 | 5, 000 |
| Oklahoma | 7,500 |  |  | 12,000 | 16,000 | 16,000 |
| Indian Territory.- |  |  |  |  |  |  |
| North Central Division: |  |  |  |  |  |  |
| Ohio -... | 800 | 5,000 | 1,800 | 3,500 | 8,000 | 4, 000 |
| Indiana. | 42,700 | 40, 000 | 65, 827 | 60, 720 | 60, 750 | 63, 35: |
| Illinois - | 99, 104 | 56,500 | 123, 610 | 64, 060 | 127, 777 | 98000 |
| Wisconsin | 62,298 | 53,450 | 61, 400 | 63, 850 | 95, 650 | 88,700 |
| Wisconsin | 120,911 | 155, 271 | 165,086 | 288, 540 | 259,396 | 198,717 |
| Minnesota | 82,000 | 88,000 | 91,500 | 95,000 | 123,000 | 125,009 |
| Iowa. | 27, 875 | 33,525 | 39, 075 | 42,625 | 51, 737 | 50., 887 |
| Missouri | 142,561 | 142,317 | 142,352 | 143,552 | 49,950 | 39, 550 |
| North Dakot | 20,000 | 础, (40) | 19,000 |  |  |  |
| South Dakot | 26, 200 | 20,000 | 12, 500 | $2 \mathrm{2c,000}$ | 27, 000 | 23,500 |
| Nebrask | 21,200 | 30,000 | 19,500 | 25,000 | 21,750 | 25,000 |
| Kansas <br> Western Division: | 9,12\% | 6,000 | 28,250 | 20,000 | 28,000 | 28,950 |
| Western Division: Montana |  |  |  |  | 7, 700 | 15, 000 |
| W yoming |  |  |  |  |  |  |
| Colorado | 35,000 | 35,000 | 35,000 | 35,000 | 35,000 | 35,000 |
| New Mex | 3,500 | 0 | 7,000 | (6,009 | 6,500 |  |
| Arizona | 7,200 | 0 | 6,009 | 8,003 | 11,500 |  |
| Utah |  |  |  |  | 58,500 | 7,500 |
|  |  |  |  |  |  |  |
| INa |  | ,,000 | 00, 200 | 17,000 | 1t,000 | 14, 6,50 |
| W ashing | 37,500 | 39,000 | 42,60 | 26,500 | 12, 500 | 29,200 |
| Oregon | 18,288 | 23,200 | 16, 000 | 15,650 | 9,700 | 20,500 |
| Calitornia | 91,300 | 117,000 | 121,250 | 123,500 | 142, 300 | 186,560 |

Thbee 8.-Review of public normal school statistics, 1893-1899.
PUBLIC APPROPRIATIONS FOR BUILDINGS AND IMPROVEMENTS.

| State or Territory. | 1893-94. | 1894-95. | 1895-96. | 1896-9\%' | 1897-98. | 1898-99. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | \$1,583, 399 | \$1,008, 933 | \$1, 124, 834 | \%\%743,333 | \$417, 866 | \$560, 896 |
| North Atlantic Division | 856,6\%0 | 449,959 | 564, 118 | 146,044 | 131,217 | 113,659 |
| South Atlantic Division | 49,580 | 100, 209 | 83, 168 | 263, 045 | 57,435 | 58,775 |
| South Central Division. | 23,350 | 11, 200 | 9,798 | 15,250 | 4,310 | 5,275 |
| North Central Division | 374, 799 | 390,165 | 288.250 | 203,669 | 97,504 | 133,375 |
| Western Division......- | 279,040 | 122, 300 | 179,500 | 115, 325 | 127,400 | 249,812 |
| North Atlantic Division: |  |  |  |  |  |  |
| Maine -.....-.... | 12,500 | 39,000 | 12,000 | 68, 000 | 41,090 | 740 |
| New Hampshi |  |  |  | 715 | 715 | 8,000 |
| Massachuset | 276,200 |  | 125, 000 | 10,000 | 0 | 53,300 |
| Rhode Island |  | 0 | 259,000 |  | 0 |  |
| Connecticut | 12\%, 060 | 240, 000 | 20,000 | 0 |  |  |
| New York.- | 97, 793 | 60, 142 | 140,869 | 16,895 | 55,587 | 18,732 |
| New Jersey | 10,000 384,87 | 10,693 100,124 | 1,249 | 50.1304 | 4,515 09400 | -4,000 |
| Pennsylvania - ....- Scuth Atlantic Division: | 324,877 | 100, 124 | 10,000 | 50, 104 |  |  |
| Delavare ........-. |  |  | 5,912 |  |  |  |
| Maryland - ${ }^{\text {Districtor }}$ Columia |  | 43,7\%6 | 1,631 | 0 | 2, 660 | 0 |
| District of Columbia |  | 0 |  |  |  |  |
| Virginia - ${ }^{\text {Wext }}$ Virgia | 5,050 20,090 | 42,000 | 5,125 55,000 | 166,405 61,400 | 45,500 |  |
| North Carolina | 4, 630 | 5,033 |  | -190 |  | 5,000 |
| South Carolina |  |  |  | 50 | 1,725 |  |
| Georgia | 2, 500 | 1,000 | 7,009 | 35, 000 |  | 456 |
| Florida - --.---.-. | 7,400 | 8,500 | 8, 00 |  | 5,000 |  |
| Kentucky | 2,500 |  |  | 2,700 | 800 | 800 |
| Alabama | 1,300 | 500 | 3,003 | 50 | 1,000 | 1,800 |
| Mississipli |  |  | 0 | 20 | 110 | 75 |
| Louisiana | 1,250 | 7,500 |  | 12, 480 |  |  |
| Texas -- | 3,000 | 3,000 | 2,500 | 0 | 2,000 | 2.000 |
| Arkansas Oklahoma | 1500 | 200 | 1,296 | 0 | 400 | 600 |
| Oklahoma Indian Territory | 15,000 |  | 3,000 | 0 |  |  |
| North Central Division: |  |  |  |  |  |  |
| Ohio ..... | 0 |  | 1,000 | 3,000 | 2,300 |  |
| Indiana | 40,000 | 20, 000 |  | 10,000 | 50 |  |
| Inlinois -- | 20, 000 | 40,000 20,100 | 47,000 | 56,000 25,1000 | 17,500 | 90,375 0 |
| Wisconsin | 20,000 | 12, \%36 | 155,800 | 55, 889 | 179,354 |  |
| Minnesota | 116, 000 | 54,500 | 11, 750 | 12,500 | 15,000 | 10,000 |
| Iowa. | 3,000 | 36,000 | 30,000 | 3,000 |  |  |
| Missouri | 104, 479 | 131,929 | 35, 400 | 6,280 | 3,000 | 1,000 |
| North Dakota | 18,220 |  |  | 0 | 300 | 2,000 |
| South Dakota | 3, 100 | 5,000 | 3,000 | 20,000 | 20,000 | 25,000 5,000 |
| Kansas | 50,000 |  | 4,300 | 12, 000 |  |  |
| Western Division: |  |  |  |  |  |  |
| Montana |  |  |  |  | 50, 000 |  |
| Wyoming |  |  |  |  |  |  |
| Colorado | 35,000 | 10,000 | 20,000 |  | 0 |  |
| New Mexico Arizona | 12,000 8,000 | 1,300 | 10,000 11,500 | 10,000 35,000 |  | 5,000 |
| Utah . |  |  | 11,00 | з5, | 58,500 | 23,000 |
| Nevada |  |  |  |  |  |  |
| Washington |  | 25, 609 | 70,000 | 1,000 |  |  |
| Oregon.-.- | 11,000 | 6,000 | 60,000 3,000 | $\stackrel{62,}{4}, 000$ | 2,850 | ${ }_{17} \mathbf{7}, 500$ |
| California | 78,000 | 80,000 | 5,000 | 2,500 | 0 | 197, 812 |

Table 9.-Summary of slatistics of private normal schools in 1898-99.
SCHOOLS AND INSTRUCTORS.

| State or Territory. |  | Teachers for normal students. |  |  | Teachers wholly for other departments. |  |  | Total number teachers employed. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Fe. male. | Total. | Male. | $\begin{aligned} & \mathrm{Fe}- \\ & \text { male. } \end{aligned}$ | Total. | Male. | $\begin{gathered} \mathrm{Fe} \text { - } \\ \text { male. } \end{gathered}$ | Total. |
| United States | 165 | 633 | 403 | 1,036 | 354 | 333 | 688 | 987 | 736 | 1,783 |
| North Atlantic Division.. | 10 | 56 | 5 | 108 | 23 | 23 | $4{ }^{\circ}$ | 73 | 5 | 154 |
| South Atlantic Division. | 33 | 57 | 78 | 135 | 36 | 102 | 138 | 93 | 180 | 273 |
| South Central Division | 46 | 136 | 101 | 237 | 89 | 114 | :03 | 295 | 215 | 440 |
| North Central Division | 72 | 356 | 159 | 515 | 185 | 91 | 276 | 541 | 250 | 791 |
| Western Divisioll....... | 4 | 28 | 13 | 41 | 21 | 3 | 24 | 49 | 16 | 65 |
| North Atlantic Division: Maine | 2 | 1 | 5 | 6 |  |  |  | 1 | 5 | 6 |
| New Hampshire |  |  |  |  |  |  |  |  |  |  |
| Vermont-.-...- |  |  |  |  |  |  |  |  |  |  |
| Massachusetts Rhode Island. | 3 | 4 | 21 | 25 | 1 | 1 | 2 | 5 | 22 | 27 |
| Connecticut.- |  |  |  |  |  |  |  |  |  |  |
| New York. | 1 | 27 | 21 | 48 | 3 | 15 | 18 | 30 | 36 | 66 |
| New Jersey |  |  |  |  |  |  |  |  |  |  |
| Pennsylvania -- | 4 | 24 | 5 | 29 | 19 | 7 | $\% 6$ | 43 | 12 | 53 |
| South Atlantic Division: Delaware |  |  |  |  |  |  |  |  |  |  |
| Maryland | 3 | 9 | 2 | 11 |  |  |  | 9 | 2 | 11 |
| District of Columbia | 2 | 0 | 8 | 8 | 0 | 12 | 12 | 0 | 20 | 20 |
| Virginia --- | 7 | 14 | 15 | 29 | 18 | 13 | 31 | 32 | 28 | ${ }_{60}$ |
| West Virginia. | $\stackrel{2}{2}$ | 6 | 5 | 11 | 0 | 2 | 2 | ${ }^{6}$ | 7 | 13 |
| North Carolina | 7 | 10 6 | 10 | 31 16 | 4 10 | $\stackrel{22}{22}$ | 26 | 14 | 43 | 58 |
| Georria. | 4 | 6 | 12 | 18 | 2 | $\stackrel{2}{2}$ | 23 | 8 | 33 | 41 |
| Florida.- | 3 | 6 | 5 | 11 | 2 | , | 8 | 8 | 11 | 19 |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 8 | 22 | 18 | 40 | 2 | 8 | 10 | 24 | 26 | 50 |
| Tennessee | 13 | 41 | 20 | 61 | 36 | 40 | 76 | 77 | 60 | 187 |
| Alabama | $\stackrel{2}{1}$ | 16 | 22 | 38 | 39 | 15 | 54 | 55 | 37 | 98 |
| Thississippi | 11 | 23 | 16 | 39 | 6 | 24 | 30 | 29 | 40 | 69 |
| Louisiana <br> Texas. | 6 | 17 | 14 | 31 | 5 | 18 | 23 | 22 | 32 | 5 |
| Arkansas. | G | 17 | 11 | 28 | 1 | 9 | 10 | 18 | 20 | 38 |
| Oklahoma |  |  |  |  |  |  |  |  |  |  |
| Indian Territory |  |  |  |  |  |  |  |  |  |  |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |
| Ohio | 11 | 71 | 20 | 91 | 14 | 7 | 21 | 85 | 27 | 112 |
| Indiana | 10 | 70 | 40 | 110 | 50 | 16 | 66 | 120 | 59 | 176 |
| Illinois | 8 | 40 | 20 | 60 | 24 | 8 | 32 | 64 | 28 | 92 |
| Michigan | 3 | 4 | 5 | 9 | 1 | 5 | 6 | 5 | 10 | 15 |
| Wisconsin | 2 | 14 | 1 |  | 0 | 7 | 7 | 14 | 8 | 22 |
| Minnesota | 2 | 7 | 0 | 7 | 3 | 1 | 4 | 10 | 1 | 11 |
| Iowa... | 18 | 75 | 33 | 108 | 36 | 24 | 60 | 111 |  | 168 |
| Missouri --... | 5 | 19 | 8 | 27 | 4 | , | 8 | 23 | 12 | 35 |
| North Dakota | 1 | 2 | 0 | $\stackrel{2}{2}$ | 4 | 1 | 5 | 6 | 1 | 7 |
| South Dakota |  | 2 | 1 | $\stackrel{3}{3}$ | 2 | 1 | 3 | 4 | 2 | 8 |
| Nebraska | 4 | 17 | 10 | 27 | 23 | 8 | 31 | 40 | 18 | 58 |
| Kansas ---..... | \% | 35 | 21 | 56 | 24 | 9 | 33 | 59 | 30 | 89 |
| Wester'n Divisioll: Montana |  |  |  |  |  |  |  |  |  |  |
| Wyoming |  |  |  |  |  |  |  |  |  |  |
| Colorado-... | 1 | 4 | 4 | 8 | 0 | 1 | 1 | 4 | 5 | 9 |
| New Mexico |  |  |  |  |  |  |  |  |  |  |
| Arizona | 2 | 23 | 8 | 31 | 21 | 2 | 23 | 44 | 10 | 54 |
| Nevada |  |  |  |  |  |  |  |  |  |  |
| Idaho |  |  |  |  |  |  |  |  |  |  |
| Washington. |  |  |  |  |  |  |  |  |  |  |
| Oregon ${ }_{\text {Califor }}$ |  |  |  |  |  |  |  |  |  |  |
| Califor'nia | 1 |  | 1 |  |  |  |  | 1 | 1 | 2 |

Table 10.-Stumary of statistics of prirate normal schools in 1898-99.
STUDENTS AND COURSES OF STUDY.


Table 11. -Summary of statistics of mivate normal schools in 1898-99.
TOTAL ENROLTIMENT OF STUDENTS, ETC.


Table 12.-Summary of statistics of private normal schools in 183S-93.
NUMBER OF NORMAL AND OTHER GRADUATES.

| C State or Territory. | Normal graduates. |  |  | Graduates in business courses. |  |  | Graduates in other courses. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | $\begin{aligned} & \text { Fe- } \\ & \text { male } \end{aligned}$ | Total. | Male. | $\begin{gathered} \mathrm{Fe}- \\ \text { male. } \end{gathered}$ | Total. | Male. | Female. | Total. |
| United States <br> North Atlantic Division South Atlantic Division. South Central Division North Central Division Western Division | 1,129 | 1,098 | 2,227 | 1,147 | 482 | 1,629 | 795 | 455 | 1,250 |
|  | 49 | 197 193 | 176 | 87 | 63 5 | 150 | 30 | 33 | ${ }_{17}^{63}$ |
|  | 156 | 117 | 273 | 108 | 59 | $16^{\prime \prime}$ | 120 | 76 | 196 |
|  | 850 | 645 | 1,495 | 934 | 343 | 1,2\%\% | 623 | 310 | 933 |
|  | 4 | 16 | 120 | 16 | 12 | 128 | 15 | 26 | 41 |
| North Atlantic Division: Maine |  |  |  |  |  |  |  |  |  |
|  | 3 | 6 | 9 |  |  |  |  |  |  |
| New Hampshire <br> Vermont <br> Massachusetts |  |  |  |  |  |  |  |  |  |
|  | 0 | 70 | 70 |  |  |  |  |  |  |
| Rhode Island |  |  |  |  |  |  |  |  |  |
| Connecticut New York | 2 | 32 | 54 | 0 | 0 |  | 7 | 12 | 19 |
| New Jersey | 2 | 3 | 54 | 0 | 0 | 0 | $\gamma$ | 12 |  |
| Pennsylvania <br> South Atlantic Division: | 24 | 19 | 43 | 87 | 63 | 150 | 23 | 21 | - |
|  |  |  |  |  |  |  |  |  |  |
| Maryland ${ }_{\text {District of }}$ Columbia. | 14 | 3 | 17 |  |  |  |  |  |  |
|  | ${ }^{0}$ | 29 | 29 | 0 | 0 | 0 | 0 | 0 |  |
| Virgınia --......---. | 11 | 28 | 39 | $\stackrel{2}{0}$ | 0 | 2 | 5 | 4 |  |
| West Virginia <br> North Carolina | 3 20 | 45 | ${ }_{5}^{7}$ | 0 0 | 0 5 | 5 | 0 | 5 |  |
| North Carolina....-.-- | 7 | 30 | ${ }_{37}^{7}$ | 0 | $\stackrel{8}{0}$ | 0 | $\stackrel{1}{2}$ | 5 |  |
| Georria... | 4 | 55 | 59 | 0 | 0 | 0 | 0 | 0 |  |
| South Central Division: | 11 | 9 | 20 | 0 | 0 | 0 | 0 | 0 |  |
|  | 20 | 13 | 33 | 65 | 49 | 114 | 0 | 0 |  |
| Kentucky-............- | 40 | 35 | 75 | 16 | 4 | $\stackrel{2}{20}$ | 70 | 41 | 111 |
| Tennessee -.-.-.----------- | 5 | 3 | 8 | 0 | 0 | 0 | 29 | 26 | 11 |
| Mississippi | 51 | 43 | 94 | 4 | 0 | 4 | 9 | 2 | 11 |
| Louisiana. | 12 | 11 | 23 | 10 | 1 | 17 |  |  |  |
| Arkansas <br> Ollahoma | 28 | 12 | 40 | 7 | 5 | 12 | 12 | 7 | 19 |
|  |  |  |  |  |  |  |  |  |  |
| Oklahoma Indian Territory |  |  |  |  |  |  |  |  |  |
| Norttl Central Division: <br> Ohio | 158 | 82 | 240 | 122 | 35 | 157 |  | 64 | $31 \%$ |
|  | 335 | 240 | 575 | 475 | 145 | 620 | 267 | 121 | 388 |
| Illinois --- | 86 | 61 | 147 | 24 | 12 | 36 | 9 | 5 | 14 |
|  | 17 | 22 | 39 | 12 | 5 | 17 | 11 | 19 | 30 |
| Wisconsin | 17 | 10 | 27 | 0 | 0 | 0 | 0 | 0 |  |
| Minnesota | 14 | 5 | 19 | 0 | 0 | 0 | 0 | 0 |  |
| Iowa ${ }^{\text {Missouri }}$ | 75 | 60 | 135 | 96 | 57 | 153 | 32 | 41 | 73 |
|  | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 |  |
| Missouri - ${ }^{\text {North Dakota }}$ |  |  |  | 8 | 3 | 11 |  |  |  |
| Nouth Dakota |  | 12 | 17 | ${ }^{0}$ | ${ }^{0}$ | 0 | 0 | 0 |  |
| Kansas <br> Western Division: | $\stackrel{95}{47}$ | 100 52 | 195 99 | 143 54 | $\stackrel{59}{27}$ |  | $\stackrel{20}{31}$ | 31 29 | 51 |
|  |  |  |  |  |  |  |  |  |  |
| Montana |  |  |  |  |  |  |  |  |  |
| Colorado <br> New Mexi | 0 | 5 | 5 | 1 | 0 | 1 | 0 | 10 | 16 |
| Arızona.. |  |  |  |  |  |  |  |  |  |
| Nevad | 4 | 1 | 5 | 13 | 10 | 23 | 15 | 10 | 25 |
|  |  |  |  |  |  |  |  |  |  |
| $\underset{\text { Idaso. }}{ }$ |  |  |  |  |  |  |  |  |  |
| Oregon |  |  |  |  |  | 4 | 0 | 0 |  |
|  |  |  | 10 |  |  | 4 | 0 | 0 |  |

Table 13. -Summary of statistics of private normal schools in 1898-92.
INCOME FROM VARIOUS SOURCES.

| State or 'Territory. |  | Appropri ated by States, counties, or cities for sup. port for, 1893-99. |  | Received flom tuition and other tees. |  | ```Received from pro- ductive funds.``` | $\left\|\begin{array}{c\|} \hline 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ y \\ y \\ y \end{array}\right\|$ | Received from other solurees, and unclassi- fied. |  | Total income for the year 1898-99. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States | 28 | 824,823 | 105 | \$590, 402 | 14 | 847, 997 | 40 | \$258, 251 | 118 | S921,4\% |
| North Atlantic Division. | 3 | 2,150 | 6 | 126,573 | 2 | 630 | 2 | 15,371 | 7 | 144, 721 |
| South Atlantic Division- | 7 | 4.991 | 22 | 126,858 | 4 | 2, 843 | 15 | 41,441 | 26 | 76,133 |
| South Central Division.- | 14 | 10,982 | 34 | 81), 687 | 4 | 6,561 | 9 | 133,426 | 38 | 231, 656 |
| Noirth Central Division.- | 4 | 6,700 | 40 | 336, 703 | 4 | 37,9033 | 12 | 48,013 | 44 | 429,381 |
| Western Division......-. |  |  |  | 19,579 |  |  |  | 20, (1)0 |  | 39,579 |
| North Atlantic Division: Maine | 2 | 1,950 | 2 | 375 | 1 | 100 |  |  | 2 | 2,425 |
| New Hampshire -...- |  |  |  |  |  |  |  |  |  |  |
| Miassachusetis |  |  |  |  |  |  | 1 | 13,359 | 1 | 13,359 |
| Rhode Island. |  |  |  |  |  |  |  |  |  |  |
| Connecticut |  |  |  |  |  |  |  |  |  |  |
| New York. | 1 | 200 | 1 | 95, 475 | 1 | 530 | 1 | 2,012 | 1 | 98,217 |
| New Jersey |  |  | 3 | 723 |  |  |  |  | 3 |  |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |  |
| Delaware.............. | -1 |  |  |  | 1 |  |  |  |  |  |
| District of Coiumbia- |  | , | 1 |  |  | 0 | $1-$ | 250 | 1 | 1,000 |
| Virginia. |  |  | 6 | 11,679 |  |  | 3 | 13,930 | 6 | 25, 609 |
| West Virginia | 1 | 1,000 | 2 | 2,521 | 1 | 1,856 | 1 | 1,268 | 2 | 6,645 |
| North Carolin | 2 | 241 |  | 1,225 |  |  | 3 | 4,032 | 4 | 5,498 |
| South Carolina | 1 | 150 | 5 | 3, 737 | 1 | 587 | 3 | 9, 200 | 5 | 13, 674 |
| Georgia |  |  |  | 3,586 | 1 | 150 | 3 | 9,361 |  | 13,097 |
| Florida.. | 2 | 1,600 | 2 | 2,860 |  |  | 1 | 3, 400 | 3 | 7,860 |
| South Central Division: |  |  | 6 | 7,160 | 1 | 240 | 2 | $61 \%$ | 6 | 8.017 |
| Tennessee | 5 | 3,062 | 8 | 25, 759 |  |  | 4 | 20,694 | 9 | 55,515 |
| Alabama | 1 | 4,500 | 1 | \% 388 | 1 | 1,921 | 1 | 98,390 | 2 | 105, 199 |
| Mississippi | 5 | 1,970 | 9 | 17,855 |  |  |  |  | 10 | 19,825 |
| Louisiana |  |  | 4 | 13,500 | 1 | 2,400 |  | 6.000 |  |  |
| Arlansas | 3 | 1,450 | 6 | 16,025 | 1 | 2,000 | 2 | 1,725 | 6 | 21,200 |
| Oklahoma |  |  |  |  |  |  |  |  |  |  |
| Indian Territory |  |  |  |  |  |  |  |  |  |  |
| North Central Division: Ohio | 2 | 3,200 |  | 69,810 |  |  |  |  |  |  |
| Indiana. |  |  | 5 | 126,385 | 1 | 21,38 | 1 | 500 | 5 | 148,269 |
| Illinois |  |  |  | 22, 900 |  |  | 1 | 650 | 4 | 23,550 |
| Michigan |  | 0 | 2 | 11,884 |  |  |  | 500 | 3 | 12, 384 |
| Wisconsin |  |  |  |  | 1 | 6,279 |  | 30, 363 | 1 | 36,642 |
| Minnesota |  | 0 | 1 | 1,400 |  |  | $\stackrel{2}{2}$ | 6,000 | $\stackrel{2}{9}$ | 7. 400 |
| Iowa ... |  | 0 | 9 | 34,645 | 1 | 10,000 | , | 200 | 9 | 45,345 |
| Missouri-...-. |  |  | 3 | 16,220 |  |  | 1 | 5,000 | $3$ | 21,220 |
| North Dakota South Dakota |  |  | 1 | 5,010 |  |  |  |  | $\frac{1}{1}$ | 5,000 4,500 |
| South Dakota Nebraska ... | 1 | 3,000 | 1 | 1,510 12,840 |  | 0 |  | 0 | 1 | 4,500 12,840 |
| Kansas ---.-.-. | 1 | 500 | 7 | $34,1: 1$ | 1 | 300 | 1 | 200 | 7 | 35, 121 |
| Western Division: Montana |  |  |  |  |  |  |  |  |  |  |
| Wyoming |  |  |  |  |  |  |  |  |  |  |
| Colorado --- |  |  |  |  |  |  |  |  |  |  |
| New Mexico <br> Arizona |  |  |  |  |  |  |  |  |  |  |
| Utah |  |  | 2 | 18,500 |  |  | 2 | 20,000 | 2 | 38,500 |
| Nevada |  |  |  |  |  |  |  |  |  |  |
| Idaho |  |  |  |  |  |  |  |  |  |  |
| Washington |  |  |  |  |  |  |  |  |  |  |
| Oregon---- California |  | 0 | 1 | 1,079 |  | ( |  | 0 | 1 | 1,679 |
|  |  |  |  |  |  |  |  |  | 1 | 1,009 |

TABLE 14.-Summary of statistics of private nornal schools in 1893-93.
VALUE OF BUILDINGS AND OTHER PROPERTY.

| Stato or Territors. |  | $\begin{aligned} & \text { Volumes } \\ & \text { in libra- } \\ & \text { ries. } \end{aligned}$ | Estimated value of libraries. |  | Value of buildings, grounde, apparatus, etc. |  | Value of benefactions received, 1898-99. |  | Total money value of endowment. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States. | 128 | $\because 06,893$ | \$181,573 | 133 | ¢5, 831,885 | 24 | \$123,755 | 23 | \$2, $508,714$. |
| North Atlantic Division. South Atlantic Division South Central Division. North Central Division Western Division ....... | $\begin{array}{r} 8 \\ 27 \\ 36 \\ 36 \\ 51 \\ 3 \\ \hline \end{array}$ | $\begin{aligned} & 34,037 \\ & 25,961 \\ & 43,861 \\ & 41.314 \\ & 9,769 \\ & 7,69 \end{aligned}$ | $\begin{array}{r} 24,021 \\ 23,15 \\ 41,650 \\ 103,078 \\ 9,000 \end{array}$ | $\begin{array}{r} 78 \\ 28 \\ 42 \\ 52 \\ 4 \\ \hline \end{array}$ | $1,527,300$ 584,603 $1,04,223$ $2,471,2003$ 155,000 | $\begin{aligned} & 2 \\ & \underset{\sim}{7} \\ & 5 \\ & 9 \\ & 1 \end{aligned}$ | $\begin{gathered} 270,607 \\ 2,414 \\ 103,406 \\ 45,968 \\ 1,700 \end{gathered}$ | $\begin{array}{r} 1 \\ 8 \\ 7 \\ 11 \\ 1 \\ \hline \end{array}$ | $1,353,160$ 404,06 312,250 420,54 18,845 |
| INorth Atiantic Division: Maine New Rampshire Vermont | 3 | 211 | $2 \% 1$ | 2 | \%,800 |  |  |  |  |
| Massachusetts....... <br> Rhode island | 2 | 4,000 | 3,200 | 1 | \%,000 | -- |  |  |  |
| Conmecticat New York. New Jersey | 1 | 11,7\%6 | 13,500 | 1 | 1,189,500 | 1 | 268, 860 | 1 | 1,353,164 |
| Pennsylvania Soath Atlantic Division: Delaware $\qquad$ | 3 | 18,050 | \%\%000 | 3 | 2-0,000 | 1 | 1,747 |  |  |
| Maryland ${ }^{\text {Districtofo.......-. }}$ | $9$ | 7,500 | 8,000 | $\sim$ | 61,000 |  |  |  |  |
| Virginia. . | 5 | 1,607 | \%65 | $\gamma$ | 142,800 |  |  | 2 | 135,090 |
| West Virginia | 2 | 5,250 | 5,500 | 2 | 55, 000 | 1 | 149 | 1 | 100,000 |
| North Carolina | 6 | 3,100 | 2, 350 | 6 | 139,062 | 3 | 975 |  |  |
| South Carolina | 4 | 2,300 | 2,850 | 5 | 78,000 | $\stackrel{2}{2}$ | 1,130 | , | 81,000 |
| Georpia | 4 | 4. 769 | 2, 1,400 | 9 | 69,960 | 1 | 160 | , | 60, 000 |
| South Central Division: | - |  |  |  |  |  |  |  |  |
| Kentucky ---.-.......- | 5 | -2, 250 | 1,830 | 11 |  | 1 |  | 2 | 12,000 |
| Tennessee | 11 | 13,745 | 17, 475 | 11 | 375,300 | 1 | 4,800 | , | 100,000 |
| Alatama- | \% | 6,200 6,720 | 6, 4,945 | $1{ }^{2}$ | $\begin{aligned} & 262,319 \\ & 168,900 \end{aligned}$ | 1 | 97,231 | 1 | 68, 25.5 |
| Louisiana . |  |  |  |  |  |  |  |  |  |
| Texas. | 4 | 5, 400 | 5,250 | 6 | 151,000 |  |  | 1 | 34,000 |
| Arlkansas | 6 | 6,460 | 5, 950 | 6 | 91,500 | 2 | 1,035 | 1 | 96,000 |
| Ondian Territory |  |  |  |  |  |  |  |  |  |
| North Centrallivision: |  |  |  |  |  |  |  |  |  |
| Ohio --- | 7 | 220000 | 24, 150 | 8 | 20\%, 500 |  |  | , | 50, 060 |
| Indiana | 7 | 20, 340 | 28,712 | ${ }_{6}$ | 6\%3), 000 | $\because$ | 240 | $\stackrel{3}{2}$ | 33, 000 |
| Michigan | 3 | 2, 350 | 3,500 | 3 | + |  |  |  | 90,000 |
| Wisconsin | 2 | 3,540 | 4,000 | 1 | 1, 5tio | 1 | 8, $0 \cdot 3$ | 1 | 192,23 |
| Minnesot | 13 | 90 | 500 | 8 | 60, 0009 | 2 | 6,000 | 2 | 3£,000 |
| Iowa - | 13 | 17,650 | 15, 975 | 13 | 402, 000 |  |  | 1 | 4,650 |
| Missouri | 2 | 800 | 1,200 | 5 | 61,200 |  |  |  |  |
| North Dakota South Dakota | 1 | 1,000 | 1,300 | 1 | 25,000 | -- | 0 |  |  |
| Nebraska... | 1 | \%,200 | 4,250 | 4 | 327, 010 |  |  |  |  |
| Kansas.- | 7 | 10,500 | 12,309 | 7 | ? 207 , 0 (6) | 4 | 9,200 | 2 | 66,709 |
| Western Division: |  |  |  |  |  |  |  |  |  |
| Wyoming. |  |  |  |  |  |  |  |  |  |
| Colorado... <br> New Mexico | 1 | 500 | 1,000 | 1 | 2,000 | --. |  |  |  |
| Arizon |  |  |  |  |  |  |  |  |  |
| Utah | 1 | 6,000 | 7,000 | 2 | 138,000 | 1 | 1,700 | 1 | 18,745 |
| Idaho |  |  |  |  |  |  |  |  |  |
| Washington |  |  |  |  |  |  |  |  |  |
| Oregon-... | 1 | 1,200 | 1,000 | 1 | 20,000 |  | 0 |  |  |

TAbLe 15.-Percentage of male and female students and percentage of gradrates to total number in normal course in pullic and private normal schools in 1898-93.

| State or Territory. | In public normal schools. |  |  | In prirate normal schools. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male. | Fernale. | Gradurates. | Male. | Female. | Graduates. |
| United States | 25.76 | 74.24 | 19.97 | 50.18 | 49.8\% | 9.45 |
| North Atlantic Division South Atlantic Division South Central Division North Central Division Western Division. | $\begin{aligned} & 23.95 \\ & 27.20 \\ & 30.26 \\ & 26.58 \\ & 20.85 \end{aligned}$ | $\begin{aligned} & 76.05 \\ & 76.80 \\ & 6.61 \\ & 6.64 \\ & 79.45 \\ & 79.15 \end{aligned}$ | $\begin{aligned} & 26.26 \\ & 1265 \\ & 11.09 \\ & 1.09 \\ & 15.50 \\ & 28.25 \end{aligned}$ | $\begin{aligned} & 19.91 \\ & 36.95 \\ & 5.70 \\ & 54.90 \\ & 39.71 \end{aligned}$ | $\begin{aligned} & 80.19 \\ & 63.25 \\ & 43.30 \\ & 45.10 \\ & 4.10 \\ & 6.20 \end{aligned}$ | $\begin{array}{r} 7.87 \\ 16.64 \\ 6.57 \\ 10.08 \\ 8.58 \end{array}$ |
| North Atlantic Division: Maine New Hampshire | 13.14 1.94 | 80.88 98.03 | $\begin{aligned} & 21.29 \\ & 20.39 \end{aligned}$ | 45.00 | 2u. 60 | 20.5 |
| Vermont -...-...- | 13.79 | 86. 21 | 34.10 |  |  |  |
| Massachaseits | 3.94 | 96.05 100.00 | 31.13 5.91 | 0 | 100.00 | 44.03 |
| Connecticut.- | . 5 | 100.60 | 35.48 |  |  |  |
| New York... | 19.58 | 80.48 | 28.13 | \%.33 | 92.6 | 3.88 |
| New Jersey - | 8.99 | 91.01 | 43.89 |  |  |  |
| Pennstlvania--...... | 30.53 | 63.47 | 20.41 | 50.47 | 49.53 | 6.68 |
| Douth Atlantic Division: | 0 | 100.00 | 60.00 |  |  |  |
| Maryland | 3.80 | 36.80 | 21.67 | 45.57 | 51.43 | 21.5 |
| District of Columbia | 8.218 | 91.76 | 42. 91 |  | 109.00 | 67.44 |
| Virginia....-- | 23.03 | \%\%.92 | 21.10 3.36 | 30-82 | 63.18 <br> $5 \%$ | 11.57 |
| North Carolin | 16.39 | 83.70 | 6.91 | 32.24 | 6.76 | 15.03 |
| South Carolin |  | 100.00 | 30.51 | 41.41 | 58.59 | 37.37 |
| Georgia | 28.61 | 71.39 | 11.57 | 30.32 | 69.68 | 21.30 |
| South Centraidivision: | 36.44 | 63.54 | 5.08 | 55.20 | 44.80 | 16.00 |
| Kentucky ............ | 44.66 | 53. 24 | 19.63 | 64.43 | 35.57 | 4.51 |
| Tennessee | 34.78 | 65.23 |  | 51.33 | 48.67 | 6.24 |
| Alabama | 35.49 51.09 | 64.51 48.91 | 15.68 | 6.10 54.0 | 37.90 45.94 | 16.61 |
| Louisiana. | 14.83 | 85.17 | 22.47 |  |  |  |
| Texas.. | 33.45 | 66.54 | 22.56 | 67.81 | 42.16 | 3.65 |
| Arkansas. | 60.61 | 39. 39 | 吹. 73 | 53.56 | 46.44 | 8.64 |
| Oklahoma | 42. | 53. 18 | 4.88 |  |  |  |
| Indian Territory -- |  |  |  |  |  |  |
| North Cental Division: Ohio | 2.01 | 97.90 | 43.10 |  |  |  |
| Indiana. | 36.98 | 63.00 | 1.70 | $5 \% .35$ | 42.63 | 15.95 |
| Tllinois - | \%6. $2 \pm$ | 73. 76 | 29.86 | 42.45 | $5 \% .55$ | 11.37 |
| Michigan. | 17.26 | 82. 74 | 35.86 | 40.08 | 59.98 | 7.41 |
| Wisconsin | 28.51 | 71.49 | 18. 68 | 6i5. 82 | 34.18 | 34.18 |
| Minnesota | 哏. 4.56 | 79.53 75.44 | 12.51 | 61. 4.71 | 50.29 | 34.55 5.28 |
| Missouri | 39.31 | 60.69 | 9.81 | 42.07 | 57.93 | 1.38 |
| North Dakota | 27.51 | 72. 49 | 12.17 | 71. 43 | 28.5\% |  |
| South Dakota | 27.64 | 72.3 | 4. 58 | 53.45 | 45.55 | 29.31 |
| Nebraska | 26.64 | 73.36 |  | 42.02 | 57.98 | 12.25 |
| Kansas --..... | 29.83 | 70.17 | 6.23 | 45.53 | $54.4 \%$ | 16.39 |
| Western Division: Montana | 7. 69 | 92.81 | 2.31 |  |  |  |
| Wyoming |  |  |  |  |  |  |
| Colorado | 15.17 | $8 \pm .83$ | 21.67 | 26.10 | 53.84 | 2.03 |
| New Mexico | 28.57 | ${ }^{71} .43$ |  |  |  |  |
| Arizona | 31.07 54.14 | 62. 43 47.86 | 17.58 | 48.13 | 51.87 | 3 |
| Nerada |  |  |  |  |  |  |
| Idaho. | 39.07 | 60.93 | 19.21 |  |  |  |
| Washington <br> Oregon | $21.43$ | 78.57 61.85 | ${ }^{9} 90.32$ |  |  |  |
| Oregon California | 11. 6.2 | 61.85 88.38 | 8.41 | 0 | 100.00 | 45.45 |

Tabie 16．－Normal students in universities and colleges and public and private high schools in 1898－99．

| State or Territory． | In universities and colleges． |  |  |  | In public high schools． |  |  |  | In private high schools． |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { 品 } \\ \stackrel{y}{尸} \end{gathered}$ |  |  |  | \％ |  |  |  |  | 或 | $\begin{aligned} & \text { ei } \\ & \stackrel{\text { Hen }}{ } \end{aligned}$ |  |
| United States | 235 | 4， 138 | 5，363 | 9，501 | 544 | 2，633 | 6，297 | 8，930 | 378 | 2，955 | 3，931 | 6，886 | 25， 317 |
| North Atlantic Division． | 30 | 730 | 617 | 1，347 | 145 | 341 | 2，839 | 3，180 | 79 | 639 | 1，0\％ 6 | 1，715 | 6，242 |
| South Atlantic Division． | 33 | 533 | 670 | 1，203 | 58 | 245 | 526 | \％ 71 | 67 | 396 | 1.549 | 1945 | 2，919 |
| South Central Division．． | 48 | 501 | 745 | 1，246 | 139 | 1，028 | 1，151 | 2，179 | 113 | 1，075 | 1，035 | 2，110 | 5，535 |
| North Central Division．－ | 97 | 1，80\％ | 2，070 | 3，872 | 194 | 1，010 | 1，727 | 2， 337 | 95 | 736 | 1，063 | 1，802 | 8，411 |
| Western Division．．．．．．．．－ | 27 | 572 | 1，261 | 1，833 | 8 | 1， 9 | ， 54 | 63 | 24 | 109 | 205 | 314 | 2，210 |
| North Atlantic Division： Maine | 1 | 0 | 8 | 8 | 8 | 14 | 83 | 97 | 4 | 22 | 101 | 123 | 228 |
| New Hampshire |  |  |  |  | 0 | 0 | 0 | 0 | 2 | 0 | 10 | 10 | 10 |
| Vermont－． |  |  |  |  | 17 | 22 | 121 | 143 | 8 | 2 | 49 | 72 | 215 |
| Massachusetts | 3 | 113 | 127 | 240 | 8 | 11 | 394 | 405 | 4 | 5 | 18 | 23 | 668 |
| Rhode Island． | 1 | 40 | 12 | 52 | 1 | 1 | $\stackrel{2}{2}$ | ${ }_{3}^{3}$ | 1 | 0 | 3 | 3 | 58 |
| Connecticut |  |  |  |  |  | 0 | 36 | 36 | 3 | 2 | 7 | 9 | 45 |
| New York． | 11 | 434 | 391 | 825 | 70 | 201 | 1，566 | 1， 767 | 19 | 56 | 218 | 274 | 2，866 |
| New Jersey． | 12 | 8 | 14 | 22 | ${ }_{2}^{10}$ | ${ }_{5}^{33}$ | 238 | 271 | 4 | 3 | 39 | 42 | 1335 |
| Pelnsylvania－－．．．．．． | 12 | 13\％ | 65 | 200 | 27 | 59 | 399 | 458 | $3 \pm$ | 528 | 631 | 1，159 | 1，817 |
| South Atlantic Division： Delaware．．．．．．．．．．． |  |  |  |  | 1 | 1 | 3 | 4 |  |  |  |  | 4 |
| Maryland．． | 1 | 3 | 41 | 44 | 2 | 5 | 68 | 73 | 5 | 8 | 15 | 23 | 140 |
| District of Columbia | 1 | 5 | 4 | 9 | 0 | 0 | 0 | 0 | 1 | 2 | 10 | 12 | 21 |
| Virginia | 4 | 156 | 45 | 201 | 11 | 71 | 137 | 218 | 12 | 42 | 88 | 130 | 579 |
| West Virginia | 1 | 15 | 10 | 25 | 3 | 10 | 12 | 22 | 2 | 12 | 43 | 55 | 102 |
| North Carolina | 6 | 134 | 261 | 395 | 0 | 0 | 0 | 0 | 23 | 170 | 152 | 322 | 717 |
| South Carolina | 5 | 80 | 56 | 136 | 8 | 8 | 63 | 71 | ${ }^{6}$ | 78 | 127 | 205 | 412 |
| Georgia | 11 | 113 | 178 | 291 | 20 | 80 | 109 | 189 | 15 | 74 | 84 | 158 | 638 |
| Florida． |  | 27 | 75 | 102 | 8 | 70 | 94 | 164 | ， | 10 | 30 | 40 | 306 |
| South Central Division： Kentucky | 9 | 176 | 170 | 346 | 19 | 202 | 201 | 403 | 2 | 302 | 245 | 547 | 1，296 |
| Tennessee | 15 | 152 | 208 | 360 | 24 | 182 | 179 | 361 | 24 | 199 | 142 | 341 | 1，062 |
| Alabama |  | 4 | 9 | 13 | 9 | 56 | 84 | 140 | 12 | 68 | 80 | 148 | 301 |
| Mississippi | 7 | 31 | 168 | 199 | 29 | 176 | 233 | 399 | 21 | 159 | 248 | 407 | 1，005 |
| Louisiana | ${ }^{2}$ | 8 | 29 | ${ }^{37}$ |  | 11 | 10 | 21 | ${ }^{6}$ | 50 | 63 | 113 |  |
| Texas．－．．－ | 11 | 117 13 | 143 18 | 200 31 | 39 15 | 273 124 | 323 127 | 596 291 | $\stackrel{21}{6}$ | $2: 8$ 65 | 201 56 | 4 | 1，285 |
| Alkansas | ${ }_{0}$ | 0 | 0 |  |  |  |  |  |  |  | 50 |  |  |
| Indian Territory |  |  |  |  | 1 | 4 | 4 | 8 | 1 | 4 | 0 | 4 | 12 |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio－－－ | 15 | 305 | 259 | 564 | 58 | 267 | 434 | 701 | 10 | 86 | 86 | 172 | 1，437 |
| Indiana | 6 | 147 | 87 | 234 | 16 | 28 | 49 | 77 | 8 | 179 | 137 | 316 | 1， 627 |
| Illinois | 15 | 295 | 455 | 750 | 17 | 79 | 204 | 283 | 18 | 39 | 144 | 183 | 1，216 |
| Michigan | 5 | 45 | 66 | 111 | 20 | 52 | 163 | 215 | ， | 74 | 119 | 193 | 519 |
| Wisconsin | 4 | 79 | 56 | 135 | 12 | 90 | 151 | 251 | 4 | 15 | 28 | 43 | 429 |
| Minnesot | 5 | 104 | 56 | 160 | ${ }^{6}$ | 11 | 60 | 61 | 4 | 43 | 58 | 101 | $32 \%$ |
| Iowa．．． | 12 | 291 | 360 | 651 | 18 | 56 | 161 | 217 | 12 | 69 | 132 | 201 | 1，069 |
| Missouri－ | 11 | 190 | 178 | 368 | 15 | 89 | 168 | 257 | 18 | 113 |  | 272 | 897 |
| North Dakot | 1 | 5 | 20 | 25 | 2 | 2 | 10 | 12 | 2 | 11 | 18 | 29 | ${ }_{6}^{66}$ |
| South Dakot | 5 | 42 | 74 | 116 | 1 | $\stackrel{2}{2}$ | 2 | 4 | ${ }^{\circ}$ | 64 | 122 | 186 | 306 |
| Nebraska．．．．．． | 7 | 99 | $\stackrel{211}{218}$ | 340 | 16 | 135 | 24 | 159 | 4 | $9_{4}^{9}$ | 48 | 24 | 523 1,000 |
| Western Division： | 11 | 200 | 218 | 418 | 13 | 199 | 301 | 500 | 5 | 34 | 48 | 82 | 1，000 |
| Montana | 3 | 4 | 23 | 27 |  |  |  |  | 1 | 0 | 3 | 3 | 30 |
| Wyoming | 1 | 1 | 25 | 26 |  |  |  |  | 1 | 0 | 11 | 11 | 37 |
| Colorado | 2 | 10 | 21 | 31 | 1 | 0 | 14 | 14 | 1 | 0 | 11 | 11 | 56 |
| Newr Mexico | 2 | 7 | 14 | 21 |  |  |  |  |  |  |  |  | 21 |
| Atah．．． | 2 | 154 | 313 | 467 |  |  |  |  | 3 | 43 | 40 | 83 | 550 |
| Nevada | 1 | 8 | 57 | 65 |  |  |  |  |  |  |  |  | 65 |
| Idaho |  |  |  |  |  |  |  |  | 2 | 11 | 13 | 24 | 24 |
| Washingt |  | 65 | 51 | 116 |  | 1 | 14 | 15 | 3 | 6 | 11 | 17 | 148 |
| Oregon ${ }_{\text {California }}$ | 4 | 30 | 88 | 118 | 1 | 8 | 10 | ${ }_{2} 10$ | 9 4 4 | $\stackrel{47}{2}$ | 100 | 147 18 | 1275 |
| California | 7 | 293 | 669 | 962 | 4 | 8 | 16 | 24 | 4 | 2 | 16 | 18 | 1，004 |

Table 1i.-Distribution of students pursuing teachers' training courses in various institutions in 1898-92.

| State or Territory. | In public normal schools. | In private norinal schools. | In universities and colleges. | In public ligh schools. | In plivate high schools. | Total normal students. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States -- | 44, 808 | 23,5\% | 9,501 | 8,930 | 6,886 | 93, 697 |
| North Atlantic Division. | 17,714 | 2,235 | 1,347 | 3,180 | 1,715 | 26,191 |
| South Atlantic Division. | 3,794 | 1,581 | 1,203 | \% $\% 71$ | 1,945 | 8,294 |
| South Central Division. | 3,2\%2 | 4,155 | 1, 246 | 2,179 | 2,110 | 12,962 |
| North Central Division | 16,325 | 14,826 | 3,87\% | 2,737 | 1, 80, | 39, 562 |
| Western Division....- | 3,703 | 775 | 1,833 | 63 | 314 | 6, 688 |
| North Atlantic Division: |  |  |  |  |  |  |
| Maine | 700 | 40 | 8 | 97 | 123 | 968 |
| New Hampshire | 103 |  |  | 0 | 10 | 113 |
| Vermont ------ | 261 |  |  | 143 | $\%$ | 476 |
| Massachusetts | 1,421 | 159 | 240 | 405 | 23 | 2,248 |
| Rhode Island. | 179 |  | 52 | 3 | 3 | 230 |
| Connecticat. | 575 |  |  | 36 | 9 | 620 |
| New Yoik. | 5, 888 | 1,392 | 825 | 1,767 | 274 | 10,146 |
| New Jersey | -. 868 |  | $\xrightarrow{23}$ | 971 | 42 | 1,203 |
| Pennsylyania | \%,7\%6 | 644 | 200 | 458 | 1,159 | 10,187 |
| South Atlantic Division: | $2 \pi$ |  |  | 4 |  | 29 |
| Maryland | 406 | \%9 | 44 | 73 | 23 | 625 |
| District of Columbia | 170 | 43 | 9 | 0 | 12 | 234 |
| Virginia --.-------- | 308 | 337 | 201 | 248 | 130 | 1,224 |
| West Virginia | 1,011 | 25.5 | 20 | 22 | 55 | 1,368 |
| North Carolina | 810 | 366 | 395 | 0 | 320 | 1,893 |
| South Carolina | 177 | 99 | 136 | r1 | 205 | 688 |
| Georgia | 769 | 277 | 291 | 189 | 158 | 1,684 |
| Flolida ----.....--- | 118 | 125 | 102 | 164 | 40 | 549 |
| South Cential Division: |  |  |  |  |  |  |
| Kentucky | 383 | \%31 | 346 | 403 | 547 | 2,409 |
| Tennessee | 604 | 1,20\% | 360 | 361 | 341 | 2,868 |
| Alabama | 817 | 562 | 13 | 140 | 148 | 1,680 |
| Mississippi | 184 | 566 | 199 | 399 | 407 | 1,755 |
| Louisiana. | 445 |  | 37 | 21 | 113 | - 616 |
| Texas..-- | 503 | 631 | 260 | 596 | 429 | 2,439 |
| Arkansas. | ${ }^{60}$ | 463 | 31 | 91 | 121 | 382 |
| Indian Territory | $\cdots$ |  |  | 8 | 4 | 12 |
| North Central Division: |  |  |  |  |  |  |
| Ohio .- | 587 | 4, 104 | 564 | 701 | 172 | 6,128 |
| Indiana. | 1,179 | 3,7\%0 | $23 \pm$ | 77 | 316 | 5,576 |
| Illinois | 1,768 | 1,993 | 750 | 283 | 183 | 4,277 |
| Michigan | 1,199 | 524 | 111 | 215 | 193 | 2,24\% |
| Wisconsin | 2,799 | 79 | 135 | 251 | 43 | 3,237 |
| Minnesota | 2,135 | 55 | 160 | 61 | 101 | 2,512 |
| Iowa---- | 2,097 | 2,567 | 651 | 217 | 201 | 5,733 |
| Missouri | 1, 600 | 145 | 368 | 257 | $27 / 2$ | 2,642 |
| North Dakota | 378 | 35 | 25 | $1 \%$ | 29 | 479 |
| South Dakota | 568 | 58 | 116 | 4 | 186 | 933 |
| Nebraska | 657 | 1,592 | 340 | 1.59 | 21 | 2,77\% |
| Kansas | 1,428 | 604 | 418 | 500 | $8: 2$ | 3,03\% |
| Westeln Division: |  |  |  |  |  |  |
| Montana ---- | 130 | ---------- | ? 27 |  | 11 | 160 37 |
| Wooming --- | 323 | 246 | 31 | 14 | 11 | 62\% |
| New Mexico | 35 |  | 21 |  |  | 56 |
| Arizona | $18 \%$ |  |  |  |  | 182 |
| Utah | 157 | 507 | 467 |  | 83 | 1,214. |
| Nevada |  |  | 65 |  |  | 63 |
| Idalıo | 151 |  |  |  | 24 | 175 |
| Washington | 398 |  | 116 | 15 | 17 | 470 |
| Oregon --- | 561 |  | 118 | 10 | 147 | 836 |
| California | 1,812 | 22 | 968 | 24 | 18 | 2,868 |

Table 18. - Colleges and universities reporting students in teachers' training courses.

| Location. | Institution. | Normal students. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1894. | 1895. | 1896. | 1897. | 1898. | 1899. |  |  |
|  |  |  |  |  |  |  | 家 |  | Higu E |
| alabama. |  |  |  |  |  |  |  |  |  |
| Athens.- | Athens Female College |  |  | 8 |  | 12 |  |  |  |
| Blountsville | Blount College | 17 |  | 14 | 29 | 29 |  |  |  |
| Cullman .-. | St. Bernard College. St |  |  |  |  |  |  |  |  |
| Lufayette | Laion Female College .. | 15 | 9 |  |  |  | 4 | $\stackrel{2}{7}$ | $1{ }^{1}$ |
| Selma. | Selma University | 4 | 40 | 13 | 15 | 3 |  |  |  |
| ARIZONA. |  |  |  |  |  |  |  |  |  |
| Tucson---------.... | University of Arizona (public) |  |  |  |  | 4 |  |  |  |
| Arkansas. |  |  |  |  |  |  |  |  |  |
| Arkadelphia Do | Arkadelphia Methodist College Ouachita Baptist College |  | 40 |  |  | 19 |  |  |  |
| Clarksville | Arkansas Cumberland College. | 17 | 17 | 9 |  |  |  |  |  |
| Conway - - | Central Baptist College --...--- | 11 | 7 |  |  |  |  |  |  |
| Fayetteville .-.....- | University of Arkansas (public). a |  |  |  | 16 | 6 | 8 | 6 | 14 |
| Little Rock........-- | Plitiander Smith College......- | 3 |  | 2 |  | 45 | 5 | 12 | 17 |
| Califorina. |  |  |  |  |  |  |  |  |  |
| Berkeley. | University of California (public). $a$ | $5 \%$ | 100 | 269 | 202 | \%17 | 181 | $41 \%$ | 598 |
| Claremont. | Pomona College -...-........... |  |  |  |  |  | 6 | 8 | 11 |
| Los Angeles | St. Vincent's College .-........... Mills Collere |  | 30 | 78 |  |  | 0 | 4 | 4 |
| Oakland... | Caliornia College |  | 3 |  |  |  | 0 | $\pm$ | 4 |
| Pasadena | Throop Poly techaic Institute |  | 16 | 11 | 10 | 13 | 1 | 11 | $1{ }^{2}$ |
| San Jose. | College of Notre Dame........- | 20 | 35 | 20 | 10 | 20 | 0 | 30 | 30 |
| Santa Rosa <br> Stanford University. <br> University | Pacific Methodist College - --.-- | ${ }^{6}$ |  |  | 1 |  |  |  |  |
|  | $\underset{\text { versity } a}{\text { Leland }}$ Stanior Uni- | 37 | 158 | 46 | 50 | 211 | 100 | 195 | 295 |
|  | University of Southern California. |  |  |  | 18 |  | 5 | 4 | 9 |
| colorado. |  |  |  |  |  |  |  |  |  |
| Boulder | University of Colorado (pub- |  |  |  | 65 | 42 |  |  |  |
| Colorado Springs... | lic). $a$ <br> Colorado College and Cutler |  |  |  |  | 15 | 3 | 14 | 17 |
| University Park... | University of Denver.... |  |  |  |  |  | 7 | 7 | 14 |
| DISTRTCT OF COLUMBIA. |  |  |  |  |  |  |  |  |  |
|  | Gallaudet College (public) --..Howard University (public) .- | 5 | $\begin{array}{r} 5 \\ 188 \end{array}$ | $\begin{array}{r} 5 \\ 47 \end{array}$ | 124 | $\stackrel{5}{21}$ | 5 | 4 | 9 |
| Florida. |  |  |  |  |  |  |  |  |  |
| Do Land -. | John B. Stetson University -- - |  |  |  | 29 |  | 11 | 37 | 48 |
| Lake city .... | Florida Agricultural College (vublic) |  |  |  |  | 19 | 9 | 31. | 40 |
| Leesburg-.- | Florida Conference College...- | 3 |  |  | 8 | 8 |  |  |  |
| $\begin{aligned} & \text { St Leo } \\ & \text { Winter Park----- } \end{aligned}$ | St. Leo Military College--....Roilins College | 2 | 3 | 2 |  | 3 8 8 | $\stackrel{5}{2}$ | 7 | 5 9 |
| gitoreia. |  |  |  |  |  |  |  |  |  |
| Athens | University of Georgia (public) |  |  |  |  |  | 20 | 0 | 20 |
| Atlanta | Atlanta Baptist́ College..-. .-. |  |  |  |  |  |  |  |  |
| $1{ }^{1}$ | Atlanta University ...--.....-- |  |  | $105$ | 127 | 139 | 9 | 4 |  |
| Do -- | Morris Brown University..... | 25 | 29 | 25 | 16 | 45 27 | 17 | 33 13 | 42 30 |
| Bowdon-...- | Bowdon College .---7--...... | 12 |  |  | 225 | 27 | 17 | 13 | 30 |
| Cuthbert - . | Andrew Female College--...-- |  |  | 4 |  | 8 | 0 | 4 | 4 |
| Dahlonega-..------ | North Georgia Agriculturai College (public). |  |  | 40 |  | 44 | 45 | 23 | 68 |
| Dalton . | Dalton Female Seminary - - |  |  |  |  | 3 | 0 | 4 | 4 |

Tame 18.-Colleges and 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.

$a$ Has a pedagogical department.

Table 18.-Colleges and universities reporing students in teachers' training courscs-Continued.

a Has a pedagogical department.

Table 18.-Colleges and 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.


Table 18.-Colleges and 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.

a Has a pedagogical department.

Table 19.-Statistics of public


[^42]normal schools, 1838-99.


Table 19.-Statistics of public


* Statistics of 1897-98.
normal schools, 1S9S-99-Continued.


Table 19.-Statistics of public


[^43]normal schools, 1898-90-Continued.


Table 19.-Statistics of public


[^44]a Too late to be included in summary.
normal schools, 1S9S-99-Continued.


Table 19.-Statistics of public


[^45]normal schiools, 1898-92-Continued.


Table 19．—Statistics of public

|  | Location． | Name of institution． | Teachers． |  |  |  | Students． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Entire num ber ployed． |  | In－ struct ing nor mal stu－ dents． |  | Entire number enrolled |  | Below normal and high school grades． |  | $\begin{aligned} & \text { In nor- } \\ & \text { mal } \\ & \text { course. } \end{aligned}$ |  |
|  |  |  | $\begin{aligned} & \text { 窵 } \\ & \text { تِ } \end{aligned}$ |  | $\stackrel{\text { 㝕 }}{\text { 品 }}$ |  |  |  |  |  | $\frac{\text { 总 }}{\text { 㤩 }}$ |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 1： |
| 14） | TENNESSEE． <br> Nashville $\qquad$ <br> texas． | Peabody Normal College．． | 13 | 16 | 15 | 11 | 210 | 394 |  |  | 210 | 394 |
| $\begin{aligned} & 141 \\ & 142 \end{aligned}$ | $\begin{aligned} & \text { Detroit } \\ & \text { Huntsville } \end{aligned}$ | Detroit Normal School．．．．－ <br> Sam Houston Normal In－ | $\stackrel{2}{5}$ | 11 | $\frac{1}{5}$ | $1{ }_{11}^{1}$ | $\begin{array}{r} 88 \\ 151 \end{array}$ | 76 $3: 8$ | 48 | 52 | 151 | 208 |
| 143 | Timpson |  | 2 | 2 | 1 | 1 | 178 | 128 | 150 | 100 | 18 | 16 |
| 144 | UTAII． <br> Cedar City <br> Salt Lake City <br> VERMONT． | Southern Branch of the State Normal School． <br> State Normal School of Utah．a | 4 | 1 | 2 | 0 | 35 | 22 |  |  | 85 | $\%:$ |
| 145 | Castleton． Jolnson | State Normal School | $\frac{1}{3}$ | 4 | 1 | 4 | 14 | 96 60 |  |  | $1 t$ 8 | 96 |
| 147 | Randolph |  | 1 | 5 | 1 | ${ }_{3}^{4}$ | 14 | 69 | 0 | 0 | 14 | 19 |
|  | virginia． |  |  |  |  |  |  |  |  |  |  |  |
| 148 | Farmville | State Normal School（fe－ male）． | 1 | 12 | 1 | 6 | 0 | 246 | 0 | 80 | 0 | 166 |
| 149 | Hampton |  | 34 | 44 | 0 | 5 | 378 | 233 | 374 | 299 | 0 | 4 |
| 150 | Petersburg Washington． | Virginia Normal and Col－ legiate Institute． | 6 | 6 | 6 | 4 | 161 | 167 | 65 | 97 | 68 | 70 |
| $151$ | Cheney ．．． | State Normal School．．．．．．． |  |  |  |  |  | 70 |  |  |  |  |
| $152$ | Ellensburg west virginia． | do | 3 | $\begin{aligned} & 0 \\ & 6 \end{aligned}$ | 3 | 5 | 38 | 183 | 0 | 0 | 33 | 183 |
| 153 | Athens． | Concord State Normal | 6 | 3 | 4 | 2 | 114 | 75 | 0 | 0 | 105 | 60 |
| $15 \frac{1}{4}$ | Fairmount． | Fairmount State Normal | 4 | \％ | 4 | 5 | 184 | 201 |  |  | 170 | 144 |
| 155 | Glenville | School． <br> Glenville State Normal | 3 | 2 | 3 | 2 | 87 | 53 |  |  | $8 \%$ | 53 |
| 156 | Huntington | School． <br> Marshall College，State <br> Normal School． | 6 | 6 | 4 | 3 | 175 | 225 | 5 | 5 | 10 | 15 |
| 157 | Institute． | Nor＇mal School． <br> West Virginia Colored In－ stitute． | 9 | 3 | 5 | 1 | 50 | 60 | 9 | 1 | 41 | 59 |
| 158 | Shepherdstowi | Shepherd College，State Normal School． | 3 | 2 | 3 | 2 | 56 | 49 | 0 | 0 | 56 | 49 |
| 159 | West Liberty ．．．． wisconsin． | West Liberty State Nor－ mal School． | 3 | 2 | 3 | $\stackrel{2}{2}$ | 73 | 89 | 0 | 0 | 73 | 89 |
| 160 | Milwaukee ． | State Normal School＊． | 8 | 14 | 8 | 8 | 176 | 454 | 135 | 101 | 41 | 353 |
| 161 | Oshkosh | ．．．．do ．．．．．．．．．．．．．．．．．．． | 11 | 20 | 11 | 15 | 368 | 617 | 135 | 142 | 223 | ${ }^{355}$ |
| $16 \%$ | Platteville．．．．．．．． | －do | 10 | $12$ | 10 | 8 | 193 | 336 | \％3 | 158 | 120 | 178 |
| 163 | River Falls <br> Stevens Point | do | 5 9 | $\begin{aligned} & 1: 2 \\ & 12 \end{aligned}$ | 5 9 | 8 9 | ${ }^{6 \%}$ | $\begin{aligned} & 208 \\ & 428 \end{aligned}$ |  |  | 67 130 | 208 309 |
| 164 165 160 | $\begin{aligned} & \text { Stevens Point... } \\ & \text { West Superior } \end{aligned}$ | $\begin{aligned} & \text { do } \\ & \text { do } \end{aligned}$ | 9 6 | $\begin{aligned} & 12 \\ & 11 \end{aligned}$ | 9 6 | 11 | 194 | 421 211 | 61 |  | 130 | 309 211 |
| 166 | Whitewater ．．．． | ．do | $\underset{\sim}{0}$ | 12 | 7 | 8 | 211 | 318 | 85 | 80 | 123 | － 237 |

＊Statistics of 189～－98．
a See table of colleges and universities．
normai schools, 1899-99-Continued.


TABLE 20.—Statistics of private


[^46]+ Statistics of 1806-97.
normal schools, $1898-99$.


Table 20.-Statistics of private

normal schools, 1898-99-Continued.


TABLE 30.-Statistics of private

normal schools, 1898-99-Continued.


Table 20．—Statistics of private

\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|}{\[
\begin{gathered}
\text { Entire } \\
\text { num- } \\
\text { ber } \\
\text { em- } \\
\text { ployed. }
\end{gathered}
\]} \& \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { In- } \\
\text { struct- } \\
\text { ing nor- } \\
\text { mal } \\
\text { stul- } \\
\text { dents. }
\end{gathered}
\]} \& \multicolumn{2}{|l|}{Entire number enrolled．} \& \multicolumn{2}{|l|}{Below normal and high school grades．} \& \multicolumn{2}{|l|}{\[
\begin{aligned}
\& \text { In nar- } \\
\& \text { mal } \\
\& \text { course. }
\end{aligned}
\]} \\
\hline \& \& \&  \&  \& \[
\frac{\dot{9}}{\stackrel{\pi}{4}}
\] \& 官 \&  \&  \&  \&  \& 㡙密 \& 官 \\
\hline \& 1 \& 2 \& 3 \& 1 \& 5 \& 6 \& 7 \& 8 \& 9 \& 10 \& 11 \& 12 \\
\hline \& \multicolumn{12}{|l|}{missouri．} \\
\hline 95 \& College Mound \& \multirow[t]{2}{*}{McGee Holiness College＊ Gainesville Normal School．} \& \multirow[t]{2}{*}{\(\stackrel{2}{3}\)} \& \multirow[t]{2}{*}{\(\underset{\sim}{2}\)} \& \multirow[b]{2}{*}{3} \& 0 \& 50 \& 5 \& 40 \& 60 \& 2 \& 14 \\
\hline 96 \& Gainesville ．．．．． \& \& \& \& \& 1 \& 36 \& 48 \& 20 \& 32 \& \multirow[t]{2}{*}{16} \& \multirow[t]{2}{*}{16
14} \\
\hline 97 \& Mill Spring． \& \& 4 \& 0 \& 1 \& 0 \& 43 \& 37 \& 25 \& 23 \& \& \\
\hline 98 \& Pleasant Hopo．．． \& Pleasant Hope Normal In－ stitute． \& \multicolumn{2}{|l|}{} \& 2 2 \& 21 \& \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{r|r|r}
40 \& 50 \\
275 \& 221
\end{tabular}}} \& \multicolumn{2}{|l|}{0

0} \& 15 \& 25 <br>
\hline \multirow[t]{2}{*}{99} \& Stanberry \& \multirow[t]{2}{*}{Stanberry Normal School．} \& \multirow[t]{2}{*}{12} \& \multirow[t]{2}{*}{6} \& \multirow[t]{2}{*}{12} \& 1 \& \& \& \multirow[t]{2}{*}{0} \& \multirow[t]{2}{*}{0} \& \multirow[t]{2}{*}{10} \& \multirow[t]{2}{*}{15} <br>
\hline \& neibraska． \& \& \& \& \& 6 \& \& 221 \& \& \& \& <br>
\hline 100 \& Fremont \& Fremont Normal School．－－ \& 18 \& \& 5 \& 2 \& 695 \& \multirow[b]{2}{*}{232} \& \& \& \multirow[t]{2}{*}{56} \& \multirow[t]{2}{*}{464
73} <br>
\hline 101 \& Normal \& Lincoln Normal Univer－ sity． \& 12 \& 3 \& 8 \& 1 \& 108 \& \& 40 \& 31 \& \& <br>
\hline 102 \& Santee Agency ．－ \& Santee Normal Training School． \& 6 \& 5 \& \multicolumn{2}{|l|}{1 2} \& \& \& \multirow[t]{2}{*}{51} \& \multirow[t]{2}{*}{44} \& ${ }^{6}$ \& 8 <br>
\hline 103 \& Wayne \& Nebraska Normal College \& 4 \& $\because$ \& 3 \& 5 \& $41 \%$ \& 591 \& \& \& \multirow[t]{2}{*}{263} \& \multirow[t]{2}{*}{375} <br>
\hline 104 \& NEW York．
New York... \& \& \& \& \& \& \& \& \& \& \& <br>
\hline \& north carolina． \& Teachers＇College ．．．．．．．．．． \& 30 \& 36 \& 27 \& 21 \& 343 \& 1528 \& 153 \& 146 \& 102 \& 1290 <br>
\hline 105 \& Asheville \& \multirow[t]{2}{*}{Normal and Collegiate In－ stitute．} \& 0 \& 13 \& 0 \& 12 \& 0 \& 237 \& \multicolumn{2}{|l|}{\multirow[t]{2}{*}{－－．}} \& 0 \& \multirow[t]{2}{*}{85} <br>
\hline 106 \& Kings Mountain． \& \& \& \& \& \& \& \& \& \& \multirow[t]{2}{*}{12} \& <br>
\hline 107 \& Lumberton．．．．．． \& Lincoln A cademy ${ }_{\text {Whitin }}$ Normal School \％．．．．． \& 0
1 \& 7
1 \& 1 \& 3
1 \& 62

20 \& $$
\begin{array}{r}
140 \\
25
\end{array}
$$ \& 59 \& 12 \& \& 14 <br>

\hline 108 \& Raleigh \& St．Augustine＇s School．－．－－ \& 6 \& 9 \& 4 \& 1 \& 135 \& 175 \& 109 \& 148 \& 26 \& 27 <br>
\hline 109 \& Traphill．．． \& \& 3 \& 1 \& \& 0 \& \& 63 \& 70 \& 55 \& 18 \& 8 <br>
\hline 110 \& Wilmington． \& \multirow[t]{3}{*}{Gregory Normal Institute Waters Normal School．．．．} \& \multirow[t]{2}{*}{1} \& 10 \& \multirow[t]{3}{*}{${ }_{3}^{1}$} \& $\stackrel{2}{2}$ \& 80 \& 209 \& 70 \& 158 \& 10 \& \multirow{3}{*}{45} <br>
\hline 111 \& Winton．．． \& \& \& 2 \& \& \multirow[t]{2}{*}{2} \& \multirow[t]{2}{*}{81} \& \multirow[t]{2}{*}{130} \& \multirow[t]{2}{*}{32} \& \multirow[t]{2}{*}{85} \& \multirow[t]{2}{*}{49} \& <br>
\hline \& NORTH DAKOta． \& \& \& \& \& \& \& \& \& \& \& <br>
\hline \multirow[t]{2}{*}{112} \& Grand Forks \& \multirow[t]{2}{*}{Northwestern Normal Col－ lege．} \& \multirow[t]{2}{*}{6} \& \multirow[t]{2}{*}{1} \& \multirow[t]{2}{*}{2} \& \multirow[t]{2}{*}{0} \& \multirow[t]{2}{*}{184} \& \multirow[t]{2}{*}{48} \& \multirow[t]{2}{*}{75} \& \multirow[t]{2}{*}{25} \& \multirow[t]{2}{*}{25} \& \multirow[t]{2}{*}{10} <br>
\hline \& OHIO. \& \& \& \& \& \& \& \& \& \& \& <br>
\hline 113 \& Ara． \& Ohio Normal University ．． \& 25 \& \multirow[t]{2}{*}{9} \& \multirow[t]{2}{*}{13} \& \multirow[t]{2}{*}{$\stackrel{4}{2}$} \& \multirow[t]{2}{*}{2189} \& \multirow[t]{2}{*}{1038} \& 8 \& 0 \& \multirow[t]{2}{*}{689
40} \& \multirow[t]{3}{*}{476
45} <br>
\hline 114 \& Canfield \& Northeastern Olio Normal \& 5 \& \& \& \& \& \& \& \& \& <br>

\hline 115 \& Dayton．．－－．．．．．－． \& | College． |
| :--- |
| St．Mary＇s Convent ．．．．．．．．． | \& \multirow[t]{2}{*}{12} \& \& \& \& \& \& 20 \& \& \& <br>

\hline 116 \& Ewington．．．．－．．．．－． \& Southern Ohio Normal Col－ \& \& 1 \& 12 \& 1 \& 25 \& 15 \& 20 \& 0 \& 60
25 \& 15 <br>

\hline 117 \& Fayette \& Noge． \& \& \& \multirow[t]{2}{*}{$$
\stackrel{4}{2}
$$} \& \& \& \& \multirow[t]{2}{*}{75} \& \& \multirow[t]{2}{*}{25} \& \multirow[t]{2}{*}{20

685} <br>

\hline 118 \& Lebanon \& National Normal Univer－ \& $\stackrel{6}{8}$ \& 9 \& \& $\stackrel{2}{9}$ \& \[
$$
\begin{array}{r}
125 \\
1800
\end{array}
$$

\] \& \[

$$
\begin{array}{r}
75 \\
7.00
\end{array}
$$
\] \& \& 20 \& \& <br>

\hline 119 \& Middlepoint \& \& \& 1 \& 4 \& 1 \& 104 \& 26 \& 0 \& \multirow[t]{2}{*}{0} \& 104 \& 26 <br>
\hline \& miadepor \& Western Ohio Normal Col－ lege． \& 4 \& \& \& \& \& \& \& \& \& <br>
\hline 120 \& New Philadel． \& John P．Kuhn＇s Normal \& 1 \& 1 \& 1 \& 1 \& 60 \& 35 \& 20 \& 15 \& 40 \& 20 <br>
\hline 121 \& piketon－－．－．．．．．．． \& Southern Ohio School of \& 3 \& 0 \& 3 \& 0 \& 30 \& 20 \& 0 \& 0 \& 30 \& 20 <br>
\hline \& \& Pedagogy．＊
Wester＇n Normal Univer－ \& \& \& \& \& \& \& \& \& \& 2 <br>
\hline 122 \& Fremont City \& Western Normal Univer－ sity． \& 1 \& 0 \& 1 \& 0 \& 9 \& 11 \& 0 \& 5 \& ${ }^{7}$ \& 2 <br>
\hline 193 \& Woodville ．． \& Evangelical Lutheran \& 4 \& 0 \& 4 \& 0 \& 23 \& 0 \& 18 \& 0 \& 15 \& 0 <br>
\hline \& pennsyluania． \& \& \& \& \& \& \& \& \& \& \& <br>
\hline 124 \& Ebensburg \& Ebensburg Normal Insti－ \& 2 \& 0 \& 2 \& 0 \& 28 \& 32 \& 8 \& 5 \& 20 \& 27 <br>
\hline 125 \& Huntingdon \& Juniata College ．．．．．．． \& 19 \& \& 10 \& 1 \& 209 \& 132 \& \& \& 184 \& 129 <br>
\hline 0 \& Muncy－．．． \& Lycoming County Nor－ \& 5 \& 1 \& 5 \& 1 \& 100 \& 120 \& \& \& 100 \& 120 <br>

\hline 127 \& Pittsburg \& | mal Scliool． |
| :--- |
| Curry College． | \& 17 \& 9 \& 7 \& 3 \& 277 \& 287 \& 42 \& 62 \& 21 \& 43 <br>

\hline
\end{tabular}

normal schools, 1898-99-Continued.


Table 20．－Statistics of private

|  | Location． | Name of institution． | Teachers． |  |  |  | Students． |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Entire <br> num－ ber em－ ployed． |  | $\begin{gathered} \text { In- } \\ \text { struct- } \\ \text { ing nor- } \\ \text { mal } \\ \text { sta- } \\ \text { dents. } \end{gathered}$ |  | Entire number enrolled． |  | Below normal and high school grades． |  | In nor－ mal course． |  |
|  |  |  |  | ¢ | $\frac{\text { 密 }}{\text { g }}$ | － | $\stackrel{\text { 淢 }}{ }$ | $\begin{aligned} & \text { 解 } \\ & \text { है } \\ & = \end{aligned}$ | $\begin{gathered} \text { 追 } \\ \frac{\mathrm{g}}{\mathrm{G}} \end{gathered}$ | 成 | $\begin{aligned} & \text { 荘 } \\ & \text { 突 } \end{aligned}$ | 号 |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 19\％ |
|  | south Carolinia． | Schofield Normal and In－ dustrial Șchool． <br> Avery Normal Institute．．． <br> Wallingford Academy．．．．． <br> Penn Normal and Indus－ trial School． <br> Brewer Normal School |  | 9 | 1 | 1 | 130 | 152 | 120 | 140 | 10 | 12 |
| 128 | Aiken |  |  |  |  |  |  |  |  |  |  |  |
| 129 | Charleston |  |  | 649 | 1 <br> 0 | $\stackrel{3}{2}$ | $\frac{59}{71}$ | $\underset{99}{251}$ | $\begin{aligned} & 18 \\ & 70 \end{aligned}$ | $\begin{array}{r}128 \\ 89 \\ \hline\end{array}$ | ${ }^{3}$ | $\stackrel{21}{10}$ |
| 130 | Do．．．． |  |  |  |  |  |  |  |  |  |  |  |
| 131 | Froginore |  | 4 |  | 3 | 2 | 139 | 115 | 120 | 105 | 19 | 10 |
| $13:$ | Greentrood |  | 1 | 8 | 1 | 2 | 98 | 14\％ | 96 | 14： | 2 | 5 |
|  | solth maliota． |  |  |  |  |  |  |  |  |  |  |  |
| 133 | Sioux Falls | Lutheran Normal School． | 4 | 2 | 2 | 1 | 84 | 53 | 53 | 29 | 31 | 27 |
| 134 | Pirchwood． | Rutherford Giraded School＊ | 2 | 1 | 1 | 0 | 134 | 12695 | $1 \begin{array}{r}12 \\ 20 \\ \hline\end{array}$ | $\begin{array}{r} 108 \\ 20 \end{array}$ | 12 | 1814 |
| 133 | Chatianooga | Chattanooga Normal Uni－ | 10 |  | ＋ | ， | $1 \%$ |  |  |  |  |  |
| 136 | Dickson． | Dickson ${ }^{\text {Versity }}$ ormal College | 2 | $\stackrel{7}{6}$ | 3 | 3 | 300 | 265 | 133 | 145 | 152 | 115 |
| 137 | Edgewood－ | Edgewood Normal College |  | 2 | 2 | 011 | 35 | $3{ }^{34}$ | 15 <br> 9 | 12 | 2024 |  |
| 138 | Fountain City | Holbrook Normal College． | 8 | ${ }_{6}^{6}$ |  |  | 121 |  |  |  |  |  |
| 139 | Greenbrier ． | Central Tennessee Normal | 2 | 1 | $\because \quad 1$ |  | 100 | 125 | 5560 |  | 60 | 38 |
| 140 | Holladay | Independent Normal | 2 | 1 | 1 | 0 | 60 | 75 | 45 | 55 | 15 | 20 |
| 141 | Hormbeak | West Tennessee Normal | 3 | 1 | 3 | 1 | 100 | 100 | \％ 5 | \％ | 20 | 20 |
| 14.2 | Huntington | Coutherer Normal Univer－ | 15 | 5 | 15 | 5 | 350 | 200 | 10 | 10 | 150 | 100 |
| 143 | Jonesboro | sity． <br> Warner Institute ． |  | 26 | ${ }_{3}^{1}$ | $\stackrel{0}{1}$ | 54 |  | 3560 | 56 |  |  |
| 144 | Maryville． | Freedmen＇s Normal Insti－ | 9 |  |  |  |  | 64 109 |  | \％1 | 10 | 35 |
| 145 | Memphis | Le Moyne Normal Insti－ | 2 | 12 | 2 | 5 | 200 | 405 | 130 | 285 | 90 | 120 |
| 146 | Morristown | Morristown Normal Col－ | 14 | 1.2 | 3 | 2 | 182 | 179 | 101 | 119 | 31 | 60 |
|  | trixas． | lege．＊ |  |  |  |  |  |  |  |  |  |  |
| 147 | Brenham | Blinn Memorial Coilege ．．．－ | 40 | 1 | 2 | 0 | 88 | $\xrightarrow{10}$ | 20 | 2 | 50 | 20 |
| 148 | Castrovill | Academy of Divine Provi－ |  |  |  |  | 0 |  |  |  |  |  |
| 149 | Commerce | East Texas Normal Col－ | \％ | 1 | 7 | 1 | 145 | 87 | 40 | 22 | 105 | 65 |
| 150 | Crockett |  |  | 1444 | $\stackrel{1}{2}$ | 1 | 040 |  | 0 | 216 | 020 | 1329 |
| 151 | Hearne． | Hearne Academy（Normal | $\stackrel{1}{2}$ |  |  |  |  | $\begin{array}{r} 209 \\ 50 \end{array}$ |  |  |  |  |
| 15： | Whitesboro | Department）．$\dagger$ <br> Whitesboro Normal Col－ |  | 8 | 5 | 3 | 210 | 183 | 0 | 0 | 190 | 132 |
|  | UTAH． | lege． | 8 |  |  |  |  |  |  |  |  |  |
| 153 | Proro City ． | Brigham Young Academy | 29 | 8 | 21 | \％ | 548 | 3\％\％ | 233 | 11\％ | 214 | 228 |
|  | Prorocity－ | and Latter－Day Saints， Normal Training School． |  |  |  |  |  |  |  |  |  |  |
| 154 | Salt Lake City ．．． | Latter－Day Saints＇College． | 15 | 2 | 2 | 1 | 309 | 149 |  |  | 30 | 35 |
|  | virginas． |  |  |  |  |  |  |  |  |  |  |  |
| 155 | Larrrenceville．．－ | St．Paul Normal and In－ | 17 | 8 | 3 | 1 | 150 | 168 | 44 | 51 | 8 | 8 |
| 156 | Reliance | dustrial School． <br> Shemandoah Normal Col－ | 6 | 3 | 3 | 0 | 101 | 78 | 10 | 5 | 35 | 30 |
| 150 | Reliance | lege． | 0 | 3 |  | 0 | 101 | ． 8 | 10 | 5 | 05 | 30 |
| $15 \%$ | Richmond | Hartshorn Memorial Col－ | 1 | 8 | 1 | 8 | 1 | 96 | 0 | 32 | 0 | 64 |
| 158 | Rockymoun | Piedmont Normal College | 1 |  | 1 | 1 | 25 | 25 |  | 10 | 18 | 15 |

normal schools, 1898-99-Continued.


Table 20.-Statistics of private

normal schools, 1838-39-Continued.


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Table 21. -Statistics of teachers' institutes and summer schools held in the United Stutes betueen October 1, 1897, and September 30, 189S, reported to this Office by county superintendents and other school officers.

| State or Teritory. | Number of institutes held. | $\begin{gathered} \text { Aggre- } \\ \text { gate } \\ \text { number } \\ \text { of days } \\ \text { insti- } \\ \text { tutes } \\ \text { were } \\ \text { held. } \end{gathered}$ | ```Number of instruct- ors and lectur- ers.``` | Enrollment. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Male. | Female. | Total. |
| United States. | 2, $39 \%$ | 21, 74 | 10,233 | 84, 760 | 167, 008 | 251, 468 |
| North Atlantic Division | 348 | 1,870 | 1,900 | 11,342 | 3\%,3\%0 | 48,712 |
| South Atlantic Division | 288 | 2, 8 43 | r09 | 9,27\% | 11,467 | 20,744 |
| South Central Division. | 516 | 4,6\% | 2.151 | 16, 593 | 18,167 | 34, 760 |
| North Central Division | 1,017 | 11,208 | 4,383 | 41,317 | 88, 184 | 129,501 |
| Western Division...... | 228 | 1,155 | 1,030 | 6,231 | 11,820 | 18,051 |
| North Atlantic Division: |  |  |  |  |  |  |
|  | 66 | 180 | $23 \%$ | 1,340 | 5,360 | 6,700 |
| New Hampshire | 18 | 54 | 46 | 103 | 1,191 | 1,294 |
| Vermont.. | 15 | 120 | 102 | $2 \% 1$ | 1,140 | 1,361 |
| Massachusetts | 23 | 40 | 184 | 43. | 4,373 | 4,805 |
| Rhode Island. | ${ }^{2}$ | 4 | 30 | 150 | 1,400 | 1,550 |
| Connecticut | 53 | $8: \%$ | 117 | -170 | 1,596 | 12, 406 |
| New York- | 79 | 436 | 669 | 2,872 | 9,534 | 12,406 |
| New Jersey- | \%0 | 85 863 | 104 471 | 959 5,065 | 4,967 7,809 | 5, 956 |
| South Atlantic Division: |  |  |  |  |  |  |
| Delaware. | 2 | 足 | 11 | 84 | $1 \%$ | 256 |
| Maryland --. | 30 | 84 | 79 | 676 | 1,506 | 2,182 |
| Virginia --........... | 42 | 392 | 86 |  | 1,430 | 2-359 |
| West Virginia | 61 | 1,001 | 113 | 4,093 | 3,642 | 7,735 |
| North Carolina | 26 | 223 | 13.5 | 776 | 938 | 1,714 |
| South Carolina | 23 | 154 | 60 | 431 | 698 | 1,169 |
| Georgia | 78 | 414 | 169 | 1,963 | 2,340 | 4, 303 |
| South Centeal Division: |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Tennessee. | 119 | 694 | 476 | 3, 3:2 | 3,300 | 6, 620 |
| Alabama | 9.5 | 186 | 180 | 1,416 | 1,211 | 2, 6: 27 |
| Mississippi | 45 | 281 | 85 | 918 | 1,434 | 2,352 |
| Louisiana. | 39 | 251 | 137 | 1,179 | 1, 535 | 2,715 |
| Texas | 237 | 1,203 | 786 | 3,975 | 4,780 | 8,755 |
| Arkansas. | 61 | 1,039 | $\cdots 14$ | 2,175 | 2,074 | 4,249 |
| Oklahoma .-..... | 16 | 280 | 53 | 279 | 617 | 896 |
| Indian Territory --.- |  |  |  |  |  |  |
| North Central Division: |  |  |  |  |  |  |
| Indiana. | 121 | 920 | 343 | 8,695 | 10,204 | 18, 899 |
| Inlinois | 121 | 291 | 418 | ¢,58\% | 11, 436 | 17,018 |
| Michigan. | 72 | 836 | 200 | 2,216 | 5,818 | 8,034 |
| Wisconsin. | 12.3 | 703 | 314 | 2,350 | 7,024 | 9,374 |
| Minnesota | 53 | 1,005 | \%33 | 1,481 | 5,040 | 6,521 |
| Iowa. | 104 | 1,258 | 746 | 3,56\% | 16,415 | 19,977 |
| Missouri. |  | 1,624 |  | 3,313 |  |  |
| North Dakota | 只 | 226 | 85 | 375 | 1,030 | 1,405 |
| South Dakota | 47 | 22. | 200 | 1,293 | 3, 146 | 4.439 |
| Nebrasiza. | 78 | 847 | 275 | 1.940 | 5,650 | 7,590 |
| Kansas | 83 | 1,942 | 361 | 2,430 | ¢,147 | 8,5\%7 |
| Western Division: |  |  |  |  |  |  |
| Mentana <br> Wyoming | 16 9 | 66 41 | ${ }_{3}^{59}$ | 109 | $\stackrel{411}{239}$ | ${ }_{290}^{520}$ |
| Colorado | 27 | 230 | 146 | 496 | 1,458 | 1,954 |
| New Mexico | 9 | 98 | 29 | 47 | 80 | 127 |
| Arizona | 4 | 34 | 4 | 59 | 112 | $1{ }_{1}$ |
| Utah. | 35 | 103 | 120 | 1.072 | 1,425 | 2,497 |
| Nevada | $\stackrel{\square}{2}$ | 12 | 8 | 18 | 119 | 137 |
| Idaho | 10 | 79 | 49 | 166 | 388 | 551 |
| Washington | 33 | 164 | 177 | 1,152 | 2.074 | 3,225 |
| Oregon | 36 | 142 | 119 | 651 | 1,274 | 1,925 |
| California | 47 | 186 | $28 \%$ | 2,410 | 4,240 | 6,650 |

## CHAPTER XLI.

## STATMSTICS OF SECONDARY SCMOOIS.

The total enrollment in the schoo's and colleges of the United States for the scholastic year ending June, 1899, was 16, T38,362. Of this number the secondary students comprised nearly 4 per cent, or $655,22 \%$. This was a gain of 29,112 over the preceding year. The secondary stndents enmerated were distributed among eight classes of institutions, as follows:

| Insúitutions. | Male. | Female. | Total. |
| :---: | :---: | :---: | :---: |
| Public high schools | 197, 12\% | 279,100 | 476,287 |
| Public normal schools | 1,502 | 3,232 | 4, $80 \pm$ |
| Public universities and college | 5,259 | 2,259 | 7,518 |
| Private high schools -- | 51,900 | 51, 938 | 103, 838 |
| Private normal schools | 4,380 | 3,811 | 8,191 |
| Private universities and colleges | 28,254 | 13,544 | 41,793 |
| Private colleges foir women |  | 5,0 | 5, 089 |
| Mamual training schools | 4,384 | 3, 3\% 8 | 7,76\% |
| Total | 292, 875 | 30,, 351 | 6\%5, 287 |

In localities in most of the States where high schools are not accessible there are many students pursuing secondary studies under the direction of teachers of the elementary schools. These students and others not reported may number nearly 20,000 . Including this number, the total eurollment of secondary stadents for the scholastic year 1898-93 was not less than 675,000. This does not include the students enrolled in commercial schools or city evening schools.
This chapter is devoted almosi exclusively to the statistics of the 5,493 public high schools and the $1,95 \%$ private high schools, academies, and seminaries reporting directly to this Burear for the year 1838-99. The following table shows the remarkable growth of public and private high schools for the past ten years:

| Year reported. | Public. |  |  | Private. |  |  | Total. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools. | Teachers. | Students. | Schools. | Teachers. | Studeuts. | Schools. | Teachers. | Students. |
| 1889-90. | 2,526 | 9,120 | 202, 963 | 1,632 |  | 94,931 |  | 16,329 |  |
| 1890-91.. | 2, 771 | 8,270 | 211,596 | 1, 711 | 6,231 | 98, 409 | 4,435 | 14,501 | 309,996 |
| 1881-92- | 3,035 | 9,564 | 239, 5556 | 1,550 | 7,093 | 100, 739 | 4, 583 | 16,657 | 340, 29, |
| 1892-93. | 3,218 | 10, 141 | 254, 023 | 1,5\% | 7,199 | 102, 375 | 4, 793 | 17, 310 | 356, 398 |
| 1893-94 | 3,944 | 12, 120 | 289, 274 | 1,982 | 8,009 | 118, 645 | 5,946 | 20, 129 | 4.97, 919 |
| 1894-95 | 4,712 | 14, 122 | 350, 099 | 2,180 | 8,559 | 118, 347 | 6,89\% | 22,681 | 468, 446 |
| 1895-96 | 4,974 | 15, 700 | 350, 493 | 2,105 | 8,752 | 106, 654 | \%, 089 | 21, 452 | 487, 117 |
| 1896-97 | 5,109 | 16, 809 | 409, 433 | 2,100 | 9,574 | 107,633 | 7,209 | 26, 383 | 517,0960 |
| 1897-98 | 5,315 | 17,941 | 449, 660 | 1,930 | 9,35\% | 105,225 | 7,305 | 27, 298 | 534,825 |
| 1898-93 | 5,495 | 18,718 | 476, 227 | 1,957 | 9,410 | 103,838 | 7, 45 | 28,128 | 580,065 |

The increase in the number of public high schools since 1899 is one of the most remarkable facts in the educational history of the decade. In 1889-90 there were 2,526 public high schools and 202,963 students, while in 1898-99 the number had reached $5,49 \mathrm{~J}$ schools, with 476,227 students. This was an increase of 117 per cent in the number of schools and 185 per cent in the number of secondary strudents.

Up to the middle of the decade there was an increase in the number of private high schools and academies, but since 1895 there has been a small decrease annually.
In 1889-90 the public high schools had about 68 per cent of the number of students and the private high schools about 32 per cent, while in 1898-99 the former had over 82 per cent and the latter nearly 18 per cent of the secondary students. The reative progress of public and private high schoos for the past ten years is shown in the following table, which gives the proportion of the number of schools, teachers, and students of the two classes:

| Year reported. | Per cent of num ber of schools. |  | Per cent of number of teachers. |  | Per cent of number of students. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pablic. | Private. | Pubiic. | Private. | Public. | Private. |
| 1889-0.0 | 60.75 | 39.25 | 55.85 | 41.15 | 68.13 | $31.8 \%$ |
| 1890-91 | 61.78 | 38.23 | 57.03 | 42.97 | $68: 6$ | 31. 74 |
| 1891-92 | 66.19 | 33. 81 | 57.42 | 4. 58 | 70.40 | 23. 60 |
| 1892-93 | 66.23 | 33. 77 | $60.2 \overline{7}$ | 39.15 | 70. 78 | 29.22 |
| 1893-94 | 66.67 | 33.33 | 60.21 | 39.79 | 70. 91 | 29. 09 |
| $1891-93$ | $68.3 \%$ | 31. 63 | 62.24 | 37.74 | 74. 74 | 25.26 |
| 1895-96 | ${ }^{7} 0.25$ | 29.75 | 61.21 | 35. 79 | 78.11 | 21.89 |
| 1896-97 | \%0.87 | 29.13 | 63. 71 | 36.29 | 79. 18 | $20.8 \%$ |
| 1897-98 | 72.76 | 27. 24 | 65. 72 | 34.28 | 81.03 | 18.97 |
| 1895-99 | 73.74 | 20.26 | 66.5 ¢ั | 33.45 | 82.10 | 17.90 |

Since 1811 the United States Bureau of Education has been collecting statistics of private secondary schools, and since 1876 statistics of public high schools in the larger cities, but it was not until 1889-90 that a systematic effor' was made to obtain information concerning all the public high schools of the country. The following table shows the number of secondary students and the per cent to the total population each year for the past 28 years. so far as the information could be gathered by this Office:

Number of secondary students in puotic and private high sehools.


a Previous to 1890 only the pupils in public city high schools are given. From 1890 onward all public high schools are inciuded.

Prior to 1890 the number of students reported by a large number of private high schools included the whole number in attendance, the clementary pupils as well as the secondary students. In the above table tho statistics for the years from 1871 to 1889 have been carefully corrected upon the basis of the reports for later years, eliminating the pupils below the high school grades.

## 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 concorning each school is given in detail in Table 42. Tables 16 to 29 relate to private secondary schools, while Tables 30 to 38 exhibit the combined statistics of public and private secondary schools. Tables 39 and 40 show the distribution of secondary strudents by States in the various classes of institutions.

For the scholastic year 1898-93 there were 5, 495 public high schouls reporting to this Omce, a gain of 180 over the preceding year. The number of these schools reported as departments of priblic school systems was 5,017 , while only 4 4i8 were reported as independent. These are generally outside the cities or villages. Of the number belonging to city or village systems'131 are in cities which have 8,000 popu?ation or over.

As shown in Table 1 there were 18,718 teachers instructing secondary strudents in the priblic high schools, the number of men being 9,289 and the number of women 9,4i9. This was an increase or $\frac{\pi}{9} 9$ in the number of teachers over the preceding year.

It is shown in the same takle that the public high schools had $476,20 \%$ secondary students, 197,127 males and $2 \pi 9,100$ females, a gain of 20,627 in the total number. The male students comprised 41.39 per cent of the whole number and the female students 58.61 per cent.

Of the total number of students in the public high schools of the United States, 239,061, or more than 50 per cent, are foum in the 2,916 schoois of the North Central Division. The 1,312 public high schools of the North Atlantic division had 150,683 secondary students, the 598 schools of the South Central had 35,632 , the 406 schools of the South Atlantic had $35,68 t$, and the 233 schools of the Western Division had 25,167 secondary students.

In the total number of stadents reported there were included $\%, 11 \%$ colored secondary strudents. OP this number only 3,352 were in the colored high schools of the two Southern divisions, while the other divisions had 3,765. In the colored high schools of Missouri, a former slave State, there were 685 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 $4,0.37$ for the Southern and 3,080 for the other sections of the United States.

STUDENTS AND COURSES OF STUDY.
The number of secondary students in classical andscientific courses known to be preparing for college, the number of graduates in 1899, the number of college preparatory stadents 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 54,49 , or 11.51 per cent of the whole number. The number of graduates was 56,468 , or 11.86 per cent of the total enrollment. The number of graduates prepared for college was 16,293 , or 28.85 per cent of the total number of graduates for the year. The number of students in military drill was 10,306, an increase of 1,364 over the preceding year.

The table which follows is a synopsis of the summaries exhibited in Tables 2 to 11. The per cent of maie students preparing for college was 14.39, and the per
cent of female students 9.47. Over 10 per cent of the male students enrolled and nearly 13 per cent of the female students graduated in 1899. The per cent of male graduates who had prepared for college was 36.26 and the per cent of female graduates $2 \pm .68$.

Students in certain courses and studies in public high sehools.

a Per cent of number of graduates.
The above table shows that there were 239,981 public high-school students studying Latin, or 50.39 per cent of the whole number. It may be considered as remarkable that a greater proportion of female than male students were studying Latin. There were 93,741 , or 47.55 per cent, of the male students and 146,240 , or 52.40 per cent, of the female students in Latin. Only 4.08 per cent of the male students and 2.44 per cent of the female stadents were studying Greek. The per cent of male students studying algebra was 58.15 , and the per cent of female students in the same study was 56.35 . The total number studying algebra was 271,880 . or more than 57 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 4, 005 of the 5,495 public high schools. This was an increase of 218 in the numker of schools in which Latin was taught. The number of students was 10,604 more than the preceding year.

The per cent of students in each of the leading high-school studies reported annually for the past ten 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 1880-90 to 50.39 in 1898-99. In the same period the per cent in algebra increased from 45.40 to $5 \% .09$, the per cent in German from 10.51 to 11.01 , and the per cent in general history from 27.31 to-38.32. The proportion of students in Greek has remained at a fraction above 3 per cent for ten years.

Per cent of total mmber of secondary studenis in public high schools in cortain courses and studies, etc.

| Students and studies. | 1883-8 | - |  |  | 1833-94 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nales Temal | $\begin{aligned} & 42.67 \\ & 57.33 \end{aligned}$ | $\begin{aligned} & 40.27 \\ & 59.73 \end{aligned}$ | $\begin{aligned} & 40.59 \\ & 59.41 \end{aligned}$ | $\begin{aligned} & 40.10 \\ & 59.90 \end{aligned}$ | $\begin{aligned} & 40.45 \\ & 59.55 \end{aligned}$ | $\begin{aligned} & 41.15 \\ & 53.85 \end{aligned}$ | $\begin{aligned} & 41.51 \\ & 58.49 \end{aligned}$ | $\begin{aligned} & 42.36 \\ & 57.64 \end{aligned}$ | $\begin{aligned} & 42.08 \\ & 5 \pi .92 \end{aligned}$ | $\begin{aligned} & 41.39 \\ & 58.61 \end{aligned}$ |
| Preparing for college, classical cow'se <br> Preparing for college, scientific courses | 7.88 7.08 | 6.04 5.80 | 6.33 6.90 | 7.50 7.10 | $7.8 \%$ 6.43 | 7.53 6.2. | 7.68 6.14 | 6.62 5.85 | 6.21 | 6. 10 |
| Total preparing for college. | 14.44 | 11.84 | 13.23 | 14.60 | 14. 30 | 13.73 | 13.82 | 12.1\% | 11.26 | 11.51 |
| Graduates | 10.75 | 12.00 | 11.48 | 12.60 | 12.80 | 12.11 | 12.05 | 12.9 | 11.79 | 11.86 |
| Graduates college a |  | 2S.5S | 32.41 | 29.97 | $2\} .70$ | 2.8.03 | 29.98 | 29.0n | 27.45 | 23.85 |
| Studying- | 34.69 | 41.20 | 38.88 | 43.05 | $4 \pm .7$ | 43.97 | 46.18 | 18.36 |  |  |
| Greek | $\begin{array}{r} 7+09 \\ 3.05 \end{array}$ | 3. 00 | 3. 08 | 3. 80 | 3.33 6.81 | 3.10 | 3.11 6.99 | 3.13 6.86 | 3. 12 | 3.12 |
| Frencl | ¢ 10.51 | - 5.70 | 10. 18 | ${ }_{11}^{6.49}$ | 6.81 | 11. 40 | 6.99 | 12. 8.8 | 18.85 | ${ }^{7.94}$ |
| Algebra | 45.40 | 52.20 | 48.93 | 52. 88 | 56.14 | 54.27 | 51. 61 | 55.46 | 56. 13 | 57. 19 |
| Geometry | 21.33 | 24. 60 | 83. 71 | 26. 10 | 27.20 | 20. 34 | 23.23 | 26.71 | 27.09 | 27. 91 |
| Trigonomet? |  |  | 2.37 | 2. 73 | 2.93 | 2.53 | 2.48 | 2.45 | 2.27 | 2.05 |
| Astronomy <br> Physics | 22.21 | 24.00 | -8.8. | 23. 27 | -25. 29 | 2. 79 | 2. 40 | 21. 01 | 3.82 0.09 | 3.23 30.20 8.80 |
| Chemistry | 10.10 | 10.20 | 10.17 | 10.00 | 10.31 | 9.15 | 8.95 | 8. 83 | 8.30 | 8.39 |
| Physical geography |  |  |  |  |  | 23.89 | 25.54 | 2. 38 | 24.94 | 21.29 |
| Geology |  |  |  |  |  |  |  |  | 4.37 | 4.04 |
| Physioleg |  |  |  |  |  | 29.95 2.74 | $31.9 \pm$ 3.00 | 30.81 2.90 | 29.98 | 29.21 |
| Rhetoric |  |  |  |  |  | 82.05 | 33.31 | 34.21 | $30.9 \%$ | 37.50 |
| English literature |  |  |  |  |  |  |  |  | 40.0 ช | 41.75 |
| History (other than United States).- | 27.31 | 23. 20 | 30.97 | 33,88 | 33.48 | 24.33 | 35. 28 | 35.73 | 37. 70 | 8.38 |

a Per cent of total number of graduates.
Although the actual number of students reported as preparing for college has increased each year, there has been a falling of in the percentage in the last ten years. In 1889-90 the per cent of public high-school students preparing for college was 14.41 and in 1898-99 only 11.51.

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 $\% 1$ public high schools, with 7,063 instructors and 294,686 students. Outside of these cities there were 4,754 public high schools, with 11,155 instructors and 251,541 students. In the cities the high schools had an average of 307 students to the school, while the average outside or the cities was 53 students to a school.

EQUIPMENT AND INCONE.
The equipment and income of the pablic high schools in each State may be found summarized in Table 15, so far as the items were reported to this O Sice. The number of volumes in the libraries of 4,537 schools was $2,618,445$; the vaino of grounds, buildings, scientific apparatas, etc., owned by 4,430 schoo's was $\$ 89,096,912$. Owing to the fact that in most cases separate accounts are not frept of the proportion of public appropriations used by the bigh schools, only 1,005 of these schools were able to report the amounts of State or municipal aid received. The aggregate of these amounts was ${ }^{3}, 700,762$. The aggregate received from tuition by 1,580 schools was $\$ 514,439$. The amount received by r2a schools from sources reported as unclassified was $\$ 1,362,561$. Nearly all of the latter item should be credited to State, county, or city appropriations. The total income of 2,102 schoois reporting this item was $\$ 6,760,213$.

## Private High 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, relating to public high schools, and the two series may be compared. Tables 27 and 15 may also le compared. Table 30 is a comparative showing of the average numbers of teachers and students in public and private high schools.

For the year 1898-99 there were 1,957 private secondary schools reporting to this Ofince, or 83 less than the number reporting the previous year. These schools had 0,410 teachers for secondary students, an increase of 53 , and 103,838 secondary students, a decrease of $1,38 \%$. The total number of private secondary students incladed 2,956 colored students-?,645 in private colored schools in the two southern divisions and 311 in the other divisions. The 1,95\% schools reported 118,050 in the elementary grades.

## STUDENTS AND COURSES OF STUDY.

In the private secondary schools there were 26.714 students preparing for college, or nearly 20 per cent of the number enrolled. As shown in Table 17, the numbor of these college preparatory students proparing for the classical course was 16,613 and the number preparing for acientific courses 10,101 . The number of graduates in 1890 was $11,80,0$, more then 11 per cent of the secondary students enrolled. Th the classes that graduated there were 5,300 students prepared for college, or neany 45 per cent of the graduates. There were 8,459 students in military drill, an increase of 605 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 25 . 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 1898-99:

Students in certain courses and studies in private high sehools and academies.

| Courses, studies, etc. | $\begin{aligned} & \text { Number } \\ & \text { students. } \end{aligned}$ | Per cent of total numbel of secondary stadents | Male stu. dents. | Per cent of total number of male students. | Female students. | Percent of total number. of̂ female students. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Students preparing for college: |  |  |  |  |  |  |
| Classical course- | 16,613 10,101 | 16.00 9.73 | 11,123 | 21.20 | 5,490 2,855 | 10.57 5.49 |
| college-...--- |  | 25. 73 | 18,369 | 35.18 | 8,345 | 6. 05 |
|  |  |  |  |  |  |  |
| duating in 1889 | 11,80:\% | 11.42 | 5,960 | 11.28 | 5,902 | 11.17 |
| College preparatory students in graduating class .-....- - ......................... | 5,309 | c 41.8 | 3,576 | a 60. 00 | 1,733 | a.29.21 |
| Students in- |  |  |  |  |  |  |
| Latin- | 51,71 | 49.80 | 28,176 | 04.20 | 23,537 | 45.31 |
| Greek | - 24,918 | 9.50 | 8,940 | 17.04 | 15,261 | 3.81 |
| German | 19,772 | 19.04 | 10,413 | 20.06 | 9,359 | 18.01 |
| Algebra | 54,171 | 52.17 | 29,278 | 56.41 | 24,893 | 47.93 |
| Geometry | 25,660 | 24.71 | 15, 130 | 29.15 | 10, 530 | 20.29 |
| Trigonometr | 5,212 | 5.12 | 3, 359 | 6.47 | 1,853 | 3.56 |
| Astronomy | 7,011 | 6. 75 | 2,202 | 4.21 | 4,809 | 9.26 |
| Physics. | 19,612 | 18.83 | 10,011 | 19.29 | 9,601 | 18.49 |
| Chemistry | 10, 157 | 9.78 | 5,053 | 11. 66 | 5,104 | 9.83 |
| Physical geograply | 22, 071 | 21.25 | 10, 139 | 19.54 | 11,932 | 27.97 |
| Geology | 6,317 | 6.11 | 2,544 | 4.90 | 3,803 | 7.3\% |
| Physiology | 20,951 | 25.95 | 12,073 | 25.17 | 14,881 | 28.46 |
| Psychology | 7,348 | 7.07 | 2,813 | 5.42 | 4,535 | 8.73 |
| Rhetoric | 34,040 | 32. 78 | 15,249 | 29.38 | 18,791 | 36. 18 |
| English litel'ature | 36,656 | 35. 30 | 16,605 | 31.99 | 24, 051 | 35. 61 |
| History (other than United States) - | 39,791 | 15.95 | 17,605 8,133 | 33.92 15.47 | 22,185 8,433 | 16.24 |
| Civics - | 16,50b |  | 8,183 |  |  | 16.34 |

An interesting comparison may be made with the above table and a similar synopsis on a preceding page relating to public high schools. It is shown that nearly 26 per cent of the private high-school students were preparing for college, while less than 12 per cent of the public high-school students were making such preparation. In both the public and private high schools about 50 per cent studied Latin. The per centstudying algebra in the private high schools was 52.17 and in the public high schools 57.03.

The following table shows the progress made by the private high schools and academies in the past ten years as indicated in the increased percentages of sturdents in certain courses and studies:

Per cent of total mumber secondary students in private high schools and achdemies in certain courses and studies.

| Students and studies. | 1889-90 | 1880-91 | 1891-9\% | 1892-08 | 1893-91 | 189145 | 1895-96 | 1896-97 | 1897-98 | 189S-99 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males <br> Femal | $\begin{aligned} & 50.07 \\ & 49.93 \end{aligned}$ | $\begin{aligned} & 50.97 \\ & 49.03 \end{aligned}$ | $\begin{aligned} & 59.14 \\ & 4 \% .86 \end{aligned}$ | $\begin{array}{r} 59.10 \\ 47.90 \end{array}$ | $\begin{aligned} & 50.39 \\ & 49.61 \end{aligned}$ | $\begin{aligned} & 48.46 \\ & 51.5 \pm \end{aligned}$ | $\begin{aligned} & 50.15 \\ & 49.83 \end{aligned}$ | $\begin{aligned} & 49.44 \\ & 50.56 \end{aligned}$ | $\begin{aligned} & 49.58 \\ & 50.42 \end{aligned}$ | 49.98 50.01 |
| Preparing for college, classical course | 17.54 | 13. 62 | 15.87 | 15.60 | 16.36 | 17.30 | 18. 50 | 1\%.72 | 15.54 | 13.00 |
| Preparing for college, scientific courses ............. | 10.16 | 7.62 | 9. 22 | 10.90 | 9.35 | 9.78 | 10. 78 | 10.45 | 9.83 | 9. |
| Total preparing for college | 27.70 | 21. 21 | 2\%. 09 | 20. 50 | 25.91 | 27.08 | 23. 28 | 28.17 | 25.36 | 25.7 |
| Graduat | 8.50 | 7.22 | 8.41 | 8. 80 | 9. 40 | 10.11 | 10.58 | 10.93 | 11.54 | 11. |
| Graduates prepared college $\alpha$. |  | 61.37 | 61. 68 | 60.10 | 50.39 | 47.83 | 49.55 | 49.81 | 4.35 | 41. $\%$ |
| Studying | 31.39 | 37.00 | 23. 60 | 39. | 40.7\% |  | 45.66 | 45.67 |  | 80 |
| Gree | \%.02 | 8. 00 | 8.48 | 8.61 | 9.01 | 9.5 | 9.83 | 10.22 | 10.43 | 9.55 |
| French | 17.03 | 16.30 | 16.69 | 18.47 | 18.85 | 19.38 | 21.31 | 21.83 | 23.01 | 23.15 |
| German | 13.55 | 15.10 | 14.45 | 15. 63 | 15. 25 | 16.07 | 17.46 | 18. 84 | 18.45 | 19.04 |
| Algebra | 37.12 | 45. 00 | 4.57 | 49.75 | 44.37 | 46.88 | 49.22 | 49.50 | 51.70 | 52.1\% |
| Geometry | 17.36 | 19.60 | 13.65 | 20.37 | 20.54 | 22.06 | 23. 84 | 24.45 | 24. 43 | 24. 71 |
| Trigonometry |  |  | 4.37 | 5. 76 | 5.93 | 5.39 | 5.51 | 5.45 | 5.25 | 5. 6 |
| Astronomy. | 18.39 | 2) 98 | 20.16 | 19.78 | 20.91 | 6. 69 | 7.99 | - 7.14 | 6.91 | 6. 75 |
| Chemistry | 8.59 | 10.60 | 9.83 | 9.94 | 10.83 | 9. 29 | 9.89 | 10.49 | 9.68 | 9.7 |
| Physical geograp |  |  |  |  |  | 18.15 | 22.75 | 21.81 | 21. 79 | 21. 25 |
| Geology |  |  |  |  |  | 7.88 | 0.61 | 6.11 | 5.99 | 6.11 |
| Physiol |  |  |  |  |  | 22. 34 | 28.01 | - ${ }^{6} .11$ | 2. 80 | 20.93 |
| $\begin{aligned} & \text { Psychology } \\ & \text { Rhetoric } \end{aligned}$ |  |  |  |  |  | 29.12 |  | 3:30 | 33.48 | 398 8 |
| English literature |  |  |  |  |  |  |  |  | 33. 88 | \%3. 30 |
| History (other than United States) --..... | 28.98 | 33.10 | 32. 22 | 32.46 | 34.07 | 35.63 | 37.35 | 37.31 | 37.59 | :33. 28 |
| Civics . |  |  |  |  |  |  |  |  | 15.7. | 15.45 |

a Per cent of number of graluates.
The above table shows that in the private secondary schools the per cent of graduates has increased from 3.50 in 1830 to 11.42 in 1899, while the proportion of graduates prepared for college has decreased from 61.37 per cent in 1891 to 44.5 per cent in 1899. 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 1883-30 to 49.80 in 1835-90, and the per cent in algebra from 37.12 in 1889-90 to 52.17 in 1898-99. In the public high schools it has been noted that a little more than 3 per cent of the students reported each year for ten years have been studying Greek. In the private high schools the percentage increased from 7.02 in 1889-90 to 10.43 in 1898-99. For the past year there was an unaccountable decrease to 9.55 per cent in the number studying Greek.

## EQUIPMENT AND INCOME.

Table 27 exhibits the equipnent, income, benefactions, value of endowment, etc., of the private secondary schools. The number of volumes in the libraries of

1,353 of these schools was $1,637,884$. The value of brildings, grounds, scientific apparatus, etc., owned by 1,372 schools was $\$ 55,749,453$. The amount of aid from public fonds received by 204 of these schools was $\$ 145,278$. The tuition fees of 1,130 schools aggregated $\$ 5,595,421$, while 278 schools derived $\$ 1,654,112$ from productive funds. Receipts from sources not named amounted to $\$ 1,039,859$ for 440 schoo.s. The aggregate income of 1,242 schools was $\$ 3,423,665$. During the year 134 schools received benefactions amounting to $\$ 1,811,693$. The total money value of the endownents of 353 schools is reported as $\$ 43,035,88 \%$.

## Dexominational Schools.

Of the $1,95 \%$ private secondary schools reported, 924 are controlled by religions denominations. In these denominational schools there were 4,637 instructors and 49,798 secondary stadents, as against 4,637 instructors and 54,040 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 23 and 29 show the number of schools in each State controlled by each religious denomination. The following synopsis is made from these tables:

| Religious denomination. | Schools. | Instructors. | Students. |
| :---: | :---: | :---: | :---: |
| Nonsectarian .... | 1,033 | 4,773 | 54, 040 |
| Roman Catholic. | 344 | 1,712 | 14, 259 |
| Baptist. | 98 | 449 | 6, 623 |
| Methodist Episcopal South | 69 | 255 | 4,875 |
| Presbyterian | 93 | 392 | 4,738 |
| Episcopal | 93 | 691 | 4,668 |
| Methodist | 41 | 243 | 3,559 |
| Friends | 53 | 271 | 3,434 |
| Congregational | 51 | 211 | 2,559 |
| Lutheran | 39 | 126 | 1,427 |
| All other denominations | 56 | 277 | 3,663 |
| Total | 1,957 | 9,410 | 103, 838 |

## Public and Priyate 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 87 students to a school and 25 students to a teacher, while in the private schools there are 53 students to a school and only 11 secondary students to a teacher. Table 31 shows that the 7,452 public and private secondary schools had 28,128 teachers and 580,065 students. Over 57 per cent, or 331,038 , of these students were females. The number of students preparing for college was 81,508 , or 14 per cent of the total secondary enrollment. The graduates for 1899 numbered 68,330 , or nearly 12 per cent of the number enrolled for the year. The number of graduates who had prepared for college was 21,602 , or nearly 32 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 of male and female stadents in certain courses and studies for the United States in 1898-99.

Students in certain courses and studies in publio and private light schools and acualemies.

| Courses, studies, etc. | Number students. | Per cent of total number secondary students. | Male students | Per cent of total number malestudents. | Female students | Per cent of total number female students. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Students preparing for college: Classical course. Scientific courses $\qquad$ | $\begin{aligned} & 45,644 \\ & 35,864 \end{aligned}$ | $\begin{aligned} & 7.87 \\ & 6.18 \end{aligned}$ | $\begin{aligned} & 2,5,5 \\ & 21,210 \end{aligned}$ | $\begin{array}{r} 10.05 \\ 8.52 \\ \hline 8 \end{array}$ | $\begin{aligned} & 20,118 \\ & 14,649 \end{aligned}$ | $\begin{aligned} & 6.05 \\ & 4.42 \end{aligned}$ |
| Total preparing for college .-...- | 81,508 | 14. 45 | 46,741 | 18.76 | 3t, 767 | 10.50 |
| Graduating in 1899 | 68,330 | 11.78 | 26;301 | 10.50 | $42,0 \% 6$ | 12.70 |
| College proparatory students in graduating cłass | 21,602 | a 31.61 | 10,95. | at $\leq 1.64$ | 10,650 | c 25.34 |
| Students in- | 291,695 | 50.29 | 121,918 | 48.96 | 169, 777 |  |
| Greek | 24,7\% | 4. 27 | 15, 990 | 6.42 | 8,786 | \%.65 |
| Wrench | 61,923 | 10.68 | 20, 549 | 9.10 | 39,374 | 11.69 |
| German | 86, 478 | 14.91 | 36,089 | 14. 49 | 50, 859 | 15.22 |
| Algebra | 3236, 058 | 56.21 | 143, 905 | 57.79 | 182, 153 | 5. 08 |
| Geometry | 158, $70 \%$ | 27.36 | 69,316 | 27.83 | 89,391 | 27.00 |
| Trigonometry | 14, 972 | 2. 58 | $8,3.37$ | 3.34 | 6,645 | 2.01 |
| Astronomy | 22,859 115,825 | $\begin{array}{r}3.94 \\ 19.97 \\ \hline 8 .\end{array}$ | 8,038 51,081 | 3.25 80.50 | 14,761 84 8464 | 4.46 19.56 |
| Chemistry | 50, 132 | 8.64 | 22, 734 | 9.13 | 27, 398 | 8.25 |
| Physical geography | 137, 768 | 23.75 | 53, 662 | 23.56 | 79, 100 | 23.89 |
| Geology | 25,595 | 4.41 | 10,525 | 4.23 | 15, 070 | 4.55 |
| Physiology | 166, 043 | 28.62 | 70, 675 | 23.38 | 95,368 | 28. 81 |
| Psychology | 18,716 | 3.13 | 6,960 | 2.79 | 11,756 | 3.55 |
| Rhetoric | 212, 859 | 26.70 | 87,423 | 35.11 | 125, 436 | 37.89 |
| English literature --..------------ | $\begin{aligned} & 2025,492 \\ & 2929 \end{aligned}$ | 40.60 38.32 | $\begin{aligned} & 95,578 \\ & 90354 \end{aligned}$ | 38.38 | 139,914 131,933 | 49.27 |
| History (other than United States) | $\begin{aligned} & 28,287 \\ & 181,203 \end{aligned}$ | $\begin{aligned} & 38.32 \\ & 90.89 \end{aligned}$ | $\begin{aligned} & 90,254 \\ & 5 ;, 250 \end{aligned}$ | 36.28 20.98 | 131,933 68,923 | 39.85 20.82 |

a Per cent of number of graduates.

One of the most significant facts recorded by the high-school statistics of the past ten years has been the steady increase of the number of students in Latin. In 1889-90 there were 100,152 students in public and private high schools studying Latin. This was 33.62 per cent of the total. In 1898-99 the number had increased to 291,695 or 21.29 per cent of the total number of secondary 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. There has been a small increase in the percentage in French. The number studying German increased from 11.48 per cent in 1889-90 to 14.91 in 1898-99. In the ten years the per cent of students in algebra increased from 43.87 to 58.21 , and the per cent in geometry increased from 20.07 to 27.36 . The percentage of strudents in general history increased from 27.83 in 1889-90 to 38.32 in 1898-99. The following synopsis exhibits these percentages for each of the ten years:

Per cent of the total number of secondary students in public and private high schools and academies in certain courses and studies, ete.

| Students and studies. | 1889-90 | 1830-91 | 1891-9: | 1392-93 | 1893-91 | 18921-95 | 1895-66 | 1896-9\% | 189\%-98 | 1835-89 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IVales... Females | $\begin{aligned} & 45.03 \\ & 51.97 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { 43.67 } 67 \\ & 56.33 \end{aligned}$ | $\begin{aligned} & 44.01 \\ & 5.09 \end{aligned}$ | $\begin{aligned} & 43.63 \\ & 6.68 \end{aligned}$ | $\begin{aligned} & 43.39 \\ & 56.61 \end{aligned}$ | $\begin{aligned} & 43.00 \\ & 57.09 \end{aligned}$ | $\begin{array}{r} 43.40 \\ 56.60 \\ 50 \end{array}$ | $\begin{aligned} & 43.81 \\ & 56.16 \end{aligned}$ | $\begin{aligned} & 43.50 \\ & 56.50 \end{aligned}$ | $\begin{aligned} & 42.93 \\ & 57.08 \end{aligned}$ |
| Preparing for college, classical course <br> Preparing for college, sci- <br> entific courses ............. | 10.61 8.05 | 8.45 6.38 | 9.18 7.59 | 9.90 8.22 | 10.34 7.33 | 10.09 7.11 | 10.05 7.16 | 8.91 0.37 | 7.99 6.03 | 7.87 6.18 |
| Total preparing for college........................ | 18.66 | 14.83 | 16. 77 | 18.12 | 17.67 | 17.11 | 17.91 | 15. 51 | 14.02 | 14.03 |

Per cent of the toid number of secondarystudents in public and private high schools and academies in certain courses and studies, etc.-Continued.

| Students and studies. | 1889-90 | 1890-91 | :591-92 | 892-93 | 893-94 | 1894 | 18\%5-96 | 1836-97 | 183\%-98 | 1898-99 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Graduates | 10.05 | 10.51 | 10.88 | 11.46 | 11.88 | 11.60 | 11.73 | 11.95 | 11.75 | 11.7 |
| Graduates college a |  | 83.74 | 39.15 | 38.62 | 30.92 | 32.44 | 32.65 | 32. 60 | 30.60 | 31. |
| Studying- |  |  |  |  |  |  |  |  |  |  |
| Gratim | 30.63 | 39.80 | 38.80 4.68 | 41.94 4.92 | $43.59$ | 43.76 | 46.22 | 48.01 | 49.44 | 5.29 |
| Frencl | 9.41 | 9.06 | 8.59 | 9.94 | 10.31 | 9.77 | 10.13 | 9.98 | 10.48 | 10. 68 |
| German | 11. 48 | 15.68 | 11.61 | 13.00 | 12.78 | 12.58 | 13.20 | 13.76 | 14. 24 | 14.91 |
| Algebra | 42. 97 | 49.89 | 47.63 | 49.92 | 52.71 | 5. 40 | 53.46 | 54.22 | 55.29 | 55.21 |
| Geometry | 29.07 | 23.04 | 23. 58 | 24.36 | 25.25 | 24.51 | 枵. 71 | 26.24 | 26.59 | 27.36 |
| Trigononet |  |  | 2.96 | 3.61 | 3.80 | 3. 25 | 3.15 | 3.08 | 2.83 | 2.58 |
| Astronomy |  |  |  |  |  | 5.27 | 5.19 | 4.89 | 4.40 | 3.94 |
| Plysies | 21.86 | 23.06 | 22.04 | 20. 25 | 24.02 | 29.15 | 81.85 | 20.89 | 20.48 | 19.97 |
| Chemistry | $9.6 \%$ | $10.5 \%$ | 30.08 | 9.98 | 10.31 | 9.31 | 9.1.5 | ${ }_{24} 9.18$ | 8. 55 | 8. 64 |
| Physical geo |  |  |  |  |  | 5. 5.4 | 21.93 | 24.64 4.93 | 24.33 4.66 | 23.65 4.41 |
| Physiolog |  |  |  |  |  | 98.03 | 31.08 | 29.98 | 29.38 | 28.62 |
| Patchology |  |  |  |  |  | 3.35 | 3.82 | 3.82 | 3.64 | 3.23 |
| Rutoric |  |  |  |  |  | 31.81 | 32.2\% | 33.78 | 35.30 | 36. 70 |
| English literature |  |  |  |  |  |  |  |  | 38.90 | 40.60 |
| History (other than United States) | 27.83 | 29.77 | 31.35 | 33.46 | 33. 78 | 34.65 | 30. 3 | 36.08 | 37.68 | 33.32 |
| Civics |  |  |  |  |  |  |  |  | 21.41 | 20.83 |

a Per cent of total number of graduates.

## Distridution of Shcondary Students.

Tables 39 and 40 show the distribution of secondary students enrolled in 1898-99 in the eight classes of institutions mentioned on the first page of this chapter. It is shown that of the 655,227 secondary students reported to this Burean for the scholastic year, 488,049 were in public institutions and 166,678 were in private institutions. In the public institutions 476,227 were in pulblic high schools, 7,518 in preparatory departments of public universities and colleges, and 4,804 in public normal schools. In the private institutions 103,838 were in private high schools and academies, 46,887 in preparatory departments of private universities and colleges, 8,198 in private normal schools, and 7,762 in manual training schools.

Table 41 shows that the number of secondary stadents to each 1,000 of population in the United States was 8.88.

The same table shows that the number of stadents in higher education was 14\%,164, or an average of 1.99 to the 1,000 of population. This number includes all students who in 1893-99 were receiving higher instruction in colleges, resident graduate students in miversities and colleges, and all professional students in theo'ogy, medicine, and law. The independent professional schools are included, as well as those class d as departments of universities and colleges. Students of normal schools and schools of dentistry, veterinary surgery, pharmacy, and nurse training are not here included.

Tables 42 and 43 give in detail the statistics of the 7,452 public and private high schools reporting to this Burean in 1898-99. Trable 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.

Tablef 1．－Public 7igh schools－Number of schools，secondary instructors，secondary students，and elementary pupits in 159s－99．

| State or Territory． |  | Secondary teachers． |  |  | Secondary stu－ dents． |  |  | Colored stri－ dents （ioclnded in proceding colamn）． |  |  | Elementary pupils，including all below second－ ary grades． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{aligned} & \dot{0} \\ & \text { 岂 } \\ & \text { g } \\ & \text { E } \end{aligned}$ | $\begin{aligned} & \text { Fig } \\ & \text { O } \\ & \text { EH } \end{aligned}$ | $\frac{\dot{0}}{\stackrel{y}{y}}$ |  | 第 | $\frac{\stackrel{0}{3}}{\stackrel{8}{3}}$ | cos |  | 急 | 盛 | 感 |
| United | 3， 495 | 3，239 | 9， 489 | 18， 718 | 197，127 | 279，100 | 4\％6， 297 | 2，4， 23 | 1， 694 | \％， $11 \%$ | 42， 832 | 43， 656 | 86， 488 |
| N．Atlantic Division | 1，34 | a， 4.01 | 3， 613 | 6， 074 | 63， 536 | 87， 148 | 150，683 | 331 | 505 | 896 | 6，105 | 6，310 | 12， 115 |
| S．Atlantic Division | 406 | 591 | 5\％6 | 1，117 | 10，278 | 15， 405 | 25，684 |  | 1，027 | 1，499 | 6， 12.5 | 5，998 | 12， 513 |
| S．Cemtral Division | 598 | 895 | 60.2 | 1，55\％ | 11，680 | 20，952 | －35，632 |  | 1．250 | 1，85：3 | 8．544 | 8，388 | 16，932 |
| N．Central Division | 2，916 | 4， 779 | 4，205 | 8， 384 | 98，691 | 140，30 | 239， 061 | 991 | 1， 79.9 | 2，\％0 | 21，022 | 203， 401 | 43，453 |
| Western Division | 233 | 513 | 473 | 985 | 9，94\％ | 15．925 | \％${ }^{3}$ ， 167 | 26 | 73 | 99 | 486 | 559 | 1，045 |
| N．Atlantic Division： <br> Traine | 158 | 179 | $16 \%$ | 3 |  |  |  |  |  | 5 |  | 838 |  |
| Main | 52 | 175 | 19 | 165 |  |  |  |  |  | 5 | 820 | 808 |  |
| Vermont | 54 | 56 | r9 | 135 | 1， $3 \cdot 6$ | 1，802 | 3，169 | 5 | 3 | 8 | 43 | 473 | 905 |
| Massachus | 232 | 514 | 888 | 1，40： | 14， 811 | 19，584 | 34，425 | 77 | 119 | 196 |  | 538 | 1，092 |
| Phode Islan | 18 | 781 | 91 | 169 | 1，448 | 1，988 | 3， 436 | 1. | 36 | 50 | 45 | 58 | 103 |
| Connecticut | 69 | 126 | 195 | $32: 2$ | 3，039 | 3，92ㄹ． | 6，963 | 1： | 26 | 38 | 108 | 189 | 357 |
| New York | 369 | 6881 | 1，996 | 1，984 | 22， 266 | 28，524 | 50， 996 | 65 | 105 | 170 | 2， $47 \%$ | 2， 518 | 4，995 |
| Now Jerse | 89. | 161 | 297 | ， 458 | 3，93：？ | 6，222 | 10， 154 | 37 | 71 | 108 | 265 | 297 | 563 |
| Pennsylvani | 302 | $59 \%$ | 502 | 1，094 | 11，297 | 18，212 | 29，439 | 117 | 202 | 319 | 1，125 | 1，162 | 2，28\％ |
| S．Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Delaware | 13 | 17 | ， | 42 | 424 | 683 | 1，087 | ， | 0 | 0 | 21 | 18 | 39 |
| Maryland | 48 | 96 | $6 ?$ | 158 | 1，8：0 | 2，2\％0 | 4，090 | 103 | 117 | 220 | $77 \%$ | 389 | 1，161 |
| Dist．of Columbia | 5 | 53 | 75 | 128 | 1，254 | 2，06\％ | 3，316 | 199 | 478 | $67 \%$ | 0 | 0 | 0 |
| Virginia | 67. | 80 | 98 | 178 | 1，581 | 2，38\％ | 3， 966 | 55 | 134 | 18.8 | 1，124 | 1，155 | ：2，279 |
| West Virginia | 26 | 45 | 29 | $7 \pm$ | 588 | 1，190 | 1，778 | 17 | 4.9 | 63 | 31 | 35 | 69 |
| North Carolina | $1 \%$ | 24 | 13 | 37 | 410 | 527 | $93 \%$ | 9 | 25 | 34 | 133 | 125 | 258 |
| South Carolina | 99 | 117 | 86 | 203 | 1，56\％ | 2， 368 | 3，935 | 61 | 149 | 210 | 2，178 | 1，929 | 4，107 |
| Georeria | 109 | 120 | 113 | 239 | 2， 245 | 3，321 | 5，566 | 26 | 67 | 93 | 2，093 | 2，091 | 4， 184 |
| Florida | 22 | 33 | 5 | 58 | 388 | 623 | 1，003 | $\because$ | 8 | 10 | 290 | 256 | $5 \pm 6$ |
| S．Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentrcky | 69 | 111 | 116 | 2. | 2，336 | 3，090 | 5， 126 | 204 | 430 | 634 | 342 | 358 | 700 |
| Tennesse | 101 | 140 | 86 | 296 | 2， 246 | 3，088 | 5， 234 | 100 | 236 | 336 | 2． 111 | 2，1\％2 | 4，583 |
| Alabama | $5 \pm$ | 79 | $7 / 2$ | 151 | 1，294 | 1，7\％\％ | 3，065 | 21 | 49 | 70 | 1，10\％ | 1，268 | 2， 375 |
| Mississipp | 91 | 102 | 91 | 196 | 1，653 | 2，213 | 3，866 | 108 | 193 | 301 | 1，\％2\％ | 1，624 | 3，346 |
| Louisiana | 21 | 41 | 57 | 98 | 584 | 1，241 | 1，885 | 24 | 42 | 66 | 178 | 198 | 376 |
| ＇Texas | 201 | $3 \% 8$ | 188 | 516 | ¢， 127 | 7，818 | 12，945 | 103 | 214 | 317 | 1，916 | 1，999 | 3， 815 |
| Arkansas | 53 | 80 | 38 | 118 | 1，263 | 1，549 | 2，81： | 43 | 86 | 129 | 594 | 649 | 1，243 |
| Oklanoma | 4 | 6 | 8 | 14 | 110 | 173 | 288 | 0 | 0 | 0 | 0 | 0 | 0 |
| Indian Territory | 4 | 8 | 3 | 11 | 62 | 8 | 70 | 0 | 0 | 0 | 274 | 130 | 394 |
| N．Central Division： |  |  |  |  |  |  |  |  |  | 23 |  | 94 | ¢ 819 |
| Indiana | 362 | 689 | 35. | 1，041 | 10， 647 | 14，823］ | 25， 468 | 171 | 258 | 429 | 2， 748 | 2，986 | 5， 734 |
| Illinois | 343 | 689 | 615 | 1，364 | 14，573 | 22， 546 | $3 \%, 119$ | 115 | 200 | 315 | 1，418 | 1，46\％ | 2，880 |
| Michigan | 286 | 433 | 564 | 997 | 11，574 | 15，572 | 27，146 | 56 | ro | 126 | 1，883 | 1，937 | 3， 76 |
| Wisconsin | 183 | 306 | 341 | $64 \%$ | 7，568 | 9，982 | 17，548 | 10 | 12 | $2 \cdot 2$ | 620 | 669 | 1，295 |
| Minnesota | 112 | $1 \%$ \％ | 324 | 496 | 4，86： | 7，002 | 11，864 | 14 | 31 | 45 | 59．\％ | 609 | 1，201 |
| Iowas | 330 | 471 | 535 | 1，003 | 11，193 | 16，206 | 27， 399 | 38 | 59 | 97 | 1， 800 | 1，875 | 3，675 |
| Missou | 211 | 389 | 316 | 705 | 7， 783 | 11， 301 | 19，524 | 216 | 469 | 685 | 1，103 | 1，318 | ：2， 419 |
| North Da | 20 | 28 | 28 | 56 | 40.5 | － 599 | 1，004 | 2 | 2 | ， | 10 | －83 | 33 |
| South Dakota | 291 | 36 | 38 | 74 | 788 | 1，083 | 1，8\％1 | 3 | 1 | 4 | 81 | 86 | $10 \%$ |
| Nebraska | 223 | 313 | 209 | 515 | 5， 394 | 8，198 | 13，592 | 18 | 37 | 55 | $\therefore$ ，5n | 2，776 | 5， $3: 8$ |
| Karisas | 189 | 284 | 188 | $47 \%$ | 5，2\％9 |  | 13， 55.8 | 123 | 21： | 345 | 9\％9 | 1，1\％1 | 2，100 |
| Westelin Division： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Montanz | 15 | 17 | 26 | 43 | 433 | 559 | 992 | 6 | \％ | 13 | 12 | $1 \%$ | 29 |
| W yomi | 1 | － |  | 13 | 118 | 151 | 269 | 0 | 1 | 1 | $1: 4$ | 113 | $23 \%$ |
| Colorado | 41 | 118 | 99 | 217 | 2，242 | 3，215 | 5，45， | 8 | 35 | 43 | 204 | 255 | 459 |
| New Me | 6 | 10 | ， | 13 | 60 | 116 | $17 \%$ | 0 | 1 | ， | 0 | 0 | 0 |
| Arizona | ， | 5 | 3 | 8 | 55 | 11. | 172 | 0 | （） | 0 | 0 | ， | 0 |
| Utan | 4 | 19 | 15 | 34 | 356 | 575 | 941 | 2 | 1 | 3 | 18 | 0 | 18 |
| Nev | 7 | ） | 10 | 19 | 160 | 263 | 423 | ， | 1 | 1 | 0 | ， | 0 |
| Iarbo | 7 | 10 | 3 | 13 | $1: 9$ | 230 | 354 | I | 4 | ． | 0 | 0 | （ |
| Washing | 36 | 65 | 45 | 110 | 1，114 | 1，874 | 2，988 | 2 |  | 6 | 99 | 124 | 238 |
| Oregon | 15 | 27 | 27 | 54 | 670 | 1，107 | 1，77\％ | 0 | 0 | 0 | 0 | 0 | 0 |
| California | 94 | 297 | 235 | 432 | 4，595 | 7，023 | 11，618 | 7 | 12 | 26 | 89 | 50 | 79 |

TABLE D．－Public high schools－Number of secondary students in college prepara－ tory courses and number of graduates and college preparatory students in grad－ rating class in 189S－99．

| State or Territory． | Secondary students preparing for college． |  |  |  |  |  | Graduates in class of 1899. |  |  | College prepar－ atory students in graduating class of 1899. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Classical course．Scientific courses． |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & \text { 灾 } \\ & \text { 発 } \end{aligned}$ | $\begin{aligned} & \text { 豆 } \\ & \text { 关 } \\ & \text { Ex } \end{aligned}$ | $\begin{aligned} & \text { E. } \\ & \text { E } \\ & \text { E } \end{aligned}$ | － | － | ＋ | $\frac{\dot{\omega}}{\stackrel{\text { ® }}{\mu}}$ | 星 | cis | $\underset{\sim}{\underset{\sim}{\underset{y}{\mid c}}}$ |  |  |  |
| Cnited States．． | 11， 108 | 228 | 9， 081 | 13，969 | ， 68 | ， 183 | 20，34t | 30,104 | 20， 408 | 7，360 | ， |  | 0，896 |
| N．Atlantic Dirision． | 6， 864 | 5，090 | 11，954 | 4，218 | 1，832 | 6， $0: 0$ | 6，856 | 11，489 | 18， 345 | 2， 402 | 133 | 4，549 | 5,144 |
| S．Atlantic Division． | 900 | 1， 045 | 1，945 | － 396 | 1， 283 | 685 | 862 | 1，764 | 2， 626 | 288 | $38 \%$ | 675 | $9 \pm 7$ |
| S．Central Division－－ | 1，1\％3 | 1，272 | 2，395 | 911 | 805 | 1，746 | 1，086 | 2，295 | 3，381 | 382 | 563 | 945 | 59. |
| N．Central Division． | 4， 960 | 6，296 | 11，256 | 7， 134 | 7，618 | 14，782 | 10，45\％ | 18， 597 | 29，054 | 3， 819 | 5， 099 | 8，918 | 2，¢44 |
| Western Divisioll ．．． | 556 | 925 | 1，481 | 1，280 | 1，2\％0 | 2，500 | 1，083 | 1，9\％9 | 3，062 | 480 | \％29 | 1，209 | 1，069 |
| N．Atlantic Division： Maine | 514 | 508 | 1，08？ | 193 | 119 | 31. | 409 | 703 | 1，112 | 150 | 141 | 291 | 253 |
| New Hampshire． | 154 | 149 | 1， 303 | 95 | 45 | 140 | 157 | 244 | 401 | 43 | 43 | 85 | 395 |
| Vermont．－．．．．．－－ | $12 \%$ | 100 | 227 | 142 | 87 | 229 | 123 | 254 | $37 \%$ | 77 | 79 | 156 | 164 |
| Massachuset | $\therefore, 030$ | 1，846 | 3， 806 | 1，345 | 324 | 1，669 | 1，980 | 3，145 | 5,125 | 011 | 6.7 | 1，2：38 | 3，743 |
| Riode Island | 95 | 178 | 173 | －66 | 52 | 118 | 146 | 273 | 419 | 81 | 65 | 147 |  |
| Connecticat | 329 | 18\％ | 511 | 25.2 | 73 | 325 | 313 | $57 \%$ | 390 | 123 | 91 | 214 |  |
| New Yolk | 2， 536 | 1，34．3 | 3， 879 | 1，256 | 716 | 1，972 | 1，620 | 2， 500 | 4，120 | 690 | 664 | 1，394 | 531 |
| NewJersey | 373 | 404 | 7 777 | 316 | 120 | 436 | 510 | 844 | 1，354 | 149 | 978 | 241 | 58 |
| Pennsylvania．．．－ | 655 | 480 | 1，136 | 533 | 296 | 849 | 1，598 | 2， 949 | 4， 547 | 484 | 336 | 820 |  |
| S．Atlantic Division： | 16 | 11 | 27 |  |  | 22 | 56 | 74 | 130 |  | 0 |  | 6 |
| Maryland | 88 | 14 | 43 | 38 | 5 | 43 | 162 | 278 | 440 | $\% 7$ | 15 | 42 |  |
| Dist．of Columbia | 91 | 68 | 159 | 91 | 89 | 180 | 138 | 259 | 397 | 37 | 27 | 64 | 724 |
| Virginia | 136 | 165 | 302 | 39 | 15 | 54 | 107 | 30. | 409 | 39 | 44 | 83 |  |
| West Virginia | 47 | 68 | 115 | 13 | 6 | 19 | 56 | $15 \%$ | 213 | 19 | 20 | 39 |  |
| North Carolina．． | 29 | $3 \%$ | 61 | 10 | 12 | 22 | 27 | 48 | 75 | 17 | 31 | 48 |  |
| South Carolina | 253 | 312 | 565 | 55 | 32 | 87 | 93 | 211 | 304 | 56 | 97 | 153 | 70 |
| Georgia | 280 | 348 | 698 | 115 | 109 | 224 | 178 | 372 | 550 | 65 | 115 | 180 | 66 |
| Florida | 19 | 26 | 45 | 17 | 17 | 34 | 45 | 63 | 108 | 12 | 18 | 30 | 51 |
| S．Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 145 | 149 | 294 | 200 | 128 | 328 | 218 | 360 | 578 | 90 | 86 | 176 |  |
| Tennessee | 186 | 140 | 333 | 130 | 100 | 230 | 179 | 381 | 560 | 56 | 69 | 125 | 83 |
| Alabama | 95 | 65 | 160 | 106 | 66 | 172 | 74 | 220 | 291 | 33 | 36 | 69 | 134： |
| Mississipl | 255 | 338 | 593 | 161 | 174 | 335 | 101 | 217 | 318 | 47 | 106 | 153 |  |
| fouisian | 24 | 54 | 78 | 21 | 23 | 44 | 68 | 229 | 297 | 13 | 31 | 44 | 37 |
| Texas | 305 | 386 | 691 | 202 | 253 | 515 | 349 | 731 | 1，080 | 110 | 186 | 296 |  |
| Arkancas | 104 | 133 | $23 \%$ | 61 | 61 | 122 | 83 | 136 | 219 | 26 | 48 | 74 | 80 |
| Oklahoma | 3 | 0 | 3 | 0 | 0 | 0 | 9 | 21 | 30 | 2 | 1 | 3 |  |
| Indian Territory | 6 | 0 | 6 | 0 | 0 | 0 | 5 | 0 | 5 | 5 | 0 | 5 | 258 |
| Central Division： |  |  |  |  |  |  |  |  |  |  | 9 |  |  |
| Indiana | 580 | 639 | 1，209 | － 491 | 1，294 | $\cdots$ | 1，088 | 1，790 | 2，878 | 349 | 303 | \％12 | 185 |
| Illinois | 715 | 1，055 | 1，7\％ | 948 | 1，036 | 1，981． | 1，563 | 3，0\％5 | 4， 588 | 577 | \％31 | 1，308 | 90 |
| Michigan | 359 | 457 | 816 | 835 | 932 | 1，767 | 1，135 | 1，979 | 3， 114 | 38\％ | 573 | 960 | 23 |
| W isconsin | 296 | 389 | 685 | 360 | 296 | 656 | 870 | 1，2\％8 | 2，148 | 278 | $27 \%$ | 555 | 24 |
| Minne | 143 | 210 | 353 | 1，185 | 1，547 | 2，732 | 509 | 925 | 1， 434 | 277 | 424 | 701 | $5 \%$ |
| Iowa | 572 | 299 | 1，371 | 464 | 514 | 978 | 1，195 | －， 281 | 3， 476 | 420 | 595 | 1，021 | 521 |
| Missouri | 493 | 636 | 1，129 | 542 | 568 | 1，110 | 705 | 1，360 | 2，065 | 235 | 355 | 590 | 330 |
| North Dakota | 61 | 68 | 129 | 31 | 32 | 63 | 43 | 77 | 120 | 30 | 39 | 69 |  |
| South Dakota | 38 | 74 | 112 | 57 | \％0 | 120 | 89 | 158 | 247 | 37 | 64 | 101 | 40 |
| Nelrask | 375 | 454 | 859 | 561 | 681 | 1，242 | 6021 | 1，196 | 1，798 | 275 | 394 | 669 | 859 |
| Kansas | 415 | 619 | 1，031 | 332 | 404 | 736 | 604 | 1，001 | 1，605 | 307 | 505 | 812 | 66 |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana | 17 | 30 | $4 \%$ | 31 | 28 | 59 | 38 | 77 | 115 | 13 | 17 | 30 |  |
| Wyoming | 4 | 14 | 18 | 3 | 10 | 13 | 13 | 33 | 46 | 8 | $2{ }^{2}$ | 50 |  |
| Colorado | 168 | 264 | 432 | 365 | 336 | $70 \%$ | 216 | 401 | 617 | 83 | 112 | 195 | 738 |
| New Mexi | 12 | 11 | 23 | 5 | 10 | 15 | ， | 10 | 16 | ） | 3 | 5 |  |
| Alizona | 3 | ¢ | 8 | 5 | 4 | 9 | ， | 17 | 24 | 5 | 9 | 14 |  |
| Utah | 38 | 45 | 85 | 42 | 15 | 57 | 34 | 61 | 95 | 15 | 17 | 32 |  |
| Neva | 7 | 1\％ | 19 | 12 | 6 | 18 | 17 | 51 | 68 | － 9 | 30 | 39 |  |
| Idaho | 32 | 37 | 69 | 23 | 10 | 33 | 14 | 35 | 49 | 5 | 13 | 18 | 33 |
| Washing | 84 | 134 | 218 | 67 | \％1 | 138 | 101 | 164 | 265 | 32 | 52 | 81 | 112 |
| Oregon． | 23 | 41 | 64 | 15 | 13 | 28 | 58 | 140 | 198 | 9. | 25 | 34 |  |
| California | 168 | 330 | 498 | 711 | $\% 17$ | 1，428 | 579 | 990 | 1，569 | 299 | 429 | $7 \times 8$ | 186 |

Table 3.-Public high schools-Number of secondary students pursuing certain studies in 1898-99.


Table 4.-Public high schools-Number of secondary students pursuing certain studies in 1898-99.

| State or Territory. | German. |  |  |  | Algebra. |  |  |  | Geometry. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | - |  | 永 |  |  | $\begin{aligned} & \dot{3} \\ & \text { ت̈ } \\ & \text { g్ } \\ & \text { E } \end{aligned}$ | $\begin{aligned} & \text { ~i } \\ & \text { B } \\ & \text { O } \\ & \text { E } \end{aligned}$ |  |  |  | + |
| United State | 1,613 | , 676 | 41,030 | 136, 708 | $\therefore, 494$ | 114, 62\% | 15\%,260 | 271, 887 | 4, 889 | 54, 186 | 78,861 | 133, 047 |
| North Atlantic Division | 613 | 0,759 | 16, 827 | 27.579 | 1,349 | 34,382 | 43, 452 | 77, 881 | 1,256 | 17.230 | 22,091 | 40,211 |
| South Atlantic Division | 53 | 1,041 | 1,768 | 2, ${ }^{2} 809$ | 405 | 7, 131 | 10, 845 | 1\%,996 | 317 | 3, $33 \cdot$ | 5,235 | 8,56\% |
| Soutl Central Division. | 66 | 826 | - 978 | 1,804 | 538 | 10.358 | 14,702 | 25, 060 | 521 | 4,554 | 7,076 | 11,630 |
| North Central Division. | 787 | 11, 805 | 15, 201 1 | 31,006 | 2, 918 | 55,013 | 78, 713 | 134,756 | 2, 585 | 2̄, 203 | 35, 291 | 63, 524 |
| Western n Division....... | 84 | 1, 25\% | -2056 | 3,508 | 293 | 6,743 | 9,498 | $16,: 21$ | 210 | 3,77\% | 5, 238 | 9,115 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| New Hampshire-.-- | 10. | 43 | 63 | 109 | 5: | 7\%1 | -841 | 1,515 | 46 | 434 | 1,825 | -259 |
| Fermont | 13 | 25 | 73 | 108 | 51 | 613 | 805 | 1,418 | 51 | 283 | 415 | ¢98 |
| Massacliusett | 95 | 1,164 | 2,585 | 3, 749 | 23\% | 7,90\% | 8. 170 | 16,380 | P23 | 4,629 | 5,283 | 9,912 |
| Rhode Island | 13 | 226 | 270 | 496 | 18 | 838 | 854 | 1,692 | 15 | 49.3 | , 555 | 1,047 |
| Connecticut | 48 | 441 |  | 1,386 | 69 | 1,504 | 1,9\%0 | 3, 424 | 66 | 800 | 1,044 | 1,814 |
| INew York | 290 | 5, 215 | 6, 62: 1 | 11, 869 | 369 | 10, 101 | 12, 49\% | 22, 593 | 359 | 4,87\% | 6, 814 | 11, 691 |
| New Jerse | 43 | 1,201 | -2,094 | 3.258 | 89 | 2,652 | 3,90\% | 6,814 | 80 | 833 | 1,539 | 2,372 |
| Ponnsylvania | 93 | 2,372 | 4,081 | 6, 456 | 30: | 7,91\% | 11,516 | 19, 483 | 275 | 3,874 | 5,516 | 9,389 |
| South AtlanticDivision: Delaware | 3 | 19 | 8 |  | 13 | 402 | 605 | 1,00\% | 13 | 150 | 258 | 411 |
| Maryland | 12 | 520 | 604 | 1,124 | 48 | 1,13? | 1,88? | 3,014 | 47 | 1,049 | 1,591 | , 640 |
| District of Colnmbia | 4 | 198 | 569 | 767 | 4 | 5\%8 | , 864 | 1,392 | 4 | 295 | $3 \pi 6$ | 671 |
| Virginia | 18 | 208 | 420 | 64 | 67 | 1,158 | 1,58\% | 2,745 | $4{ }^{5}$ | 454 | 646 | 1, 100 |
| West Virgi | 6 | 25 | 71 | 96 | 23 | 413 | 753 | 1,166 | 24 | 145 | 315 | 463 |
| Nortlı Carolina | 1 | 2 | 1 | 3 | 17 | 306 | 3.4 | 680 | 11 | 148 | 230 | 378 |
| South Carol | 4 | 38 | 29 | 54 | 99 | 1,128 | 1,711 | ת, 838 | 62 | 200 | 399 | 599 |
| Georgia | 4 | 19 | 34 | 53 | 109 | 1,806 | 2, 6.51 | 4, 457 | 89 | 763 | 1,180 | 1,943 |
| Tlorida | 1 | 8 | 15 | $\mathfrak{\sim}$ | P2 | 258 | 438 | 696 | 20 | 125 | 237 | 362 |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentuclay | 18 | $45 \%$ | 321 | 778 | 68 | 1.538 | 1,968 | 3,506 | 59 | 729 | 963 | 1,688 |
| Tennessee | 8 | 49 | 110 | 13.8 | 101 | 1,57\% | 1,975 | 8, 252 | 94 | 586 | 862 | 1, 148 |
| Alabama | 6 | 37 | 64 | 104 | 54 | 959 | 1,369 | 2, 3\%4 | - 46 | 457 | 860 | 1,317 |
| Mississip | 4 | 8 | 4 | 12 | 91 | 1.0\%8 | 1,453 | 2, 48\% | 61 | 244 | 381 | 628 |
| Louisiana |  |  |  |  | 21 | 42 | - 956 | 1,428 | 18 | 245 | 534 | 779 |
| Texas | 23 | 259 | 433 | 698 | 901 | 8, 772 | 5, 656 | 9,528 | 195 | 1,956 | 2, 96\% | 4,923 |
| Arkansas | 6 | 17 | 33 | 50 | 53 | 888 | 1,10\% | 1,990 | 41 | 301 | 455 | 756 |
| Oklanoma | 1 | 6 | 10 | 16 | 4 | 68 | $11 \%$ | 180 |  | 30 | 48 | 78 |
| Indian Territory --. |  |  |  |  | 4 | 60 | 5 | 65 |  | 13 | 0 | 13 |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio <br> Indiana | 119 | 2, 114 | $2,88 \%$ 1,506 | 5, 0,7 | 613 362 | 11.011 6.723 | 14,105 9,483 | 25,168 16,216 | 502 | 4.654 | 6,480 4,194 | 11,137 |
| Itlinois | $10^{\circ}$ | 1,908 | 3,851 | 5, 759 | 349 | r,561 | 10,900 | 18, 461 | 313 | 3,821 | 5,986 | 9,807 |
| Michigan | 18: | 1,683 | 2, 70\% | 4, 410 | 236 | 6, 108 | 8, 129 | 14, 2 | 25:2 | 2,297 | 3,404 | 5, $\uparrow 01$ |
| Wisconsin | 117 | 1,696 | : 2,508 | 4, 204 | 183 | 3,473 | 4,518 | \%,991 | 180 | 1,766 | 2,385 | 4,151 |
| Minnesot: | 50 | 728 | 1,240 | 1,968 | 11: | :2,478 | 3,638 | 6, 116 | 109 | 1,632 | 2, 005 | 4, 297 |
| Towa. | 58 | 889 | 1,451 | 2,280 | 330 | 6. 237 | 9,055 | 15,202 | 295 | 2,648 | 4,42:2 | 7,070 |
| ITissout | 33 | $8: 5$ | 1,59\% | ㄹ.204 | 211 | 5,244 | 7, 8.5 | 12,89 | 184 | 2,113 | 2,983 | 5, 096 |
| Nowth Dakot |  |  |  |  | 25 | 270 | $3 \% 8$ | 648 | 21 | 109 | 184 | 293 |
| South Dakot | 9 | 42 | 88 | 130 | 29 | 392 | 610 | 1,002 | 25 | 158 | 274 | 432 |
| Nebraska | 49 | 580 | 779 | 1,359 | 233 | 3,414 | 5,318 | 8, 78\% | 224 | 1,698 | $\stackrel{2}{2} 848$ | 4, 516 |
| Kanses ----. | 59 | 409 | 715 | 1, 1:4 | 189 | 3, 09. | 4,905 | 7,998 | 163 | 1, 148 | 2,396 | 3, 844 |
| Western Division: |  |  |  |  |  |  |  |  |  |  |  |  |
| mLontana | 4 |  | 151 |  | 15 | 309 | 428 | 732 | 14 | 143 | 2 E 0 | 363 |
| Vyoming | 1 | 16 | 23 |  | 6 | 76 | - 98 | 174 | 4 | 38 | 44 | $8 \%$ |
| Colorado | di | 456 | 717 | 1, 203 | 41 | 1,251 | 1,708 | 2, 959 | 32 | 865 | 1,170 | 2,033 |
| New Mex |  |  |  |  | 6 | 53 | 81 | 134 | 5 | 17 | 30 | 47 |
| Arizon | 1 |  | , | 8 | 2 | 27 | 74 | 101 | 2 | 12 | 23 | 35 |
| Utah | 2 |  | 124 | 206 | 4 | 256 | - 399 | 655 | 2 | 72 | 107 | 179 |
| Nevada | 1 | 0 | 3 | 3 | 7 | 151 | . 250 | 401 | 7 | 82 | 138 | 220 |
| Idano |  |  |  |  | f | 80 | 144 | 224 | 6 | 49 | 100 | 149 |
| Washin | 7 | 98 | 193 | 291 | 36 | 798 | 1,191 | 1,989 | 29 | 396 | 550 | 875 |
| Oregon | - | 92 | 20.3 | 294 | 15 | 519 | 74\% | 1,266 | 10 | 154 | 236 | 390 |
| Calitornia | 48 | 428 |  | 1,934 | 94 | 3, $2 \times 3$ | - 4,388 | 7,606 | 92 | 2,018 | 2,7:0 | 4,739 |

Table 5．－Public high schools－Number of secondary students pursuing certain studies in 1898－93．

| State or＇Territory． | Trigonometry． |  |  |  | Astronomy． |  |  |  | Physics． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \dot{9} \\ & \stackrel{y}{\leftrightarrows} \\ & \text { 侖 } \end{aligned}$ |  | 要 |  |  |  | $\begin{aligned} & \text { ت゙ } \\ & \text { O } \\ & \text { E } \end{aligned}$ |  |  |  | － |
| United States | 778 | 4，968 | 4，792 | 9，${ }^{760}$ | 1，125 | 5， 896 | 9，952 | 15,848 | 4，514 | 41，050 | 55， 163 | 96， 213 |
| North Atlantic Division | 228 | 1，627 | 1． 066 | 2，693 |  | 2，189 | 3， 845 | 6， 034 | 1，108 | 12， 662 | 14，936 | 27， 298 |
| South Atlantic Division | 95 | 617 |  | 1，250 | 53 | 311 | ${ }^{6} 58$ | －989 | 253 | 2， 606 | 4，085 | 6，691 |
| South Central Division | 167 | 866 | 1，138 | 2，004 | 82 | 454 | 727 | 1，181 | 500 | 4，167 | 5， 463 | 9，630 |
| Worth Central Division | 216 | 1． 408 | 1，509 | 2，917 | 506 | 2， 775 | 4，395 | 7， 170 | 2， 406 | 19， 461 | 27， 572 | 4\％， 033 |
| Western Division | $7 \%$ | 450 | 446 | 896 | 24 | 167 | 307 | $4 \% 4$ | ｜ 187 | 2， 154 | 3， 107 | 5，261 |
| North Atlantic Division： Maine | 8 | 20 | 22 | 47 | 76 | $3 \% 1$ | 458 | 809 | 120 | 782 | 907 | 1，689 |
| New Hampsl | 4 | 26 | 2 | 28 | 19 | 91 | $11 \%$ | 211 | 4.4 | 440 | 384 | 824 |
| Vermont． | 2 | 5 | 0 |  | 27 | 87 | 151 | 238 | 38 | 184 | 193 | $3 \% 9$ |
| Massachuset | 40 | 300 | 53 | 353 | 121 | 630 | 1，283 | 1，913 | 204 | 3 ， 395 | 3，699 | 7，036 |
| Fimode Island | 4 | 38 | 15 | 53 | 11 | 37 | 105 | 142 | 13 | 322 | 378 | ． 700 |
| Connecticu | 14 | 94 | 13 | 107 | 29 | 126 | 189 | 315 | 53 | 526 | 654 | 1，180 |
| IVew York | 93 | 507 |  | 1，042 | 110 | 416 | 640 | 1，086 | 298 | 3，40\％ | 3，842 | 7，049 |
| New Jersey | 14 | 96 | 100 | 196 | 24 | 141 | 380 | 591 | 80 | 837 | 1，338 | 2，175 |
| Pennsylvania | 47 | 536 | 320 | 862 | 43 | 277 | 5\％ | 799 | 200 | 2， 797 | 3，739 | 6，536 |
| South Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Delaware Maryland | 21 | 278 | 187 | 27 405 | 10 | 72 | 10 | 234 | 12 | 138 | 1，231 | 366 2,134 |
| District of Columbia | 4. | 92 | 26. | 118 |  |  |  |  | 4 | 246 | 1， 410 | 246 |
| Vinginia． | 20 | 95 | 88 | 183 |  |  |  |  | 45 | 420 | 583 | 1，003 |
| West Virginia | 4 | 20 | 30 | 50 | 4 | 24. | 33 | 60 | 20 | 104 | 206 | 310 |
| North Carolina | 1 | 2 | 1 | 3 | 2 | 12 | 33 | 45 | 6 | 104 | $18 \%$ | 206 |
| South Carolin | 10 | 46 | 74 | 120 | 9 | 24 | 116 | 140 | 48 | 265 | 449 | 714 |
| Georgia | 26 | 36 | 176 | 262 | 22 | 132 | $2 \% 0$ | 402 | 56 | 348 | 644 | 99\％ |
| Florida | 9 | 31 | 51. | 8 8， | 6 | 47 | 61 | 108 | 18 | 101 | 159 | 200 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 31 | 188 | 177 | 365 | 25 | 117 | 193 | 310 | 50 | 645 | 575 | 1，220 |
| Tennessee | 17 | 50 | 57 | 107 | 13 | 78 | 110 | 188 | 85 | $51 \%$ | 69.1 | 1，211 |
| Alabama | 20 | 166 | 202 | 388 | 8 | 34 | 48 | 82 | 41 | 388 | 430 | － 858 |
| Mississipp | 16 | 33 | 37 | 70 | 8 | 47 | 71 | 118 | $8 \%$ | 565 | \％ 63 | 1，3：8 |
| Louisiana | 4 | 12 | 20 | 32 | 5 | 25 | 50 | 81 | 19 | 199 | 417 | ， 616 |
| Texas | 65 | 312 | 476 | 782 | 18 | 125 | 206 | 331 | 185 | 1，530 | 2，143 | 3，6\％3 |
| Arkansas | 14 | 105 | 150 | 250 | 4 | 24 | 39 | 65 | 33 | 282 | － 361 | 643 |
| Oklasoma |  |  |  |  |  |  |  |  | 3 | 26 | 39 | 85 |
| Indian Trerritory |  |  |  |  | 1 |  | 1 | 3 | 2 | 15 | 1 | 16 |
| North Central Division： <br> Onio | 8 | 472 |  | 974 |  |  |  | 1，900 | 483 |  | 4， 986 | 8， 025 |
| Indisma | 20 | 122 | 154 | 278 | 22 | 209 | 316 | 1， $5 \%$ | 254 | 2，174 | －，951 | 5，125 |
| Illinois | 27 | 222 | $14 \%$ | 369 | 89 | 480 | 906 | 1，256 | 311 | 2， 639 | 4，027 | 0， 266 |
| Irichigan | 10 | 87 | 43 | 130 | 5. | 251 | 349 | 600 | 286 | 1，931 | 2，754 | 4，685 |
| Wisconsin | 9 | 49 | 46 | 95 | 4 | 31 | 21 | 52 | $17 \%$ | 1，209 | 1，654 | 2，953 |
| Minnesota | ， | 43 | 40 | 83 | 21 | 180 | 260 | 440 | \％ 9 | \％92 | 1，191 | 1，990 |
| Iowa． | 17 | 45 | 76 | 171 | 86 | 463 | 790 | 1，253 | $30 \%$ | 2， $45 \%$ | 3，534 | 5，991 |
| Missouri | 24 | 135 | 309 | 504 | 26 | 144 | 383 | 327 | 165 | 1，489 | 2， 166 | 3． 655 |
| Nor＇th Dakota | 3 | 6 | 9 | 15 | 2 | 5 | 10 | 15 | 20 | 161 | 101 | 105 |
| South Dakota | 3 | 12 | 27 | 39 | 5 | 28 | 47 | 75 | 26 | 17.9 | 240 | 412 |
| Nebraska | 17 | 77 | 103 | 180 | 15 | 61 | 124 | 188 | 204 | 1，319 | 2， 04 号 | 3，361 |
| Kanses | r | 23. | 53 | 81 | 37 | 159 | 250 | 409 | $1 \%$ | 1，318 | 1，985 | 3，304 |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana | 4 | 27 | 45 | 72 | 2 | 14 | 33 | 48 | 11 | 83 | 135 | 218 |
| Wyoming | 1 | 0 | 8 | 0 |  |  |  |  | 3 | 27 | 38 | 65 |
| Colorado | $1 \frac{1}{4}$ | 129 | 116 | 245 | 8 | 63 | 146 | 214 | 34 | 475 | 738 | 1，214 |
| New Mexico |  |  |  |  | 1 | 0 | 5 | 5 | 3 | 11 | 12 | 26 |
| Arizona | 1 | 5 | 8 | 1.3 |  |  |  |  | 2 | 14 | 23 | 37 |
| Utah | 2 | 27 | 37 | 61 | 1 | 21 | 27 | 48 | 3 | $6 \%$ | 81 | 128 |
| Neva |  |  |  |  | 1 | $\stackrel{2}{2}$ | 6 | 8 | 7 | 99 | 16 | 275 |
| Idabo |  |  |  |  | 2 | 3 | 5 | 8 | 6 | 31 | 75 | 109 |
| Washimgton | 3 | 13 | 15 | 29 | 1 | 1 | 10 | 11 | 24 | 200 | 331 | 534 |
| Oregon－－ | 4 | 19 | 19 | 33 | 4 | 29 | 39 | 61 | 9 | $1: 2$ | 196 | 316 |
| California | 43 | 230 | 202 | 43： | 4 | 29 | 43 | \％ | 83 | 1，018 | 1，361 | 2，319 |

Table 6.-P'ublic high schools-Number of sccondary students pursuing certain studies in 1898-99.


Table 7．－Public high schools－Nimber of secondary shudents pursuing certuin studies in $1898-99$.

| State or Territory． | Physiology． |  |  |  | I＇sycholiogy． |  |  |  | Inctorie． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \stackrel{\Xi}{\Xi} \\ \text { ت゙ } \end{gathered}$ |  | $\begin{aligned} & \text { تं } \\ & \text { O } \\ & \text { E } \end{aligned}$ |  | 岂 |  | E－ |  | 亗 |  | － |
| United States | 4，167 | 58，602 | 80，487 | 139， 089 | 820 | 4，147 | 7，221 | 11，368 | 4，718 | 72， 174 | 106， 645 | 178，819 |
| North Atlantic Division |  | 17， 663 | 24，470 | 42， 133 | 102 |  | 1，289 | 1， 774 | 1，150 | 23， 264 | 31， 059 | 54，323 |
| South Atlantic Division | 290 | 3，315 | 4，955 | 8，270 | 42 | 159 | ， 471 | 630 | ， 324 | 3，225 | 6，166 | 9，391 |
| South Central Division | 488 | 6，913 | 8，885 | 15，798 | 177 | 979 | 1，34＇ | 2，326 | 530 | 5， 604 | 8，930 | 14，434 |
| North Central Division | 2， 307 | 29，370 | 40， 102 | 69， 472 | 477. | 2， 396 | 3， 797 | 6，193 | 2，512 | 35，462 | 53， 226 | 83，68\％ |
| Western Division | 89 | 1，34］ | 2，075 | 3，416 | 22 | 128 | 317 | 445 | 202 | 4，619 | 7，364 | 11，983 |
| North Atlantic Division： <br> Maine． | 101 | 761 | 933 | 1，691 | 15 | 91 | 126 | 217 | 124 | 1，056 | 1，386 | 2，442 |
| New Hamps | 29 | 198 | 226 | 1，421 | 3 | 14 | 18 | 32 | 42 | － 898 | 1,379 481 | ， 877 |
| Vermont．． | 27 | 181 | 247 | 428 | 17 | 51 | 120 | 174 | 50 | 450 | 681 | 1， 131 |
| Massachusett | 150 | 2， 202 | 3，014 | 5， 216 | 8 | 54 | 103 | 157 | 206 | 7， 323 | 8，272 | 15，535 |
| Rhode Island | 8 | 39 | 170 | 209 | 4 | 5 | 90 | 85 | 16 | 854 | 983 | 1，837 |
| Connecticut | 37 | 702 | 964 | 1，666 | 1 | 5 | 8 | 13 | 64 | 1，442 | 1，807 | 3，249 |
| New York | 3.8 | 8，632 | 10， 706 | 19，338 | 11 | 42 | 287 | 329 | 314 | 6，902 | 8，092 | 11， 994 |
| New Jersey | 63 | 1，117 | 1，56．t | 2，681 | 9 | 17 | 145 | 162 | 79 | 1，097 | 2， 194 | 3，291 |
| Pennsylvania | $2 \because 0$ | 3，831 | 6，616 | 10， 477 | 31 | 203 | 402 | 605 | 255 | 3，742 | 7，165 | 10，907 |
| South Atlantic Division： Delaware | 11 |  |  |  |  |  | 9 | 14 | 3 |  | 281 | 422 |
| Maryland | 40 | 570 | 1，037 | 1，607 | 5 | 12 | 146 | 158 | 26 | 417 | 1，331 | 1，748 |
| District of Colu |  |  |  |  |  |  |  |  | 2 | 93 | －279 | － 372 |
| Virginia | 56 | 677 | 923 | 1， 600 | 2 | 4 | 48 | 52 | 51 | 660 | 1，062 | 1，722 |
| West Virginia | 20 | 257 | 396 | 633 | ， | 12 | 25 | 37 | 24 | 155 | 331 | 486 |
| North Carolin | 13 | 216 | 262 | 478 | 1 | 2 | 1 | 3 | 13 | 128 | 214 | 312 |
| South Carolin | 61 | 532 | 800 | 1，332 | 4 | 9 | 58 | 67 | 70 | 486 | 802 | 1，283 |
| Georgia | 65 | 600 | 812 | 1， 442 | 12 | 64 | 61 | 125 | 93 | 931 | 1，461 | ＇2，392 |
| Florida． | 21 | 228 | 860 | 585 | 13 | 51 | 123 | 174 | 22 | 214 | 405 | 619 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 56 | 993 | 1，156 | 2，149 | 26 | 181 | 241 | 422 | 61 | 963 | 1，330 | 2，293 |
| Tennesse | 82 | 989 | 1，096 | 2，085 | 12 | 25 | 65 | 90 | 93 | 779 | 1，074 | 1，853 |
| Alabama | 4. | 702 | 981 | 1，683 | 10 | 99 | 85 | 184 | 48 | 591 | 1， 121 | 1，712 |
| Mississippi | 77 | 867 | 1， 182 | 2，019 | 7 | 32 | 50 | 82 | 71 | 537 | 795 | 1，332 |
| Louisiana | 18 | 310 | 5.17 | ，857 | 4 | 14 | 22 | 36 | 20 | 347 | 768 | 1，115 |
| Texas | 153 | 2，461 | 3， 231 | 5， 692 | 106 | 551 | 778 | 1， 329 | 182 | 1，813 | 3，018 | 4，861 |
| Arkansa | 45 | 569 | 688 | 1，257 | 10 | 69 | 92 | 161 | 47 | 467 | 607 | 1，074 |
| Oklahoma．．．．． |  |  |  |  |  |  | 11 | 22 | 4 | 73 | 116 | 189 |
| Indian Territory | 3 | 22 | 4 | 26 |  |  |  |  | 1 | － 4 | ， | 5 |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio ．．． | 533 | 6， 871 | 8，527 | 15，398 | 93 | 505 | 60． | 1，110 | 492 | 6，106 | 8， 542 | 14， 643 |
| Indiana | 201 | 2，113 | 2， 7,538 | 4，916 12,926 | 61 25 | 362 120 | 255 | 918 375 | 315 | 5， 5,960 | 9， 107 | 12， 153 |
| Michigan | 259 | 2，600 | 3，614 | 6，214 | 40 | 158 | 291 | 449 | 261 | 3，573 | 4，998 | 8，571 |
| Wisconsin | 173 | 1，905 | 2， 483 | 4，388 | 120 | 559 | 787 | 1，346 | 141 | 1，587 | 2，031 | 3，621 |
| Minncsota | 5.1 | 629 | 1， 031 | 1，660 | 3 | 13 | 31 | 41 | 94 | 1，873 | 3，011 | 4，88t |
| Iowa | 271 | 3，310 | 4，534 | 7，894 | 17 | 89 | 121 | 210 | 303 | 3， 543 | 5,523 | 9，066 |
| Missouri | $15 \frac{1}{1}$ | 2，414 | 3， 476 | 5，890 | 59 | 281 | 615 | 894 | 188 | 2， 967 | 5， 096 | 8，063 |
| North Dal | 17 | 152 | 186 | － 338 | ， | 11 | 25 | 36 | 22 | 152 | 207 | 359 |
| South Dal | 20 | 230 | 311 | 574 | 1 | 2 | 2 | 4 | 24 | 195 | 328 | 523 |
| Nebraska | 169 | 2，200 | 3， 078 | 5， 278 | 9 | 512 | 83 | 135 | 190 | 2，356 | 8， 779 | 6， 135 |
| Kansas． | 139 | 1，605 | 2，361 | 3，966 | 44 | 214 | 426 | 670 | 173 | 2， 119 | 3，524 | 5，643 |
| Western Division： |  |  | 179 |  |  |  |  |  |  |  | 04 |  |
| Montana | 10 | 109 | 179 | 288 | 1 | ， | 6 | 8 | 15 | 152 | 241 | 393 |
| Wyoming | 3 | 31 | 42 |  |  |  |  |  | 5 | 55 | 84 | 139 |
| －Colorado | 15 | 243 | 883 | 626 | 12 | 76 | 207 | 283 | 39 | 711 | 1，124 | 1，865 |
| New Mexico | 5 | 39 | 56 | 95 |  |  |  |  | 3 | 12 | 25 | 37 |
| Arizona | － | 12 | 22 | 34 |  |  |  |  | 2 | 7 | 38 | 45 |
| Utah | 2 | 55 | 80 | 135 | 2 | 18 | 33 | 51 | 3 | 84 | 111 | 195 |
| Nevad | 4 | 73 | 127 | 200 | ］ | 1 | 8 |  | 7 | 103 | 180 | 283 |
| Idaho | 6 | 51 | 100 | 151 | 1 | 1 | 2 | 3 | 7 | 39 | 83 | 122 |
| Washingt | 18 | 205 | 371 | 576 | 4 | 20 | 41 | 61 | 26 | 345 | 543 | 888 |
| Oregon． | 11 | 217 | 277 | 494 | 1 | 10 | 20 | 30 | 13 | － 281 | 466 | 747 |
| California | 14 | 306 | 438 | 744 |  |  |  |  | 82 | 2， 800 | 4，469 | 7，269 |

Table 8．－Public high schools－Number of secondary students purnuing certuin studies in 1898－99．

| State or＇lerritory． | English literature． |  |  |  | Mistory． |  |  |  | Civics． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 灾 | 感 |  |  | 号 |  | ت゙ |  | $\frac{\text { 令 }}{\text { 云 }}$ | 守 | $\underset{\text { \％}}{\substack{\text { ® }}}$ |
| United Stat | 1，586 | 78，973 | 119，863 | 198，836 | 4，720 | 72， 749 | 109， 747 | 182， 436 | 4，266 | 44， 147 | 60， 490 | 04，637 |
| North Atlantic Division． | 1，149 | 28，935 | 40， 539 | 69， 474 | 1，162 | 24， 471 | 37， 266 | 61， 737 | 1，068 | 11，547 | 14，905 | 26， 452 |
| South Atlantic Division． | 287 | 4，608 | 7，943 | 12，551 | 333 | 5，253 | 8，509 | 13， 762 | 158 | 1，507 | 2，150 | 3， 657 |
| South Central Division－ | 438 | 4，＇140 | 7，732 | 12， 472 | 463 | 6， 021 | 9,205 | 15，226 | 412 | 4，476 | 6，004 | 10， 480 |
| North Central Division | 2， 502 | 34，528 | 53， 899 | 88， 427 | 2，556 | 31， 651 | 46，281 | 77，935 | 2， 447 | 24，703 | 34， 348 | 59， 051 |
| Western Division | 210 | 6， 162 | 9，750 | 15，912 | 206 | 5，350 | 8，486 | 13， 836 | 181 | 1，914 | 3，083 | 4，997 |
| North Atlantic Division： |  |  |  |  |  |  |  |  |  |  | 770 | 1，478 |
| New Hampshire．． | 45 | 605 | 724 | 1，329 | 45 | 604 | 741 | 1，345 | 29 | 141 | 204 | 345 |
| Yermont | 47 | 372 | 520 | \＄92 | 45 | 420 | 559 | 1979 | 47 | 837 | 440 | 777 |
| Massachusetts | 221 | 10，343 | 13，542 | 23，885 | 220 | 7，159 | 10，818 | 17，977 | 163 | 1，868 | 2，308 | 4，176 |
| Rhode Islan | 17 | －95\％ | 1，355 | 2，337 | 17 | 536 | 957 | 1，493 | 15 | 225 | 286 | 511 |
| Connecticut | 69 | 2，222 | 2，781 | 5，003 | 65 | 1，523 | 1，924 | 3， 447 | 47 | 333 | 576 | 909 |
| New York | 291 | 5，727 | 7，197 | 12，924 | 326 | 6，913 | 9，688 | 16，631 | 327 | 3， 714 | 4，357 | 8，071 |
| New Jersey | 77 | 1， 433 | 2， 5.3 | 4，016 | 83 | 1，925 | 3，198 | 5， 118 | 70 | 936 | 1，217 | 2， 153 |
| Pennsylvania ．－．．．．． | 266 | 6，019 | 10，058 | 16， 077 | 241 | 4，027 | 7，711 | 11，738 | 259 | 3，285 | 4，747 | 8，032 |
| South Atlantic Division： Delaware | 12 |  |  | 347 | 12 |  | 265 |  | 12 | 110 | 172 | 282 |
| Maryland | 45 | 1，196 | ］，517 | 2，713 | 42 | 1， 255 | 1，636 | 2，891 | 24 | 353 | 503 | 856 |
| Distrietof Columbia | 5 | 1，118 | 1，934 | 3， 052 | 5 | 623 | 1，208 | 1，831 | 2 | 8 | 13 | 21 |
| Virginia | 44 | 488 | 912 | 1，400 | 53 | 840 | 1，413 | 2，253 | 18 | 171 | 211 | 382 |
| West Virgin | 22 | 186 | 394 | 580 | 25 | 239 | 455 | 694 | 22 | 121 | 253 | 374 |
| North Carolin | 13 | 271 | 359 | 630 | 13 | 283 | 345 | 628 | b | 88 | 107 | 195 |
| South Carol | 69 | 457 | 916 | 1，373 | 85 | 668 | 1，292 | 1，960 | 40 | 292 | 455 | 747 |
| Georgia | 63 | 633 | 1，458 | 2，091 | 80 | 964 | 1，578 | 2， 542 | 23 | 288 | 302 | 590 |
| Floxida | 14 | 122 | 243 | 365 | 18 | 205 | 317 | 522 | 14 | 76 | 134 | 210 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 61 | 1，028 | 1，359 | 2，387 | 57 | 1，005 | 1，177 | 2，182 | 62 | 795 | 856 | 1，651 |
| Tennessee | 63 | 516 | 824 | 1，310 | 60 | 633 | 982 | 1，615 | 52 | 445 | 528 | 973 |
| Alabama | 41 | 413 | 803 | 1，216 | 41 | 527 | 1，011 | 1，538 | 28 | 311 | 451 | 762 |
| Mississiph | 71 | 637 | 916 | 1，553 | 66 | 604 | 962 | 1，566 | 61 | 565 | 849 | 1，414 |
| Louisiana | 21 | 247 | 819 | 1，066 | 19 | 492 | 1，016 | 1，418 | 14 | 117 | 343 | 450 |
| Texas | 140 | 1，474 | 2，468 | 3， 942 | 174 | 2， 268 | 3， 298 | 5，561 | 156 | 1，710 | 2，359 | 4，069 |
| Arkansa | 37 | 399 | 511 | 910 | 43 | 576 | 740 | 1，316 | 37 | 513 | $57 \pm$ | 1，087 |
| Oklahoma | 3 | 24 | 32 | 56 | 2 | 8 | 17 | 25 | 1 | 20 | 42 | 62 |
| Indian Territory．．．． | 1. | 12 | 0 | 2 | 1 | 3 | 2 | 5 | 1 | 0 | 2 | 2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio． | 495 | 6，107 | 8， 879 | 14， 986 | 49 | 5， 420 | 7，464 | 12， 890 | 525 | 4，513 | 5，857 | 10，370 |
| Indiana | 325 | 5， 833 | 8，571 | 14， 404 | 323 | 4， 113 | 5，650 | 9，763 | 263 | 2，613 | 3， 460 | 6， 073 |
| Illinois． | 321 | 6，689 | 11， 204 | 17，893 | 313 | 4，764 | 7，023 | 11，787 | 289 | 2，991 | 4，334 | 7，325 |
| Michigan | 252 | 2，293 | 3， 588 | 5，881 | 272 | 3，884 | 5，474 | 9，358 | 249 | 2， 639 | 3，452 | 6，091 |
| Wisconsi | 105 | 1， 901 | 2，782 | 4，683 | 171 | 1，987 | 2，606 | 4，593 | 167 | 1，762 | 2， 437 | 4，199 |
| Minneso | 93 | 941 | 1，609． | 2， 550 | 99 | 1，693 | 2，580 | 4，273 | 67 | 681 | 816 | 1，527 |
| Iowa | 290 | 3，883 | 6，234 | 10， 117 | 297 | 3， 329 | 4，995 | 8，324 | 307 | 3，239 | 4，686 | 7，925 |
| Missouri | 176 | 2，159 | 3，457 | 5，616 | 187 | 2， 770 | 4，563 | 7，333 | 163 | 2， 139 | 3，143 | 5，282 |
| North Daketa | 23 | －261 | 394 | 655 | 20 | 158 | 224 | 382 | 19 | 138 | 170 | 308 |
| South Da | 24 | 227 | 336 | 563 | 27 | 2.50 | 361 | 611 | 24 | 201 | 303 | 510 |
| Nebracki | 178 | 2，378 | 3， 743 | 6，12i | 193 | 1，710 | 2， 682 | 4，392 | 201 | 1，961 | 2， 893 | 4， 854 |
| Kansas． | 160 | 1， 856 | 3， 102 | 4，958 | 162 | 1，570 | 2，659 | 4，229 | 167 | 1，823 | 2， 761 | 4，587 |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana．．．．． | 15 | 148 | 219 | 367 | 13 | 123 | 211 | 334 | 14 | 137 | 191 | 328 |
| Wyoming | 41 | $\underline{25}$ | － 42 | 67 3 | 5 | － 6.5 | 63 $2 \quad 059$ | － $\begin{array}{r}118 \\ 3,395\end{array}$ | ． 26 | 27 363 | 41 587 | 950 |
| Colorado | 39 | 1，338 | 2，052 | 3，390 | 36 | 1，343 | 2，052 | 3， 395 | 26 | 363 23 | 587 | 950 |
| New Miexi | 3 | 9 | 17 | 26 | ¢ | 40 | 50 | 96 | 2 | 23 | 26 <br> 47 | 49 |
| Arizoii | 2 | 34 | 67 | 101 | ， | 12 | 22 | 31 | $\stackrel{2}{2}$ | 10 | － 47 | 57 |
| Utah | 4 | 42. | 73 | 115 | 3 | 161 | 219 | 410 |  | 42 | 66 | 108 |
| Nevada | 7 | 103 | 186 | 289 | 6 | 82 | 153 | 235 | 6 | 86 | 147 | 233 |
| Idaho |  | 47 | 115 | 162 | 6 | 77 | 153 | 230 | 6 | 48 | 117 | 165 |
| Washing | 27 | 528 | 873 | 1， 401 | 23 | 327 | 571 | 598 | 27 | 254 | 348 | 602 |
| Oregon． | 13 | 194 | 358 | 552 | 14 | 333 | 534 | 867 | 10 | 174 | －292 | 463 |
| California | S9 | 8，694 | 5，748 | 9， 412 | 92 | 2，797 | 4， 422 | 7，219 | 80 | 750 | ｜ 1,221 | 1，971 |

TABuE 9.--Public high schools-Proportion of male and femate shudents, per cent of students pursuing certain courses, per cent of gratuates, ctc., in 1898-99.

| State or 'jerritory. | Total secondary students. | Per cent of total number'. |  |  |  |  | Per cent of gradiaates prepared for college. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | College <br> classieal <br> preparatory students. | College scientifie preparator'y students. | Gradu- <br> ates in 1899. |  |
| United States. | 476,227 | 41.39 | 58.61 | 6.10 | 5.41 | 11.86 | 28.85 |
| North Atlantic Division | 150,683 | 42.17 | 57.83 | 7.93 | 4.02 | 12.17 | 24.78 |
| South Atlantic Division | 25, 684 | 40.02 | 59.93 | 7.57 | 2. 67 | 10.22 | 25. 70 |
| South Central Division. | 35, 632 | 41.20 | 58.80 | 6. 72 | 4.90 | 9.49 | 27.96 |
| North Central Division. | 239, 061 | 41.28 | 58.72 | 4.71 | 6.18 | 12.15 | 30.69 |
| Western Division. | 25,167 | 39.50 | 60.50 | 5.88 | 9.93 | 12.17 | 39.48 |
| North Atlantic Division: |  |  |  |  |  |  |  |
| Maine... New Ham | 8,843 3,464 | 43.76 44.63 | 56.24 55.37 | 12.24 8.75 | 3.53 4.04 | 12.57 11.58 | 26.17 21.20 |
| Vermont... | 3,169 | 43.11 | 56.80 | 7.16 | 7.23 | 11.90 | 41.38 |
| Massachusetts | 34, 425 | 43.11 | 56.89 | 11.23 | 4.85 | 14.89 | 24.16 |
| Rnode Island. | 3,436 | 42.14 | 57.86 | 5.03 | 3.43 | 12.19 | 35.08 |
| Connecticut | 6,963 | 43.64 | 56.36 | 7.34 | 4.67 | 12.78 | 24.04 |
| New York | 50,790 | 43.84 | 56.16 | 7.64 | 3.88 | 8.11 | 32.86 |
| New Jersey | 10,151 | 38.72 | 61.28 | 7.65 | 4.29 | 13.33 | 17.80 |
| Pemsylvania | 29,439 | 38.14 | 61.86 | 3.86 | 2.88 | 15.45 | 18.03 |
| South Atlantic Division: |  |  |  |  |  |  |  |
| Daryiand | 1,090 | 34.01 | 55.50 | 1.05 | 1.05 | 11.98 | 27.09 9.55 |
| District of Colu | 3,316 | 37.82 | 62.13 | 4. 79 | 5.43 | 11.97 | 16.12 |
| Virginia | 3,966 | 39.94 | 60.06 | 7.61 | 1.36 | 10.31 | 20.29 |
| West Virgini | 1,778 | 33.07 | 66.93 | 6.47 | 1.07 | 11.98 | 18.31 |
| North Carolina | 937 | 43. 76 | 56.24 | 6.51 | 2.35 | 8. 00 | 64.00 |
| South Carolina | 3,935 | 39.82 | 60.18 | 14.36 | 2.21 | 7.73 | 50.33 |
| Georgia. | 5, 566 | 40.33 | 59.67 | 11.28 | 4.02 | 9.88 | 32.73 |
| Florida | 1,009 | 38.20 | 61.74 | 4.46 | 3.37 | 10.70 | 27.78 |
| South Central Division: |  |  |  |  |  |  |  |
| Kentucky ........... | 5,426 | 43. 05 | 5.6 .95 | 5.42 | 6.04 | 10.65 | 30.45 |
| Tennessee | 5, 334 | 42.11 | 57.89 | 6. 24 | 4.31 | 10.50 | 2\%. 32 |
| Alabama | 3, 066 | 42. 20 | 57.80 | 5. 22 | 5.61 | 9.59 | 23.47 |
| Mississippi | 3,866 | 42.76 | 57.24 | 15.34 | 8.67 | 8.23 | 48.11 |
| Louisiana | 1,825 | 32.00 | 68.00 | 4.27 | 2.41 | 16.27 | 14.81 |
| Texas | 12,915 | 39.61 | 60.39 | 5.34 | 3.98 | 8.34 | 27.41 |
| Arkansas | 2,812 | 44.91 | 55.09 | 8.43 | 4.31 | 7.79 | 33.79 |
| Oklahoma | 288 | 39.93 | 00.07 | 1. 01 | 0.00 | 10.42 | 10.00 |
| Indian Territory | 70 | 88.57 | 11.43 | 8.57 | 0.00 | 7.14 | 100.00 |
| North Central Division: |  |  |  |  |  |  |  |
| Onio...... | 42,968 | 43.49 | 39.93 | 4. 16 | 6.05 | 12.77 | 25.79 |
| Indiana | 25, 468 | 41.81 39.26 | 58. 19 | 4.75 4.77 | 3.08 0.34 | 11.30 | 24.74 |
| Michigan | 27, 146 | 42.64 | 57.36 | 3.01 | 6.51 | 11.47 | 30.83 |
| Wisconsin | 17,548 | 43.12 | 56.88 | 3. 90 | 8.74 | 12.21 | 25.84 |
| Minnesota | 11, 861 | 40.98 | 59.02 | 2.98 | 23.03 | 12.09 | 48.88 |
| Inva | 27,399 | 40.85 | 59.15 | 5.00 | 3.57 | 12.69 | 29.37 |
| Missouri | 19,524 | 39.56 | 60.41 | 5.78 | 5.69 | 10.58 | 15.98 |
| North Dakota | 1,001 | 40.34 | 59.66 | 12.85 | 6.27 | 11.95 | 57.50 |
| South Dakota | 1,871 | 42.12 | 57.88 | 5.99 | 6. 79 | 13.20 | 40.89 |
| Nebraska | 13,592 | 39.69 | 60.31 | 6. 32 | 9. 14 | 13.23 | 37.21 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Montana | 992 | 43.65 | 56.35 | 4. 74 | 5.95 | 11.59 | 26.09 |
| Wyoming | -269 | 43.87 | 56.13 | 6. 69 | 4.83 | 17.10 | 65.22 |
| Colorado | 5,457 | 41.08 | 58.92 | 7.92 | 12. 86 | 11.31 | 31.60 |
| New Mexico | 176 | 34.09 | 65.91 | 13.07 | 8. 52 | 9.09 | 31.25 |
| Arizona | 172 | 31.98 | 68.02 | 4. 65 | 5.23 | 13.95 | 58.33 |
| Utah | 941 | 38.89 | 61.11 | 9.03 | 6.06 | 10.10 | 33.68 |
| Nevada | 423 | 37.83 | 62.17 | 4. 49 | 4.26 | 16.08 | 57.35 |
| Idaho | 354 | 36.44 | 63.56 | 19.49 | 9.32 | 13.84 | 36.73 |
| Washington | 2,988 | 37.28 | 62. 72 | 7. 30 | 4.62 | 8.87 | 31.70 |
| Oregon .. | 1,777 | 37.70 | 62.30 | 3.60 | 1.58 | 11.14 | 17.17 |
| Caliiornia | 11,818 | 39.55 | 60.45 | 4.29 | 12. 29 | 13.50 | 46. 50 |

Table 10.-Public high sehools-Percentages of secondury students pursuing certain studies in 1898-93.

| State or Territors. | Per cent of total secondary students. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Latin. | Greek: | French. | German. | Algebra. | $\begin{aligned} & \text { Geom- } \\ & \text { etry. } \end{aligned}$ | Trigo-nometry. | Astronomy. | $\begin{aligned} & \text { Phys- } \\ & \text { ics. } \end{aligned}$ |
| Cnite | 50.39 | 3.12 | 7.9.1 | 14.01 | 57.09 | 27.91 | 2.05 | 3.33 | 20.20 |
| North Atlantic Division. South Atlantic Division. South Central Division. <br> Norill Central Division. <br> Western Division........ | 47.06 | 6.16 | 17.81 | 13.30 | 51.65 | 26.69 | 1.79 | 4.00 | 18.32 |
|  | 62. 98 | 2.34 | 9.57 | 10.94 | 70.07 | 33.36 | 4.87 | 3.85 | $2{ }^{18.05}$ |
|  | 56.01 | 1.93 | 5.02 | 5.06 | 70.33 | 32.64 | 5. 62 | 3.31 | 27.03 |
|  | 49.69 | 1.22 | 2.21 | 12.97 | 56.37 | 26.57 | 1.22 | 3.00 | 19.67 |
|  | 56.24 | 3.58 | 5.76 | 13.94 | 64.53 | \$3,22 | 3.56 | 1.88 | 20.90 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
|  | 48.23 | 11.0.5 | 20.38 | 1. 26 | 52. 70 | 26.00 | 0.53 | 9.15 | 19. 10 |
| New Hamps | 54. 88 | 9.24 | 33. 66 | 3. 60 3.41 | 46.62 | 27.68 | 0.81 | 6.09 | 23.79 |
| Massachuset | 47.44 | ${ }_{9.27}$ | 40.60 | 10. 89 | 47.60 | 28.79 | 1.03 1.03 | 5.56 | 20.53 |
| Rhode Island | 44.21 | 9.52 | 25.17 | 14.44 | 49.24 | 20. 47 | 1.54 | 4.13 | 20.37 |
| Connecticut | 53.31 | 7.86 | 16.96 | 19.91 | 49.17 | 26.48 | 1.54 | 4.52 | 16.95 |
| New York | 41.22 | 4.97 | 11.27 | 23.37 | 44. 48 | 23.02 | 2.05 | 2.14 | 13.88 |
| New Jersey | 41. 09 | 5.30 | 7. 15 | 32.48 | 65.14 | ${ }^{23.36}$ | ${ }_{2}^{1.93}$ | 5. 13 | 21. 42 |
| Pennsylvania | 55.85 | 3. 77 | 3.21 | 21.93 | 66.01 | 31.59 | 2.93 | 2.71 | 22.20 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maryland | 63.20 | 2.27 | 10.10 | 27.43 | 73. 69 | 64.55 | 9. 90 | 5.72 | 52.18 |
| District of | 42.58 | 3.05 | 14. 26 | 23.13 | 41.93 | 20.24 | 3.56 | 0.00 | 19.48 |
| Virginia | 75.87 | 0.35 | 12.66 | 16.19 | 69.21 | 27.74 | 4.61 | 0.00 | 25.29 |
| West Virgini | 33.91 | 0.17 | 0.00 | 5. 40 | 65.58 | 26.01 | 2.81 | 3.37 | 17.44 |
| North Caroli | 84.95 | 5.12 | 0.00 | 0.32 | 72.57 | 40.34 | 0.32 | 4.80 | 28.39 |
| South Carolin | 57.81 | 1.37 | 8.59 | 1.45 | 72.15 | 15.22 | 3.05 | 3.56 | 18.14 |
| Georgia. | 73.03 | 5.03 | 12.40 | 0.95 | 80.08 | 31.91 | 4.71 | 7.22 | 17.82 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Kentucky | 57.39 <br> 48.8 | 3.63 1.26 | 2.12 1.69 | $\begin{array}{r}14.31 \\ 2.85 \\ \hline 8.8\end{array}$ | 64.61 66.59 | 18.11 <br> 27.15 <br> 15 | 6.73 2.01 | 5.71 3.52 | 22.48 22.70 |
| Alabama | 58.90 | 1.34 | 6.65 | 3.39 | 75.80 | 42. 95 | 12. 65 | 2.67 | 27.98 |
| Mississipp | 53.13 | 3.26 | 0.39 | 0.31 | 61.33 | 16.24 | 1.81 | 3.05 | 34.35 |
| Louisiana | 81.10 | 0.66 | 63.40 | 0.00 | 78.25 | 42.68 | 1.75 | 4.60 | 33.75 |
| Texas. | 53.07 | 1.77 | 1. 10 | 5.3 .7 | 73.60 | 38.03 | $6.0 \pm$ | 2.56 | 28.37 |
| Arkansas | 58.89 | $1.1 \pm$ | 2.35 | 1.78 | 70.77 | 26.85 | 9. 25 | 2.31 | ${ }^{22} .87$ |
| Oklahoma | 73.26 | 0.00 | 0.00 | 5.56 | 62.50 | 27.08 | 0.00 | 0.00 | 22.57 |
| Indian Territory | 67.14 | 0.00 | 0.00 | 0.00 | 92, 86 | 18.57 | 0.00 | 4. 29 | 22.56 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Indiana | 65.24 | 0.42 | 0. 70 | 9.80 | 63.67 | 28.07 | 103 | 2.06 | 20.12 |
| Illinois | 52.62 | 1.32 | 4.38 | 15.51 | 49.73 | 26.42 | 0.99 | 3.73 | 18.23 |
| Miehigan | 36.19 | 1. 82 | 3.23 | 16. 2.5 | 52.45 | 21.00 | 0.48 | 2.21 | 17.26 |
| Wisconsi | 24.64 | 0.95 | 0.48 | 23. 96 | 45.51 | 23. 66 | 0.54 | 0.30 | 16.8 .3 |
| Minneso | 60.24 | 0.66 | 5.39 | 16.59 | 51.55 | 36.23 | 0.70 | 3.71 | 15. 77 |
| Iowa | 42.70 | 0.23 | 0.39 | 8.32 | 55.81 | 25.89 | 0.62 | 4.57 | 21.87 |
| Missouri | 51.93 | 2.41 | 3.04 | 11.39 | 66.07 | 26.10 | 2.53 | 1.67 | 18.72 |
| North Dako | 72. 71 | 0.60 | 0.10 | 0.00 | 64.54 | 29.18 | 1.49 | 1.49 | 16.43 |
| South Dak | 45.43 | 0.86 | 1. 66 | 6.95 | 53.55 | 23. 09 | 2.08 | 4.01 | 22. 02 |
| Nebraska | 57.56 | 1. 29 | 1. 77 | 10.00 | (64. 24 | 33. 45 | 1. 32 | 1.38 | 21.73 |
| Kansas. | 59.06 | 0.53 | 0.45 | 8.29 | 58.99 | 25.35 | 0.60 | 3.02 | 21.37 |
| Western Division: |  |  |  |  |  |  |  |  |  |
| Wroming | 69.14 | 0.00 | 0.00 | 14.50 | 64.63 | 30.43 | 1.12 | 0.09 | 24.16 |
| Colorado | 66.94 | 5.96 | 6. 82 | $2{ }^{2} .0 .5$ | 54.29 | 37. 29 | 4.49 | 3. 92 | 22. 25 |
| New Me | 60.80 | 0.00 | 0.00 | 0.00 | 76.11 | 26.70 | 0.00 | 2.84 | 14. 77 |
| Arizona | 43.60 | 0.00 | 0.00 | 4.63 | 58.72 | 20.35 | 7.56 | 0.00 | 21.51 |
| Utah | 26.13 | 0.00 | 4. 68 | 21.89 | 69.61 | 19.02 | 6.80 | 5. 10 | 15.73 |
| Nevad | 63.83 | 0.00 | 4.96 | 0.71 | 91.80 | 53.01 | 0.00 | 1.89 | 65.01 |
| Idaho. | 49.72 | 0.00 | 0.00 | 0. 00 | 63.28 | 4ㄴ. 09 | 0.00 | 2. 26 | 30.79 |
| Washing | 46.59 | 0.30 | 3.35 | 9. 71 | 66.57 | 29.33 | 0.97 | 0.37 | 17.87 |
| Oregon | 34.16 | 0.00 | 0. 00 | 16.54 | 71.24 | 21.95 | 2.14 | 3. 43 | 17. 78 |
| California | 57.45 | 4.80 | 7.37 | 10.62 | 65.47 | 40.79 | 3.72 | 0.62 | 19,96 |

Table 11.-Public high schools-Percentages of secondary students pursuing cerkun studies in 1898-99.

| State or Territory, | Per cent of total secondary students. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chemistry. | Physical geography. | Geology'. | Physiology. | Psy-chology. | Rhetorie. | English literature. | IIistory. | Civics. |
| United States | 8.39 | 24.29 | 4.04 | 29.21 | 2. 39 | 37.55 | 41.75 | 38.32 | 21.97 |
| North Atlantic Division | 9.15 | 18.93 | 5.70 | 27.96 | 1.18 | 36.05 | 46.11 | 40.97 | 17.55 |
| South Atlantic Division | 7.53 | 28.15 | 2. 57 | 32.20 | 2.45 | 36. 56 | 48.87 | 53.58 | 14.24 |
| South Central Division | 8.49 | 34.89 | 5.34 | 44.31 | 6.53 | 40.51 | 35.00 | 42.73 | 29.41 |
| North Central Division | 7.46 | 26.13 | 2.93 | 29.06 | 2.59 | 37.10 | 36.99 | 32. 60 | 24.70 |
| Western Division | 13.47 | 19.99 | 4.36 | 13.57 | 1. 77 | 47.61 | 63.23 | 54.98 | 19.86 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine................. | 10. $8 t$ | 17. 70 | 8. 58 | 19.16 | 2. 45 | 27.62 | 34.05 | 34.03 | 10.71 |
| New Hamp | 10.68 | 13.45 | 6. 70 | 12. 24 | 0.92 | 25.32 | 38.37 | 38.83 | 9.96 |
| Vermont. | 7.64 | 26.22 | 5. 77 | 13. 51 | 5. 49 | 35.69 | 28.15 | 30.89 | 24.52 |
| Massachusetts | 12.33 | 8.28 | 5.15 | 15.15 | 0. 46 | 45.30 | 69.38 | 52.22 | 12.13 |
| Rhode Island | 12.63 | 10.07 | 2.82 | 6.08 | 2. 47 | 53.46 | 68.02 | 43.45 | 14.87 |
| Connecticut | 10.61 | 21. 61 | 6.33 | 23.93 | 0.19 | 46.66 | 71.85 | 49.50 | 13.05 |
| New York. | 6. 68 | 19. 46 | 5.31 | 38.07 | 0.65 | 29.52 | 25.45 | 32.74 | 15.89 |
| New Jersey | 11. 87 | 24.17 | 6.42 | 26. 40 | 1.60 | 32.41 | 39.55 | 50.40 | 21.20 |
| Pennsylrania | 7.47 | 29.29 | 5.98 | 35.59 | 2.06 | 37.05 | 54.61 | 39.87 | 27.28 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Delaware | 10.85 | 42.69 | 0.00 | 52.44 | 1.29 | 38.82 | 31.92 | 40.57 | 25.94 |
| Maryland | 6.19 | 17.68 | 1.10 | 39.29 | 3.86 | 42.74 | 66.33 | 70.68 | 20.93 |
| District of | 8.02 | 0.00 | 0.00 | 0.00 | 0.00 | 11.22 | 92. 0.4 | 55.22 | 0.63 |
| Virginia | 10.61 | 34. 29 | 0.45 | 40.31 | 1.31 | 43.42 | 25. 20 | 56.81 | 9. 63 |
| West Virginia | 5.40 | 42. 35 | 1.80 | 36.73 | 2.08 | 27.33 | 32.62 | 39.03 | 21.03 |
| North Carolina | 7.90 | 28.50 | 10.35 | 51.01 | 0.32 | 36.50 | 67.24 | 67.02 | 20.81 |
| South Carolina | 2.52 | 37.89 | 1.88 | 33.85 | 1.70 | 32.73 | 34.89 | 49.81 | 18.98 |
| Georgia | 8.19 | 30.87 | 5.25 | 25.91 | 2.25 | 42.98 | 37.57 | 45.67 | 10.60 |
| Florida | 14.97 | 45.09 | 10.01 | 58.28 | 17.24 | 61.35 | 36.17 | 51.73 | 20.81 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
|  | 12.07 | 25.51 25.70 | 4.28 | 39.61 | 7.78 1.69 | 42. 26 | 43. 99 | 40.21 | 30.43 |
| Tennessee | 4.86 14.22 | 25.70 29.35 | 10.93 8.25 | 39.09 54.89 | 1.69 6.00 | 34. 74 | 25.12 39.66 | 30.28 50.16 | 18.24 |
| Mississipp | 2.92 | 39.34 | 2.15 | 53.00 | 2.12 | 31.45 | 40.17 | 40.51 | 36.58 |
| Louisiana | 21.86 | 42.36 | 0.71 | 46.96 | 1.97 | 61.10 | 58.41 | 77.70 | 25.21 |
| Texas. | 7.45 | 41.02 | 4.70 | 43.97 | 10.27 | 87.55 | 30.45 | 42.98 | 31.43 |
| Arkansas | 5.51 | 36.02 | 3.91 | 44.70 | 5.73 | 38.19 | 32.36 | 46.80 | 33.66 |
| Oklahoma | 9.38 | 45.49 | 6.25 | 0.00 | 7.64 | 65.63 | $19.4 \pm$ | 8.68 | 21.53 |
| Indian Territory | 22.80 | 40.00 | 4.29 | 37.11 | 0.00 | 7.14 | 2.86 | 7.14 | 2. 86 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Indiana | 8.83 | 24.43 | 2.83 | 19.42 | 3.60 | 47.52 | 56.56 | 38.33 | 23.85 |
| Illinois | 8.21 | 28.02 | 2.78 | 34.82 | 1.01 | 40.61 | 48.20 | 31.75 | 19.73 |
| Michigan | 9. 60 | 21.44 | 2.40 | 22. 89 | 1.65 | 31.57 | 21.66 | 34.47 | 22.44 |
| Wisconsin | 3.48 | -3. 3.53 | 1.50 | 25. 01 | 7.67 | 20.63 | 26.69 | 26.17 | 23.93 |
| Minnesota | 11.50 | 7.62 | 1.50 | 13.99 | 0.37 | 41.17 | 21.49 | 36.02 | 12.87 |
| Iowa | 3.94 | 26.68 | 4.35 | 28.81 | 0.77 | 33.09 | 36.92 | 20.38 | 28.92 |
| Missouri | 7.97 | 22.17 | 3.94 | 30.17 | 4. 59 | 41.30 | 28. 76 | 37.56 | 27.05 |
| North Dako | 4.38 | 23.71 | 2.09 | 33.67 | 3.59 | 35.76 | 65.21 | 38.05 | 30.68 |
| South Dako | 3.37 | 27.71 | 6.09 | 30.68 | 0.21 | 27.95 | 30.09 | 32.56 | 27.26 |
| Nebraska | 10.70 | 32.11 | 2.19 | 38.83 | 0.99 | 45. It | 45.03 | 32.31 | 35. 71 |
|  | 6.11 | $3 \pm .39$ | 3.88 | 29.25 | 4.94 | 41.62 | 36.57 | 31.19 | 33.83 |
|  |  |  |  |  |  |  |  |  |  |
| Montana..... <br> Wyoming | 16.73 | 28.43 | 8.37 | 29.03 | 0. 81 | 39.62 | 37.00 | 33.67 | 33. 06 |
| Wyoming | 8.18 14.86 | 45.35 16.33 | 0.00 12.59 | 27.14 11.47 | 0.00 5.19 | 51.67 34.18 | 24.91 62.12 | 43.87 62.21 | 25. 28 |
| New Mexic | 9.09 | 43.75 | 8.52 | 53.98 | 0.00 | 21.02 | 14.77 | 54.55 | 27.84 |
| Arizo | 8.14 | 36. 05 | 0.00 | 19.77 | 0.00 | 25.16 | 58.72 | 19. 77 | 33.14 |
| Utah | צ. 93 | 27.31 | 6.91 | 14. 35 | 5.42 | 20.72 | 12.22 | 43.57 | 11.48 |
| Nerad | 39.01 | 27.19 | 0.00 | 47.28 | 2.13 | 66.90 | 68.32 | 55.56 | 55.08 |
| Idaho | 6.21 | 59.89 | 0.85 | 42.66 | 0.85 | 34.46 | 45.76 | 64.97 | 46.61 |
| Washington | 5.92 | 37.48 | 2.91 | 19.28 | 2.04 | 29.72 | 46.89 | 30.05 | 20.15 |
| Oregon | 13.28 | 32.19 | 2. 93 | 27.80 | 1. 69 | 42.0 0 f | 31.06 | 48.79 | 26.22 |
| California | 14.85 | 11.38 | 0.91 | 6.40 | 0.00 | 62.57 | 81.27 | 62.14 | 16.97 |

Table 12.-Statistics of public high schoots in cities of 8,000 population and over.

| State or 'rerritory. | Schools. | Secondary instructors. |  |  | Secondary pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Femaie. | Total. | Male. | Female. | Total. |
| United States. | 731 | 2,990 | 4,573 | 7,563 | 89,240 | 135,446 | 224,686 |
| North Alantic Division. | 271 | 1,215 | 2,031 | 3,246 | 38,182 | 53, 133 | 91,315 |
| South Atlantic Division | 53 | 196 | 254 | 450 | 4,669 | 7,893 | 12,567 |
| South Central Division | 85 | 199 | 256 | 455 | 4,323 | 3,330 | 12, $6 \overline{3} 3$ |
| North Central Division. | 279 | 1,186 | 1, 772 | 2,958 | 36, 904 | 57,591 | 91, 495 |
| Westera Division... | 38 | $19 \pm$ |  | $45 \pm$ | 5,162 | 8,494 | 13,656 |
| North Atlantic Division: |  |  |  |  |  |  |  |
| Maine............ | 9 | 27 | 42 | 69 | 952 | 1,192 | 2, 144 |
| New Hampsiire | 7 | 22 | 37 | 59 | 705 | 978 | 1, 683 |
| Vermont ....... | 3 | 6 | 13 | 19 | 229 | 338 | 567 |
| Massachusetts | 73 | 347 | 615 | 962 | 11,053 | 14,561 | 25,614 |
| Rhode Island. | 13 | 73 | 85 | 158 | 1,386 | 1,901 | 3,290 |
| Connecticut | 20 | 82 | 136 | 218 | 2,081 | 2,646 | 4,730 |
| New York. | 60 | 324 | 628 | 952 | 12,949 | 16,093 | 29,042 |
| New Jersey | 22 | 77 | 119 | 236 | 2, 363 | 3,905 | 6, 268 |
| Pennsylvania ... | 64 | 257 | 326 | 583 | 6,461 | 11,516 | 17,977 |
| South Atlantic Division: <br> Delaware | 1 | 5 | 15 | 20 | 238 | 361 | 599 |
| Maryland | 10 | 50 | 39 | 89 | 1,172 | 1,325 | 2,497 |
| Distriet of Columbia | 5 | 53 | 75 | 128 | 1,254 | 2,062 | 3,316 |
| Virginia. | 15 | 28 | 52 | 80 | 837 | 1,431 | 2,268 |
| West Virginia | 5 | 15 | 9 | 24 | 191 | 449 | 640 |
| North Carolina | 4 | 7 | 6 | 13 | 147 | 185 | 332 |
| South Carolina. | 5 | 9 | 14 | 23 | 115 | 536 | 651 |
| Georgia. . | 11 | 24 | 38 | 62 | 616 | 1,337 | 1,953 |
| Florida. | 2 | 5 | 6 | 11 | 99 | 212 | 311 |
| South Central Division: |  |  |  |  |  |  |  |
| Kentucky . | 21 | 54 | 72 | 126 | 1,217 | 1,927 | 3, 144 |
| Temnessee | 12 | 25 | 34 | 59 | 552 | 1,256 | 1, 808 |
| Alabama | 9 | 12 | 27 | 39 | 382 | 681 | 1,093 |
| Mississippi | 6 | 9 | 14 | 23 | 206 | 413 | 1619 |
| Louisigna | 6 | 19 | 38 | 57 | 331 | 840 | 1,171 |
| Texas. | 24 | 65 | 58 | 123 | 1,325 | 2,723 | 4, 0 ¢3 |
| Arkansas | 6 | 14 | 9 | 23 | 265 | 409 | 674 |
| Oklahoma....... | 1 | 1 | 4 | 5 | 45 | 76 | 121 |
| Indian Territory ... |  |  |  |  |  |  |  |
| North Central Division: |  | 220 | 309 | 529 |  | 10,066 | 17,165 |
| Onio.... | 51 39 | 161 | 175 | 338 | 4,360 | 10,066 6,810 | 17,160 11,170 |
| Illinois | 50 | 278 | 357 | 635 | 7,213 | 12, 663 | 19,876 |
| Nichigan | 28 | 106 | 199 | 305 | 4,125 | 5,799 | 9,924 |
| Wisconsin | 27 | 97 | 145 | 2.42 | 2,936 | 4,012 | 6,948 |
| Minnesota | 16 | 52 | 157 | 209 | 2,522 | 3,708 | 6,280 |
| lowa.. | 23 | 82 | 142 | 224 | 2,665 | 4,046 | 6, 711 |
| Missouri | 20 | 108 | 150 | 258 | 3, 141 | 5, 586 | 8,727 |
| Norih Dakota | 2 | 3 | 6 | 9 | 59 | 128 | 187 |
| South llakota | 1 | 2 | 6 | 8 | 115 | 161 | 276 |
| Nebraska.. | 10 | 43 | 68 | 111 | 1,406 | 2,273 | 3,679 |
| Kansas. | 12 | - 31 | 56 | 90 | 1,263 | 2,339 | 3,602 |
| Western Division: |  |  |  |  |  |  |  |
| Montana | 2 | 4 | 8 | 12 | 149 71 | 228 78 | 377 149 |
| Wyoming | 1 | ${ }_{56}^{1}$ | ${ }^{4} 4$ | 120 | 1,349 | 1,991 | 149 3,340 |
| Colorado ... | 11 | 56 | 61 | 120 | 1,349 | 1, 901 | 3, 3.0 |
| New Miexleo. Arizona .... |  |  |  |  |  |  |  |
| Arizona | 2 | 15 | 15 | 30 | 316 | 542 | 888 |
| Tuevacia |  |  |  |  |  |  |  |
| Idaho. |  |  |  |  |  |  |  |
| Washiostou | 4 | 24 | 30 | 54 | 649 | 1,133 | 1,782 |
| Oregon ..... | 2 | 11 | 17 | 28 | 394 | . 734 | 1,128 |
| California.. | 10 | 83 | 122 | 205 | 2,204 | 3,783 | 5,992 |

Table 13.-Siatistics of public high schoo?s outside of cities of $\mathcal{S}, 000$ population and orer.

| State or Territory. | Schools. | Secondary instructors. |  |  | Seeondary pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Femate. | Total. | Male. | Femalc. | Total. |
| United States. | 4,764 | 6,249 | 4,906 | 11,155 | 107, 887 | 143, 654 | 251,541 |
| North Atlantic Division. | 1,071 | 1,246 | 1,582 | 2,828 | 25, 354 | 34,014 | 59, 36 |
| South Atlantic Division. | 348 | 395 | 272 | ${ }^{6} 667$ | 5,609 | 7,508 | 13, 117 |
| South Central Divisiou.. | 513 | ${ }_{6}^{696}$ | ${ }^{406}$ | 1,102 | 10, 857 | 12, 622 | 22,979 |
| North Central Division. | 2,637 | 3,593 | 2,433 | 6, 025 | 61,787 | 82, 779 | 144, 560 |
| Western Division...... | 195 | 319 | 213 | 532 | 4,780 | 6,731 | 11,511 |
| North Atlantic Division: |  |  |  |  |  |  |  |
| Maine .......... | 148 | 152 | 124 | 275 | 2, 918 | 3,781 | 6,699 |
| Netv Hampshire. | 45 | 4. | 62 | 105 | 841 | 910 | 1. 781 |
| Massachusetts | 51 159 | 50 167 | 66 273 | - $\begin{array}{r}116 \\ 440\end{array}$ | 1,138 3,788 | 1, 51624 | 2,602 |
| Rhode Island | 5 | 5 | 6 | 11 | -62 | - 81 | -146 |
| Connecticut | 49 | 45 | 59 | 104 | 955 | 1,278 | 2,233 |
| New York. | 309 | 364 | 668 | 1,032 | 9,317 | 12, 431 | 21,748 |
| New Jersey | 67 | 84 | 148 | 232 | 1,569 | 2,317 | 3,886 |
| Penusylvania | 238 | 385 | 176 | 511 | 4,766 | 6,696 | 11,462 |
| South Atlantic Division: |  |  |  |  |  |  |  |
| Delaware. | 12 | 46 | 10 23 | 22 69 | $\begin{aligned} & 186 \\ & 648 \end{aligned}$ | ${ }_{945}^{302}$ | 48.8 1,503 |
| District of Columbi | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Virginia.. | 52 | 52 | 46 | 98 | 747 | 951 | 1,698 |
| West Virginia | 21 | 30 | 20 | 50 | 397 | 741 | 1,188 |
| North Carolina | 13 | 17 | 7 | 24 | 263 | 342 | 605 |
| South Carolina | 94 | 108 | 72 | 180 | 1,452 | 1,832 | 3,284 |
| Georgia. | 98 | 102 | 75 | 177 | 1,629 | 1,984 | 3,613 |
| Florida. | 20 | 28 | 19 | 47 | 287 | 411 | 699 |
| South Central Division: |  |  |  |  |  |  |  |
| Kentucky | 48 | 57 |  |  | 1,119 | 1,163 | 2, 289 |
| Tennessee | 89 45 | 115 67 | 52 <br> 45 | 1167 | 1,694 | 1,883 1,091 | 3,526 2,063 |
| Mississippi | 85 | 93 | 80 | 173 | 1,447 | 1,800 | 3,247 |
| Lovisiana | 15 | 22 | 19 | 41 | 253 | 401 | 654 |
| Texas | 177 | 263 | 130 | 393 | 3,802 | 5,090 | 8,892 |
| Arkansas. | 47 | 66 | 29 | 95 | 985 | 1,140 | 2,188 |
| Oklahoma....... | 3 | 5 | 4 | 9 | 70 | 97 | 167 |
| Indian Territory ... | 4 | 8 | 3 | 11 | 62 | 8 | . 0 |
| North Central Division: Ohio.............. |  |  |  |  |  |  |  |
| Ondio... | 562 323 | 749 <br> 528 | $\begin{aligned} & 333 \\ & 175 \end{aligned}$ | 1,082 703 | 11,588 6,287 | 11,215 8,011 | 25,803 14,298 |
| illinois. | 293 | 411 | 318 | 729 | 7,360 | 9,883 | 17,243 |
| Michigan. | 258 | 327 | 365 | 692 | 7,449 | 9,773 | 17,222 |
| Wisconsin | 155 | 209 | 196 | 405 | 4, 630 | . 5,970 | 10,600 |
| Minnesota | 96 | 120 | 167 | 287 | 2, 340 | 3,291 | 5,684 |
| Iowa | 307 | 383 | 393 | 782 | 8,528 | 12, 160 | 20,688 |
| Missouri. | 191 | 281 | 166 | 447 | 4,582 | 6,215 | 10, 797 |
| North Dakota | 23 | 25 | 22 | 47 | 346 | 471 | 817 |
| South Dakota Nebraska.... | 28 | 34 | 32 | 66 | 673 | 929 | 1,595 |
| Nebraska. | 223 | 270 | 134 | 404 | 3,988 | 5, 925 | 9,913 |
| Kansas....... | 177 | 250 | 132 | 382 | 4,016 | 5, 340 | 9, 056 |
| Western Division: Montana |  |  |  |  | 284 | 831 |  |
| Wyoming | 13 | 5 | 13 | 8 | 47 | ${ }^{3} 1$ | 120 |
| colorado. | 30 | 62 | 35 | 97 | 893 | 1,224 | 2, 117 |
| New Mexice | - | 10 | 3 | 13 | 60 | 116 | 176 |
| Arizona | 2 | 5 | 3 | 8 | 55 | 117 | 172 |
| Utah | 2 | 4 | 0 | 4 | 20 | 33 | 53 |
| Nevada. | 7 | 9 | 10 | 19 | 160 | 263 | 423 |
| Idaho. | 7 | 10 | 3 | 13 | 129 | $22 \overline{5}$ | 3 H |
| Washirgton | 32 | 41 | 15 | 56 | 465 | 741 | 1,204 |
| Oregon. | 13 | 16 | 10 | 26 | 276 | 373 | 649 |
| California | 78 | 144 | 113 | 257 | 2,391 | 3,235 | 5, 226 |

Tabra 1．－－tecrage 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．

| Statc or Territory． |  |  | Avcrage teach－ ers to a high school． |  | Average students to a teacher． |  | Average students to a high school． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & 0.0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |
| United States | 5.017 | 478 | 10.3 | 2.3 | 29.7 | 22.5 | 307.4 | 52.8 |
| North Atlantic Division | 1，267 | 55 | 12.0 | 2.6 | 28.1 | 21.0 | 337.0 | 55.4 |
| South Atlantic Division | 832 | 74 | 7.8 | 1.9 | 27.9 | 19.7 | 216.7 | 37.7 |
| South Central Division | 489 | 109 | 5.4 | 2.1 | 27.8 | 20.9 | 148.9 | 44.8 |
| North Central Division | 2，742 | $17 \pm$ | 10.6 | 2.3 | 31.9 | 24.0 | 338.7 | 54.8 |
| Western Division ．．．． | 187 | 46 | 11.9 | 2.7 | 30.1 | 21.6 | 359.4 | 59.0 |
| North Atlantic Division： |  |  |  |  |  |  |  |  |
|  | 138 | 19 | 7.7 | 1.9 | 31.1 | 24.3 | 238.2 | 45.3 |
| New Hampshir | 50 | $\cdots$ | 8.1 | 2.4 | 28.5 | 16.8 | 240.4 | 39.6 |
| Vermont． | 53 | 1 | 6.3 | 2.3 | 29.8 | 22.4 | 189.0 | 51.0 |
| Massachusetts | 229 | 1： | 13.2 | $\stackrel{2}{2}$ | ${ }^{26.6}$ | 20.0 | 350.9 | 55.4 |
| Rhode Island | 18 | 0 | 12.2 | 2.2 | 20.8 | 13.3 | 253.1 | 29.2 |
| Connecticut | 62 | 7 | 10.9 | 2.1 | 21.7 | 21.5 | 236.5 | 45.6 |
| New York | 839 | 30 | 15.9 | 3.3 | 30.5 | 21.1 | 484.0 | 70.4 |
| New Jersey | 88 | 1 | 10.3 | 3.5 | 27.7 | 16.8 | 284.9 | 58.0 |
| Penneylyania | 299 | 3 | 9.1 | 2.1 | 30.8 | 22.4 | 280.9 | 48.2 |
|  |  |  |  |  |  |  |  |  |
| Delaware ．．．．．．．．．．．． | 13 | 0 | 20.0 | 1.8 | 30.0 | 22.2 | 599.0 | 40.7 |
| Maryland | 42 | 6 | 8.9 | 1.8 | 28.1 | 23.1 | 249.7 | 41.9 |
| District of Colun | 5 | 0 | 25.6 | 0.0 | 25.9 | 0.0 | 663.2 | 0.0 |
| Virginia | 58 | 9 | 5.3 | 1.9 | 28.4 | 17.3 | 151.2 | 32.7 |
| West Virgini | 26 | 0 | 4.8 | 2.4 | 26.7 | 22.8 | 128.0 | 54.2 |
| North Carolina | 17 | 0 | 3.3 | 1.8 | 25.5 | 25.2 | 83.0 | 46.5 |
| South Carolina | 68 | 31 | 4.6 | 1.9 | 28.3 | 18.2 | 130.2 | 34.9 |
| Georgia | 83 | 20 | 5.6 | 1.8 | 31.5 | 20.4 | 177.5 | 36.9 |
| Florida | 20 | ＂ | 5.5 | 2.4 | 28.3 | 14.9 | 155.5 | 34.9 |
| South Central Division： |  |  |  |  |  |  |  |  |
| Tennessee | 80 | 21 | 4.9 | 1.8 | 30.6 | 21.1 | 150.7 | 39.6 |
| Alabama． | 40 | 14 | 4.3 | 2.5 | 27.3 | 17.9 | 118.1 | 44.5 |
| Mississippi | 63 | 28 | 3.8 | 2.0 | 26.9 | 18.8 | 103.2 | 38.2 |
| Louisiana | 17 | 4 | 9.6 | 2.7 | 20.5 | 16.0 | 195.2 | 43.6 |
| Texas．． | 178 | 23 | 5.1 | 2.2 | 33.0 | 22.6 | 168.9 | 50.2 |
| Arkansas | 47 | 6 | 3.8 | 2.0 | 29.3 | 22.5 | 112.3 | 45.5 |
| Oklahoma ．．．．．． | 4 | 4 | 5.0 | 3． 0 | 24.2 | 18.6 | 121.0 | 55.7 |
| Indian Territory ．．． | 0 | 4 | 0.0 | 2.8 | 0.0 | 6.4 | 0.0 | 17.5 |
|  |  |  |  |  |  |  |  |  |
| Indiana． | 336 | 26 | 8.7 | 2.2 | 33.0 | 20.3 | 286.4 | 44.3 |
| Illinois． | 325 | 18 | 12.7 | 2.5 | 31.3 | 23.7 | 397.5 | 58.8 |
| Michigan | 257 | 29 | 10.9 | 2.7 | 32.5 | 24.9 | 354.4 | 66.8 |
| Wisconsin | 176 | 7 | 9.0 | 2.6 | 28.7 | 26.2 | 257.3 | 67.9 |
| Minnesota | 102 | 10 | 13.1 | 3.0 | 29.8 | 19.6 | 389.4 | 58.7 |
| Iowa． | 299 | 31 | 9.7 | 2.5 | 30.0 | 26.5 | 291.8 | 67.4 |
| Missouri | 208 | 3 | 12.9 |  | 33.8 |  |  | 56.5 |
| North Dakota | 25 | ， | 4.5 | 2.0 | 20.8 | 17.4 | 93.5 | 35.5 |
| South Dakota | 29 | 0 | 8.0 | 3.4 | 34.5 | 24.2 | 276.0 | 57.0 |
| N＇cbraska | 219 | 14 | 11.1 | 1.8 | 33.1 | 24.5 | 376.9 | 41.5 |
| Kansas． | 183 | ， | 7.5 | 2.2 | 40.0 | 26.1 | 300.2 | 56.2 |
|  |  |  |  |  |  |  |  |  |
| Montana．．．．． | 15 | 0 | 6.0 | 2.4 | 31.4 | 19.8 | 188.5 | 47.3 |
| Wyoming | 6 | 0 | 5.0 | 1.6 | 29.8 | 15.0 | 149.0 | 24.0 |
| Colorado． | 39 | 2 | 10.9 | 3.2 | 27.8 | 21.8 | 303.6 | 70.6 |
| New Mexic | 6 | 0 | 0.0 | 2.2 | 0.0 | 13.5 | 0.0 | 29.3 |
| Arizona | 2 | 0 | 0.0 | 4.0 | 0.0 | 21.5 | 0.0 | 86.0 |
| Utah | 3 | 1 | 15.0 | 2.0 | 29.6 | 13.3 | 44.0 | 26.5 |
| Nevada | 7 | 0 | 0.0 | 2.7 | 0.0 | 22.3 | 0.0 | 60.4 |
| Idaho． | 6 | 1 | 0.0 | 1.9 | 0.0 | 27.2 | 0.0 | 50.6 |
| Washingto | 36 | 0 | 13.5 | 1.8 | 33.0 | 21.5 | 445.5 | 37.7 |
| Oregon．．． California． | 15 | ${ }^{0} 2$ | 14.0 12.8 | 2.0 3.3 | 40.3 29.2 | 25.0 21.9 | 561.0 | 49.9 |
| Calitornia | 52 | 42 | 12.8 | 3.3 | 29.2 | 21.9 | 374.5 | 72.1 |

State or Territory.
United states......
North Atlantic Division. South Central Division. North Central Division.
Western Division....... North Atlantic Division:





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TABLE 15.-Public high schools-Equipmeni, income, benefactions, and endowments.

| Jibraries. |  | Grounds, buildings, scientific apparatus, etc. |  | State and municipal aid. |  | Tuition fees. |  | Proauctive funds. |  | Income from other sources and unclassified. |  | Total income from all sources. |  | Benefactions. |  | Total money value of endowment. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 0 \\ 0.8 \\ 0.7 \\ 0.7 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{gathered}$ | Volumes. |  | Talue. | $\begin{aligned} & 0 \\ & 0.0 \\ & 0.0 \\ & 0.7 \\ & 0.0 \\ & 0.0 \\ & 0 \\ & 0.0 \\ & 02 \end{aligned}$ | Amount. | 0 0. 0. 0. 0. 0 0 0 0 0 | Amount. |  | Amount. | $\begin{aligned} & \dot{u} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ | Amount. |  | Amount. |  | Amount. | $\left\|\right\|$ | Amount. |
| 1,537 | 2, 618, 445 | 4,430 | 9, 096, 912 | 1,905 | \$1,700, 762 | 1,580 | \$514,489 | 201 | \$191, 401 | 722 | \$1, 362, 561 | 2, 102 | 86,769, 213 | 58 | \$23, 042 | S0 | \$975, 921 |



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|  |  <br> -Hincco |
|  |  |

Table 15．－Public high schools－Equipment，income，benefactions，and codorment：－Continued．

|  |  |  |
| :---: | :---: | :---: |
|  | $\begin{array}{r} \hline \text {.auprod } \\ \text { - } 0 \text { siooyos } \\ \hline \end{array}$ |  |
|  | E E E 相 |  |
|  | ：sulniod －ә2 โโoves |  |
|  |  |  <br>  |
|  | －sumzod －ax siooqos |  |
|  | E E 品 |  |
|  |  |  |
|  | ＋ \＃ 相 |  |
|  | $\begin{gathered} \text {-suniod } \\ -9 x \text { soouns } \end{gathered}$ | $\vdots$ ¢0．0めめ－0000 |
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|  | －8umrod <br>  |  |
|  |  |  <br>  |
|  | － 8 untiod －ax slooyos |  |
|  |  |  <br>  <br> wioninciontios बंतi－ |
|  |  |  |
|  |  |  <br>  |
|  | － 8 mprad －2．stooqos |  |
|  |  |  |

Table 16.-Tritaie high schools and academies-Number of schoole, secondary instructors, secondary students, and elementury pupits in 1898-99.


Pable 17．－Private high schools and academies－Number of secondary students in college preparatory course，mumber of graduates and college preparatory students in graduating cluss in 189S－99．

| State or Territory． | Secondary students preparing for college． |  |  |  |  |  | $\begin{gathered} \text { Graduates in } \\ \text { the class of } \\ 1899 . \end{gathered}$ |  |  | College prepara－tory studentsin graduatingelass of 1899. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Classieal course． |  |  | Scientific course． |  |  |  |  |  |  |  |  |  |
|  | 范 |  | 要 | 盛 |  | 范 | $\underset{\underset{\sim}{ت}}{\substack{3}}$ | $\begin{aligned} & \text { 范 } \\ & \text { 范 } \end{aligned}$ | 淢 | 爵 | $$ |  |  |
| United States．．．． | 1，123 | 0 |  |  |  | ， 101 |  |  | 1，862 | 3，576 |  |  |  |
| North Atlantic Division South Atlantic Division South Central Division．．． North Central Division． Western Division．． | $\left\|\begin{array}{c} 5,958 \\ 1,901 \\ 1,037 \\ 1,032 \\ 1,322 \\ 305 \end{array}\right\|$ | 2,210 <br> 1 <br> 1,018 <br> 1,136 <br> 894 <br> 202 <br>  <br> 1 | $\begin{aligned} & 8,168{ }^{8,168} \\ & 2,949 \\ & 2,723 \\ & 2,216 \\ & 2070 \end{aligned}$ | $1 \begin{aligned} & 119 \\ & 488 \end{aligned}$ | $\begin{aligned} & 790 \\ & \hline 29 \\ & \hline 27 \\ & \hline 762 \\ & \hline 762 \end{aligned}$ | （ $\begin{gathered}4,418 \\ 1,161 \\ 1,948 \\ 1,981 \\ 1,981 \\ 690\end{gathered}$ |  | $\begin{gathered} 2,883 \\ 660 \\ 7,25 \\ 1,342 \end{gathered}$ | $\left\|\begin{array}{l} 5,950 \\ 1,350 \\ 1,359 \\ 2,564 \end{array}\right\|$ | re， 3981 | 731 201 295 385 121 |  | （ 34 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North Atlantic Division： Maine New Ham Mrassachuseits． Rhode Island New Yoricu New Jersey Pennsylvania | 279 | 19.5 | 474 | 103 | ${ }^{35}$ | 138 | 175 | 210 | 298 |  | ${ }_{6}^{66}$ | 151 | 144 |
|  | 47 | 20 | ${ }_{115}$ | － 5 | ${ }_{37}$ | ${ }_{9} 2$ | ${ }_{89}$ |  | 178 | 11 | 20 |  |  |
|  | 1，153 | 4.46 | 1，599 | 451 | 162 | 613 | 510 | 458 | 958 | 398 | 190 | 588 |  |
|  | ${ }_{457}^{67}$ | 141 |  |  | ${ }_{53}^{4}$ | 114 <br> 328 | ${ }^{45}$ | 439 | 88 421 | 158 | 57 | 37 216 |  |
|  | 1，513 | 612 | 2， 1251 | 1，127 | 248 | 1，375 | 750 | 815 | 1，565 | 564 | 191 |  | 5， 000 |
|  | 1，270 | 498 | 1， 8.78 | ${ }_{818}^{557}$ | ${ }_{101}^{114}$ | ${ }_{919}^{671}$ | 315 780 | ${ }_{6}^{233}$ | 578 1,439 | 260 | 79 98 | 339 <br> 545 | 02 <br> 749 |
| South Atlantic Division <br> Delaware <br> Tistriet of Columbia <br> Virginia <br> West Virginia <br> North Carolina <br> South Carolina <br> Tlorida |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | ${ }_{238}^{12}$ | $\begin{aligned} & 11 \\ & 33 \end{aligned}$ |  |  | 18 106 | 17 97 | $\begin{array}{r}3 . \\ 203 \\ \hline 0\end{array}$ | 63 |  | 11 | ［1 $\begin{array}{r}0 \\ 89\end{array}$ |
|  | $66^{6}$ | 83 | 149 | 41 | 58 | 102 | 36 | 65 | 101 | 13. |  |  |  |
|  | 332 | 70 | 402 | 149 | 11 | 169 | 89 | 144 | ${ }^{233}$ |  | 21 |  |  |
|  | －39 | 2 2 | ${ }^{63}$ | 20 | 9 | 47 | ${ }^{31}$ |  | 31. | 138 |  | ${ }_{189}^{13}$ |  |
|  | 91 | ${ }_{40}$ | ${ }_{134}$ | 49 |  |  |  |  | 155 |  |  |  |  |
|  | 470 | $40 \pm$ | 871 | 208 | 81 | 292 | 92 | 131 | 223 |  | 63 | 129 | 216 |
|  | 10 |  |  |  |  |  |  |  |  |  |  |  |  |
| South Central Division： Kentucky | 296 | 163 | 459 | 14＋ | 88 | $\underline{232}$ | 128 | 103 | 231 |  | 46 | 102 | 183 |
| Alabama | ${ }_{236} 3$ | ${ }_{165}$ | 401 | $\stackrel{-9}{9}$ | 8 | \％18 | 170 | ${ }_{6}{ }^{8}$ | \％ |  |  |  |  |
| Mississip | 199 | 12T | 325 | 97 | 65 | 16.2 | ， | 109 | 12 | 56 |  | 101 |  |
| Louisia | 73 | \％ | 131 | 71 | 40 | 111 | 55 | 15 | 20 |  |  |  |  |
| Aexas | ${ }_{13}^{288}$ | 202 | 234 | －92 | ${ }^{148}$ | ${ }_{1}^{408}$ | － | ${ }^{105}$ | －92 |  |  |  | 127 |
| Oklahom | 10 | 17 |  | 4 |  | 16 |  |  |  |  |  |  | 0 |
| Indian Territory |  |  | 14 | 36 | 49 | 85 |  |  |  |  |  |  | 23 |
| North Central Division： Ohio | 132 | 153 |  | 103 | 134 |  | 147 | 212 | 359 |  |  | 160 | 107 |
| Indiana | 129 |  | 216 | 100 |  | 158 | T 7 | 110 | $18 \pm$ |  |  | 73 |  |
| Minchiza | ${ }_{17}^{292}$ | 153 | ${ }_{23}$ | 197 |  | ${ }_{90}$ | ${ }^{236}$ | ${ }_{90}{ }^{111}$ | 176 |  |  |  | 78 98 |
| Wiseol | 119 | 40 | 159 | 98 | 32 | 130 | 119 | 78 | 227 | 52 |  | 70 | 03 |
| Minn | 17 | ${ }_{6}^{65}$ | 162 | 27 | ${ }_{95}^{29}$ | 5 | ． 139 | 112 |  | 5 |  | 82 | 1 |
| $\frac{10182}{\text { Inissouri }}$ | 220 | ${ }^{8} 9$ | 299 | 312 | 103 | 415 |  |  | 408 | 107 |  | ， | 422 |
| North Da | ${ }^{13}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Nelorask | ${ }^{62}$ | 36 |  | 38 | 22 |  | ${ }_{25}^{11}$ |  | ${ }_{61} 1$ | 19 | 15 | 34 |  |
| Western Division： | 43 |  | － | 85 | ${ }^{14}$ | 129 | 19. | 41 | 90 | 16 | 13 | 29 | 41 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| WYoming |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Colorado |  |  |  |  | ${ }_{0}^{0}$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 15 |  |  |  |  |  |  |  |  | 35 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| WashingOreoulcralionn | 28 |  | d |  |  | 102 | co |  | 51 |  | 11 | $\frac{26}{26}$ | ${ }^{6}$ |
|  | ${ }_{19}{ }^{21}$ | 139 | 332 | 310 | 125 | 465 | 121 | 165 | 286 | 106 | 68 | 174 | 256 |

Tabse 18．－Pricate high schools and academies－Number of scondary students pursuing certain studies in 1898－99．

| State or Territory． | Latin． |  |  |  | Greek． |  |  |  | French． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | － | $\begin{gathered} \dot{1} \\ 0 \\ i=0 \\ \text { n. } \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \\ n \end{gathered}$ | 家 |  | ＋ |  | 永 | 先 | 完 |
| United States | 1，811 | 28， 177 | 23， 537 | 51， 714 | 887 | 7，940 | 1，978 | 9，918 | 1，119 | 8，845 | 15， 261 | 24， 106 |
| North Atlantic Division | 639 | 12，354 | 8，943 | 21，297 | 380 | 4，424 | 8571 | 5，281 | 535 | 6，497 | 8，772 | 15，269 |
| South Atlantic Division | 366 | 5，371 | 4，246 | 9，617 | 159 | 960 | 163 | 1，123 | 195 | 913 | 2，067 | 2，980 |
| South Central Division | 391 | 4，770 | 4，714 | 9， 484 | 153 | 1，029 | 351 | 1，380 | 142 | 448 | 1，224 | 1，672 |
| North Central Division | 345 | 4，721 | 4，716 | 9，437 | 156 | 1，396 | 497 | 1，893 | 181 | 786 | 2，382 | 3，168 |
| Western Uivision | 100 | 861 | 1，018 | 1，879 | 39 | 181 | 110 | $\bullet 41$ | 66 | 201 | 816 | 1，017 |
| North Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine．．．．． | 31 | 507 | 563 | 1，070 | 28 | 204 | 131 | 335 | 28 | 136 | 367 | 503 |
| New Hampshire | 27 | 888 | 362 | 1，250 | 18 | 466 | 37 | 503 | 25 | 546 | 298 | 844 |
| Vermont．．．．．． | 21 | 235 | 225 | 460 | 14 | 66 | 29 | 95 | 13 | 79 | 137 | 216 |
| Massachusetts | 100 | 2,004 | 1，540 | 3，544 | 70 | 926 | 204 | 1，180 | 93 | 1，340 | 1，569 | 2，909 |
| Rhode Island | 12 | 181 | 135 | ， 316 | 7 | 53 | 7 | 60 | 12 | 160 | 230 | 390 |
| Connecticut | 58 | 937 | 644 | 1，581 | 36 | 339 | 67 | 406 | 51 | 328 | 769 | 1，097 |
| New York． | 191 | 2，859 | 2，437 | 5，296 | 102 | 1，070 | 168 | 1，238 | 171 | 1，945 | 3，139 | 5，08 |
| New Jersey | 69 | 1，323 | 906 | 2，229 | 33 | 454 | 59 | ， 513 | 61 | 793 | 778 | 1，571 |
| Pennsylvania | 127 | 3，400 | 2，131 | 5，5．51 | 72 | 840 | 155 | 1，001 | 81 | 1，170 | 1，485 | 2，635 |
| South Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Dclaware | 2 | 94 | 72 | 166 | 2 | 18 | 6 | 24 |  | 41 | 47 | 88 |
| Maryland | 85 | 603 | 589 | 1，192 | 16 | 139 | 45 | 181 | 26 | 251 | 501 | 752 |
| District of Columisi | 17 | 142 | 176 | 318 | 6 | 53 | 6 | 59 | 17 | 97 | 375 | 472 |
| Virginia． | 78 | 1，105 | 789 | 1，891 | 25 | 128 | － | 133 | 54. | 216 | 402 | 618 |
| West Virginia | 12 | 142 | 223 | 365 | 9 | 60 | 7. | 67 | 10 | 34 | 66 | 100 |
| North Carolina | 118 | 1，501 | 899 | 2，460 | 46 | 238 | 20 | 258 | 42 | 156 | 214 | 370 |
| South Carolin | 30 | ， 545 | 336 | 881 | 14 | 99 | 26 | 125 | 16 | 48 | 121 | 169 |
| Gcorgia | 69 | 1，163 | 1，108 | 2， 271 | 40 | 225 | 47 | 272 | 25 | 70 | 305 | 375 |
| Florida | 5 | －16 | ， 54 |  | 1 | 0 | ， | 1 | 3 | 0 | 36 | 36 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky． | 74 | 743 | 747 | 1，490 | 33 | 199 | 45 | 244 | 33 | 68 | 244 | 312 |
| Tennessee | 97 | 1，488 | 1，275 | 2，763 | 48 | 459 | 155 | 614 | 24 | 66 | 201 | 270 |
| Alabama． | 55 | 658 | 559 | 1，217 | 20 | 51 | 16 | 70 | 19 | 50 | 120 | 170 |
| Mississippi | 42 | 440 | 395 | 835 | 11 | 109 | 17 | 126 | 10 | 78 | 36 | 114 |
| Louisiana | 29 | 252 | 377 | 629 | 6 | 43 | 24 | 67 | 23 | 121 | 362 | 483 |
| Texas | 58 | 793 | 991 | 1，784 | 25 | 99 | 71 | 170 | 28 | 55 | 246 | 301 |
| Arkansas． | 24 | 305 | 252 | 537 | 8 | 60 | 23 | 83 |  | 10 | 6 | 16 |
| Oklahoma | 2 | 21 | 34 | 55 | ， | 4 | 0 | 4 | 1 | 0 | 3 | 3 |
| Indian Territory． | 10 | 70 | 81 | 154 | 1 | 2 | 0 | 2 | 1 | 0 | 3 | 3 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio．．．．． | 54 | 590 | 697 | 1， 287 | 23 | 254 | 33 | 287 | 38 | 118 | 656 | 774 |
| Indiana | 25 | 430 | 472 | 1，902 | 10 | 96 | 110 | 206 | 10 | 63 | 169 | 232 |
| Illinois． | 61 | 692 | 964 | 1，656 | 31 | 187 | 99 | 286 | 31 | 49 | 561 | 613 |
| Michigan | 22 | 170 | 357 | ， 527 | 9 | 31 | 35 | 66 | 13 | 46 | 207 | 253 |
| Wisconsin | 24 | 580 | 184 | 764 | 14 | 305 | 23 | 328 | 16 | 195 | 106 | 301 |
| Minnesota | 24 | 402 | 319 | 751 | 12 | 92 | 13 | 105 | 14 | 22 | 173 | 195 |
| Iowa | 32 | 350 | 398 | 748 | 12 | 88 | 41 | 129 | 10 | 14 | 33 | 47 |
| Missouri | 68 | 1，106 | 876 | 1，982 | 27 | $2 \div 9$ | 60 | 289 | 35 | 255 | 328 | 583 |
| North Dakota | 2 | 14 | 22 | 1， 36 | 1 | 0 | 1 | 1 | 1 | 2 | 36 | 38 |
| South Dakiot | 7 | 44 | 52 | 96 | 5 | 19 | 6 | 25 | 3 | 1 | 19 | 20 |
| Nebraska | 12 | 135 | 142 | 277 | 6 | 44 | 62 | 106 | 4 | 7 | 57 | 64 |
| Kansas． | 14 | 208 | 203 | 411 | 8 | 51 | 11 | 65 | 6 | 14 | $3!$ | 45 |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana． | 1 | 0 | 9 |  |  |  |  |  | 2 | 0 | 45 | 45 |
| Wyoming | 1. | 4 | 2 |  |  |  |  |  |  |  |  |  |
| Colorado | 6 | 33 | 49 | 82 | 3 | 8 | 1 | 9 | 1 | 1 | 33 | 31 |
| New Mcrico | 3 | 9 | 3 | 12 | 1 | 1 | 0 | 1 | 1 | 6 | 0 | 6 |
| Arizona | 1 | 0 | 9 | 9 | 0 | 0 | 0 | 0 | ， | 0 | 0 | 0 |
| Utah | 7 | 99 | 71 | 170 | 5 | 22 | 29 | 51 | 4 | 18 | $5 \%$ | 70 |
| Nerada |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho | 4 | 51 | 33 | 84 | 1 | 5 | 0 | 5 | 2 | 2 | 6 | 8 |
| Washingto | 10 | 58 | 136 | 191 | 4 | 14 | 12 | 26 | 5 | 2 | 113 | 115 |
| Oregon． | 14 | 173 | 176 | 349 | 6 | 34 | 50 | 84 | 11 | 65 | 98 | 163 |
| California |  | 434 | 530 | 964 |  |  | 18 | 65 | 40 | 107 | 469 | 576 |

Table 19．－Private high schools and academies－Number of secondury students pursuing certuin studies in 1893－99．

| State or Territory． | German． |  |  |  | Algebra． |  |  |  | Geometry． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\frac{\dot{9}}{\underset{\sim}{\pi}}$ |  | $\begin{gathered} \stackrel{\rightharpoonup}{8} \\ \stackrel{y y}{*} \\ \hline \end{gathered}$ |  | $\frac{\dot{\tilde{\pi}}}{\stackrel{\pi}{\tilde{\pi}}}$ |  | $\begin{gathered} \text { ت⿹\zh26灬犬 } \\ \underset{\sim}{\circ} \end{gathered}$ |  | $\frac{\dot{ভ}}{\frac{\tilde{\pi}}{\mathrm{~K}}}$ |  |  |
| United | 1，095 | 10，413 | 9，359 | 19， 772 | 1，926 | 8 | 24， 893 | 54， 171 | 59 | 15，130 | 10， 530 | 25，660 |
| North Atlantic Division South Atlantic Divisio South Central Division North Central Division Western Division ．．．． | $\begin{aligned} & 499 \\ & 123 \\ & 1292 \\ & 271 \\ & 60 \\ & \hline \hline \end{aligned}$ | $\begin{array}{r} 5,825 \\ 790 \\ 745 \\ 2,822 \\ 231 \\ \hline \hline \end{array}$ | $\begin{array}{r}4,733 \\ 736 \\ 849 \\ 2,788 \\ \hline 563 \\ \hline\end{array}$ | $\begin{array}{r} 10,5.58 \\ 1,526 \\ 1,591 \\ 5,300 \\ 7901 \\ \hline \hline \end{array}$ | 6.51 371 413 364 121 121 | $\begin{array}{r} \hline 11,972 \\ 5,727 \\ 6,062 \\ 4,423 \\ 1,095 \\ \hline \end{array}$ | $\begin{aligned} & 8,395 \\ & 4,518 \\ & 5,781 \\ & 4,690 \\ & 1,509 \\ & \hline \end{aligned}$ | $\begin{array}{r}20,366 \\ 10,245 \\ 11,983 \\ 9,13 \\ 2,604 \\ 2 \\ \hline\end{array}$ | 590 <br> 289 <br> 345 <br> 333 <br> 102 <br> 1 | 7,182 <br> 2,411 <br> 2,592 <br> 2,323 <br> 622 | $\begin{array}{r}4,135 \\ 1,541 \\ 2,342 \\ 1,921 \\ 521 \\ \hline\end{array}$ | $\begin{aligned} & 11,317 \\ & 3,922 \\ & 4,934 \\ & 4,314 \\ & 1,143 \\ & 1,143 \\ & \hline \end{aligned}$ |
| North Atlantic Divisio |  |  |  |  |  |  |  |  |  |  |  |  |
| Naine Hampshire | ${ }_{13}^{10}$ | $\begin{array}{r}25 \\ 192 \\ \hline\end{array}$ | $\begin{gathered} 53 \\ 76 \end{gathered}$ | 288 | $\begin{aligned} & 36 \\ & 30 \end{aligned}$ | ${ }_{8827} 5$ | $\begin{aligned} & 661 \\ & { }_{2}^{655} \end{aligned}$ | $\begin{aligned} & 1,234 \\ & 1,082 \end{aligned}$ | $\stackrel{29}{29}$ | ${ }_{737}^{278}$ | $\begin{aligned} & 308 \\ & 139 \\ & \hline \end{aligned}$ | 586 876 |
| Vermont． | 11 | ${ }^{60}$ | 69. | 129 | 20 | ${ }^{4063}$ | 397 |  | ${ }^{14}$ |  | 93． |  |
| Mhossachusetts | 7 | ${ }^{7} 18$ | 713 | 1，473 | 101 | 1，908 | 1，281 | ${ }^{3}, 185$ | 11 | 1，116 | ${ }_{75}$ | 1798 |
| Comnecticut． | 48 | 392 | 429 | 821 | 58 | 672 | 519 | 1，191 | 53 | 530 | 303 |  |
| New York | 167 | 2，008 | 1，721 | 3，729 | 197 | 2， 478 | 2，343 | 4，821 | 178 | 1，649 | 1，245 | 2，894 |
| New Jersey | ${ }^{63}$ |  |  | 1，374 | 70 |  |  |  |  |  | ${ }_{897} 8$ | （1，280 |
| South Athantic Division |  |  |  |  |  |  |  |  |  |  |  | 2，702 |
| Delaware |  | 19 | 20 | 39. | $\stackrel{2}{2}$ | 65 |  | 6 | 2 | 29 | 21 | 50 |
| Maryland | 27 | 345 | ${ }^{226}$ | 571 | ${ }^{3} 1$ | ${ }^{642}$ | ${ }^{657}$ | 1，299 | ${ }^{32}$ | ${ }_{4} 98$ | ${ }^{308}$ | 806 |
| Virginia． | 44 | 181 | 139 | ${ }_{320}$ | 78 | 1，137 | 772 | 1，909 | 72 | 637 | 284 | ${ }_{921}^{218}$ |
| West Virginia | 10 | 35 | 70 | 105 | 12 | 137 | 160 | 297 | 11 | 77 | 53 | 130 |
| North car | 18 | 132 | 49 | 181 | 118 | 1，758 | 92 | 2, | ${ }_{23}$ | 153 | 121 | 574 |
| Georgia | 8 | 24 | 7 | 93 | 71 | 1，293 | 1，247 | 2，542 | 62 | 514 | 451 |  |
| South Central inision： |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tennessee | 31 | 175 | 121 | 296 | 100 | 1，639 | 1，393 | 3，032 | 91 | 685 | 556 | 1，241 |
| Alabama |  |  |  | 51 | 56 | 815 | 683 | 1，495 | 48. | 386 | 334 |  |
| Mississi | 5 | 27 | 11 |  | 46 | 581 | 450 | 1，061 | 32 | 241 | 129 | 370 |
| Louisia | ${ }^{56}$ | 235 | ${ }^{13} 48$ | （15） | 62 | 1，211 | 1.496 | 2，707 | 58. | 678 | 1807 | 1，479 |
| Arkansas | 8 | 37 | 16 | 53 | 24 | ${ }_{391}$ | ${ }_{287}$ |  | 18 | 117 | 7 |  |
| Oklahoma | ${ }^{2}$ | ${ }^{7}$ | 21 | ${ }_{13}^{28}$ | ${ }^{2}$ | 110 | 111 | 227 | $\frac{2}{6}$ | 30 | 31 | ${ }_{61}^{16}$ |
| Nerth Central Division：．．．．${ }^{3}$ a ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio | 45 | 347 | 445 | 791 | 54 | 481 |  | 1，039 |  | 278 | 269 | 517 398 |
| Inlinois | ${ }_{47}^{18}$ | ${ }_{412}$ | ${ }_{499}^{105}$ | ${ }_{911}^{368}$ | ${ }_{6} 6$ | 400 | 445 |  | 5 | 24， | 15 |  |
| Michigan | 16 | 75 | 116 | 191 | 2 | 199 | 430 | 629 | 21 | 102 | 136 | 238 |
| Wisconsi | 21 | 570 | 234 | 504 | 24 | 447 | 202 | 649 | ${ }^{21}$ | 309 | 111 | 420 |
| Minnes | ${ }^{23}$ | 298 | 241 | 539 | 29 | ${ }_{3}^{397}$ | 438 | ${ }^{732}$ | 26. | 190 | ${ }_{193}^{103}$ | 343 |
| Missour | 41 | 551 | 310 | ${ }_{851}$ | ${ }_{73}$ | 1，321 | 992 | 2,313 | 69 | 626 | 417 | 1，043 |
| North Dak |  | 10 | 9 | 19 | － |  | 27 |  |  |  | ， | 21 |
| Nebraska | 12 | 61 | ${ }_{96}$ | 160 | 15 | 128 | 15 | 286 | 13 | 52， | 57 | 109 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Colorad |  |  | 16 | 21. |  | 36 | 50 | 86 | 4 | 19 |  | 27 |
| New Mexi | 0 | 0 | 0 | 0 | ${ }_{4}$ | 2 | 8 | 30 | ${ }^{3}$ | ${ }^{14}$ | ， | ${ }_{0}^{16}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nevada |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Canhorna |  |  |  |  |  |  |  |  |  |  |  |  |

Table 20．－Privale high schools and academies－Number of secondery students pursuing． certain studies in 1898－99．

| State or Territory． | Trigonometry． |  |  |  | Astronomy． |  |  |  | Physics． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\stackrel{\stackrel{0}{\tilde{\pi}}}{\stackrel{y}{c}}$ |  | $\begin{aligned} & \text { 感 } \\ & 0 \end{aligned}$ |  | $\stackrel{\oplus}{\stackrel{\sim}{心}}$ | 宊 | $\stackrel{\text { ت゙ }}{\text { ت゙ }}$ |  | 挲 | 盛 | ¢ |
| United States | 665 | 3， 359 | 1，853 | 5，212 | 702 | 2，202 | 4，809 | 7，011 | 1，388 | 10， 011 | 9，601 | 19，612 |
| North Atlantie Division | 217 | 1，460 | 273 | 1，733 | 234 | 799 | 1，692 | 2，491 | 486 | 4，140 | 3，187 | 7， 327 |
| South Atlantic Division | 131 | 471 | 322 | 793 | 93 | 283 | ， 648 | 931 | 224 | 1，531 | 1，419 | 2，950 |
| South Central Division | 139 | 781 | 769 | 1，550 | 149 | 612 | 1，012 | 1，624 | 282 | 2，224 | 2，388 | 4，612 |
| North Central Division | 131 | 490 | 391 | 881 | 174 | 448 | 1，096 | 1，544 | 306 | 1，758 | 2，014 | 3，772 |
| Western Division | 47 | 157 | 98 | 255 | 52 | 60 | 361 | 421 | 90 | 358 | 593 | 951 |
| North Atlantie Division： Maine | 4 | 6 | 8 | 14 | 17 | 93 | 108 | 201 | 28 | 182 | 204 | 386 |
| New Hamps | 9 | 80 | 16 | 96 | 12 | 7 | 56 | 133 | 25 | 320 | 84 | 404 |
| Vermont．．．．．． | 2 | 13 | 0 | 13 | 12 | 34 | 49 | 83 | 12 | 78 | 61 | 139 |
| Massachusetts | 28 | 177 | 15 | 192 | 31 | 99 | 158 | 257 | 69 | 670 | 411 | 1，081 |
| Rhode Island | 4 | 26 | 6 | 32 | 4 | 0 | 40 | 40 | 9 | 65 | 43 | 108 |
| Connecticut | ＇21 | 63 | 8 | 71 | 18 | 57 | 19.1 | 251. | 35 | 191 | 233 | 424 |
| New York． | 67 | 449 | 69 | 518 | 73 | 191 | 550 | 741 | 160 | 965 | 1，142 | 2， 107 |
| New Jersey | 24 | 178 | 27 | 205 | 27 | 50 | 189 | 239 | 49 | 364 | 276 | 640 |
| Pennsylvania | 58 | 468 | 124 | 592 | 40 | 198 | 348 | 546 | 99 | 1，305 | 733 | 2，038 |
| South Atlantic Division： Delaware | 0 | 0 | 0 | 0 | 1 | 4 | 7 | 11 | 2 | 16 | 8 | 24 |
| Maryland | 17 | 112 | 20 | 132 | 13 | 9 | 126 | 135 | 26 | 141 | 224 | 365 |
| District of Columbi | 10 | 24 | 20 | 44 | 10 | 1 | 78 | 79 | 14 | 50 | 134 | 184 |
| Virginia | 43 | 116 | 84 | 200 | 21 | 58 | 151 | 209 | 56 | 341 | 317 | 658 |
| West Virginia． | 8 | 27 | 14 | 41 | 7 | 14 | 44 | 58 | 9 | 50 | 72 | 122 |
| North Carolina | 14 | 53 | 37 | 90 | 15 | 126 | 56 | 182 | 52 | 447 | 178 | 625 |
| South Carolina | 9 | 29 | 33 | 62 | 8 | 14 | 42 | 56 | 18 | 131 | 61 | 192 |
| Georgia | 30 | 110 | 114 | 224 | 13 | 57 | 93 | 150 | 41 | 352 | 361 | 713 |
| Florida | 0 | 0 | ， | 0 | 5 | 0 | 51 | 51 | 6 | 3 | 64 | 67 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky． | 34 | 122 | 76 | 198 | 24 | 79 | 121 | 200 | 41 | 184 | 219 | 403 |
| Teunessee | 5 | 203 | 129 | 332 | 33 | 159 | 202 | 361 | 67 | 464 | 460 | 924 |
| Alabama． | 27 | 120 | 86 | 206 | 20 | 70 | 86 | 156 | 38 | 271 | 270 | 541 |
| Mississippi | 12 | 102 | 32 | 134 | 14 | 118 | 65 | 183 | 35 | 415 | 359 | 774 |
| Louisiana | 13 | 31 | 51 | 82 | 16 | 20 | 149 | 169 | 23 | 145 | 259 | 405 |
| Texas． | 41 | 177 | 375 | 552 | 33 | 125 | 354 | 479 | 57 | 570 | 671 | 1，241 |
| Arkansas | 4 | 24 | 12 | 36 | 7 | 40 | 29 | 69 | 14 | 130 | 104 | 234 |
| Oklahoma | 1. | 0 | 5 | 5 | 1 | 0 | 5 | 5 | 2 | 5 | 7 | 12 |
| Indian Territory． | 2 | 2 | 3 | 5 | 1 | 1 | 1 | 2 | 5 | 39 | 39 | 78 |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio | 18 | 101 | 51 | 152 | 26 | 61 | 151 | 212 | 42 | 219 | 248 | 467 |
| Indiana | 13 | 51 | 39 | 90 | 10 | 23 | 57 | 80 | 21 | 144 | 174 | 318 |
| Illinois． | 21. | 54 | 107 | 161 | 30 | 40 | 199 | 239 | 57 | 264 | 412 | 676 |
| Michigan | 5 | 15 | 14 | 29 | 11 | 10 | 116 | 126 | 21 | 71 | 197 | 268 |
| Wisconsin． | 5 | 68 | 3 | 71 | 11 | 65 | 62 | 127 | 19 | 236 | 76 | 312 |
| Minnesota | 7 | 21 | 10 | 31 | 7 | 9 | 55 | 64 | 21 | 148 | 142 | 290 |
| Towa | 10 | 24 | 22 | 46 | 18 | 43 | 70 | 113 | 29 | 167 | 187 | 354 |
| Missouri | 41 | 132 | 135 | 267 | 43 | 143 | 279 | 422 | 61 | 349 | 401 | 750 |
| North Dakota | 1. | ， | 4 | 5 | 1 | 1 | 4 | 5 | 2 | 5 | 8 | 13 |
| South Dakota |  |  |  |  | 2 | 10 | 11 | 21 | 5 | 27 | 21 | 48 |
| Nebraska | 2 | 3 | 1 | 4 | 5 | 9 | 39 | 48 | 14 | 44 | 80 | 124 |
| Kancas． | 8 | 20 | 5 | 25 | 10 | 34 | 53 | 87 | 14 | 84 | 68 | 152 |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana． | 1. | 0 | 3 | 3 | 1 | 0 | 4 | 4 | 1 | 0 | 9 | 9 |
| Wyoming |  |  |  |  |  |  |  |  |  |  |  |  |
| Colorado | 1 | 0 | 1 | 1 | 1 | 14 | 23 | 37 | 4 | 8 | 11 | 19 |
| New Mexico | 1 | 0 | 2 | 2 | 1 | 0 | 6 | 6 | 1 | 0 | 2 | 2 |
| Arizona | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 9 |  |
| Utah | 3 | 10 | 4 | 14 | 1 | 3 | 3 | 6 | 8 | 48 | 35 | 83 |
| Nevada |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho． | 1 | 2 | 0 | 2 | 2 | 3 | 10 | 13 | 2 | 19 | 10 | 29 |
| Washington | 6 | 13 | 14 | 27 | 6 | 1 | 70 | 71 | 10 | 13 | 78 | 91 |
| Oregon．．． | 13 | 27 | 36 | 63 | 10 | 13 | 35 | 48 | 12 | 56 | 49 | 105 |
| California． | 21 | 105 | 38 | 143 | 30 | 26 | 210 | 236 | 51 | 214 | 390 | 604 |

Table 21．－Pricate high schools and academies－Number of secondary students pursuing certain studies in 1898－99．

| State or Territory． | Chemistry． |  |  |  | Physical geographr． |  |  |  | Geology． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 家 | Ė | $\begin{aligned} & 0 \\ & 0.0 \\ & 0.3 \\ & 0 \\ & 0 \\ & 0.3 \\ & 3 \\ & 0 \\ & 0 \end{aligned}$ | 艺 | 号 | － |  | 岂 | 宽 | $\begin{aligned} & \stackrel{\rightharpoonup}{\text { Fs }} \\ & \stackrel{0}{0} \\ & \hline \end{aligned}$ |
| United States | 875 | 5， 053 | 5， 104 | 10，157 | 1，379 | 10，139 | 11， 932 | 22， 071 | 608 | 2， 544 | 3， 803 | 6，347 |
| North Atlantic Division | 322 | 2，394 | 1，773 | 4，167 | 438 | 3，332 | 3， 512 | 6，844 | 192 | 965 | 1，264 | 2，229 |
| South Atlandic Division | 137 | 739 | 813 | 1，552 | 281 | 1，969 | 2，117 | 4，086 | 65 | 245 | 401 | 646 |
| South Central Division | 150 | 717 | 1，091 | 1，808 | 289 | 2，469 | 2，942 | 5，411 | 156 | 784 | 1，011 | 1，795 |
| North Central Division | 201 | 964 | 1，149 | 2，113 | 277 | 1，869 | 2，455 | 4，324 | 149 | 445 | 822 | 1，267 |
| Western Division | 65 | 239 | 278 | 517 | 94 | 500 | 906 | 1，406 | 46 | 105 | 305 | 410 |
| North Atlantie Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine． | 19 | 112 | 121 | 233 | 24 | 188 | 200 | 388 | 17 | 87 | 113 | 200 |
| New Hampsh | 15 | 189 | 71 | 260 | 22 | 208 | 101 | 309 | 13 | 105 | 54 | 159 |
| Vermont | 9 | 51 | 23 | 74 | 14 | 98 | 123 | 221 | 10 | 36 | 51 | 87 |
| Massachusetts | 50 | 377 | 288 | 665 | 45 | 292 | 298 | 590 | 25 | 125 | 145 | 270 |
| Rhode Island | 5 | 12 | 40 | 52 | 4 | 49 | 34 | 83 | 3 | 22 | 19 | 41 |
| Connecticut | 21 | 69 | 143 | 212 | 37 | 219 | 262 | 481 | 17 | 52 | 145 | 197 |
| New York | 107 | 657 | 547 | 1，204 | 141 | 909 | 1，296 | 2， 205 | 60 | 176 | 427 | 603 |
| New Jersey | 33 | 273 | 103 | 376 | 47 | 338 | 332 | 670 | 11 | 33 | 77 | 110 |
| Pennsylrania | 60 | 654 | 437 | 1，091 | 104 | 1， 031 | 856 | 1，897 | 36 | 329 | 233 | 562 |
| South Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Delaware | 1 | 13 199 | 10 173 |  |  |  |  |  | 0 | ${ }^{0} 8$ | 0 | 0 19 |
| Maryland． | 22 | 199 | 173 | 372 | 29 | 194 | 339 | 533 | 11 | 28 | 91 | 119 |
| Wistrict of Co | 11 | 18 | 62 | 80 | 14 | 45 | 97 | 142 | 8 | 0 | 50 | 50 |
| Virginia | 33 | 154 | 158 | 312 | 58 | 379 | 383 | 762 | 15 | 81 | 89 | 170 |
| West Virginia | 10 | 47 | 51 | 98 | 10 | 46 | 109 | 155 | 4 | 34 | 20 | 54 |
| North Carolina | 23 | 149 | 77 | 226 | 91 | 732 | 527 | 1，259 | 9 | 74 | 45 | 119 |
| South Carolina | 11. | 51 | 68 | 119 | 25 | 185 | 152 | 337 | 6 | 10 | 46 | 56 |
| Georsia | 22 | 108 | 192 | 300 | 47 | 379 | 407 | 786 | 11 | 18 | 50 | 68 |
| Florida | 4 | 0 | 22 | 22 | 7 | 9 | 103 | 112 | 1 | 0 | 10 | 10 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky． | 32 | 97 | 178 | 275 | 56 | 362 | 437 | 799 | 29 | 102 | 114 | 216 |
| Tennessee | 29 | 178 | 164 | 342 | 57 | 459 | 458 | 917 | 49 | 319 | 324 | 643 |
| Alabama． | 18 | 90 | 87 | 177 | 36 | 243 | 301 | 544 | 17 | 53 | 62 | 115 |
| Mississippi | 14. | 128 | 77 | 205 | 32 | 309 | 318 | 627 | 13 | 117 | 58 | 175 |
| Louisiana | 16 | 32 | 142 | 174 | 25 | 152 | 278 | 430 | 15 | 25 | 86 | 111 |
| Texas | 36 | 136 | 391 | 527 | 57 | 655 | 885 | 1，540 | 28 | 143 | 336 | 479 |
| Arkansas | 4 | 56 | 45 | 101 | 10 | 228 | 172 | 400 | 3 | 25 | 24 | 49 |
| Oklahoma | 1 | 0 | 7 | 7 | 1 | 0 | 15 | 15 | 1 | 0 | 6 | 6 |
| Indian Territory | 0 |  |  |  | 9 | 61 | 78 | 139 | 1 | 0 | 1 | 1 |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio | 31 | 162 | 151 | 313 | 36 | 273 | 331 | 604 | 17 | 63 | 82 | 145 |
| Indiaria | 18 | 120 | 114 | 234 | 23 | 176 | 241 | 417 | 14 | 34 | 66 | 109 |
| nlinois． | 34 | 107 | 200 | 307 | 50 | 276 | 442 | 718 | 22 | 40 | 161 | 201 |
| Miehigan | 13 | 43 | 105 | 148 | 15 | 63 | 191 | 254 | 8 | 11 | 49 | 60 |
| Wiseonsin | 13 | 143 | 62 | 205 | 17 | 188 | 114 | 302 | 9 | 99 | 15 | 114 |
| Minnesota | 11 | 90 | 76 | 166 | 21 | 154 | 177 | 331 | 5 | 7 | 44 | 51 |
| Iowa | 17 | 45 | 86 | 131 | 29 | 186 | 233 | 419 | 17 | 57 | 99 | 156 |
| Miscouri | 46 | 200 | 269 | 469 | 53 | 390 | 466 | 856 | 44 | 110 | 258 | 368 |
| North Dakota | 1 | 1 | 4 | 5 | 1 | 2 | 4 | 6 | 1. | 1 | 4 | 5 |
| South Dakota | 2 | 3 | 4 | 7 | 5 | 21 | 35 | 56 | 1 | 1 | 0 | 1 |
| Nebraska | 7 | 14 | 22 | 36 | 13 | 45 | 106 | 151 | 4 | 2 | 19 | 21 |
| Kansas． | 8 | 36 | 56 | 92 | 14 | 95 | 115 | 210 | 7 | 20 | 25 | 45 |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana． | 0 | 0 | 0 | 0 | 1 | 0 | 12 | 12 | 2 | 0 | 19 | 19 |
| Wyoming | 1. | 3 | 1 | 4 | 1 | 2 | 1 | 3 | 1 | 4 | 1 | 5 |
| Colorado | 1 | 7 | 0 | 7 | 5 | 24 | 40 | 64 | 2 | 4 | 8 | 12 |
| New Mexieo | 1 | 0 | 2 | 2 | 2 | 13 | 8 | 21 | 2 | 13 | 8 | 21 |
| Arizona． | 0 | 0 | 0 | 0 | 1 | 0 | 9 | 9 | 0 | 0 | 0 | 0 |
| Utah | 7 | 33 | 34 | 67 | 11 | 86 | 88 | $\cdot 174$ | 5 | 46 | 49 | 95 |
| Nevada |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho | 3 | 13 | 20 | 33 | 5 | 32 | 26 | 58 |  |  |  |  |
| Washington | 4 | 3 | 33 | 36 | 9 | 43 | 90 | 133 | 4 | 2 | 49 | 51 |
| Oregon． | 10 | 28 | 34 | 62 | 15 | 113 | 139 | 252 | 8 | 17 | 46 | 63 |
| California． | 38 | 152 | 154 | 306 |  | 187 | 493 | 680 | 22 | 19 | 125 | 144 |

Table 22．－Private high schools and academies－Number of secondary students mersuing certain studies in 1898－99．

| State or Territory． | Physiology． |  |  |  | Psychology． |  |  |  | Rhetoric． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\underset{\text { B゙ }}{\stackrel{y}{3}}$ | 碳 | － | $\begin{aligned} & 1 \\ & 0 \\ & 0 \\ & 0 . E \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  | $\begin{aligned} & \text { ت゙ं } \\ & \stackrel{3}{0} \\ & E-1 \end{aligned}$ |  | 家 | 烒 | \％ |
| United States | 1，323 | 12，073 | 14， 881 | 26，954 | 673 | 2，813 | 4，535 | 7，348 | 1，653 | 15， 249 | 18， 791 | 34， 040 |
| North Atlantic Division | 398 | 3， 749 | 4，299 | 8，048 | 188 | 694 | 1，429 | 2， 123 | 553 | 6， 149 | 6，727 | 12，876 |
| South Atlantic Division | 240 | 2，086 | 2，256 | 4，342 | 115 | 396 | 703 | 1，099 | 314 | 2，700 | 2， 866 | 5，566 |
| South Central Division | 314 | 3，454 | 4，071． | 7，525 | 152 | 878 | 1，024 | 1，902 | 345 | 3,112 | 3，9－48 | 7，060 |
| North Central Division | 284 | 2， 184 | 3， 128 | 5， 312 | 172 | 682 | 1，080 | 1，762 | 333 | 2， 651 | 4，036 | 6，687 |
| Western Division | 87 | 600 | 1，127 | 1，727 | 46 | 163 | 299 | 462 | 108 | 637 | 1，214 | 1，851． |
| North Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Maine | 24 | 151 | 186 | 337 | 13 | 75 | 143 | 218 | 30 | 259 | 412 | 671 |
| New Hamp | 20 | 242 | 153 | 395 | 6 | 16 | 40 | 56 | 27 | 362 | 200 | 562 |
| Vermont | 12 | 77 | 116 | 193 | 8 | 17 | 32 | 49 | 14 | 108 | 142 | 250 |
| Massachusetts | 45 | 347 | 393 | 740 | 23 | 94 | 124 | 218 | 81 | 694 | 1，269 | 1，963 |
| Rhode Island | 8 | 55 | 72 | 127 | 3 | 22 | 34 | 56 | 11 | 95 | 135 | 230 |
| Connecticut | 34 | 233 | 370 | 603 | 19 | 13 | 133 | 146 | 46 | 363 | 545 | 908 |
| New Jork | 111 | 1，085 | 1，434 | 2，519 | 52 | 86 | 357 | 443 | 176 | 1，411 | 2， 180 | 3， 591 |
| New Jersey | 46 | 309 | 341 | 650 | 14 | 28 | 82 | 110 | 64 | 1，162 | 428 | 1，590 |
| Pernsylvania | 98 | 1，250 | 1，234 | 2， 484 | 50 | 343 | 484 | 827 | 104 | 1，695 | 1，416 | 3，111 |
| South Atlantic Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Delaware | 1 | 7 | 10 | 17 | 0 | 0 | 0 | 0 | 2 | 36 | 25 | 61 |
| Maryland | 22 | 111 | 197 | 308 | 7 | 0 | 73 | 73 | 30 | 281 | 517 | 801 |
| District of Columbi | 12 | 9 | 134 | 143 | 9 | 16 | 60 | 76 | 16 | 85 | 241 | 326 |
| Virginia | 47 | 328 | 402 | 730 | 26 | 74 | 127 | 201 | 69 | 563 | 454 | 1，017 |
| West Virginia | 9 | 79 | 60 | 139 | 9 | 33 | 48 | 81 | 12 | 80 | 153 | 233 |
| North Carolina | 82 | 935 | 732 | 1，667 | 29 | 103 | 108 | 211 | 92 | 789 | 579 | 1，368 |
| South Carolina | 19 | 128 | 129 | 257 | 5 | 35 | 59 | 94 | 27 | 220 | 173 | 393 |
| Gecrgia | 41 | 460 | 449 | 909 | 24 | 130 | 202 | 332 | 59 | 634 | 656 | 1，290 |
| Florida | 7 | 29 | 143 | 172 | 6 | 5 | 26 | 31 | 7 | 9 | 68 | 77 |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky | 64 | 534 | 664 | 1，198 | 27 | 157 | 207 | 364 | 68 | 584 | 778 | 1，362 |
| Tennessee | 74 | 885 | 858 | 1，743 | 32 | 165 | 160 | 325 | 85 | 853 | 871 | 1，724 |
| Alabama． | 38 | 448 | 455 | 903 | 17 | 68 | 87 | 155 | 44 | 353 | 424 | 777 |
| Mississippi | 32 | 357 | 410 | 767 | 11 | 89 | 41 | 130 | 34 | 230 | 265 | 495 |
| Louisiana | 22 | 138 | 376 | 514 | 14 | 45 | 106 | 151 | 27 | 156 | 319 | 475 |
| ＇exas | 55 | 589 | 851 | 1，440 | 42 | 280 | 351 | 637 | 57 | 725 | 1，078 | 1， 803 |
| Arkansas | 20 | 444． | 368 | 812 | 7 | 67 | 55 | 122 | 21 | 161 | 143 | 304 |
| Oklahoma ．．． | 1 | 0 | 18 | 18 |  |  |  |  | 1 | 0 | 15 | 15 |
| Indian Territory： | 8 | 59 | 71 | 130 | 2 | 7 | 11 | 18 | 8 | 50 | 55 | 105 |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Ohio | 36 | 253 | 398 | 651 | 26 | 96 | 167 | 263 | 48 | 372 | 631 | 1，003 |
| Indiania | 22 | 231 | 243 | 474 | 12 | 99 | 118 | 217 | 24 | 201 | 403 | 604 |
| Illinois． | 46 | 284 | 491 | 775 | 24 | 62 | 180 | 242 | 62 | 362 | 666 | 1，028 |
| Michigan | 18 | 85 | 350 | 435 | 8 | 25 | 85 | 110 | 20 | 128 | 360 | 488 |
| Wisconsin | 19 | 218 | 138 | 356 | 4 | 21 | 28 | 49 | 23 | 392 | 223 | 615 |
| Minnesot | 23 | 195 | 261 | 456 | 11 | 73 | 51 | 124 | 24 | 181 | 418 | 599 |
| Iowa | 31 | 161 | 299 | 460 | 17 | 48 | 77 | 125 | 32 | 249 | 355 | 604 |
| Missouri | 55 | 496 | 570 | 1，066 | 52 | 199 | 296 | 495 | 66 | 527 | 660 | 1，187 |
| North Dakota | 2 | 17 | 37 | 54 | 1 | 1 | 2 | 3 | 2 | 7 | 13 | 20 |
| South Dak | 7 | 67 | 95 | 162 | 4 | 13 | 16 | 29 | 5 | 8 | 42 | 50 |
| Nebraska | 11 | 55 | 93 | 148 | 3 | 15 | 12 | 27 | 13 | 97 | 118 | 215 |
| Kansas． | 14 | 122 | 153 | 275 | 10 | 30 | 48 | 78 | 14 | 127 | 147 | 27. |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana． | 2 | 0 | 35 | 35 | 2 | 0 |  | 6 | 2 | 0 | 23 | 23 |
| W yowing | 1 | ， | 5 | 12 |  |  |  |  | 1 | 1 | 2 | 3 |
| Colorado | 5 | 26 | 40 | 66 | 1 | 0 | 11 | 11 | 5 | 21 | 51 | 72 |
| New Mexico | 2 | 13 | 16 | 29 | 1 | 0 | 2 | 2 | 2 | 1 | 4 | 5 |
| Arizona | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Utan | 7 | 207 | 168 | 375 | 5 | 118 | 101 | 219 | 9 | 125 | 147 | 272 |
| Nevada |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho | 5 | 36 | 39 | 75 | 1 | 9 | 1 | 10 | 5 | 43 | 51 | 94 |
| Washingto | 13 | 59 | 137 | 196 | 8 | 9 | 40 | 49 | 12 | 28 | 130 | 158 |
| Oregon． | 16 | 129 | 176 | 305 | 9 | 8 | 35 | 43 | 15 | 109 | 128 | $2: 7$ |
| California． | 36 | 123 | 511 | 634 | 19 | 19 | 103 | 122 | 57 | 309 | 678 | 987 |

Table 23．－Private high schools and academics－Number of serondary siudents pursuing certain studies in 1898－99．

| State or Territory． | English literature． |  |  |  | History． |  |  |  | Civies． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\left\lvert\, \begin{array}{cc} 0_{0} & 0 \\ 0 & 0 \\ 0 & . \\ 0 & E \\ 0 & 0 \\ 0 & 0 \\ \sigma_{2} & 0 \end{array}\right.$ | $\underset{\sim}{\text { E }}$ | 家 | $\underset{\text { ¢ }}{\substack{\text { ® }}}$ |  | $\underset{\sim}{\underset{\sim}{c}}$ | 芯 | \％ |  | 芯 | 関 | 等 |
| United States | 1，602 | 16，605 | 20， 051 | 36，656 | 1，631 | 17，605 | 22， 186 | 39，791 | 1，034 | 8，133 | 8，433 | 16，566 |
| North Atlantic Division | 576 | 7，822 | 8，001 | 15， 823 | 549 | 7，376 | 8，697 | 16， 073 | 366 | 2，519 | 2，505 | 5， 024 |
| South Atlantic Division | 279 | 2，366 | 3， 106 | 5，472 | 314 | 3， 218 | 3， 704 | 6，922 | 134 | 1，024 | 1，084 | 2，108 |
| South Central Division | 322 | 2， 820 | 3，469 | 6，289 | 327 | 3， 228 | 4，111 | 7，339 | 220 | 2， 365 | 2，111 | 4， 476 |
| Nortin Central Division | 319 | 2， 758 | 4，123 | 6，881 | 332 | 3， 041 | 4，239 | 7，280 | 244 | 1，900 | 2，091 | 3，991 |
| Western Division | 106 | 839 | 1，352 | 2，191 | 109 | 742 | 1，435 | 2，177 | 70 | 325 | 6.42 | 967 |
| North Atlantic Division： Maine | 31 | 438 | 606 | 1，044 | 32 | 356 | 494 | 850 | 22 | 127 | 146 | 73 |
| New Hamps | 26 | 375 | 259 | 634 | 23 | 443 | 335 | 778 | 15 | 157 | 93 | 250 |
| Vermont | 16 | 71 | 125 | 196 | 16 | 121 | 160 | 281 | 13 | 79 | 109 | 188 |
| Massachusett | 92 | 1， 715 | 1， 605 | 3,320 | 92 | 1，216 | 1，361 | 2，577 | 45 | 256 | 355 | 611 |
| Rliode Island | 12 | 47 | 152 | 199 | 12 | 144 | 191 | 335 | 8 | 36 | 50 | 86 |
| Connecticut | 47 | 509 | 651 | 1， 160 | 55 | 625 | 660 | 1， 285 | 23 | 88 | 153 | 241 |
| New York | 177 | 1，521 | 2，334 | 3， 855 | 182 | 1，780 | 2，991 | 4，771 | 117 | 698 | 962 | 1，660 |
| New Jersey | 61 | 1，098 | 678 | 1，776 | 21 | 690 | 818 | 1，508 | 61 | 122 | 110 | 232 |
| Pennsylvania | 114 | 2，048 | 1，591 | 3，639 | 116 | 2， 001 | 1，687 | 3，688 | 62 | 956 | 527 | 1，483 |
| South Atlantic Division： |  |  |  |  |  |  |  | 98 |  |  |  |  |
| Delaware | ${ }_{2}$ | 33 | 29 | 62 | 2 | 58 | 40 | －98 | 1 | 10 | ${ }^{8}$ | 18 |
| Maryland | 33 | 317 | 644 | 961 | 34 | 443 | 801 | 1， 244 | 18 | 71 | 194 | 265 |
| District of | 16 | 93 | 383 | 482 | 17 | 77 | 308 | 385 | 7 | 15 | 56 | 71 |
| Virginia | 62 | 466 | 476 | 942 | 67 | 594 | 682 | 1，276 | 25 | 136 | 236 | 372 |
| West Virgini | 12 | 65 | 149 | 214 | 12 | 109 | 194 | 303 | 7 | 63 | 52 | 115 |
| North Carolina | 77 | 754 | 507 | 1，261 | 92 | 974 | 632 | 1，606 | 36 | 386 | 205 | 591 |
| South Carolina | 23 | 226 | 180 | 406 | 28 | 406 | 212 | 618 | 16 | 144 | 91 | 285 |
| Georgia | 47 | 401 | 657 | 1， 058 | 56 | 545 | 733 | 1， 278 | 21 | 199 | 210 | 499 |
| Florida | 7 | 5 | 81 | S6 | 6 | 12 | 102 | 114 | 3 | 0 | 32 | $\because 2$ |
| South Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Kentucky．．．．．．．．．．． | 67 | 481 | 680 | 1， 161 | 651 | 531 | 700 | 1，231 | 52 | 488 | 468 | 956 |
| Tenncasce | 76 | 784 | 742 | 1，526 | 73 | 748 | 871 | 1，619 | 51 | 550 | 414 | 964 |
| Alabama． | 37 | 265 | 234 | 550 | 37 | 328 | 373 | 701 | 13 | 118 | 168 | 286 |
| Mississippi | 38 | 308 | 335 | 643 | 33 | 435 | 433 | 868 | 31 | 421 | 286 | 707 |
| Louisiana | 25 | 131 | 251 | 382 | 29 | 175 | $3 \pm 3$ | 518 | 10 | 61 | 142 | 203 |
| Texas | 54 | 565 | 892 | 1， 457 | 62 | 631 | 1，083 | 1， 714 | 48 | 583 | 550 | 1， 113 |
| Arkansas． | 18 | 248 | 223 | 471 | 18 | 305 | 205 | 510 | 11 | 92 | 67 | 159 |
| Oklahoma | 2 | 14 | 29 | 43 | 1 | 0 | 22 | 22 | 1 | 0 | 14 | 14 |
| Indian Territorv | 5 | 23 | 33 | 56 | 9 | 75 | 81 | 156 | 3 | 52 | 22 | 74 |
| North Central Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| ．Ohio ．．．．．．．．．．．． | 49 | 344 | 679 | 1，023 | 50 | 415 | 659 | 1，074 | 28 | 184 | 209 | 593 |
| Indiana | 22 | 183 | 355 | 538 | 28 | 243 | 315 | 558 | 18 | 95 | 152 | 247 |
| Illinois | 60 | 465 | 848 | 1，313 | 62 | 405 | 815 | 1， 220 | 40 | 278 | 342 | 62.3 |
| Michigan | 19 | 115 | 322 | 437 | 20 | 160 | 405 | 565 | 13 | 101 | 119 | 220 |
| Wisconsin | 20 | 270 | 212 | 482 | 20 | 396 | 227 | 623 | 13 | 108 | 95 | 203 |
| Minneso | 22 | 180 | 310 | 490 | 25 | 339 | 389 | 728 | 21 | 245 | 183 | 428 |
| Iowa | 30 | 248 | 328 | 576 | 33 | 225 | 286 | 511 | 30 | 212 | 250 | 462 |
| Missouri | 61 | 752 | 710 | 1， 462 | 65 | 661 | 799 | 1， 460 | 48 | 433 | 490 | 9.3 |
| North Datota | 2 | 10 | 24 | 34 | 2 | 6 | 22 | 28 | 2 | 10 | 6 | 16 |
| South Dakota | 6 | 25 | 47 | 72 | 7 | 38 | 72 | 110 | 7 | 64 | 70 | 134 |
| Nebraska | 13 | 76 | 145 | 221 | － 11 | 42 | 135 | 177 | 12 | 2 | 69 | 161 |
| Kansas． | 15 | 90 | 143 | 233 | 14 | 111 | 115 | 226 | 12 | 78 | 106 | 184 |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana． | 2 | 0 | 24 | 24 | 1 | 0 | 10 | 10 | 2 | 0 | 27 | 27 |
| W yoming |  |  |  |  | ， | 2 | 2 | 4 | 1 | 3 | 1 | 4 |
| Colorado | 6 | 22 | 42 | 64 | 5 | 24 | 43 | 67 | 4 | 15 | 18 | 33 |
| New Mexico | 1 | 1 | 8 | 9 | 2 | 28 | 8 | 36 | 1 | 0 | 16 | 16 |
| Arizona | 0 | 0 | 0 | 0 | 1 | 0 | 7 | 7 | 0 | 0 | 0 | 0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Idaho | 4 | 60 | 51 | 111 | 4 | 25 | 28 | 53 | 2 | 18 | 29 | 47 |
| Washington | 12 | 58 | 122 | 180 | 12 | 87 | 128 | 215 | 9 | 27 | 136 | 163 |
| Oregon． | 14 | 115 | 129 | 244 | 14 | 99 | 202 | 301 | 8 | 15 | 80 | 95 |
| California | 59 | 511 | 886 | 1，397 | 62 | 396 | 909 | 1，305 | 58 | 158 | 318 | 470 |

Pable 24.-Private high schools and academies-Proportion of male and female students, per cent of students pursuing certain courses, per cent of graduates, etc., in 1898-93.

| State or Territory. | Total number of secondary students. | Per cent of total number. |  |  |  |  | Per cent of graduates prepared for college. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | College elassical preparatory students. | Collcge scicntifie preparatory students. | $\begin{gathered} \text { Gradu- } \\ \text { ates in } \\ 1899 \end{gathered}$ |  |
| United States.....Vorth Atlantic Division | 103, 838 | 49.98 | 50.02 | 16.00 | 9.74 | 11.42 | 44.75 |
|  | 39,325 | 52.88 | 47.12 | 20.77 | 11.23 | 15.13 | 47.39 |
| South Atlantic Division | 17,683 | 50.58 | 49.42 | 16. 68 | 6.58 | 7.63 | 44.37 |
| South Central Division. | 20,936 | 49.36 | 50.64 | 13.25 | 9.30 | 6.87 | 45.59 |
| North Centrai Division. | 20,640 | 46.93 | 53.07 | 10.74 | 9.11 | 12.42 | 37.52 |
| Western Division.... | 5,254 | 40.65 | 59.35 | 9.65 | 13.13 | 10.64 | 48.66 |
| North Atlantic Division: |  |  |  |  |  |  |  |
| Maine................. | 2, 5851 | 46.22 | 53. 78 | 18.36 | 5.35 | 16. 62 | 35.20 |
| New Hampshire. | 2,445 | 63.80 | 36.20 | 21.55 | 9.74 | 11.78 | 43.75 |
| Vermont | 1,346 | 49.77 | 50.23 | 8.55 | 6.84 | 13.22 | 35.39 |
| Massachusettes | 5,554 | 54.34 | 45. 66 | 28.79 | 11. 04 | 17. 43 | 60.74 |
| Rhode Island. | 514 | 45.53 | 54.47 | 16.93 | 2.72 | 16.34 | 44.05 |
| Connecticut | 2,488 | 46.86 | 53.14 | 24.07 | 13.26 | 16.92 | 51.31 |
| New York | 10,882 | 46. 32 | 53.68 | 19.53 | 12.64 | 14.38 | 48.24 |
| New Jersey | 3,486 | 55.54 | 44.46 | 25.65 | 19.24 | 16.58 | 58.65 |
| Pennsylvania | 10,029 | 59.63 | 40.37 | 17.43 | 9.46 | 14.35 | 37.87 |
| South Atlantic Division: |  |  |  |  |  |  |  |
| Maryland | 1,975 | 44.25 | 55.75 | 11. 80 | 12.13 | 10.28 | 31.42 |
| District of Columbia | 737 | 31.21 | 68.79 | 20.22 | 13.84 | 13.70 | 23.76 |
| Virginia. | 3,310 | 50.60 | 49. 40 | 12.15 | 4.83 | 7.04 | 31.76 |
| West Virginia | 593 | 39.63 | 60.37 | 10.62 | 3.71 | 11.80 | 18.57 |
| North Carolina | 5,649 | 56.42 | 43.58 | 19.07 | 7.38 | 5.61 | 59.62 |
| South Carolina | 1,354 | 57.53 | 42.47 | 9.90 | 7. 82 | 11.45 | 41.29 |
| (ieorgia. | 3,695 | 49.47 | 50.53 | 23.65 | 7.90 | 6.04 | 57.85 |
| Florida. | 150 | 12.00 | 88.00 | 10.00 | 0 | 8.67 | 23.07 |
|  |  |  |  |  |  |  |  |
| Kentucky ........... | 3,077 | 50.86 | 49.14 | 14.92 | 7.54 | 7.51 | 44.16 |
| Tennessee | 5,505 | 51.15 | 48.85 | 11.46 | 6. 76 | 6.49 | 44.82 |
| Alabama | 2,364 | 55.50 | 44.50 | 16.96 | 16.12 | 6.26 | 39.19 |
| Mississippi | 2,221 | 50.43 | 49.57 | 14.68 | 7.29 | 9.32 | 48. 79 |
| Louisiana | 1,210 | 43.88 | 56.12 | 10.83 | 9.17 | 9.92 | 56. 66 |
| Texas.. | 4,619 | 43.00 | 57.09 | 11.91 | 8. 83 | 6.32 | 39.39 |
| Arkansas | 1,452 | 53.51 | 46.49 | 16.12 | 12. 81 | 5.03 | 60.27 |
| Oklahoma....... | 55 | 38.18 | 61.82 | 49.09 | 29.09 | 9.09 | 80.00 |
| Indian Territory | 433 | 47.80 | 52.20 | 3.23 | 13. 63 | 1.38 | 66.66 |
| North Central Division: |  |  |  |  |  |  |  |
| Ohio.... | 2,568 | 41.00 | 59.00 | 11.10 | 9.23 | 13.98 | 44.57 |
| Indiana | 2,134 | 43.21 | 56.79 | 10.12 | 7. 40 | 8. 62 | 39.67 |
| Illinois. | 3,431 | 42.75 | 57.25 | 13.84 | 11. 40 | 15.94 | 36.56 |
| Michigan | 1,192 | 30.96 | 69.04 | 1.93 | 7.55 | 12. 25 | 31.51 |
| Wisconsin | 1,419 | 62.44 | 37.56 | 11.20 | 9.16 | 16. 00 | 30.84 |
| Minnesota | 1,510 | 52.45 | 47.55 | 10.73 | 3.71 | 16.95 | 32.03 |
| Iova ... | 1,898 | 47.84 | 52.16 | 11.75 | 10.91 | 13.65 | 35.52 |
| Missouri ...... | 4,669 | 53.20 | 46.80 | 8.55 | 8.89 | 8.76 | 37.99 |
| North Dakota | 68 | 29.41 | 70.59 | 30.88 | 4. 41 | 0 | - ${ }^{0}$ |
| South Dakota | 247 | 40.89 | 59.11 | 39.68 | 2.03 | 10.93 | 40. 74 |
| Nebraska. | 677 | 38.70 | 61.30 | 12.56 | 8.86 | 9.01 | 55.74 |
| W Kansas ........ | 827 | 51.14 | 48.86 | 8.47 | 15.60 | 10.88 | 32. 22 |
| Western Division: |  |  |  |  |  |  |  |
| Montana.. | 53 | 0 | 100.00 | 7.55 | 0 | 7.54 | 50.00 |
| Wroming | 83 | 42.16 | 57.81 | 0 | 2.41 | - 0 | 5. 0 |
| Colorado - | 140 | 37.86 | 62.14 | 12.86 | 8.57 | 7.86 | 27.27 |
| New Mexico | 83 | 37.35 | 62.65 | 7.23 | 0 | 3.61 | 66.66 |
| Arizona | 10 |  | 100.00 | 0 | 0 | 0 | - 0 |
| Utah | 1,093 | 56.08 | 43.92 | 2.02 | 2.56 | 5. 76 | 31.74 |
| Nevada. |  |  |  |  |  |  |  |
| Idaho.. | 170 | 52.94 | 47.06 | 20.00 | 10.59 | 10.59 | 50.00 |
| Washington | 515 | 34.17 | 65. 83 | 7.77 | 19.81 | 9.90 | 50.98 |
| Oregon . . | $\begin{array}{r}928 \\ \hline 179\end{array}$ | 42.35 | 57.65 | 4.31 | 6.79 | 13.25 | 29.26 |
| California | 2, 179 | 32.14 | 65.86 | 15. 23 | 21.34 | 13.13 | 60.83 |

Tible 25.-Paicate high schools and academies-Percentages of secondary students pursuing certain studies in 1898-99.

| State or Territory. | Per cent of total number of secondary students. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Latin. | Greek. | French. | Ger. mann. | Algebra. | Geom- ctry. | Trigo-nometry: | Astronomy. | $\begin{aligned} & \text { Phys } \\ & \text { ics. } \end{aligned}$ |
| United State | 49. 80 | 9.55 | 23.22 | 19.04 | 52.17 | 24.71 | 5.02 | 6.75 | 18.89 |
| North Atlantic Divisio | 54.16 | 13.43 | 38.82 | 26.85 | 51.78 | 28.78 | 4.41 | 6.33 | 18.63 |
| South Atlantic Division | 5438 | 6. 35 | 16.85 | 8.63 | 57.93 | 22.34 | 4.48 | 5.26 | 16.68 |
| South Central Division | 45.30 | 6. 59 | 7.99 | 7.61 | 56.57 | 23.57 | 7.40 | 7.76 | 22.03 |
| North Central Division | 45. 72 | 9.17 | 15.35 | 23.63 | 41.15 | 20.90 | 4.27 | 7.48 | 18. 28 |
| Western Division. | 35. 76 | 4.59 | 19.36 | 15. 11 | 49.56 | 21.76 | 4.85 | 8.01 | 18.11 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine | 41.46 | 12.97 | 19.49 | 3.02 | 47.81 | 22. 70 | 0.54 | 7.78 | 14.95 |
| New Hamp | 51.13 | 20.57 | 34. 93 | 10.96 | 41.25 | 35. 83 | 3.93 | 5.44 | 16.52 |
| Vermont | 34.18 | 7.06 | 16. 05 | 9.58 | 59.66 | 11. 66 | 0.97 | 6.17 | 10.33 |
| Massachusett | 63.81 | 20.35 | 52.38 | 26.56 | 57.33 | 32.37 | 3.46 | 4. 63 | 19.46 |
| Rhode Island | 61.48 | 11.67 | 55.88 | 16.15 | (3.23 | 37.16 | 6.23 | 7.78 | 21.01 |
| Connecticut | 63.55 | 16.32 | 44.09 | 33.00 | 47.86 | 33.48 | 2.85 | 10.09 | 17.04 |
| New Xork | 48.67 | 11.33 | 46. 72 | 34.27 | 44.30 | 25. 59 | 4.76 | 6.81 | 19.36 |
| New Jersey | 63.94 | 14.72 | 45.07 | 39.41 | 64.31 | 36.72 | 5.88 | 6.86 | 18.96 |
| Pennsylrania | 55.35 | 9.98 | 26.47 | 25.93 | 51.68 | 26.94 | 5. 90 | 5.44 | 20.32 |
| South Atiantic Division: |  |  |  |  |  |  |  |  | 10.90 |
| Maryland | 60.35 | 9.32 | 38.08 | 23.91 | 65.77 | 40.81 | 6.68 | 6.84 | 18.48 |
| District of | 43.15 | 8.01 | 64.05 | 19.40 | 48.17 | 29.58 | 5.97 | 10.71 | 24.97 |
| Virginia | 57.22 | 4.02 | 18.67 | 9.67 | 57.67 | 27.82 | 6.04 | 6.31 | 19. 88 |
| West Virginia | 61.55 | 11.30 | 16.86 | 17.71 | 50.08 | 21.92 | 6.91 | 9.78 | 20.57 |
| North Carolin | 43.55 | 4.57 | 6.55 | 3.20 | 48.33 | 9.68 | 159 | 3.22 | 11.06 |
| South Carolina | 65.07 | 9.23 | 12.48 | 4.28 | 66.77 | 20. 24 | 4.58 | 4.14 | 14. 18 |
| Georgia. | 61.46 | 7.36 | 10.15 | 2.57 | 68.80 | 26.12 | 6.06 | 4.06 | 19.30 |
| Florida.............. | 46.66 | 0.66 | 24.00 | 9.33 | 62.00 | 27.33 | 0 | 34.00 | 44.66 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Kentucky | 48.42 | 7.93 | 10.13 | 14. 20 | 61.20 | 19. 17 | 6.43 | 6. 50 | 13. 10 |
| Tennessee | 5.19 | 11.15 | 4.92 | 5.38 | 5.08 | 22.54 | 6. 03 | 6.56 | 16.79 |
| Alabama | 51.43 | 2.96 | 7.19 | 2.16 | 63.37 | 30.46 | 8.71 | 6.60 | 22.88 |
| Mississippi | 37.61 | 5.67 | 5.13 | 1.71 | 47.77 | 16.66 | 6.03 | 8.24 | 34.85 |
| Louisiana | 51.98 | 5.54 | 39.92 | 1. 24 | 60.58 | 22.15 | 6. 78 | 13.97 | 33.48 |
| Texas | 38.62 | 3.68 | 6.52 | 14.35 | 58.60 | 32. 01 | 11.95 | 10.37 | 26.87 |
| Arkansas | 38.36 | 5.72 | 1.10 | 3.65 | 46.90 | 13.02 | 2.48 | 4.75 | 16.12 |
| Okiahoma | 100.00 | 7.27 | 5.45 | 50.90 | 49.09 | 29.09 | 9. 09 | 9.09 | 21.81 |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
| Ohio... | 50.11 42.21 | 11.18 9.65 | $\begin{array}{r}30.14 \\ 7.91 \\ \hline\end{array}$ | 30.80 17.24 | 40.46 43.11 | 21.30 18.65 | 5.92 4.22 | 8.26 3.75 | 1818 14.90 |
| Illinois | 42.44 | 8.34 | 17.87 | 26.55 | 36.58 | 18.04 | 4.69 | 6.97 | 19.70 |
| Michigan | 44.21 | 5.54 | 21.22 | 1602 | 52.77 | 19.97 | 2.43 | 10.57 | 22.48 |
| Wisconsin | 53.84 | 23.11 | 21.22 | 56.66 | 45.73 | 29.60 | 5.00 | 8.95 | 21.99 |
| Minnesot | 49.74 | 6. 95 | 12.91 | 35. 70 | 48.68 | 22. 72 | 2.05 | 4. 42 | 19.21 |
| Iowa | 10.44 | 15.23 | 30.72 | 45.36 | 43.26 | 18.86 | 2.42 | 5.95 | 18. 65 |
| Missouri | 42.45 | 6.19 | 12.49 | 18.44 | 49. 51 | 22.31 | 5.71 | 904 | 16.06 |
| North Dak | 52.91 | 1.47 | 55.88 | 27.91 | 52.94 | 30.88 | 7.35 | 735 | 19.11 |
| South Da | 38.87 | 10.22 | 8.10 | 38.87 | 36.43 | 19.03 | 0 | 850 | 19.43 |
| Nebraski | 40.92 | 15.66 | 9.45 | 23.63 | 42.25 | 16.10 | 0.59 | 7.09 | 18.46 |
| Kansas | 49.70 | 7.87 | 5.82 | 30.71 | 41.11 | 20.68 | 3.02 | 10.52 | 18.30 |
| Western Division: |  |  |  |  |  |  |  |  |  |
| Montana | 16. 98 | 0 | 84.90 | 47.17 | 73.58 | 13. 21 | 5.60 | 7.54 | 16.98 |
| Wyoming | 7.23 | 0 |  |  | 86.71 | 0 | 0 | 0 | 0 |
| Colorado | 58. 57 | 6. 43 | 24.28 | 15. 00 | 61.43 | 19. 28 | 0.77 | 26.43 | 13. 57 |
| New Mexi | 14.46 | 1.20 | 7.23 | 0 | 36. 14 | 19.28 | 2.41 | 7.23 | 2.41 |
| Arizona | 90.00 | 4 | 10 | 0 | 90.00 | ${ }^{0}$ | ${ }^{0}$ | ${ }^{0}$ | 90.00 |
| Utah | 15.55 | 4. 67 | 6.40 | 8.05 | 40.30 | 11.80 | 1.28 | 0.54 | 7.59 |
| Idaho |  |  |  |  |  |  | 1.15 |  |  |
| Washing | 37.67 | 5.05 | 22.33 | 11.26 | 45.82 | 19.22 | 5.24 | 13. 79 | 17.67 |
| Orego | 37.61 | 9.05 | 17.56 | 31.03 | 38.69 | 15. 63 | 6.79 | 5.17 | 11.31 |
| Californi | 44.24 | 2. 93 | 26.39 | 14.18 | 56.95 | 31.80 | 6.52 | 10.83 | 27. 72 |

Table 26.-Private high schools and academies-Percentages of secondeny studchts pursuing certain studies in 1898-99.

| State or Territcry. | Per cent of total number of secondary students. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chemistry. | $\begin{gathered} \text { Phys- } \\ \text { ical } \\ \text { geogra- } \\ \text { phy. } \end{gathered}$ | Geology. | Physiology. | Psy. chology. | Rhetoric. | English literature. | History. | Civies. |
| United States. | 9.78 | 21.26 | 6.11 | 25. 96 | 7.08 | 32.78 | 35.30 | 38.32 | 15.95 |
| North Atlantic Division | 10.60 | 17.40 | 5.67 | 20.47 | 5.39 | 32.74 | 40.23 | 40.87 | 12. 77 |
| South Atlantic Division | 8.77 | 23.10 | 3.65 | 24.55 | 6.21 | 31.47 | 30.94 | 39.14 | 11.92 |
| South Central Division | 8.64 | 25.84 | 8.57 | 35.95 | 9.09 | 33.77 | 30.04 | 35.05 | 21.38 |
| North Central Division | 10.27 | 20.95 | 6.14 | 25.74 | 8.54 | 32.40 | 33.31 | 35.27 | 19.34 |
| Western Division. | 9.81 | 26.76 | 7.80 | 32.87 | 8.79 | 35.23 | 41.70 | 41.43 | 18.40 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine.................. | 9.02 | 15.03 | 7.74 | 13.05 | 8.44 | 25.99 | 40.45 | 32.93 | 10.58 |
| New Hampsh | 10.63 | 12.64 | 6.50 6.46 | 16.16 | 2. 29 | 22.90 | 25.93 | 31.82 20.88 | 10.28 |
| Vermont | 5.50 | 16.42 | 6.46 | 14.34 | 3.64 | 18. 57 | 14.56 | 20.88 | 13.97 |
| Massachusetts | 11.97 | 10.62 | 4.86 | 13. 32 | 3.93 | 35.34 | 59.78 | 46.40 | 11.09 |
| Rhode Island | 10.12 | 16.15 | 7.93 | 24.71 | 10.89 | 44. 75 | 38.71 | 65.18 | 16.73 |
| Connecticut | 8.52 | 19.33 | 7.92 | 24.24 | 5.87 | 36.49 | 46.62 | 51.65 | 9.69 |
| New York | 11.06 | 20.26 | 5.54 | 23.15 | 4.07 | 33.00 | 35.42 | 43.84 | 15.25 |
| New Jcrse | 10.79 | 19.22 | 3.16 | 18.65 | 3.16 | 45.61 | 50.95 | 43.26 | 6. 66 |
|  | 10.88 | 18.91 | 5.60 | 24.77 | 8.25 | 31.02 | 36.23 | 36.77 | 14.78 |
|  |  |  |  |  |  |  |  |  |  |
| Praryland | 18.84 | 26.99 | 6.03 | 15.59 | 3.70 | 40.56 | 48.66 | 62.99 | 13.42 |
| District of Columbia | 10.85 | 19.27 | 6.78 | 19.40 | 10.31 | 44.23 | 65.40 | 52.24 | 9.63 |
| Virginia | 9.43 | 23.02 | 5.14 | 22.05 | 6.07 | 30.73 | 28.46 | 38.55 | 11.24 |
| West Virgini | 16.52 | 26.14 | 9.11 | 23.44 | 13.66 | 39.29 | 36.09 | 51.10 | 19.39 |
| North Carolin | 4.00 | 22.29 | 2.11 | 29.51 | - 3.74 | 24.22 | 22.32 | 28.43 | 10.46 |
| South Carolin | 8. 79 | 24.89 | 4.14 | 18.98 | -6.94 | 29.03 | 29.99 | 45.64 | 17.36 |
| Gcorgia. | 8.12 | 21.27 | 1.84 | 24.60 | 8.99 | 31.91 | 28.63 | 34.59 | 11.07 |
| Florida. | 14.66 | 74.66 | 6.66 | 11.46 | 20.66 | 51.33 | 57.33 | 76.00 | 21.33 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Tennesse | 6.21 | 16.66 | 11.68 | 31.66 | 11.83 5.92 | 41.26 31.32 | 27.72 | 22.75 29.59 | 17.51 |
| Alabama | 7.49 | 23.01 | 4.86 | 38. 20 | 6.56 | 52.87 | 23.27 | 29.65 | 12.10 |
| Mississippi | 9.23 | 28.23 | 7.88 | 34.53 | 5.85 | 22.28 | 28.95 | 39.13 | 31.83 |
| Louisiana | 14.38 | 35.54 | 9.17 | 42.47 | 12.48 | 39.25 | 31.57 | 42.81 | 16.78 |
| Texas | 11. 41 | 33.34 | 10.37 | 31.18 | 13.79 | 39.03 | 31.54 | 23.45 | 24.10 |
| Arkansa | 6.96 | 27.55 | 3.37 | 55.92 | 8.40 | 20.94 | 32.44 | 35.12 | 10.95 |
| Oklahom | 12.72 | 27.27 | 10.90 | 32.72 | 0 | 27.27 | 78.18 | 40.00 | 25.45 |
| Indian Territory | 0 | 32.10 | 0.23 | 30.02 | 4.16 | 24.25 | 12.93 | 36.02 | 17.09 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohio.-.......-.-. . . | 12.20 | 23.52 | 5.65 | 21.46 | 10.24 | 39.06 | 39.83 | 41.82 | 15.30 |
| Indiana | 10.97 | 19.54 | 4.69 | 22. 20 | 10.21 | 28.30 | 25.21 | 26.15 | 11.10 |
| Illinois | 8.95 | 20.93 | 5.86 | 22.59 | 7.05 | 29.96 | 38.27 | 35.56 | 18.07 |
| Michigan | 12.41 | 21.31 | 5.03 | 36.49 | 9.23 | 40.93 | 35.66 | 47.40 | 18.45 |
| Wisconsi | 14.45 | 21.28 | 8.03 | 25.09 | 3.45 | 43.34 | 33.97 | 43.90 | 14.31 |
| Minnes | 10.99 | 21.92 | 3.38 | 30.20 | 8.21 | 39.67 | 32. 45 | 48.21 | 28.31 |
| Iowa | 6.90 | 22.08 | 8.22 | 24. 24 | 6.59 | 31.82 | 30.35 | 26.92 | 21.34 |
| Missouri | 10.04 | 18.33 | 6. 88 | 22.83 | 10.60 | 25.42 | 31.31 | 31.27 | 19.77 |
| North Dakota | 7.35 | 8.82 | 7.35 | 79. 41 | 4.41 | 2941 | 50.00 | 41.18 | '23. 53 |
| South Dakot | 2.83 | 22.67 | 0.40 | 65.59 | 11. 74 | 20.24 | 29.15 | 45.53 | 54.25 |
| Nebraska | 5.32 | 22.30 | 3.10 | 21.88 | 5.99 | 31.76 | 32.64 | '26. 14 | 23.73 |
| Kansas | 11.12 | 25.39 | 5. 41 | 33.25 | 9. 43 | 33.13 | 23.30 | 27.33 | 22. 25 |
| Western Division: ${ }_{\text {W }}$ |  |  |  |  |  |  |  |  |  |
| Wyoming | 4. 8.2 | 22. 3.61 | 30.85 6.02 | 60.04 14.46 | 11.32 0 | 43. 3. 3 | 45. 28 | 18.86 4.82 | 50.94 4.82 |
| Colorado | 5. 00 | 45. 71 | 8.57 | 47.14 | 7.86 | 51.43 | 45.71 | 4786 | 23.57 |
| New Mexico | 2.41 | 25.30 | 25.30 | 34.94 | 2.41 | 6.02 | 10.84 | 43.37 | 19.27 |
| Arizona | 0 | 90.00 | 0 | 0 | 0 | 0 | 0 | 70.00 | 0 |
| Utah | 6.13 | 15.91 | 8.69 | 34.31 | 20.04 | 24.89 | 14.82 | 16.38 | 9.70 |
| Nevada |  |  |  |  |  |  |  |  |  |
| Idaho | 19.41 | 34.12 | 0 | 44.12 | 5.88 | 55.29 | 65. 29 | 31.18 | 27.65 |
| Washingto | 6.99 | 25. 82 | 9.90 | 38.06 | 9.51 | 30.68 | 34.95 | 41.75 | 31.65 |
| Oregon | 6. 68 | 27.16 | 6.79 | 32.87 | 4. 63 | 25.54 | 26. 29 | 32.44 | 10.2 t |
| California | 14.04 | 31.21 | 6.56 | 29.10 | 5.60 | 45.30 | 63.65 | 59.89 | 21.81 |

Table 27.-Pbirate high schools and academie-Equipment, income, benefactions, and endouments, $1838-39$.

| State or Territory. | Libraries. |  | Grounds. buildings, seientific apparatus, ete. |  | State and municipal aid. |  | Tuition fees. |  | Productive funds. |  | Ineome from other sources and unclassified. |  | Total income from all sources. |  | Benefactions. |  | Total money value of endowment. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { 苞 } \\ \stackrel{3}{3} \end{gathered}$ |  | $\begin{aligned} & \dot{\Xi} \\ & \stackrel{\ddot{\Xi}}{\ddot{B}} \end{aligned}$ | $\begin{gathered} \dot{u} \\ 0 \\ 0 \\ 0 \\ 0.0 \\ 0 \\ 0 \\ 0 \\ 0 \\ 0 \end{gathered}$ |  | $\begin{aligned} & \dot{d} \\ & \vdots \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & u \end{aligned}$ |  | $\left\lvert\, \begin{array}{ll} 2 & 0 \\ 2 & 8 \\ 2 & 0 \\ 0 & E \\ 0 & E \\ 0 & 0 \\ 0 & 0 \\ 0 & 0 \end{array}\right.$ | $\begin{aligned} & \dot{\tilde{Z}} \\ & \dot{\Xi} \\ & \text { B } \end{aligned}$ |  | $\begin{aligned} & \dot{ت} \\ & \stackrel{\rightharpoonup}{Z} \\ & \ddot{\Xi} \end{aligned}$ | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  | $\begin{aligned} & \stackrel{\text { H }}{\Xi} \\ & \stackrel{y}{0} \end{aligned}$ |  | E E 矿 |
| United States | 1,353 | 1,697, 884 | 1,372 | \$ $\$ 555,749,456$ | 264 | \$146, 273 | 1,130 | \$5, 595, 421 | 278 | \$1,654,112 | 440 | \$1,032, 859 | 1,2.12 | \$8,428, 665 | 184 | \$1,611,693 | 353 | 843, 085, 885 |
| North Atlantic Division | 466 | 816,522 | 423 | 32,074,040 | 76 | 38,930 | 391 | 3, 039, 190 | 148 | 1,337, 927 | 147 | 453,887 | 409 | 4, 869, 884 | 69 | 704,679 | 162 | 32, 818,950 |
| South Atlantic Division | 224 | 187, 768 | 283 | 4, 950,668 | 79 | 43,250 | 179 | 612, 201 |  | 181,612 | 73 | 147,394 | 258 | 987, 457 | 29 | (332,488 | 47 | 5, 178, 745 |
| South Central Division | 274 | 218, 92 4 | 335 | 5,670, 476 | 10: | 55,798 | 277 | 562, 278 | 26 | 33, 800 | 82 | 28,332 | 284 | 750, 208 | 23 | 23, 162 | 40 | 934,286 |
| North Central Divisio | 801 | 397,348 | 25.3 | 9, 929, 604 | 3 | 1,095 | 216 | 1,031, 525 | 59 | 74,656 | 105 | 229,706 | 221 | 1,333, $98^{2}$ | 51 | 229,189 | 86 | 3,511,797 |
| Western Division | 88 | 77,322 | 78 | 3, 124, 668 | 3 | 7,200 | 67 | 350, 227 | 15 | 23, 117 | \%3 | J03, 590 | 71 | 484, 134 | 12 | 22,175 | 18. | 642,107 |
| North Atlantic Division: | - |  | 29 | 644, 910 | 21 |  | 28 |  | 22 | 25,485 | - | 2,170 | 29 | 76,920 | 5 | 11,363 | 19 | 643,094 |
| New Hamp | 2 | 39, 238 | 25 | 1,016, 000 | 3 | 2, 130 | 18 | 49,123 | 15 | 53, 771 | 8 | 9, 896 | 20 | 114, 920 | , | 18,530 | 13 | 2, 376,000 |
| Vermont | 18 | -0,185 | 15 | 443, 912 | 1. | 480 | 14 | 27,053 | 10 | 11,349 | 7 | 1,980 | 14 | 40, 862 | 4 | 3,350 | 9 | 247,308 |
| Massachusetts | 63 | 119, 521 | 63 | 4, 783, 531 | 6 | 3,160 | 66 | 547, 101 | 31 | 182, 487 | 28 | 174,129 | 75 | 856, 880 | 14 | 476, 185 | 35 | 5, 408,136 |
| Rhode Island | 6 | 3,074 | 6 | 208, 050 | 0 |  | 7 | 57,393 | 1 | 777 | 1 | 5,357 | 7 | (63, 527 | 1 | 1,650 | 1 | 19, 800 |
| Connecticut | 38 | 55, 742 | 27 | 1,737,500 | 3 | 3,160 | 24 | 224,359 | 10 | 37, 860 | 5 | 3,595 | 24 | 268, 974 | 2 | 600 | 11 | 1,032,601 |
| New York | 154 | 365,403 | 137 | 12,678, 976 | 40 | 10,882 | 116 | 1, 156, 439 | 28 | 66, 696 | 54 | 194,696 | 120 | 1,428,713 | 2, | 108, 259 | 43 | 4,161,889 |
| New Jerscy | 40 | ( 5,888 | 37 | 3, 279, 001 | 2 | 1,500 | 35 | 291, 811 | 8 | 23, 250 | 14 | 16,974 | 35 | 333, 535 | 4 | 17,792 | 10 | 1,098, 976 |
| fennsylvania | 97 | 172, 582 | 84 | 7,282,160 | (1) | - | 83 | 654,261 | 23 | 986, 252 | 23 | 45, 040 | 85 | 1,685,553 | - | (6i6, 950 | 21 | 17, 831, 143 |
| South Attantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Delaware. | 2 | 3,625 37,641 17 | 2 | 125,000 $1,284,488$ | ${ }_{4}$ | 8,100 | 23 | 17,200 140 | $\frac{1}{5}$ | 161,895 | 1 6 | 600 13,525 | 6 | 18,230 324,179 | 0 | 56is, 290 | $\frac{2}{4}$ | $\begin{array}{r} 98,800 \\ 3,947,008 \end{array}$ |
| District of Col | 12 | 17, 100 | 8 | 1, 440, 300 | 0 | 0 | 7 | 28,500 | $\stackrel{2}{2}$ | 2, 800 | 3 | 7,800 | 8 | 39, 100 | 0 | 0 |  | 150, 000 |
| Virginia. | 52 | 43, 919 | (1) | 1,110, 170 | 5 | 2, 926 | 54 | 149,829 | 3 | 4,599 | 14 | 42, 041 | 5.1 | 199,495 | \% | 9,936 | 11 | 282,525 |
| West Virgini | 9 | 14.425 | 9 | 143, 900 | 0 | 0 | 9 | 20,283 | 2 | 3,203 | 3 | 1,530 | 9 | -5, 016 | 1 | 150 | $\stackrel{\rightharpoonup}{-}$ | 8,150 |
| Norch Carolina | 59 | 30.994 | 96 | 760.460 | 25 | 6,471 | 75 | 126. 708 | 8 | 1,745 | 22 | 9,837 | 82 | 144,761 | 5 | 10,490 | 9 | 145, 400 |
| South Carolina | 19 | 10.489 | 23. | 249, 800 | 9 | 3,070 | 16 | 22, 422 | 8 | 1,500 | 10 | 33, 107 | 18 | 60, 099 | 3 | 26, 160 | 4 | 276,225 |
| Georgia. | 44 | 27, 875 | 58 | 730,550 | 36 | 22, 683 | 51 | 103, 769 | 8 | 8, 440 | 13 | 35. 054 | 56 | 169,946 | 10 | 17, 362 | 13 | 270,637 |
| Florida... | 4 | 1.700 | 5 | 105,000 | 0 | 0 | $\because$ | 2,831 | 0 | 0 | 1 | 3,900 | : | 6,731 | 1 | 100 | 0 | 0 |
| Kentueky. | 46 | 44, 190 | 50 | 584, 050 | 8 | 5.680 | 49 | 87,265 | 4 | 4,810 |  | 16,118 | 50 | 113,873 | $\because$ | 1,280 | 7 | 106,010 |
| Tennessee | 74 | 48,165 | 92 | 1.565, 469 | 33 | 15,110 | 76 | 131,296 | 5 | (, 425 | 21 | 16, 411 | 77 | 169, 242 | 4 | 2,505 | 10 | 135, 019 |
| Alabama | 25 | 26,730 | 47 | 401,257 | ${ }^{21}$ | 6,995 | $3^{2}$ | 48.412 | 3 | 7,000 | 8 | 7,995 | 38 | 70, 402 | 2 | 1,210 | 5 | 293, 607 |
| Mississipp | 32 | 22,034 | 41 | 450,800 | 20 | 8,800 | 29 | 30,585 | 1 | 200 | 9 | 16,360 | 31 | 55,945 | 5 | 9,010 | 1 | 10,000 |
| Louisiana | 19 | 13, 894 | 22 | 810,000 | 2 | 613 | 17 | 51,640 | 8 | 2, 700 | 7 | 9,000 | 19 | 633, 953 | 0 |  | 5 | 122, 500 |
| Texas | 3 | 49, 723 | 53 | 1,524, 600 | 13 | 11, 600 | 46 | 177, 785 | 8 | 10,515 | 9 | 18,593 | 46 | 218, 493 | 6 | 6,972 | 9 | 259,900 |
| Arkansa | 17 | 11,998 | 18 | 169,500 | 6 | 7,000 | 13 | 19,410 | 2 | 2,150 | 6 | 5,650 | 13 | 34,210 | 2 | 1,035 | 1 | 3, 000 |



Table 25.-Denominational schools included in the tables of private high schools and academies.

| State or Territory. | Nonseetarian. |  |  | Baptist. |  |  | Congregational. |  |  | Episcopal. |  |  | Friends. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | $\begin{array}{r} \dot{3} \\ \dot{8} \\ \dot{0} \\ \dot{U} \end{array}$ |  | $\begin{aligned} & \text { 空 } \\ & \stackrel{y}{3} \\ & \underset{\sim}{3} \end{aligned}$ | $\begin{aligned} & \dot{8} \\ & \dot{8} \\ & \dot{8} \\ & \dot{3} \\ & \dot{3} \end{aligned}$ |  |  |  |  |  |
| United states | 1,033 | 4,773 | 54,040 | 98 | 449 | 6,623 | 51 |  | 2,559 | 99 | 691 | 4,668 | 52 | 2713 | 3,434 |
| North Atlantic Division | 424 | 2, 554 | 23, 298 | 21 |  | 2,029 | 11 | 41 | 620 | 45 | 332 | 2, 299 | 23 | 1802 | 2,120 |
| South Atlantic Division | 224 |  | 10, 313 | 36 |  | 1,950 | 6 | 17 | 208 | 13 | 44 | 552 | 6 | 16 | 183 |
| South Central Division | 244 |  | 12,478 | 24 |  | 1,130 | 10 | 44 | 523 | 9 | 58 | 326 | 3 | 10 | 161 |
| North Central Division | 113 | 601 | 6, 922 | 17 | 110 | 1,514 | 17 | 75 | 969 | 22 | 160 | 1,078 | 20 | 65 | 970 |
| Western Division. | 28 | 133 | 999 | 0 | , |  | 7 | 34 | 239 | 10 | 97 | 413 | 0 | 0 |  |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 27 | 89 | 1,619 | 4 | 27 | 600 | 2 | 4 | 55 | 1. | 6 | 15 | 1 | 4 |  |
| New Hamp | 13 | 50 | 1,003 | 8 | 19 | 290 | 4 | 16 | 308 | , | 53 | 409 | 0 | 0 |  |
| Yermont | 11 | 37 | 658 | 3 | 23 |  |  |  | 114 | 0 | 0 | 0 | 0 |  |  |
| Nassachusett. | 84 | 512 | 4,625 | 1 | 6 | 24 | 2 | 14 | 133 | 1 | 54 | 350 | 0 | 0 |  |
| Thode Island | 6 | 39 | 1222 | 0 | 0 |  | 0 | 0 | 0 | 1 | 7 | 25 | 0 | 0 |  |
| Connecticut | ${ }^{40}$ | 187 | 1,687 | , | 5 | 92 | 1 | 2 | 10 | 12 | 74 | 538 | 0 | 0 |  |
| New York | 127 | 934 | 6, 535 | 3 | 23 | 317 | 0 | 0 | 0 | 14. | 108 | 726 | 2 | 20 |  |
| New Jersey | 45 | 275 | 1,831. |  | 17 | 238 | 0 |  | 0 |  | 11 | 47 |  |  | 106 |
| Pennsylvania | 71 | 401 | 5,118 | 1 | 16 | 204 | 0 | 0 |  | 5 | 19 | 189 | 15 | 1441 | 1,865 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Maryland | 22 | 120 | 1,199 | 0 | 0 |  | , | 0 | 0 | 3 | 8 | 63 | 2 | 6 |  |
| District of | 12 | 83 | 511 | 1 | 6 | 68 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Virginia | 47 | 144 | 1,791 | c | 20 | 258 | , | 0 | 0 | 3 | 5 | 45 | 1 | 1 |  |
| West Virginia | 5 | 16 | 262 |  | 9 | 145 | 0 | 0 |  |  | 0 | 0 | 0 |  |  |
| North Carolina | 76 | 216 | 3,598 | 15 | 36 | 713 | 2 |  | 33 | 3 | 13 | 217 | 2 | 3 |  |
| South Carolina | 17 | 62 | 820 |  | 17 | 156 | 0 | 0 |  |  |  |  | 0 | 0 |  |
| Georgia. | 45 | 125 | 2,162 | 8 | 31 | 610 | 4 | 13 | 175 | 0 | , | 0 | 0 | , |  |
| Florida | 0 | 0 | 0 | 0 | , |  | 0 | 0 | 0 | 1 | 2 | 15 | 0 | 0 |  |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tennessee | 68 | 175 | 3,033 | 4 | 13 | 196 |  | 12 | 279 | 3 | 19 | 135 | 2 | 7 |  |
| Alabama | 42 | 110 | 1,858 | 5 | 9 | 107 | 3 | 10 | 94 | 0 | 0 | 0 | 0 | 0 |  |
| Mississipp | 31 | 83 | 1,680 | 1 | 3 |  | 1 | 4 | 20 | 1 | 6 | 48 | 0 |  |  |
| Louisiana | 13 | 36 | 438 | 4 | 13 | 172 | 0 | 0 | 0 | ${ }^{0}$ | 0 | 0 | 0 | 0 | 0 |
| Texas | 33 | 117 | 2,696 | 5 | 28 | 381 | 1 | 8 | 46 | 2 | 24 | 74 |  | 0 |  |
| Arkansa | 16 | 50 | 1,084 | 2 | 6 | 82 | 1 | 5 | 62 | 0 | 0 | 0 | 1 |  | 66 |
| Oklahoma | 0 | $\bigcirc$ | 0 | 0 | , | ${ }^{4}$ | 1 | 5 | 22 | 0 | 0 | 0 | 0 |  |  |
| Indian Territory ... | 4 |  | 185 | 1. | 1 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |  |  | 2 | 9 |  |
| Indiana | 5 | 49 | ${ }^{7} 702$ | 1 | 6 | 70 | 0 | 0 | 0 | 2 | 13 | 68 | 6 | 18 | 467 |
| Illinois | 21 | 131 | 1,155 | 3 | 26 | 341 | 4 | 19 | 166 | 2 | 17 | 97 | 1 | 1 |  |
| Mieligan | 7 | 51 | 691 | 0 |  | 0 | 1 | 2 | 22 | 1 | 4 | 34 | 1 | 3 |  |
| Wisconsi | 5 | 28 | 232 | 1 | 15 | 120 | 1 | 4 | 13 | 5 | 42 | 286 | 0 | 0 |  |
| Mimbesot | 4 | 27 | 130 | 1 | 1 | 147 | 1 |  | 28 | 3 | 17 | 164 | 0 | 0 | 0 |
| Iowa | 7 | 28 | 463 |  | 13 | 213 | 3 | 16 | 196 | 0 | . | 0 | 6 | 21 | 218 |
| Missotiri | 33 | 130 | 1,975 | 6 | 30 | 457 | 2 | 8 | 185 | 2 | 11 | 64 | 0 |  |  |
| North Dakota |  | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| South Dakota | 0 | 0 | 0 | 1 | 4 | 9 | 1 | 5 | 53 | 1. | 7 | 41 | 0 | 0 |  |
| Nebraska | 0 | 0 | 0 | 1 | 7 | 41 | 3 | 12 | 221 | 2 | 9 | 61 | 0 | 0 | 0 |
| Kansas | 2 | 13 | 175 | 1 | 8 | 103 | 1 | 6 | 85 | 1. | 6 | 41 | 4 | 13 | 127 |
| Western Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Montara | 0 | 0 | 0 | ${ }^{0}$ | 0 |  | 0 | ${ }^{0}$ | 0 | 0 |  | 0 |  |  | 0 |
| Wyoming | 0 | 0 | 0 |  | 0 | 0 | $\stackrel{3}{\square}$ | 8 | 83 | 0 | 0 | ${ }^{0} 1$ | 0 | 0 | 0 |
| Colorado | 0 | 0 | , | 0 | 0 |  | 0 |  | 0 | 2 | 18 | 51 | 0 | 0 | 0 |
| Ner Mexi Arizona.. | 1 0 | 2 | 6 0 | ${ }_{0}^{0}$ | 0 | ${ }_{0}^{0}$ | 0 | ${ }_{0}^{0}$ | 0 0 | 0 | 0 | 0 | 0 | 0 | 0 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jdaho. | 0 | 0 | 0 |  | 0 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 |
| Washingtor | 0 | 0 | 0 | 0 | 0 | 0 | ) | 16 | 58 | 2 | 22 | 65 | , | 0 | 0 |
| Oregon - . |  | 19 | 259 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |  | ${ }^{6.5}$ | 0 |  | 0 |
| California | 23 |  | 734 |  |  |  |  | 7 | 77 | 4 | 42 | 172 | 0 | 0 | 0 |

Table 29.-Denominational schools included in the tables of pritote high sehools and acudemies.


TABLe 30.-Awerages of number of teachers, students, and graduates to the public high school, and like aterages for the private high school and academy.

| State or Terriory | Public high schools. |  |  |  |  | Private high schools. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { Elementary pupils } \\ & \text { to a school. } \end{aligned}$ | $\begin{gathered} \text { Graduates to a } \\ \text { school. } \end{gathered}$ |  | Secondary students to a school. | Secondary students to a teacher. |  |  |
| United States | 3.4 | 86.7 | 25.4 | 15.7 | 10.3 | 4.8 | 233.1 | 11.0 | 60.3 | 6.0 |
| North Allantic Division | 4.5 | 112.3 | 24.8 | 9.3 | 13.7 | 6.0 | 59.2 | 9.6 | 45.4 | 8.9 |
| South Atiantie Division | 2.8 | 63.3 | $\bigcirc 3.0$ | 31.1 | 6.5 | 3.7 | 46.9 | 12.7 | 64.6 | 3.6 |
| South Central Division | 2.6 | 59.6 | 22. 9 | 28.3 | 5.7 | 3.4 | 50.2 | 14.6 | 70.8 | 3.4 |
| North Central Division | 3.1 | 82.0 | 26.6 | 14.9 | 10.0 | 5.0 | 5.5 | 11.0 | 55.5 | 6. 9 |
| Western Division . . . . | 4.2 | 108.0 | 25.5 | 4.5 | 13.1 | 4.8 | 41.0 | 8.5 | 10.4 | 4.4 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |  |
| Maine...... | 2.2 | 56.3 | 25.6 | 10.6 | 7.1 | 3.9 | 69.8 | 17.9 | 9.7 | 11.6 |
| New Hamp | 3.2 | 66.6 | 21.0 | 8.7 | 7.7 | 5.5 | 78.9 | 14.4 | 58.1 | 9.3 |
| Vermont.. | 2.5 | 58.7 | 23.5 | 16.8 | 7.0 | 4.3 | 64.1 | 14.8 | 43.0 | 8.5 |
| Massachusetts. | 6.0 | 148.4 | 24.6 | 4.7 | 22.1 | 6.3 | 55.0 | 8.4 | 17.3 | 9.6 |
| Rhode Island | 9.4 | 190.9 | 20.3 | 5.7 | 23.3 | 6.2 | 42.8 | 6.9 | 107.5 | 7.0 |
| Connecticut | 4.7 | 100.9 | 21.6 | 5.2 | 12.9 | 5.0 | 42.9 | 8.6 | 21.6 | 7.3 |
| New York. | 5.4 | 137.6 | 25.6 | 13.5 | 11.2 | 7.1 | 53.9 | 7.8 | 60.4 | 7.7 |
| New Jersey | 5.1 | 114.1 | 22.2 | 6.3 | 15.2 | 5.6 | 49.1 | 8.6 | 48.6 | 8.1 |
| Pennsyivania | 3.6 | 97.5 | $\because 6.9$ | 7.6 | 15.1 | 6.3 | 76.5 | 12.1 | 51.0 | 11.0 |
|  |  |  |  |  |  |  |  |  |  |  |
| Delaware....... | 3.2 | 83.6 | 25.9 | 3.0 | 10.0 | 7.5 | 110.0 | 14.6 | 74.5 | 18.5 |
| Maryland | 3.3 | 85.2 | 25.9 | 24.2 | 9.2 | 5.3 | 53.1 | 9.5 | 46.5 | 5.5 |
| District of Columbia | 25.6 | 663.2 | 25.9 | 0.0 | 79.4 | 6.2 | 38.8 | 6.2 | 70.6 | 5.3 |
| Virginia. | 2.7 | 59.2 | 22.3 | 31.0 | 6.1 | 3.6 | 41.4 | 11.4 | 39.4 | 2.9 |
| West Virginia | 2.8 | 68.4 | 24.0 | 2.7 | 8.2 | 4.5 | 49.4 | 11.0 | 74.6 | 5.8 |
| North Carolin | 2.2 | 55.1 | 25.3 | 15.2 | 4.4 | 2.9 | 47.5 | 16.5 | 61.4 | 2.7 |
| South Carolina | 2.1 | 39.7 | 19.4 | 41.5 | 3.1 | 3.8 | 43.7 | 11.6 | 53.1 | 5.0 |
| Georgia . | 2.2 | 51.1 | 23.3 | 38.4 | 5.0 | 3.1 | 52.0 | 16. 6 | 99.3 | 3.1 |
| Florida ............. | 2.6 | 45.9 | 17.4 | 24.8 | 4.9 | 3.8 | 25.0 | 6.5 | 131.0 | $\because .1$ |
| Sonth Central Division: |  |  |  |  |  |  |  |  |  |  |
| Tennessee | 2.2 | 52.8 | 23.6 | 45.4 | 5.5 | 3.3 | 54.0 | 16.5 | 74.2 | 3.5 |
| Alabama. | 2.8 | 56.8 | 20.3 | 44.0 | 5.4 | 2.8 | 42.2 | 14.9 | 58.9 | 2.6 |
| Mississipp | 2.2 | 42.5 | 19.7 | 36.8 | 3.5 | 3.1 | 48.3 | 15.4 | 89.3 | 4.5 |
| Louisiana | 4.7 | 86.9 | 18.6 | 17.9 | 14.1 | 4.0 | 39.0 | 9.8 | 80.6 | 3.9 |
| Texas. | 2.6 | 64.4 | 25.1 | 19.5 | 5.4 | 4.5 | 72. 0 | 16.1 | 71.4 | 4.6 |
| Arkansas | 2.2 | 53.1 | 23.8 | 23.5 | 4.1 | 3.1 | 60.5 | 19.4 | 67.4 | 3.0 |
| Oklahorna | 3.5 | 72.0 | 20.6 | 0.0 | 7.5 | 4.5 | 27.5 | 6.1 | 44.5 | 2.5 |
|  | 2.8 | 17.5 | 6.4 | 98.5 | 1.3 | 2.4 | 43.3 | 18.0 | 134.5 | 0.6 |
|  |  |  |  |  |  |  |  |  |  |  |
| Ohio ........ . . . . . . | $\stackrel{2.6}{9}$ | 70.1 | ${ }^{26.7}$ | 24. 2 | 9.0 | 5.4 | 48.4 | 8.8 | 38.3 | 6. 8 |
| Indiana | - 4.9 | 70.4 | 24.5 | 15.8 | 8. 0 | 5. 3 | 76.2 | 14.3 | 81.9 | 6. 6 |
| Michigan | 4.0 3.5 | 108.2 | 27.2 27.2 | 13.4 | 13.4 10.9 | 6.1 5.5 | 52.8 51.8 | 10.4 9.4 | 51.9 127.0 | 8.4 6.3 |
| Wisconsin | 3.5 | 95.9 | 27.1 | 7.1 | 11.7 | 6.7 | 56.7 | 8.4 | 37.6 | 9.1 |
| Mimmesota | 4.4 | 105.9 | 23.9 | 10.7 | 12.8 | 5.2 | 52.1 | 10.0 | 62.3 | 8.8 |
| Iowa. | 3.0 | 83.0 | 27.2 | 11.1 | 10.5 | 4.1 | 54.3 | 13.3 | 61.5 | 7.4 |
| Missomi | 3.3 | 92.5 | 27.7 | 11.5 | 9.8 | 4.6 | 63.1 | 13.8 | 32.5 | 5.5 |
| North Dakota | 2.2 | 40.2 | 17.9 | 1.3 | 4.8 | 4.0 | 34.0 | 8.5 | 54.0 | 0.0 |
| South Dakotal | 2.6 | 64.5 | 25.3 | 5.8 | 8.5 | 4.3 | 35.9 | 8.2 | 83.5 | 3.8 |
| Nebraska | 2.2 | 58.3 | 26.4 | 22.9 | 7.7 | 4.5 | 45. 1 | 10.1 | 65.8 | 4.1 |
| Kansas........ | 2.5 | 71.7 | 28.7 | 11.1 | 9.0 | 5.0 | 55.1 | 11.0 | 54.3 | 6.0 |
| Western Division: |  |  |  |  |  |  |  |  |  |  |
| Montana. | 2.9 | 66.1 | 23.1 | 1.9 | 7.7 | 4.5 | 26.5 | 5.9 | 228.5 | 2.0 |
| Wyoming | 2.2 | 44.8 | 20.7 | 39.5 | 7.7 | 4. 0 | 41.5 | 10.4 | 17.0 | 0.0 |
| Colorado. | 5.3 | 133.1 | 25.1 | 11.2 | 15.0 | 6.1 | 23.3 | 3.8 | 131.0 | 1.8 |
| New Mexico. | 2.2 | 29.3 | 13.5 | 0.0 | 2.7 | 3.0 | 20.7 | 6,9 | 58.7 | 0.7 |
| Arizona. | 4.0 | 86.0 | 21.5 | 0.0 | 12.0 | 2.0 | 10.0 | 5.0 | 60.0 | 0.0 |
| Utah. | 8.5 | 235.3 | 27.7 | 4.5 | 23.8 | 5.5 | 91.1 | 16.6 | 96.0 | 5.2 |
| Nevada | 2.7 | 60.4 | 22.3 | 0.0 | 9.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Idaho...... | 1.9 | 50.6 | 27.2 | 0.0 | 7.0 | 3.8 | 28.3 | 7.4 | 97.0 | 3.0 |
| Washington | 3.1 | 83.0 | 27.2 | 6.2 | 7.4 | 5.5 | 39.6 | 7.3 | 76.2 | 3.9 |
| Oregon... | 3.6 | 118.5 | 32.9 | 0.0 | 13.2 | 4.6 | 48.8 | 10.7 | 80.7 | 6.5 |
| California. | 4.9 | 123.6 | 25.1 | 0.8 | 16.7 | 4.8 | 34.6 | 7.3 | 120.3 | 4.5 |

Table 31.-Combined statistics of public high schools and prirate high sehools amd areet-emies-Number of schools, instructors, and students in 1595-99.

| State or Territory. | Total schools. | Total secondary teachcrs. | Total secondary students. | Male. |  | Female. |  | Classical preparatory students. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Number. | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Number. | Per |
| United States | 7,452 | 28, 123 | 580,065 | 249, 027 | 42.93 | 331,038 | 57.07 | 45, 64k | 7.87 |
| North Atlantic Division | 2, 005 | 10, 168 | 190, 008 | 84,333 | 44.38 | 105,675 | -55.62 | 20,122 | 10.59 |
| South Atlantic Division | 783 | 2,507 | 43, 367 | 19,223 | 44.33 | 24, 14.1 | 5.5. 67 | 4,894 | 11.29 |
| South Central Division | 1,015 | 2,993 | 56, 568 | 25, 015 | 44.22 | 31,553 | 55.78 | 5,168 | 9.14 |
| North Central Division | 3,287 | 10,859 | 259, 701 | 108,378 | 41. 73 | 151, 323 | 58.27 | 13, 472 | 5.19 |
| Western Division. | 361 | 1,601 | 30, 421 | 12,078 | 39.70 | 18,343 | (i0. 30 | 1,988 | (2.53) |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine | 194 | 489 | 11, 424 | 5,063 | 44.32 | 6,361 | 50. 68 | 1,5.56 | 13.62 |
| New Hampsl | 83 | 335 | 5,909 | 3, 106 | 52.56 | 2, 803 | 47.44 | 830 | 14.04 |
| Termont | 75 | 226 | 4,515 | 2,037 | 45.12 | 2,478 | 54. 88 | 312 | 7.57 |
| Massachuset | 333 | 2,067 | 39,979 | 17,859 | 44.67 | 22, 120 | 55.33 | 5,465 | 13.67 |
| Rhode Isiand | 30 | 243 | 3,950 | 1,682 | 42.58 | 2,268 | 57.42 | 260 | 6. 58 |
| Connecticut | 127 | 612 | 9,451 | 4,205 | 44.49 | 5,246 | 55.51 | 1,110 | 11.74 |
| New York | 571 | 3,411 | 61,672 | 27,306 | 44.28 | 34, 366 | 55.72 | 6,004 | 9.73 |
| New Jersey | 160 | 864 | 13, 640 | 5, 868 | 43.02 | 7,772 | 56.98 | 1,671 | 12. 25 |
| Pennsylvania..... | 433 | 1,921 | 39,468 | 17,207 | 43.60 | 22, 261 | 56.40 | 2,884 | 7.31 |
| South Atlantic Division: $\quad$ 年 ${ }^{\text {S }}$ |  |  |  |  |  |  |  |  |  |
| Delaware | 15 | 57 365 | 1,307 | 543 2.694 | 41.55 44.42 | 764 3,371 | 58.45 55.58 | $\xrightarrow{29} 8$ | 2. 99 |
| District of ${ }^{\text {M }}$ C | 85 | 365 | 6,065 | 2, 69.1 | 44.42 | 3, 371 | 55.58 | 276 | 4.55 |
| District of C | 24 | 246 | 4,053 | 1,48.1 | 36.61 | 2,569 | 63.39 | 308 | 7. 60 |
| Virginia . | 147 | 469 | 7,276 | 3,259 | 44.79 | 4,017 | 55.21 | 704 | 9.68 |
| West Virginia | 38 | 128 | 2, 371 | 823 | 34.71 | 1,548 | 65.29 | 178 | 7.51 |
| North Carolina | 135 | 380 | 6,586 | 3, 597 | 54.62 | 2,989 | 45.38 | 1,128 | 17.13 |
| South Carolina | 130 | 320 | 5,289 | 2, 346 | 44.36 | 2,943 | 55. 61 | 699 | 13.22 |
| Georgía | 180 | 461 | 9,261 | 4,073 | 43.93 | 5,188 | 56.02 | 1,502 | 16.22 |
| Florida. | 28 | 81 | 1,159 | 404 | 34.80 | 755 | 65.14 | 60 | 5.18 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Kentucky | 151 | 50.8 | 8,503 | 3,901 | 4.5. 88 | 4, 602 | 54.12 | 753 | 8.85 |
| Tennessee | 203 | 560 | 10,839 | 5,062 | 46.70 | 5,777 | 53.30 | 964 | 8. 89 |
| Alabama | 110 | 309 | 5, 430 | 2, 606 | 47.99 | 2, 824 | 52.01 | 561 | 10. 33 |
| Mississippi | 137 | 340 | 6, 087 | 2,773 | 45.56 | 3,314 | 54.44 | 919 | 15. 10 |
| Louisiana | 52 | 222 | 3, 035 | 1,115 | 36.74 | 1,920 | 63. 26 | 209 | 6.88 |
| Texas. | 265 | 803 | 17,564 | 7,113 | 40.50 | 10, 451 | 59.50 | 1,241 | 7.07 |
| Arkansas | 77 | 193 | 4,264 | 2, 040 | 47.84 | 2,224 | 22. 16 | 471 | 11.05 |
| Oklahoma. | 6 | 23 | 343 | 136 | 39.65 | 207 | 60.35 | 30 | 8.75 |
| Indian Territory | 14 | 35 | 503 | 269 | 53.48 | 23.1 | 46.52 | 20 | 3.98 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohio.... | 666 | 1,899 | 45,536 | 19, 740 | 43.35 | 25, 796 | 56.65 | 2, 074 | 4.56 |
| Indiana | 390 | 1,190 | 27,602 | 11,569 | 41.91 | 16, 038 | 58.09 | 1,425 | 5. 16 |
| Illinois . | 408 | 1,695 | 40, 550 | 16, 040 | 39.56 | 24,510 | 60. 44 | 2,245 | 5.53 |
| Michigan | 309 | 1, 123 | 28,338 | 11, 943 | 42.14 | 16,395 | 57.86 | 839 | 2.96 |
| Wisconsin | 208 | 815 | 18,967 | 8,452 | 44.56 | 10, 515 | 55.44 | 84. | 4.45 |
| Minneso | 141 | 647 | 13, 374 | 5,654 | 42.28 | 7, 720 | 57.72 | 515 | 3.85 |
| Iowa. | 365 | 1,149 | 29,297 | 12, 101 | 41.30 | 17, 193 | 58.70 | 1,594 | 5. 41 |
| Missouri | 285 | 1,044 | 24, 193 | 10, 207 | 42.19 | 13, 986 | 57.81 | 1,528 | 6.32 |
| North Dakota | 27 | 64 | 1,072 | 425 | 39.65 | 6.64 | 60.35 | 159 | 13.99 |
| Sonth Dakota | 36 | $10 \pm$ | 2,118 | -889 | 41.97 | 1,229 | 58.03 | 210 | 9.92 |
| Nebrask | 248 | 582 | 14,269 | 5,656 | 39.64 | 8,613 | 60.36 | 944 | 6.62 |
| Kansas. | 204 | 547 | 14,385 | 5, 702 | 39.64 | 8,683 | 60.30 | 1,104 | 7.68 |
| Western Division: |  |  |  |  |  |  |  |  |  |
| Montana | 17 | 52 | 1,045 | 433 | 41.44 | 612 | 58.56 | 51 | 4.88 |
| Wyoming | 8 | 21 | - 352 | -153 | 43.47 | 199 | 56.53 | 18 | 5.11 |
| Colorado | 47 | 254 | 5, 597 | 2.295 | 41.01 | 3,302 | 58.99 | 450 | 8.01 |
| New Mexi | 10 | 25 | 259 | 91 | 35. 14 | 168 | 64.86 | 29 | 11.20 |
| Arizona | 3 | 10 | 182 | 55 | 30. 22 | 127 | 69.78 | 8 | 4. 40 |
| Utah | 16 | 100 | 2,034 | 979 | 48.13 | 1,055 | 51.87 | 118 | 5.80 |
| Nevada | 7 | 19 | 423 | 180 | 37.83 | 263 | 62.17 | 19 | 4. 49 |
| Idaho | 13 | 36 | 52.4 | 219 | 41. 79 | 305 | 58. 21 | 103 | 19.66 |
| Waslington | 49 | 181 | 3, 503 | 1,290 | 36.83 | 2,213 | 63. 17 | 2.8 | 7.37 |
| Oregon.. | 34 | 141 | 2,705 | 1,063 | 39. 30 | 1,642 | 60. 70 | 104 | 2. 85 |
| California | 157 | 762 | 13,797 | 5,340 | 38. 70 | 8,457 | 61.30 | 830 | 6.02 |

Table 3:-Combined statistics of public high schools and private high schools and academies-College preparatory students and graduates in 1898-99.

| State or Territory. | Seientific preparatory students. |  | Total eollege preparatory students. |  | $\begin{gathered} \text { Graduates in } \\ 1899 . \end{gathered}$ |  | Graduates prepared for college. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number. | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Num. ber. | $\begin{aligned} & \text { Per } \\ & \text { eent. } \end{aligned}$ | Nimber. | $\begin{aligned} & \text { Per } \\ & \text { eent. } \end{aligned}$ | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ |
| Cnitedstates. | 35, 864 | 6.18 | 81,508 | 14.05 | 63, 330 | 11.78 | 21,602 | 31.61 |
| North Atlantic Division | 10,468 | 5.51 | 30, 590 | 16.10 | 24, 295 | 12. 79 | 7,366 | 30.32 |
| South Atlantie Division | 1,849 | 4.26 | 6,743 | 15.55 | 3,976 | 9.17 | 1,274 | 32. 0-4 |
| South Central Division | 3,694 | 6.53 | 8,862 | 15.67 | 4,820 | 8.52 | 1,601 | 33. 22 |
| North Central Divisio | 16,663 | 6. 41 | 30, 135 | 11. 60 | 31,618 | 12.17 | 9,880 | 31.25 |
| Western Division | 3,190 | 10.49 | 5,178 | 17.02 | 3,621 | 11.90 | 1,481 | 40.90 |
| North Atlantie Division: |  |  |  |  |  |  |  |  |
| Maine | 450 | 3.94 | 2,006 | 17.56 | 1,541 | 13.49 | 442 | 28.68 |
| New Hampshire | 378 | 6.40 | 1,208 | 20.44 | 689 | 11.66 | 211 | 30.62 |
| Vermont... | 321 | 7.11 | -663 | 14.68 | 555 | 12.29 | 219 | 39.40 |
| Massaehusett | 2, 252 | 5.71 | 7,747 | 19.38 | 6,093 | 15.24 | 1, 826 | 29.97 |
| Rhode Island | 132 | 3.34 | -392 | 9.92 | . 503 | 12. 73 | 181 | 36.58 |
| Connecticut | $6{ }^{6} 3$ | 6.91 | 1,763 | 18.65 | 1,311 | 13.87 | 430 | 32.80 |
| New York | 3,347 | 5.43 | 9,351 | 15.16 | 5,685 | 9.22 | 2, 109 | 37.10 |
| New Jersey | 1,107 | 8.12 | 2,778 | 20.37 | 1,932 | 11.16 | 580 | 30.02 |
| Pennsylyania | 1,798 | 4.55 | 4,682 | 11.86 | 5,986 | 15.17 | 1,365 | 22.80 |
| South Atlantie Division: |  |  |  |  |  |  |  |  |
| Delaware | 45 8.5 | 3.44 1.40 | 84 361 | 6.43 5.95 | 165 | 12. 62 | 47 | 28.48 |
| Martiland of Colum | 8.5 | 1. 6.90 | 361 590 | 5.95 | 643 | 10.60 | 134 | 20.81 |
| Vistrict of Colbinbia | -214 | $\stackrel{6.94}{2.94}$ | 918 | 11.56 | 6 | 12.29 | 108 | 17.67 |
| West Virgini | 41 | 1.73 | 219 | 9.24 | 283 | 11.94 | 52 | 18.37 |
| North Cirrolina | 439 | 6.66 | 1,567 | 23.79 | 392 | 5.95 | 237 | 60.46 |
| South Carolin | 193 | 3.65 | 892 | 16.87 | 459 | 8.68 | 217 | 47.28 |
| Georgial | 516 | 5.57 | 2,018 | 21.79 | 773 | 8.30 | 309 | 39.97 |
| Florida. | 84 | 2.93 | 94 | 8.11 | 121 | 10.44 | 33 | 27.27 |
| South Central Division: |  |  |  |  |  |  |  |  |
| Kentueky | 500 | 6.59 | 1,313 | 15.44 | 809 | 9.51 | 278 | 34.26 |
| Tennessee | 597 | 5.51 | 1,561 | 14.40 | 917 | 8. 46 | 285 | 31.08 |
| Alabama | 5.53 | 10.19 | 1,114 | 20.52 | 442 | 814 | 127 | 28.73 |
| Mississipl | 497 | 8.16 | 1,416 | 23.26 | 525 | 8.62 | 254 | 48.38 |
| Louisiant | 155 | 5.11 | 364 | 11.99 | 417 | 13.71 | 112 | 26.86 |
| Texas. | 923 | 5.25 | 2,164 | 12.32 | 1,372 | 7.81 | 411 | -99.96 |
| Arkansas | 308 | 7.22 | 779 | 18. 27 | 292 | 6.85 | 119 | 40. 41 |
| Oklahoma. | 16 | 4.66 | 46 | 13.41 | 35 | 10.20 | 7 | 20.00 |
| Indian Territory. | S5 | 16.90 | 105 | 20.88 | 11 | 2.19 | 9 | 81.82 |
| North Central Division: |  |  |  |  |  |  |  |  |
| Ohio .. <br> Indiana | 2,839 943 | 6.23 3.42 | 4,913 2,368 | 10.19 8.58 | -3,060 | 12.09 | 1, 288 | 27 25.61 |
| Ininois. | 2,375 | 5.86 | 4,620 | 11.39 | 5,135 | 12.66 | 1,518 | 29.56 |
| Michigan | 1,857 | 6.55 | 2,696 | 9.51 | 3,260 | 11.50 | 1,006 | 30.86 |
| Wiseonsin | 785 | 4.14 | 1,630 | 8.59 | 2,375 | 12.52 | 625 | 26. 32 |
| Minnesota | 2, 788 | 20.85 | 3,303 | 24.79 | 1,690 | 12.64 | 783 | 46. $3: 3$ |
| Iowa | 1,185 | 4.05 | 2,779 | 9.49 | 3,735 | 12.75 | 1,113 | 29.80 |
| Missouri | 1,525 | 6.30 | 3, 053 | 12. 62 | 2,113 | 10.22 | 745 | 30. 13 |
| North Dakota | - 66 | 6.16 | 216 | 20.15 | 120 | 11.19 | 69 | 57.50 |
| South Dakota | 132 | 6.23 | 342 | 16.15 | 27. | 12.94 | 112 | 40.88 |
| Neloraska | 1,302 | 9.12 | 2, 246 | 15. 74 | 1,859 | 13.03 | 703 | 37. 3 |
| Kansas. | 865 | 6.01 | 1,969 | 13.69 | 1,785 | 12.41 | 841 | 47.11 |
| Western Division: |  |  |  |  |  |  |  |  |
| Montana | 49 | 5. 65 | 110 | 10.53 | 119 | 11. 39 | 32 | 2689 |
| Wyoming | 15 | 4.26 | , 33 | 9.87 | 46 | 13:07 | 80 | (65. 2. |
| Colorado | 714 | 12.76 | 1,164 | 20.80 | 628 | 11.2. | 198 | 31.53 |
| New Mexico | 15 | 5.79 | 44 | 16.99 | 19 | 7.34 | 7 | 3681 |
| Arizona | 8 | 4.94 | 17 | 9.31 | -4 | 13.19 | 14 | 58. |
| Utah ... | 85 | 4.18 | 203 | 9.98 | 158 | 7.77 | 52 | 32. 91 |
| Nevada | 18 | 4.26 | 37 | 8.75 | 68 | 16.08 | 39 | 57.35 |
| Idaho... | 51 | 9.73 | 154 | 29.39 | 67 | 12.79 | 23 | 40. 30 |
| Washington | 240 | 6.85 | 498 | 14.22 | 316 | 9. 027 | 110 | 34.81 |
| Oregon.... | 91 1,893 | 3.36 13.72 | 195 2,723 | 7.21 19.74 | 321 1,855 | 11.87 13.44 | 70 902 | 21.81 48.63 |
| California | 1,893 | 13.72 | 2, 723 | 19.74 | 1,855 | 13.44 | 902 | 48.63 |

Table 33.-Combined stalistics of public high schools and private high schools and academies-Secondary students in certain studies in 1898-99.

| State or Territory. | Latin. |  |  | Greck. |  |  | French. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools reporting. | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Schools reporting. | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Schools reporting. | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ |
|  |  |  |  |  |  |  |  |  |  |
| North Allantic Division | 1,886 | 92, 204 | 48.53 | 980 | 15,019 | 7.94 | 1,102 | 42, 107 | 22.16 |
| South Atlantic Division. | 755 | 25, 792 | 59.47 | 241 | 1,723 | 3.97 | 284 | 5,438 | 12.54 |
| South Central Division. | 932 | 29,442 | 52.05 | 237 | 2,054 | 3.68 | 192 | 3, 461, | 6.12 |
| North Central Division | 2,671 | 128, 225 | 49.37 | 343 | 4,807 | 1.85 | 285 | 8,450 | 3.25 |
| Western Division. | 303 | 16,032 | 52.70 | 83 | 1,143 | 3.76 | 102 | 2,467 | 8.11 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine | 174 | 5,335 | 46.70 | 105 | 1,312 | 11.48 | 109 | 2,305 | 20.18 |
| New Hampshir | 77 | 3,151 | 53.33 | 43 | 823 | 13.93 | 44 | 2,010 | 34.02 |
| Vermont | 72 | 1,795 | 39.76 | 41 | 299 | 6.62 | 42 | 669 | 14.82 |
| Massachusetts | 329 | 19,876 | 49.72 | 226 | 4,322 | 10.81 | 294 | 16,886 | 42. 21 |
| Rhode Island | 26 | 1,835 | 46.46 | 18 | 387 | 9.80 | 23 | 1,255 | 31.77 |
| Connecticut | 125 | 5,293 | 56.00 | 68 | 953 | 10.08 | 79 | 2,278 | 24.10 |
| New York | 548 | 26,230 | 42.53 | 281 | 3,761 | 6.10 | 313 | 10,807 | 17.58 |
| New Jersey | 134 | 6,401 | 46.93 | 57 | 1,051 | 7.71 | 77 | 2, 297 | 16.81 |
| Pennsyl vania | 401 | 22,288 | 56.47 | 141 | 2, 111 | 5.35 | 101 | 3,600 | 9.12 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Delaware. | 15 | 1,065 | 81.48 | 3 | 26 | 1.99 | 3 | 98 | 7.50 |
| Maryjand | 79 | 3,777 | 62. 28 | 22 | 277 | 4.57 | 36 | 1,165 | 19.21 |
| District of Columbi | 21 | 1,730 | 42.68 | 10 | 160 | 3.95 | 21 | 915 | 23.32 |
| Virginia. | 143 | 4,903 | 67.39 | 32 | 147 | 2.02 | 77 | 1,120 | 15.39 |
| West Virginia | 36 | 968 | 40.83 | 10 | 70 | 2.95 | 10 | 100 | 4.22 |
| North Carolina | 135 | 3,256 | 49.44 | 50 | 306 | 4.65 | 42 | 370 | 5. 62 |
| South Carolina | 122 | 3,156 | 59.67 | 33 | 179 | 3.38 | 41 | 507 | 9.59 |
| Georgia. | 177 | 6,336 | 68.42 | 79 | 552 | 5.96 | 49 | 1,065 | 11.50 |
| Florida. | 27 | 601 | 51.88 | , | 6 | 0.52 | 5 | 68 | 5.87 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Kentucky | 140 | 4, 604 | 54.15 | 43 | 441 | 5.19 | 41 | 427 | 5. 02 |
| Tennessee | 181 | 5,367 | 49.52 | 68 | 681 | 6.28 | 29 | 360 | 3.32 |
| Alabama | 107 | 3,023 | 55.67 | 29 | 111 | 2.04 | 27 | 874 | 6.89 |
| Messissippi | 122 | 3,005 | 49.37 | 32 | 252 | 4.14 | 13 | 129 | 2. 12 |
| Louisiana | 48 | 2,109 | 69.49 | 7 | 79 | 2.60 | 34 | 1,640 | 54.04 |
| Texas | 238 | 8, $65 \frac{1}{1}$ | 49.27 | 43 | 399 | 2.27 | 36 | 443 | 2.52 |
| Arkansas | 76 | 2,213 | 51.90 | 13 | 115 | 2.70 | 10 | 82 | 1.92 |
| Oklahoma | 6 | 266 | 77.55 | 1 | 4 | 1.17 | 1 | 3 | 0.87 |
| Indian 'erritory | 14 | 201 | 39.96 | 1 | 2 | 0.40 | 1 | 3 | 0. 60 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohıo. | 53.4 | 23, 386 | 51.36 | 72 | 1,074 | 2.36 | 53 | 1,602 | 3.52\% |
| Indiana | 350 | 17,517 | 63.46 | 19 | 314 | 1.14 | 14 | 410 | 1.49 |
| Illinois | 347 | 21,189 | 52.25 | 58 | 775 | 1.91 | 54 | 2,239 | 5.52 |
| Michigan | 217 | 10, 350 | 36.52 | 43 | 560 | 1.98 | 38 | 1, 144 | 4.04 |
| Wisconsin | 116 | 5, 087 | 26.82 | 27 | 494 | 2.60 | 21 | 386 | 2.01 |
| Minnesota | 134 | 7,898 | 59.05 | 21 | 183 | 1.37 | 2.1 | 834 | 6.21 |
| Iowa | 275 | 12, 448 | 42.49 | 20 | 193 | 0. 66 | 14 | 155 | 0.5 |
| Missouri | 248 | 12, 120 | 50.10 | 42 | 760 | 3.14 | 42 | 1,176 | 4.86 |
| North Dakota | 26 | 766 | 71.46 | 3 | 7 | 0.65 | 2 | 39 | 3. 615 |
| South Dakota | 32 | 946 | 44.66 | 5 | 41 | 1.94 | 4 | 51 | 2.41 |
| Nebraska | 208 | 8,100 | 56.77 | 11 | 269 | 1. 89 | 7 | 305 | 2.14 |
| Kansas . . | 181 | 8,418 | 58.52 | 16 | 137 | 0.95 | 12 | 109 | 0.76 |
| Western Dıvision: |  |  |  |  |  |  |  |  |  |
| Montana | 16 | 681 | 65.17 | 1 | 10 | 096 | 4 | 102 | 9.76 |
| Wroming | 6 | 192 | 54.55 |  |  | 0.00 |  |  | 0.00 |
| Colorado | 46 | 3,735 | 66.73 | 16 | 334 | 5.97 | 6 | 406 | 7.25 |
| New Mexico | 8 | 119 | 45.95 | 1 | 1 | 0.39 | 1 | 6 | 2.33 |
| Arizona | 3 | 84 | 46.15 | 0 | 0 | 0. 00 | 0 | 0 | 0.00 |
| Utah | 9 | 510 | 25.07 | 5 | 51 | 2.51 | 5 | 114 | 5.60 |
| Nevada | 7 | 270 | C3. 83 |  |  | 0.00 | 1 | 21 | 4. 96 |
| Idaho. | 11 | 260 | 49.62 | 1 | 5 | 0.95 | 2 | 8 | 1.53 |
| Washington | 27 | 1,586 | 45.28 | 5 | 35 | 1.00 | 9 | 215 | 6.11 |
| Oregon | 24 | 956 | 35.34 | 6 | 84 | 3.11 | 11 | 163 | 6. 03 |
| California | 146 | 7,639 | 55.37 | 48 | 623 | 4.52 | 63 | 1,432 | 10.38 |

Table 3.4.-Combined statistics of public high schools and private high schools and acad-emies-Secondary students in certain studies in 1898-99.

| State or Territory. | German. |  |  | Algebra. |  |  | Geometry. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools reporting. | Num- <br> ber. | $\begin{gathered} \text { Per } \\ \text { cent. } \end{gathered}$ | Schools reporting. | $\begin{gathered} \text { Num- } \\ \text { ber. } \end{gathered}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Schools reporting. | $\begin{gathered} \text { Num- } \\ \text { ber. } \end{gathered}$ | Per cent. |
| United States | 2,708 | 86, 478 | 14.91 | 7,420 | 326, 058 | 56.21 | 6,518 | 158,707 | 27.36 |
| North Atlantic Division. | 1,112 | 38,137 | 20.07 | 1,996 | 98, 200 | 51.68 | 1,846 | 51, 528 | 27.12 |
| South Atlantic Division. | 176 | 4,335 | 10.00 | 779 | 28,241 | 65.12 | 605 | 12,519 | 28.87 |
| South Central Division. | 208 | 8,398 | 6.01 | 1,011 | 36,903 | 65.24 | 866 | 16, 564 | 29. 28 |
| North Central Division. | 1,058 | 36,306 | 13.98 | 3,280 | 143, 869 | 55.40 | 2,918 | 67,838 | 26.12 |
| Western Division. | 154 | 4,302 | 14.14 | 354 | 18, 845 | 61.95 | 312 | 10,258 | 33.72 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine | 18 | 189 | 1. 65 | 193 | 5, 894 | 51, 59 | 170 | 2, 88.5 | 25.25 |
| New Hamps | 23 | 374 | 6.33 | 82 | 2,697 | 45.64 | 75 | 1, $8: 85$ | 31.05 |
| Yermont | 24 | 237 | 5.25 | 74 | 2, 2:21 | 49.19 | 65 | 8.5.5 | 18.94 |
| Massachusett | 172 | 5, 224 | 13.07 | 333 | 19, 569 | 48.95 | 314 | 11,710 | '29. 29 |
| Rhode Istand | 20 | - 579 | 14.66 | 30 | 2,017 | 51.06 | 26 | 1,238 | 31.34 |
| Connecticut | 96 | 2, 207 | 23.35 | 127 | 4,615 | 48.83 | 119 | 2,673 | 28.33 |
| New York | 457 | 15, 598 | 25. 29 | 566 | 27,414 | 44.45 | 537 | 14,585 | 23. 65 |
| New Jersey | 106 | 4,672 | 34.95 | 159 | 8,856 | 61.93 | 143 | 3,652 | 26.77 |
| Pennsylyania | 196 | 9,057 | 22.95 | 432 | 24,917 | 63.13 | 397 | 12,091 | 30.63 |
| South Atlantre Division: |  |  |  |  |  |  |  |  |  |
| Delaware | 5 39 | 83 1,695 | 6.35 27.95 | 8.5 | 1,123 4,313 | 85.92 71.11 | 1.7 | 461 3,46 | 35.27 56.82 |
| District of Colu | 16 | - 910 | 22.45 | 23 | 1,747 | 43.10 | 21 | 889 | 21.93 |
| Virginia | 62 | 962 | 13.22 | 145 | 4, 654 | 63.96 | 119 | 2,021 | 27.78 |
| West Virginia | 16 | 201 | 8.48 | 38 | 1,463 | 61.70 | 35 | 593 | 25.01 |
| North Carolina | 14 | 184 | 2.79 | 135 | 3, 410 | 51.78 | 75 | 925 | 14.04 |
| South Carolina | 10 | 115 | 2.17 | 129 | 3,743 | 70.77 | 85 | 873 | 16.51 |
| Georgia. | 12 | 148 | 1.60 | 180 | 6,999 | 75.57 | 151 | 2, 908 | 31.40 |
| Florida | 2 | 37 | 3.19 | 29 | 789 | 68.08 | 26 | 403 | 34.77 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Kentucky . . | 62 | 1,215 | 14.29 | 151 | 5, 389 | 63.38 | 123 | 2,278 | 26.79 |
| Tennessee | 39 | 448 | 4.13 | 201 | 6,584 | 60.74 | 187 | 2,689 | 24.81 |
| Alabama | 14 | 155 | 2.85 | 110 | 3, 822 | 70. 39 | 94 | 2,037 | 37.51 |
| Mississippi | 9 | 50 | 0.82 | 137 | 3,548 | 58. 29 | 93 | 998 | 16.40 |
| Louisiana | 5 | 15 | 0.49 | 52 | 2,161 | 71.20 | 44 | 1,047 | 34.50 |
| Texas... | 59 | 1,355 | 7.71 | 263 | 12, 235 | 69.66 | 253 | 6, 402 | 36.45 |
| Arkansas | 14 | 103 | 2. 42 | 77 | 2, 671 | 62.64 | 59 | 945 | 22.16 |
| Oklahoma. .-.... | 3 | 44 | 12. 83. | 6 | 207 | 60.35 | 5 | 91 | 27.41 |
| Indian Territory ... | 3 | 13 | $2.58{ }^{\circ}$ | 14 | 286 | 56.86 | 8 | 74 | 14.71 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohio... | 164 | 5, S42 | 12.83 | 667 | 26, 206 | 57.55 | 558 | 11, 684 | 25.66 27 |
| Inlinois | 149 | 6,670 | 16.45 | 405 | 17,736 | 48. 62 | 329 | 10,548 10,426 | 27.35 25.71 |
| Michigan | 148 | 4,601 | 16.24 | 309 | 14,866 | 52.46 | 283 | 5,939 | 20.96 |
| Wisconsin | 138 | 5, 008 | 26. 40 | 207 | 8,640 | 45.55 | 201 | 4,571 | 24.10 |
| Minnesota | 73 | 2,507 | 18. 75 | 141 | 6,851 | 51.23 | 135 | 4,640 | 34.69 |
| Iowa. | 84 | 2,586 | 8.83 | 365 | 16, 11: | 55.00 | 328. | 7,428 | 25. 35 |
| Missonri | 77 | 3,085 | 12.75 | 284 | 15, 209 | 62.87 | 253 | 6,139 | 25.38 |
| North Dakota | 2 | 19 | 1.77 | 27 | 684 | 63.81 | 26 | 314 | 29.29 |
| South Dakota | 14 | 226 | 10.67 | 35 | 1,092 | 51.56 | 29 | 479 | $2 \cdot .62$ |
| Nebraskia | 61 | 1,519 | 10.65 | 248 | 9,018 | 63. 20 | 237 | 4,655 | 32. 62 |
| Kansas | 64 | 1,378 | 9.58 | 204 | 8,338 | 57.96 | 177 | 4,015 | 27.91 |
| W้estern Division: |  |  |  |  |  |  |  |  |  |
| Montana | 5 | 255 | 24.40 | 17 | 72 | 73.78 | 16 | 370 | 35.41 |
| Wroming | 1 | 39 | 11.08 | 8 | 246 | 69.89 | 4 | 82 | 23.30 |
| Colorado | 30 | 1,224 | 21.87 | 47 | 3,045 | 54.40 | 43 | 2,062 | 36.84 |
| New Mexico | 0 | 0 | 0.00 | 10 | 164 | 63.32 | 8 | 63 | 24.32 |
| Arizona | 1 | 8 | 4.40 | 3 | 110 | 60.44 | 2 | 35 | 1923 |
| Utah. | 8 | 294 | 14.45 | 14 | 1,102 | 54.18 | 10 | 308 | 15.14 |
| Nevada | 1 | 3 | 0.71 | 7 | 401 | 91. 80 | 7 | 220 | 52.01 |
| Idaho. | 2 | 5 | 9,95 | 12 | -308 | 58. 78 | 8 | 176 | 33.59 |
| Washington | 13 | 349 | 9. 96 | 49 | 2,225 | 63.52 | 40 | 975 | 27.83 |
| Oregon ... | 15 | 58:2 | 21.52 | 31 | 1,625 | 60.07 | 25 | 535 | 19.78 |
| California | 78 | 1,543 | 11.18 | 156 | 8,848 | 64.13 | 149 | 5,432 | 39.37 |

Table 35.-Combined siatistics of public high schools and private high schools and acad-emies-Secondary students in certain studies in 1898-99.

| State or Territory | Trigonometry. |  |  | Astronomy. |  |  | Physies. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools reporting. | Number. | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Schools reporting. | Number. | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Sehools reporting. | Number. | $\begin{aligned} & \text { Per } \\ & \text { eent. } \end{aligned}$ |
| Uniteu States. | 1,443 | 14,972 | 2.58 | 1,827 | 22,859 | 3.94 | 5,902 | 115, 825 | 19.97 |
| North Atlantie Division. | 445 | 4,426 | 2.33 | 694 | 8,525 | 4. 49 | 1, 594 | 34,925 | 18.38 |
| South Atlantic Division. | 226 | 2,043 | 4.71 | 146 | 1,920 | 4.43 | 477 | 9,641 | 22.23 |
| South Central Division. | 306 | 3,554 | 6.28 | 231 | 2,805 | 4.96 | 782 | 14,242 | 25.18 |
| North Central Division | 347 | 3, 798 | 1.46 | 680 | 8,714 | 3.36 | 2, 772 | 50, 805 | 19.56 |
| Western Division.. | 119 | 1,151 | 3.78 | 76 | 895 | 2.94 | 277 | 6,212 | 20.42 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine | 12 | 61 | 0.53 | 93 | 1, 010 | 8.84 | 148 | 2, 075 | 18.16 |
| New Hampsh | 13 | 124 | 2.10 | 31 | 344 | 5.82 | 69 | 1,228 | 20.78 |
| Vermont | 4 | 18 | 0.40 | 39 | 321 | 7.11 | 50 | 518 | 11.47 |
| Massachusetts | 68 | 545 | 1.36 | 152 | 2,170 | 5.43 | 273 | 8,147 | 20.38 |
| Rhode Island. | 8 | 85 | 2.15 | 15 | 182 | 4. 61 | 22 | 808 | 20.46 |
| Conneetieut | 35 | 178 | 1. 88 | 47 | 566 | 5.99 | 91 | 1,604 | 16.97 |
| New York | 162 | 1,560 | 2.53 | 183 | 1,827 | 2.96 | 453 | 9, 156 | 14.85 |
| New Jersey | 38 | 401 | 2.94 | 51 | 760 | 5.57 | 129 | 2,815 | 20.64 |
| Pennsylvania | 105 | 1,454 | 3.68 | 83 | 1,345 | 3.41 | 359 | 8,574 | 21.72 |
| South Atlantie Division: Delaware........... | 1 | 27 | 2.07 | 1 | 11 | 0.84 | 14 | 390 | 29.84 |
| Maryland | 37 | 537 | 8.85 | 23 | 369 | 6.08 | 70 | 2, 499 | 41. 20 |
| Distriet of Columbi | 14 | 162 | 4.00 | 10 | 79 | 1.95 | 18 | 830 | 20.48 |
| Virginia. | 63 | 383 | 5.26 | 21 | 209 | 2.87 | 101 | 1,661 | 22.83 |
| West Virginia | 12 | 91 | 3.84 | 11 | 118 | 4.98 | 29 | 432 | 18.22 |
| North Carolina | 15 | 93 | 1.41 | 17 | 227 | 3.45 | 58 | 891 | 13.53 |
| South Carolina | 19 | 182 | 3.44 | 17 | 196 | 3.71 | 66 | 906 | 17.13 |
| Georgia. | 56 | 486 | 5.25 | 35 | 552 | 5.96 | 97 | 1,705 | 18. 41 |
| Florida | 9 | 82 | 7.08 | 11 | 159 | 13.72 | 24 | 327 | 28.21 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Kentucky . | 65 | 563 | 6. 62 | 49 | 510 | 6.00 | 91 | 1, 623 | 19.09 |
| Tennessee | 22 | 439 | 4.05 | 46 | 549 | 5.07 | 152 | 2,135 | 19.70 |
| Alabama | 47 | 594 | 10.94 | 28 | 238 | 4. 38 | 79 | 1,399 | 25.76 |
| Mississippi | 28 | 204 | 3.35 | 22 | 301 | 4.94 | 117 | 2,102 | 34.53 |
| Louisiana | 17 | 114 | 3.76 | 21 | 253 | 8.34 | 42 | 1,021 | 33.64 |
| Texas | 106 | 1,334 | 7.60 | 51 | 810 | 4.61 | 242 | 4, 914 | 27.98 |
| Arkansas | 18 | 296 | 6.94 | 11 | 134 | 3.14 | 47 | 877 | 20.57 |
| Oklahoma | 1 | 5 | 1. 46 | 1 | 5 | 1.46 | 5 | 77 | 22.45 |
| Indian Territory | 2 | 5 | 0.99 | 2 | 5 | 0.99 | 7 | 94 | 18.69 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohio.... | 93 | 1,126 | 2.47 | 173 | 2, 11.2 | 4. 64 | 527 | 9,093 | 19.97 |
| Indiana | 33 | 366 | 1.33 | 32 | , 605 | 2.19 | 275 | 5,443 | 19.72 |
| Ihlinois . | 48 | 530 | 1.31 | 119 | 1,625 | 4.01 | 368 | 7,442 | 18.35 |
| Miehigan | 15 | 159 | 0.56 | 63 | 726 | 2.56 | 287 | 4,953 | 17.48 |
| Wisconsin | 14 | 166 | 0.83 | 15 | 179 | 0.94 | 191 | 3,265 | 17.21 |
| Minnesot | 11 | 114 | 0.85 | 28 | 504 | 3.77 | 100 | 2,280 | 17.05 |
| Iowa | 27 | 217 | 0.74 | 104 | 1,366 | 4.66 | 336 | 6,345 | 21. 66 |
| Missouri | 65 | 771 | 3.19 | 69 | 749 | 3.10 | 226 | 4,405 | 18.21 |
| North Dakota | 4 | 20 | 1.87 | 3 | 20 | 1.87 | 22 | 178 | 16.60 |
| South Dakota | 3 | 39 | 1.84 | 7 | 96 | 4. 53 | 31 | 460 | 21. 72 |
| Nebraska | 19 | 181 | 1.29 | 20 | 236 | 1. 65 | 218 | 3,485 | 24.42 |
| Kansas | 15 | 106 | 0.74 | 47 | 496 | 3.45 | 191 | 3,456 | 24.03 |
| Western Division: |  |  |  |  |  |  |  |  |  |
| Montana | 5 | 75 | 7.18 | 3 | 51 | 4.83 | 12 | 227 | 21. 72 |
| Wyoming | 1 | 3 | 0.85 |  |  | 0.00 | 3 | 65 | 18.47 |
| Colorado | 15 | 246 | 4.40 | 9 | 251 | 4.48 | 38 | 1,233 | 22.03 |
| New Mexico | 1 | 2 | 0.77 | 2 | 11 | 4.25 | 4 | 28 | 10.81 |
| Arizona | 1 | 13 | 7.14 |  |  | 0.00 | 3 | 46 | 25.27 |
| Utah | 5 | 78 | 3.83 | 2 | 54 | 2.65 | 11 | 231 | 11.36 |
| Nevada |  |  | 0.00 | 1 | 8 | 1.89 | 7 | 275 | 65.01 |
| Idaho | 1 | 2 | 0.38 | 4 | 21 | 4.01 | 8 | 138 | 26.34 |
| Washington | 9 | 56 | 1. 60 | 7 | 82 | 2.34 | 34 | 625 | 17.84 |
| Oregon | 17 | 101 | 3.73 | 14 | 109 | 4.03 | 21 | 421 | 15.56 |
| California . | 64 | 575 | 4.17 | 34 | 308 | 2.23 | 136 | 2,923 | 21.19 |

Tabla 30.-Combined statistics of pubric high schools and private high schools and acad-emies-Secondary students in certain studies in 1898-99.

| State or Territory. | Chemistry. |  |  | Physical geography. |  |  | Geology. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools reporting. | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Schools reporting. | Number. | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Sehools reporting. | Number. | Per |
| United State | 2,764 | 50,132 | 8.64 | 5,749 | 137,762 | 23.75 | 1,769 | 25,595 | 4.41 |
| North Atlantic Division | 970 | 17,952 | 9.45 | 1,475 | 35,367 | 18.61 | 702 | 10,823 | 5.70 |
| South Atlantic Division | 220 | 3,487 | 8.04 | 581 | 11, 317 | 26.10 | 97 | 1, 305 | 3.01 |
| South Central Division. | 292 | 4,833 | 8.54 | 728 | 17,842 | 31.54 | 274 | 3, 699 | 6.54 |
| North Central Division. | 1,075 | 19, 952 | 7.68 | 2,725 | 65,798 | 25.72 | 597 | 8,260 | 3.18 |
| Western Division.. | 207 | 3, 908 | 12.85 | - 237 | 6, 438 | 21.16 | 99 | 1,508 | 4.96 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine | 95 | 1,192 | 10. 43 | 127 |  |  |  | 959 | 8.39 |
| New Hamps | 44 | ${ }_{3}^{630}$ | 10.66 | 55 | 775 | 13. 12 | 33 | 391 | 6. 62 |
| Vermont. | 33 | 316 | ${ }^{\text {7. }} 00$ | 58 | 1,052 | 23.30 | 27 | 270 | 5.98 |
| Massachusetts | 223 | 4, 911 | 12. 28 | 178 | 3,440 | 8.60 | 138 | 2, 042 | 5.11 |
| Ihiode Island | 17 | 486 | 12.30 | 13 | 1.429 | 10.86 | 10 | 138 | 3. 49 |
| Commecticut |  | ${ }_{4}^{951}$ | 10. 06 | 83 | 1,986 | 21. 01 | 44 | 638 | 6.75 |
| New York | $\begin{array}{r}279 \\ 80 \\ \hline\end{array}$ | 4, 595 | 7.45 | 468 | 12,089 | ${ }^{19.60}$ | 243 | 3,302 | 5.35 |
| Pennsylvania | 137 | 3,290 | - $8.3 \pm$ | 383 | 10,519 | 26.65 | ${ }_{91}^{32}$ | 2,321 | 5. 58 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Delaware | , | 141 | 10.79 | 11 | 461 | 35.50 |  |  | 0.00 |
| Maryland | 32 | 625 | 10.31 | 65 | 1,256 | 20.71 | 12 | 164 | 2. 70 |
| Distriet of Colum | 15 | 346 | 8.54 | 14 | 142 | 3.50 | 8 | 50 | 1.23 |
| Virginia. | 49 | 734 | 10.09 | 105 | 2,122 | 29.16 | 16 | 188 | 2.58 |
| West Virginia | 17 | 191 | 8.18 | 34 | 908 | 38.30 | 6 | 86 | 3.63 |
| North Carolina | 26 | 300 | 4. 56 | 103 | 1,526 | 23.17 | 12 | 216 | 3.28 |
| Suuth Carolina | 15 | 218 | 4.12 | 104 | 1, 828 | 34.56 | 13 | 130 | 2.46 |
| Georgia. | 48 | 756 | 8.15 | 123 | 2,504 | 27.04 | 22 | 360 | 3. 89 |
| South Central Division: | 12 | 173 | 14.93 | 25 | 567 | 48.92 | 8 | 111 | 9.58 |
| Kentucky | 54 | 930 | 10. 94 | 110 | 2,183 | 25.67 | 45 | 448 | 5.27 |
| Tennessee | 48 | 601 | 5.54 | 113 | 2,288 | ${ }^{21.11}$ | 95 | 1,226 | 11. 31 |
| Alabama | 35 | ${ }_{6} 613$ | 11. 29 | 68 | 1,444 | 26. 59 | 28 | 368 | 6.78 |
| Mississippi | 25 | 318 | 5.22 | 89 | 2,148 | 35.29 | 20 | 258 | 4.21 |
| Louisiana | 26 | 573 | 18.88 | 42 | 1,203 | 39.64 | 16 | 124 | 4.09 |
| Texas | 85 | 1,492 | 8.49 | 235 | 6,850 | 39.00 | 58 | 1,088 | 6.19 |
| Arkanisas | 13 | 256 | 6.00 | 55 | 1,413 | 33.14 |  | 159 | 3.73 |
| Oklahoma. | 4 | 34 | 9.91 | 5 | 146 | 42. 57 | ${ }_{2}^{2}$ | 24 | 7.00 |
| Indian Territory | 2 | 16 | 3.18 | 11 | 167 | 33.20 | 2 | 4 | 0.80 |
| North Central Division: | 153 | 3,250 | 7.14 | 576 | 12, 424 | 27.28 |  |  |  |
| Indiana | 109 | 2,484 | 9. 00 | 308 | 6,639 | 24.05 | 56 | 1,822 | 2.98 |
| Illinois | 178. | 3,353 | 8.27 | 345 | 11,120 | 27.42 | 73 | 1,234 | 3.04 |
| Miehigan | 179 | 2,754 | 9.72 | 260 | 6,074 | 21.43 | 65 | 712 | 2.51 |
| Wiscousin | 43 | 815 | 4. 30 | 192 | 6,185 | 32. 61 | 22 | 378 | 1. 99 |
| Minnesot | 86 | 1,530 | 11. 44 | 51 | 1,235 | 9.23 | 14 | 229 | 1.71 |
| lowa | 76 | 1,211 | 4.13 | 318 | 7,728 | 26.38 | 92 | 1,349 | 4. 60 |
| Missouri | 108 | 2,025 | 8.37 | 225 | 5,185 | 21. 43 | 80 | 1,138 | 4.70 |
| North Dakot | G | 49 | 4.57 | 17 | 244 | 22.76 | 3 | 26 | 2.43 |
| South Dakot |  | 70 | 3.31 | 31 | 575 | 27.15 | 9 | 115 | 5.43 |
| Nebraska | 78 | 1,491 | 10.45 | 220 | 4,515 | 31.64 | 25 | 319. | 2. 24 |
| Kansas | 51 | 920 | 6. 40 | 182 | 4,873 | 33.88 | 53 | 571 | 3.97 |
| Western Division: |  |  |  |  |  |  |  |  |  |
| Montina Wyoming | 9 3 | $\begin{gathered} 166 \\ 26 \end{gathered}$ | 15.89 7.39 | 13 7 | $\begin{aligned} & 294 \\ & 125 \end{aligned}$ | 28.13 35.51 | 7 | $\begin{array}{r} 102 \\ 5 \end{array}$ | 9.76 1.42 |
| Colorado | 32 | 818 | 11.61 | 29 | 955 | 17.08 | 30 | 699 | 12. 49 |
| New Mexi | , | 18 | 6. 95 | 7 | 98 | 37.84 | , | 36 | 13.90 |
| Arizona | 1 | 14 | 7.69 | 3 | 71 | 39.01 |  |  | 0.00 |
| Utah | 9 | 104 | 5.11 | 14 | 431 | 21.19 | 6 | 160 | 7.87 |
| Nevada | $\frac{7}{5}$ | 165 | 39.01 10.50 | 6 12 | ${ }_{270}^{115}$ | 27.19 5.53 | i | 3 | 0.09 0.57 |
| Washingt | 11 | 213 | 6.08 | 43 | 1,253 | 35. 77 | 10 | 138 | 3.91 |
| Oregon.. | 15 | 298 | 11.02 | 28 | 824 | 30.46 | 11 | 115 | 4.25 |
| California | 112 | 2,031 | 14.72 | 75 | 2,002 | 14.51 | 30 | 250 | 1.81 |

Table 37.-Combined statistics of muthic high schools and private high schools and acade-mies-Secondary students in certain studies in 1898-99.

| State or Territory. | Physiology. |  |  | Psychology. |  |  | Rhetorie. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools reporting. | Num- <br> ber. | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Schools reporting. | Num- <br> lier. | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Schools report ing. | Numper. | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ |
| United States. | 5,490 | 166, 043 | 28.62 | 1,493 | 18,716 | 3.23 | 6,371 | 212, 859 | 30.70 |
| North Atlantic Division | 1,391 | 50, 181 | 26.41 | 290 | 3, 897 | 2.05 | 1,703 | 67, 199 | 35.37 |
| South Atlantic Division | 580 | 12, 612 | 29.08 | 157 | 1,729 | 3.99 | 638 | 14,957 | 34. 49 |
| South Central Division. | 802 | 23, 323 | 41.23 | 329 | 4,228 | 7.47 | 875 | 21, 491 | 33.00 |
| North Central Division | 2,591 | 74, 784 | 28.80 | 649 | 7,955 | 3.06 | 2, 845 | 95, 375 | 36. 72 |
| Westera Division... | 176 | 5,143 | 16.91 | 68 | 907 | 2.98 | , 310 | 13, 834 | 45.18 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine .......... | 125 | 2,031 | 17.78 | 28 | 435 | 3.81 | 15.1 | 8, 11.3 | 27.25 |
| New Hampshir | 49 | 819 | 13.86 | 9 | 88 $\bigcirc 023$ | 1.49 | 69 | 1,439 | 24.35 |
| Vermont --.-. | 39 | 621 | 10.70 | 21 | 22 | 4.94 | 64 | 12,351 | 30.59 |
| Massachusetis | 195 | 5,956 | 14. 90 | 31 | 370 | $0.9 \pm$ | 281 | 17,508 | 43.92 |
| Rhode Island. | 16 | 336 | 8.51 | 7 | 141 | 3.57 | 27 | 2,067 | 52.33 |
| Connecticut | 71 | 2,269 | 24.01 | 20 | 159 | 1.68 | 110 | 4,157 | 43.98 |
| New York | 469 | 21,857 | 35.44 | 66 | 772 | 1.25 | 490 | 18,585 | 30.11 |
| New Jersey | 109 | 3,331 | 24. 12 | 23 | 272 | 1.99 | 113 | 4,881 | 35.78 |
| Pennsylvania | 318 | 12,961 | 32. 84 | 81 | 1,432 | 3.63 | 359 | 14,018 | 35.52 |
| South Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Delaware | 12 | 1. 587 | 44.91 | 19 | 111 | 1.07 3.81 | 15 | 483 2,549 | 36.95 4.93 |
| Maryland. - Columbia | $\underline{12}$ | 1,915 | 31.57 3.53 | 12 | 231 | 1.81 1.88 | 66 18 | 2,549 698 | 42. 03 |
| Virginia .......... | 103 | 2,330 | 32.02 | 28 | 253 | 3.48 | 120 | 2, 739 | 37.64 |
| West Virginia | 29 | 792 | 33. 40 | 13 | 118 | 4.98 | 36 | 719 | 30.32 |
| North Carolina | 95 | 2, 145 | 32.57 | 30 | 21 t | 3.25 | 105 | 1,710 | 25.96 |
| South Carolina | 83 | 1,589 | 30.04 | 9 | 161 | 3.04 | 97 | 1,681 | 31.78 |
| Georgia. | 106 | 2,351 | 25.39 | 36 | 457 | 4.93 | 152 | 3,682 | 39.76 |
| Florida. | 28 | 760 | 65.57 | 19 | 205 | 17.69 | 29 | 698 | 60.05 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Kentucky | 120 | 3,3皟7 | 39.36 | 53 | 786 | 9.24 | 132 | 3, 655 | 42.98 |
| Tennessee | 156 | 3, 328 | 35.32 | 4 | 415 | 3.83 | 178 | 3,577 | 33.00 |
| Alabama | 82 | 2,586 | 17.62 | 27 | 339 | 6.24 | 92 | 2, 489 | 45.84 |
| Mississipp | 109 | 2,816 | 46.26 | 18 | 212 | 3.48 | 105 | 1, 827 | 30.01 |
| Louisiana | 40 | 1,371 | 45.17 | 18 | 187 | 6.16 | 47 | 1,590 | 52.39 |
| Texas | 218 | 7, 132 | 40.61 | 118 | 1,966 | 11.19 | 239 | 6,664 | 37.91 |
| Arkansas | 65 | 2,069 | 48.52 | 17 | 283 | 6.64 | 68 | 1,378 | 32.32 |
| Oklahoma | 1 | 18 | 5.25 | 2 | 22 | 6.41 | 5 | 204 | 59.48 |
| Indian Territory | 11 | 156 | 31.01 | 2 | 18 | 3.58 | 9 | 110 | 21.87 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohio. | 569 | 16, 049 | 35.24 | 119 | 1,373 | 3.02 | 510 | 15, 651 | 31.37 |
| Indiana | 226 | 5, 420 | 19.64 | 75 | 1,135 | 4.11 | 339 | 12,706 | 46. C3 |
| Illinois | 360 | 13,701 | 33.79 | 49 | 617 | 1.52 | 371 | 16, 101 | 39.71 |
| Michigan | 277 | 6,649 | 23. ${ }^{6} 6$ | 48 | 559 | 1.97 | 281 | 9,059 | 31.97 |
| Wisconsin | 122 | 4,744 | 25.01 | 121 | 1,395 | 7.35 | 164 | 4,236 | 22.33 |
| Minnesota | 77 | 2,116 | 15.82 | 14 | 165 | 1.26 | 118 | 5,483 | 41.00 |
| Iowa. | 302 | 8, 35. | 28.51 | $3 \pm$ | 345 | 1.11 | 335 | 9,670 | 33.01 |
| Missouri | 209 | 6,956 | 28.75 | 111 | 1,391 | 5.75 | 254 | 9,250 | 38.23 |
| North Dakota | 19 | 392 | 36.57 | 3 | 39 | 3.64 | 24 | 379 | 35.35 |
| South Dakota | 27 | 736 | 34.75 | 5 | 33 | 1.56 | 29 | 573 | 27.05 |
| Nebraska | I 80 | 5, 426 | 38.03 | 12 | 162 | 1.14 | 203 | 6,350 | 44.50 |
| Kansas | 153 | 4,211 | 29.48 | 51 | 718 | 5.20 | 187 | 5,917 | 41.13 |
| Western Division: |  |  |  |  |  |  |  |  |  |
| Montana | 12 | 323 | 30.91 | 3 | 14 | 1.34 | 17 | 416 | 39.81 |
| Wyoming | 4 | 85 | 24.15 |  |  | 0.00 | 6 | 142 | 40.31 |
| Colorado | 20 | 692 | 12. 36 | 13 | 291 | 5.25 | 44 | 1,937 | 31.61 |
| New Mex | 7 | 124 | 47.88 | 1 | 2 | 0.77 | 5 | - 42 | 16. 22 |
| Arizona | 1 | 34 | 18.68 |  |  | 0.00 | 2 | 45 | 24.73 |
| Utal | 9 | 510 | 25.07 | 7 | 270 | 13.27 | 12 | 407 | $2 \% .96$ |
| Nevada | 4 | 200 | 47.28 | 1 | 9 | 2.13 | 7 | 283 | 66.90 |
| Idano | 11 | 226 | 43. 13 | 2 | 13 | 2. 48 | 12 | 216 | 41.22 |
| Washington | 31 | 772 | 22.04 | 12 | 110 | 3.14 | 33 | 1,046 | 29.86 |
| Oregon | 27 | 799 | 29.54 | 10 | 73 | 2.70 | 28 | 931 | 36.38 |
| California | 50 | 1,378 | 9.99 | 19 | 122 | 0.88 | 139 | 8,256 | 59.81 |

Table 38.-Combined statistics of public high schools and private high schools and acade-mies-Secondary students in certain studies in 1898-99.

| State or Territory. | English literature. |  |  | History. |  |  | Civics. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools reporting. | $\begin{aligned} & \text { Num- } \\ & \text { ber. } \end{aligned}$ | $\begin{aligned} & \text { Per } \\ & \text { cent. } \end{aligned}$ | Schools reporting. | Number. | Per | Schools reporting. | Number. | Per cent. |
| United State | 6,188 | 235, 492 | 40. 60 | 6,351 | 222, 287 | 38.32 | 5,300 | 121, 203 | 20.89 |
| North Atlantic Divisio | 1,725 | 85,297 | 44.89 | 1,711 | 77,810 | 40.95 | 1,434 | 31, 476 | 16.57 |
| South Atlantic Division | 566 | 18, 023 | 41.56 | 647 | 20,684 | 47.70 | 292 | 5,765 | 13.29 |
| South Central Division. | 763 | 18,761 | 33.17 | 790 | 22,565 | 39.89 | 632 | 14,956 | 26.44 |
| North Central Division | 2,821 | 95, 308 | 36. 70 | 2,888 | 85,215 | 32.81 | 2, 691 | 63, 042 | 24.27 |
| Western Division | 316 | 18,103 | 59.51 | 315 | 16,013 | 52.64 | 251 | 5,964 | 19.60 |
| North Atlantic Division: |  |  |  |  |  |  |  |  |  |
| Maine | 147 | 4,055 | 35.50 | 152 | 3, 859 | 33.78 | 133 | 1,751 | 15.33 |
| New Hampsh | 71 | 1,963 | 33.22 | 68 | 2,123 | 35. 93 | 44 | 595 | 10.07 |
| Vermont | 63 | 1,088 | 21.10 | 61 | 1,260 | 27.91 | 60 | 985 | 21.37 |
| Massachusett | 313 | 27, 205 | 68.05 | 312 | 20,554 | 51.41 | 208 | 4,787 | 11.97 |
| Rhode Island | 29 | 2,536 | 64.20 | 29 | 1,828 | 46.28 | 23 | 597 | 15.11 |
| Connecticut | 116 | 6,163 | 65.21 | 120 | 4,732 | 50.07 | 70 | 1,150 | 12.17 |
| New York | 468 | 16,779 | 27.21 | 508 | 21,402 | 34.70 | 444 | 9,731 | 15.78 |
| Ncw Jersey | 138 | 5,792 | 42.46 | 104 | 6,626 | 48.58 | 131 | 2,385 | 17.49 |
| Pennsylvania | 380 | 19, 716 | 49.95 | 357 | 15,426 | 39.08 | 321 | 9,515 | 24.11 |
| South Atlantic Division: Delaware | 14 | 409 | 31.29 | 14 | 539 | 41.24 | 13 | 300 | 22.95 |
| Maryland | 78 | 3, 674 | 60.58 | 76 | 4, 135 | 68.18 | 42 | 1,121 | 18.48 |
| District of | 21 | 3,534 | 87.19 | 22 | 2,216 | 54. 68 | 9 | 92 | 2.27 |
| Virginia | 106 | 2,342 | 32.19 | 120 | 3, 529 | 48.50 | 41 | 754 | 10.36 |
| West Virgini | 34 | 794 | 33.49 | 37 | 997 | 42.05 | 29 | 489 | 20.62 |
| North Caro | 90 | 1,891 | 28.71 | 105 | 2, 234 | 33.92 | 41 | 786 | 11.93 |
| South Caro | 92 | 1,779 | 33.64 | 113 | 2,573 | 48.74 | 56 | 982 | 18.57 |
| Georgia. | 110 | 3,149 | 34.00 | 136 | 3, 820 | 41.25 | 44 | 999 | 10.79 |
| Florida | 21 | 451 | 38.91 | 24 | 636 | 54.87 | 17 | 242 | 20.88 |
| South Central Division: |  |  |  |  |  |  |  |  |  |
| Kentucky | 128 | 3,548 | 41.73 | 122 | 3,413 | 40.14 | 114 | 2,607 | 30.66 |
| Tennessec | 139 | 2, 866 | 26.44 | 133 | 3,234 | 29.84 | 103 | 1,937 | 17.87 |
| Alabama | 78 | 1,766 | 32.52 | 78 | 2, 239 | 41.23 | 41 | 1,048 | 19.30 |
| Mississipp | 109 | 2,196 | 36.08 | 99 | 2, 433 | 39.99 | 92 | 2,121 | 34.84 |
| Louisiana | 46 | 1,448 | 47.71 | 48 | 1,936 | 63.79 | 24 | 66:3 | 21.85 |
| Texas. | 194 | 5,399 | 30.74 | 236 | 7,275 | 41. 42 | 204 | 5,182 | 29.50 |
| Arkansa | 55 | 1,381 | 32.39 | 61 | 1,826 | 42. 82 | 48 | 1,246 | 29. 22 |
| Oklahoma | 5 | 99 | 28.86 | 3 | 47 | 13. 70 | 2 | 76 | 22.16 |
| Indian Territory | 6 | 58 | 11. 53 | 10 | 161 | 32.00 | 4 | 76 | 15.11 |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Indiana | 317 | 14, 942 | 54.13 | 346 | 10,321 | 37.39 | 281 | 6, 320 | 22.90 |
| Illinois | 381 | 19, 206 | 47.36 | 375 | 13,007 | 32.08 | 329 | 7,945 | 19.59 |
| Michigan | 271 | 6,318 | 22.30 | 292 | 9,923 | 35. 02 | 262 | 6, 311 | 22.27 |
| Wisconsi | 185 | 5,165 | 27.23 | 191 | 5,216 | 27.50 | 180 | 4,402 | 23.21 |
| Minneso | 115 | 3,040 | 22.73 | 124 | 5,001 | 37.39 | 88 | 1,955 | 14.62 |
| Iowa | 320 | 10,693 | 36. 50 | 330 | 8,835 | 30.16 | 337 | 8,387 | 28.63 |
| Missouri | 237 | 7,078 | 29.26 | 252 | 8,793 | 36. 35 | 211 | 6,205 | 25.65 |
| North Dako | 25 | 689 | 64.27 | 22 | 410 | 38.25 | 21 | 324 | 30.22 |
| South Dako | 30 | 635 | 29.98 | 34 | 721 | 34. 04 | 31 | 644 | 30.41 |
| Nebraska | 191 | 6,342 | 44.45 | 204 | 4,569 | 32.02 | 216 | 5,015 | 35.15 |
| Kansas | 175 | 5,191 | 36.09 | 176 | 4,455 | 30.97 | 179 | 4, 771 | 33.17 |
| Western Division: |  |  |  |  |  |  |  |  |  |
| Montana | 17 | 391 | 37.42 19.03 | 14 6 | $\begin{aligned} & 344 \\ & 122 \end{aligned}$ | $\begin{aligned} & 32.92 \\ & 34.66 \end{aligned}$ | 16 | $\begin{array}{r} 355 \\ 72 \end{array}$ | ${ }_{20.45}^{33 .}$ |
| Colorado | 45 | 3, 454 | 61.71 | 41 | 3,462 | 61.85 | 30 | 983 | 17.56 |
| New Mexi | , | 35 | 13.51 | 8 | 132 | 50.97 | 3 | 65 | 25.10 |
| Arizona. | 2 | 101 | 55.49 | 3 | 41 | 22.53 |  | 57 | 31.32 |
| Utah. | 12 | 277 | 13.62 | 10 | 589 | 28.95 | 7 | 214 | 10.52 |
| Nevada | 7 | 289 | 68.32 | 6 | 235 | 55.56 | 6 | 233 | 55.08 |
| Idaho. | 11 | 273 | 52.10 | 10 | 283 | 54. 01 |  | 212 | 40.46 |
| Washingt | 39 | 1,581 | 45.13 | 35 | 1,113 | 31.77 | 36 | 765 | 21.84 |
| Oregon | 27 | 796 | 29.43 | 28 | 1,168 | 43.18 | 18 | 561 | 20.74 |
| Califorui | 148 | 10,839 | 78.56 | 154 | 8,524 | 61.78 | 118 | 2,447 | 17.74 |

Table 39.-Distribution of secondary students in public and private institutions of all classes reporting to the United States Bureau of Education for the

| 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 public normal schools. |  |  | Total public secondary students. |  |  |
|  | Male. | Female. | Total. | Male. | Femalc. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. |
| United States | 292, 876 | 362,351 | 655,227 | 197,127 | 279, 100 | 476,227 | 5,259 | 2,259 | 7,518 | 1,572 | 3,232 | 4,801 | 203, 958 | 284,591 | 488,5 |
| North Atlantic Division | 93, 595 | 111,692 | 205,287 |  | 87,147 | 150,683 | 798 | 12 | 810 | 422 | 1,697 | 2,119 |  |  | 153, |
| South Atlantic Division | 23,667 <br> 31619 | ${ }^{27}{ }^{27} 741$ | 51,408 68,673 | 10, 12,288 14.680 | 15,406 20,952 20 | 25,684 3563 35 | 1,071 | ${ }_{206}^{211}$ | 1,282 | 143 <br> 186 | 295 <br> 159 <br> 1 | ${ }_{315}^{438}$ | [11,492 | ${ }_{\text {15, }}^{1512} \mathbf{2 1 2}$ | ${ }_{37}^{27}$, |
| North Central Division | 128,021 | 164,497 | 292,518 | ${ }_{98,691}$ | 140,370 | 239,061 | 1,100 | 721 | 1, 1,821 | 763 | 1,010 | 1,773 | 100,554 | 142, 101 |  |
| Western Division .... | 15,974 | 21,367 | 37,341 | 9,912 | 15,225 | 25,167 | 1,322 | 1,109 | 2,431 | 58 | 71 | 129 | 11,322 | 16,405 | 27,727 |






















Table 39.-Distribution of secondary students in public and private institutions of all classes reporting to the United Slates Bureau of Education for the

| State or Territory. | Total public and private secondary students. |  |  | In public institutions. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | In public high sehools. |  |  | In preparatory departments of public universities and colleges. |  |  | Scoondary students in public normal schools. |  |  | Total public secondary students. |  |  |
|  | Malc. | Female. | Total. | Male. | Female. | Total. | Male. | Female. | Total. | Malc. | Female. | Total. | Male. | Femalc. | Total. |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Indiana | 23,601 | 27,880 16,893 | 31,43 30,369 | 18,657 10,64 | 24, 14.321 | 42,968 25,468 | 243 0 | 103 0 | 316 0 | 43 0 | 50 | ${ }_{0}^{93}$ | 15,973 10,647 | 24.43. 14.821 | 43,407 25,468 |
| 111 inois . | 19,529 | 26,738 | 46, 267 | 14,573 | 22,546 | 37,119 | 132 | 47 | 179 | 97 | (0) | 157 | 14, 80: | 22, 653 | 37, 455 |
| Michigan | 12, 53.2 | 16,6:41 | 29, 193 | 11,574 | 15,572 | 27,146 | 0 | 0 | 0 | 0 | 0 | 0 | 11,574 | 15,572 | 27,146 |
| Wisconsin | 9, 119 | 10, 816 | 19,935 | 7,566 | 9,982 | 17,548 | 0 | 0 | 0 | 13 | 99 | 42 | 7,579 | 10,011 | 17,590 |
| Minnesota | 6,101 | 8,078 | 14,179 | 4,862 | 7,002 | 11,861 | 0 | 0 | 0 | 0 | 0 | 0 | 4,862 | 7,002 | 11,864 |
| Iowa. | 14,242 | 18,922 | 33, 161 | 11,193 | 16, 206 | 27, 399 | 95 | 3 t | 129 | 7 | 60 | 137 | 11,365 | 16,300 | 27, 665 |
| Missouri | 13,031 | 16,446 | 29,480 | 7,723 | 11,801 | 19,521 | 0 | 0 | 0 | 52\% | 802 | 1,330 | 8,251 | 12, 603 | 20, 85-1 |
| North Dakota | 731 | 1,022 | 1,756 | 403 | 599 | 1,004 | 188 | 263 | 451 | 0 | 0 | 0 | 593 | 862 | 1,455 |
| South Dakota | 1,335 | 1,558 | 2,893 | 788 | 1,083 | 1, 871 | 212 | 158 | 370 | 5 | 9 | 14 | 1,00й | 1,250 | 2,255 |
| Nebraska. | 6, 480 | 9,462 | 15, 942 | 5; 391 | 8,198 | 13, 592 | 140 | 96 | 236 |  |  |  | 5,534 | 8,294 | 13,828 |
| Kansas. | 7,818 | 10,085 | 17, 903 | 5,279 | 8,279 | 13,558 | 90 | 20 | 110 |  |  |  | 5,369 | 8,299 | 13,668 |
| Western Division: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Montana. | 681 | 826 241 | 1,507 433 | 433 | 559 151 | 992 <br> 269 <br> 69 | $\begin{array}{r}178 \\ 39 \\ \hline\end{array}$ | 143 4.2 | 321 81 81 | 27 | 33 | 60 | ${ }_{1}^{6: 38}$ | 735 193 | 1,373 350 |
| Colorado | 2,696 | 3,623 | 6,319 | 2,242 | 3,215 | 5,457 | 166 | 189 | 355 |  |  |  | 2,408 | 3,404 | 5, 812 |
| New Mexico | 292 | 298 | ${ }^{590}$ | 60 | 116 | 176 | 176 | 99 | 275 | 25 | 31 | 56 | 261 | 246 | 507 |
| Arizona | 288 | 329 | 617 | 55 | 117 | 172 | 20 | 20 | 40 |  |  |  | 75 | 137 | 212 |
| Utah. | 1,773 | 1,819 | 3,592 | 366 | 575 | 941 | 459 | 377 | 836 |  |  |  | 82.5 | 952 | 1,777 |
| Nevada | 243 | 370 | 613 | 160 | 263 | 423 | 63 | 87 | 150 |  |  |  | 223 | 350 | 573 |
| Idaho. | 281 | 347 | $6: 2$ | 129 | 225 | 35. | $6^{6} 2$ | 42 | 104 | 0 | 0 | 0 | 191 | 267 | 458 |
| Washington | 1,671 | 2,419 | 4,090 | 1,114 | 1,874 | 2,988 | 100 | 70 | 170 | 0 | 0 | 0 | 1,211 | 1,944 | 3,158 |
| Oregon..... | 1,516 | 1,980 | 3,496 | 670 | 1,107 | 1,777 | 59 | 40 0 | 93 | 6 | 7 | 13 | 735 4,595 | ${ }_{6}^{1,154}$ | 1,889 11,618 |
| California | 6,341 | 9,115 | 15,456 | 4,593 | 7,023 | 11,615 | 0 | 0 | 0 |  |  |  | 4,505 | 7,023 | 11,618 |

Table 40.-Distridution of secondary siudents in pullic and private institutions of all classes reporting to the United States Bureau of Education for the

| State or Territory. | In private institutions. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | In private high sehools. |  |  | In preparatory departments of private universities and colleges. |  |  | In preparatory departments of colleges for women. | Secondary students in private normal schools. |  |  | Seeondary students in manual training schools |  |  | Total private secondary students. |  |  |
|  | Male. | Female. | Total. | Male. | Female. | Total. |  | Male. | Female. | Total. | Male. | Fcmale. | Total. | Male. | Female. | Total. |
| United States | 51,900 | 51, 938 | 103, 833 | 28,254 | 13, 54 t | 41,798 | 5,089 | 4,380 | 3,811 | 8,191 | 4,384 | 3,978 | 7,762 | 88, 913 | 77, 760 | 166,678 |
| North Atlantic Division | 20, 797 | 18,528 | 39,325 | 5,360 | 1,091 | 6,451 | 1,203 | 285 | 275 | 560 | -2,397 | 1,739 | 4,136 | 28,839 | 22, 8:36 | 61.675 |
| South Atlantic Division | 8,94.5 | 8,738 | 17,683 | 2,760 | 1,139 | 3,899 | 1,036 | 270 | 479 | 749 | 200 | 4.37 | 637 | 12, 17.5 | 11, 822 | 21,001 |
| South Central Division | 10,335 | 10,601 | 20,936 | 4,755 | 3,003 | 7,758 | 1,548 | 619 | 525 | 1,14 | 76 | 60 | 136 | 15,785 | 15,737 | 31,52:2 |
| North Central Division | 9,687 | 10,953 | 20,640 | 13,548 | 7,172 | 20,720 | 1,131 | 3,126 | 2,412 | 5,568 | 1,106 | 698 | 1,804 | 27,467 | [2, 396 | 49,863 |
| Western Division..... | 2,130 | 3,118 | 5, 254 | 1,831 | 1,139 | 2,970 | 171 | 80 | - 90 | 170 | 605 | 44 | 1,049 | 4,652 | 4,932 | 9, 61 |
| North Atlantic Division: | 1,193 | 1,383 | 2,581 | 0 |  |  |  | 83 | 82 | 105 |  |  |  |  |  |  |
| New Hampshir | 1,560 | 1,885 | 2,445 | 20 | 0 | 20 | 0 |  |  |  |  |  |  | 1,580 | ${ }^{1,085}$ | 2,405 |
| Vermont | 670 | 676 | 1,346 | 0 | 0 | 0 | 0 |  |  |  |  |  |  | 6 | 676 | 1,346 |
| Massachusetts | 3,018 | 2,536 | 5,551 | 379 | 17 | 390 | 15 |  |  |  |  |  |  | 3,397 | 2,518 | 5, 265 |
| Rhode Island | 1234 | 280 | 51. | 0 | 0 | 0 | 0 |  |  |  | 565 | 602 | 1,167 | 799 | 882 | 1,681 |
| Connecticut | 1,166 | 1,322 | 2, 158 | - | 0 | 0 | 19 |  |  |  |  |  |  | 1,166 | 1,322 | ${ }^{2}, 488$ |
| New York | 5,040 | 5.812 | 10,88. | 2,962 | 616 | 3,578 | 519 | 83 | 92 | 180 | 1,616 | 1,058 | 2,674 | 9,706 | 8,127 | 17, $83: 3$ |
| New Jersey.. | 1,936 | 1,559 | 3,486 | 427 | 39 | 466 | 33 |  |  |  | 30 |  | 109 | 2,393 | 1,701 | 4, 091 |
| Pennsylvania -...... | 5,930 | 4,019 | 10, 029 | 1,572 | 419 | 1,991 | 412 | 114 | 101 | 215 | 186 | 0 | 180 | 7, 853 | 4,981 | 12, 833 |
| Delaware | 119 | 101 | 220 | 0 | 0 | 0 | 0 |  |  |  | 35 | 0 | 35 | 151 | 101 | 25 |
| Maryland | 874 | 1, 101 | 1,95 | 515 | 79 | 624 | 11.1 | 0 | 0 | 0 |  |  |  | 1, 419 | 1,294 | 2, 713 |
| District of Coltmbla | 230 | 507 | 737 | 356 | 0 | 356 | 0 | 0 | , | 0 |  |  |  | 586 | 507 | 1,093 |
| Virginia. | 1,675 | 1,035 | 3,310 | 135 | 83 | 223 | 322 | 151 | 152 | 396 | 115 | 65 | 180 | 2,079 | 2, 262 | 4,341 |
| West Virginia | 2.35 | 838 | -593 | 9 | 15 | 24 | 19 | 31 | 18 | 49 |  |  |  | 27.5 | 410 | -685 |
| North Carolina | 3,187 | 2, 462 | 5,649 | 6.51 | 347 | 993 | 255 | 0 | 143 | 143 | 50 | 372 | 422 | 8,888 | 3,579 | 7,467 |
| South Carolin | 779 | 575 | 1,354 | 4.12 | 302 | 74 | 112 | 31 | 102 | 136 |  |  |  | 1,255 | 1.091 | $\cdots, 316$ |
| Georgia... | 1,828 | 1, 8107 | 3,695 | 470 | 187 | 657 | $<14$ | 3 | ${ }^{6}$ | 11 |  |  |  | -2,306 | 2,274 | 4, 580 |
| South Central Division: | 18 | 132 | 150 | 152 | 121 | 273 | 0 | 43 | 53 | 101 |  |  |  | 213 | 011 |  |
| Kentucky | 1,565 | 1,512 | 3,077 | 970 | 743 | 1,713 | 238 | 96 | 116 | 212 |  |  |  | 2, 631 | 2,699 | 5,240 |
| Tennessee | 2,816 | 2,689 | 5.505 | 1,520 | 899 | 2,419 | 374 | 35. | 215 | 599 |  |  |  | 4,690 | 4, 207 | 8,897 |
| Alabama | 1,312 | 1,052 | -2,364 | 2191 | 152 20 | 371 | 181 | 7.7 | 41 | 121 | 15 | 0 | 16 | 1,551 | 1,426 | 2,980 2,987 |
| Louissiani | 1, 530 | 1, 101 | 1,210 | 101 | 152 | 121 | 52 | 7.) | 49 | 12 |  |  |  | 1, 811 | 1,923 | 2,953 |
| Texas | 1,986 | 2, 633 | 4,619 | 1,211 | C17 | 1,361 | 122 | 20 | 21 | 41 |  |  |  | 3,220 | 3,423 | (6, 613 |
| Arkansas. | 777 | 075 | 1,452 | 303 | 251 | 507 | 50 | C7 | 53 | 120 |  |  |  | 1,147 | 1,032 | 2,179 |

TAble 40.-Distribution of secondary students in public and private institutions of all classes reporting to the United Siates Bureau of Education for the


Table 41.--Number of secondary students to each 1,000 inhabitants in each State in 1899; also number of students in higher cducation to each 1,000 of population.

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Table No. 42.—Statistics of public high schools in the United States for the scholastic year 1898-99—Continued.


Table No. 42.-Statistics of mulic high schools in the United Slates for the scholastic year 1898-99—Continued.


Table No．42．—Statistics of public high schools in the United States for the scholastic year 1S98－99—Continued．

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TAble No. 42.-Statistics of public high schools in the United States for the scholastic year 1898-99-Continued.


Table No．42．—Statistics of public high schools in the United States for the scholastic year 1898－99－Continued．

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| 349 | St．August | High School | J．W．McClung |
| 350 | Sanford | ．．．．do．＊ | Samuel M．Tuc |
| 351 | Spring Lak | do | E．B．O＇Berry |
| 352 | Starke．．．． | Bradford County High School． | A．Hereules．． |
| 353 | Tampa ．．．．．． GEORGIA． | Hillsboro County High School． | B．C．Graham |
| 354 | Adairsvill | High Schoo | J．R．Conner |
| 355 | Adel | Institute． | W．T．Daniel |
| 356 | Albany | Academy | S．R．de Jarnett |
| 357 | Alpharet | High School | J．R．Trammell，L．I．，A．B |
| 358 | Amason | High School（Union）＊．．． | Miss Mary Lightfoot．．． |
| 359 | Americ | Furlow High School ．．．．． | N．C．Miller ．－ |
| 360 | do | McKay Hill School（col－ ored）．＊ | C．A．Catledge |
| 361 | Athens | West Broad High School （colored）． | J．A．Bray，A．B． |
| 362 | Atlan | Boys＇High School＊．．．．． | W．M．Slaton |
| 363 |  | Girls＇High School | Miss Nettie C．Sergcant． |
| 364 | Augusta | Tubman High Schoo | John Neely |
| 365 | Austell | High School＊ | G．T．McLart |
| 366 | Bainbridg | ．．．．．do．${ }^{\text {＊}}$ ．．． | G．B．Toole． |
| 367 | Baldwinville | Academy | Miss Rosa V．Caldwell． |
| 368 | Ball Ground | High Schoo | C．L．Gunnels，A．B |
| 369 | Bethlehem | ．．．．do | John H．Breedlove |
| 370 | Blakely | Military Instit | James E．Dunn，C．E |
| 371 | Brooks Station | High School＊ | A．S．Hutchinson ． |
| 372 | Brunswiek | Glynn High Sc | Mrs．Minnie L．Parker． |
| 373 | Buford | High School＊ | Jas．M．Pitner，A．B |
| 374 | Carrollton | High School | Mrs．T．B．Slade |
| 375 | Cartersville | ．．．．do | Miss Lena Ford |
| 376 | Cedartown | ．．．．．do | H．L．Sewell |
| 377 | Chauncey |  | Sam P．Aiken． |
| 378 | Clarkston． | do | Miss Bessie Tu |
| 379 | Coleman | do | L．O．Freeman |
| 380 | Columbus | do | J．T．Alderman |
| 381 | Concord | Middle Georgia Institute． | W．G．Brown |
| 382 | Cordele | High School．．．．．．．．．．．．．．．．． | R．J．Prentiss |
| 383 | Covington | ．．．do ．． | W．C．Wright |
| 384 | Crawford． | Academy＊ | Harry F．Pitt |
| 385 | Culloden | Institute＊ | C．G．Power ． |
| 386 | Duluth | Academy | H．L．Brock，A．B |
| 387 | Dunn | Pleasant VallcyAcademy＊ | J．T．Leamon，B．S |
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| 389 | Fairburn | Institute | John E．Pendergr |
| 390 | Flowery Bran | Academy | Allen Wilder．．． |
| 391 | Fort Gaines | High School． | W．T，Kcese． |

Table No. 42.-Statistics of public high schools in the United States for the scholastic year 1898-93-Continued.



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Table No．42．－Statistics of public high schools in the United States for the scholastic year 1898－99—Continued

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Table No. 42.—Statistics of public high schools in the United States for the scholastic year 1898-99—Continued.


Tabre No. 42.-Siatistics of mublic high schools in the Cnited States for the scholastic year 1895-39-Continued.







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Table No. 42.—Statistics of public high schoots in the United States for the scholastic year 1898-93-Continued.


TABLE TO. 42.-Statistics of pubic high schools in the Thited States for the scholastic year 1898-99-Continued.


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 ED 99－vOL II－－ 121Table No. 42.—Statistics of public high schools in the United States for the scholastic year 1898-90—Continued.






Table No．42．—Statistics of public high schools in the United States for the scholastic year 1898－99——ontinued．

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 A．E．Bond．．．
G．C．Powers．
E．J．Klewelyn

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Table No. 12.—Skatistics of public hioh schools in the Linited Siales for the scholastic year 189S-90—Continued


Table No. 42.-Slatistics of public high schools in the Chited States for the scholastic year 1898-99-Continued.


Table No. 42.-Statistics of public high schools in the Cnited States for the scholastic year 1898-33-Continued.


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Table No. 12.—Statistics of public high schools in the Thited States for the scholastic year 1898-99—Continued


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Table No. 42.-Siatistics of public high schools in the United Staies for the scholastic year 1898-99—Continued.


Table No．42．—Statistics of public high schools in the United States for the scholastic year 1898－99—Continued．

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Table No. 42.—Statistics of public high schools in the United States for the scholustic year 1898-99—Continued.


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Tabli: No. 12.-Statistics of public: high schools in the United States for the scholastic year 1898-99-Continued.


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Table No. 42.-Statistics of public high schoots in the United States for the scholastic year 1898-99-Continued.



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Table No．42．－Statistics of public high schoots in the Unitad Siates for the scholastic year 189S－33—Continued．

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Table No. 42.-Statistics of public high schoots in the United States for the scholastic year 1898-99-Continued.


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Table No. 42.-Statistics of public high schools in the United Siates for the scholastic year 1898-99—Continued.


Table No．42．－Statistics of public high schools in the United States for the scholastic year 189S－99—Continned．

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Table No. 42.-Stutistics of public high schools in the Unifel States for the scholastic year 1898-92—Continued.


Table No. 42.-Stutistics of mublic high schools in the United States for the scholastic year 189S-99—Continued




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Table No. 42.-Statistics of public high schools in the United States for the scholastic year 1898-99-Continued.


Table No．42．－Statisties of mulic high schools in the United Slates for the scholastic year 1898－99－Continued．

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Table No．42．－Statistics of public high schools in the United States for the scholastic year 1898－99－．－Contimmed．

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Table No. 42.—Statistics of public high schools in the United States for the scholastic year 1898-99—Continued.


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Table No. 42.-Statistics of public high schools in the United Slates for the scholastic year 1898-99-Continued.

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| Sandlake | IIigh School............ |
| Saugatuck | . . . . do . . . . . . . . . . . . . . . . |
| Sault Ste. Ma | do |
| Schoolcraft. | . d 0 |
| Shelby | Unon School. |
| Sheridan | High School............. |
| South Frank | . . . . do . . . . . |
| South Haver | .do |
| South Lyon | Union School. |
| Sparta. | Higll School. |
| Springlake | ..... do ...... |
| Springport | .do |
| Stephenson. | . 10 |
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| Stockbridge | . 10 |
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[^47]Table No．42．—Statistics of public high schools in the United States for the scholastic year 1898－93—Continued．

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Taple No. 42.-Statistics of public high schools in the United States for the scholastic year 1898-99-Continued.




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| 2653 | Harrison Station | High Sehool | A. M. Beamehamp |
| 2654 | Hattiesburg | Graded Seh | F. F. Phillips, supt |
| 2655 | Hickory | . do | J. L. Taylor . |
| 2656 | Holly Springs | Normal Insti | W. A. Anderso |
| 2657 | Houlka..... | High Sehool | Jas. W. Beard |
| 2658 | Tuka | Collcgiate Hi | John Neuhardt, A. |
| 2659 | Jacinto | High Sehool | J.R. Reynolds |
| 2660 | Jackson | ....do. ${ }^{\text {d }}$ | J. C. Hardy |
| 2661 | do | Graded School (colored).. | J. A. Martín |
| 2662 | Jcfierson | High School \% . | T.F. Abernethy |
| 2663 | Kilmichael | ...-do | Vernom D. Rowe |
| 2664 | Kosciusk | .do | G. F. Poyd |
| 2665 | Lafayctte Springs | Collcgiate Institute | Gilmer and Spradling. |
| 2666 | Laurel.......... | Normal High School | J. W. Copeland. |
| 2667 | Lena | Harmony Baptist Institutc. | J. F. Cadenhead and M. P. Hendrick. |
| 2668 | Longtown | Ifigh School* | P. Watt Lanier |
| 2669 | Lumberton | -do | H. W. Forman |
| 2670 | Maeon | . .d | Charles H. Spe |
| 2671 | Magnoli | d | W. H. Rowan |
| 2672 | Marictta | Normal Institute | W. A. Simmon |
| 2673 | Masengal | Fellowship Institute* | J.T. Hoscy |
| 2674 | Meridian | Whitfield High School | Prof. D. C. Hu |
| 2675 | Miller | Training School* | C. N. Craig |
| 2676 | Monticello | Aeadcmy | Leon Tyro |
| 2677 | Mount Plcasant | High Sch | C. H. Curd |
| 2678 | Myrtl | Aeademy | K.S.Archer |
| 2679 | New Alba | High Sehool | Jno. H. Mitcl |
| 2680 | Oakland. | Graded Sehoo | II. W. Sanden |
| 2681 | Ocean Spri | High School | Q.D.Sauls |
| 2682 | Okolona | Graded School | W. D.Shue |
| 2683 | Olivebranc | High Sehool* | Harper Johnson and Clyde Johnson. |
| 268.1 | Oxifo | Grade | R. H. Mester |
| 2685 | Pickens | - - - | A. N. Grafton |
| 2686 | Poplarville | High School | V. I. Thames |
| 2687 2688 | Port Gibson | Graded Sehool No. 1 (colored). | A. M. Addison |
| 2688 |  | Graded School No. 2 | J. M. Taylor. |
| 2689 | Potts Cam | Reid's Institute | W. M. Sanders |
| 2690 | Purvis | High School | Wiilard Bond |
| 2691 | Raymond | Graded Sehool | IIiss Jennie D. Bab |
| 2692 | Sardis. | Panola High Sehool (colored). | John A. Spain |
| 2693 | Scranton | High Sehool . . . . . . . . . | H. F. Fisher |
| 269.1 | Senatobia | High School for Boys. | C. B. sisler. |
| 2695 | Silvercreek | Lawrenee County High School. | II. L. MeLau |
| 2696 | Starkville | Iigli Selnool.. | J. IH. Yoodard |

Table No. 42.-Statistics of public high schools in the United States for the scholastic year 1898-99—Continued.


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|  | John W. Richardson. |
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|  | Alfred Page |
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|  | J.R. Hale ...... |
|  | Chas. H. Hitch born |
|  | Isaae H. Hughes. |
|  | L. N. Gray |
|  | Prof. D.T.Gentry |
| Summer High School (colored). | C. G. Williams . |
| High School............... | W. J. Rowley |
| do. | J. H. Eckleber |
| do.* | E. C.Orr |
| do .................. | J. U. White |
| Elliott High School (colored). | J. H. Smith |
| High School..... | C. L. Buckmaster |
| do | W. A. Wilkinson |
| Central High School * | John Kirkpatrick |
| High School* | J. F. Starr. |
| do.* | J. A. Woodford |
| do | Geo. R. Sullivan |
| do | Walter L. Finks |
| Aurora High School | F. B. Owen.. |
| High School | Miss Bertha L. Ensign. |
|  | A. O. Moore |
| 7...do................... | Mrs. A. R. Quisenberry. |
| Lincoln High School (colored). | J. Thos. Payne .-....... |
| High School. | A. A. Antles. |
| do. | Edwin Gray |
| do.* | I.W. Wingo |
| do.* | W. A. Muir. |
| .do | A. R. Boone |
| Central High School .... | J. W. Barton |
| Garrison Higli Sehool (colored). | Joe E. Hėrriford |
| High School........... | I. McCutchan |
| Salem High School* | W. J. Dougherty |
| High School | R. H. Emberson |
| do | H. H. Cassell. |
| do | W. L. Cochran |
|  | G. O. Nations |
| do | D. Walker Smi |
|  | A. B. Carroll |
| do | J. A. Presso |
| do | A. R. Cobur |
|  | Mrs. W, H, Mille |

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 Breckenridge Brunswick.
 Carterville品 Centralia.. Chillicothe

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Table No. 42.-Statistics of public high schools in the United Slates for the scholastic year 1898-39--Continued.



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 Henry King ...
L. Donaldson..
John U. Crosen
R. S. Douglass.
Table No. 42.—Statistics of public high schools in the United States for the scholastic year 1898-99-Continued.

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Table No. 42.-Statistics of public high schools in the United States for the scholastic year 189S-99—Continued.


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Table No. 42.—Statistics of public high schools in the United States for the scholastic year 1898-99—Continued.










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|  | J. A. Dowde |
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|  | L. W. Wimberl |
|  | Jno. R. Gray |
|  | J. F. Manlin |
|  | F.E. Mullen |
|  | P. M. Whitehe |
|  | E. D. Lehman |
|  | F. W. Montgome |
|  | E. A. Lundburg |
|  | R. Campbelle |
|  | J.T. MeKinno |
|  | G.F.Warren. |
|  | O.C. Hubbell |
|  | Joseph Sparks |
|  | W. H. Pillsbury |
|  | Mrs. Mina C. Bal |
|  | J. W. Fisher |
|  | Ed. M. Shor |
|  | Miss Eoline |
|  | E. E. Sams |
|  | E.S. Niekerson |
|  | J. I. McBrien |
|  | J. W. Nation |
|  | S.D. Nixson |
|  | C. A. Freema |
|  | M. Parsons. |
|  | W. M. Shepp |
|  | John F. Matthe |
|  | H. W. Bothwell |
|  | E. Lance Jones |
|  | T.J. Oliver. |
|  | R.V. Whitn |
|  | Miss Susey Hore |
|  | J. M. Richardson |
|  | Chas. E. Humphr |
|  | H.L. P. Hussong |
|  | Miss Emma Heat |
|  | S. P. Arnot. |
|  | J. D. French |
|  | C. W. Corey |
|  | Miss May Ho |
|  | W. H. Wagne |
|  | Miss Tina A. |

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Table No. 42.—Statistics of public high schools in the United States for the scholastic year 1898-99—Continued.




[^48]Table No. 42.-Statistics of public high schools in the Unated States for the scholastic year 1898-93—Continued.


Table No. 42. -Stutistics of public high schools in the United States for the scholastic year 1S2.-37-Continued.


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Table No. 42.-Siatistics of public high schools in the United Siates for the scholastic year 1898-99-Continued.


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 Theodore J．Green． Brother Gabricl．．． W．W．Robertson． D．M．Richards．．．． Wm．F．MeClelland
Table No. 42.-Statistics of public high schools in the United States for the scholastic year 1898-99—Continued.




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Table No. 42.-Statistics of public high schools in the United States for the scholastic year 1898-99—Continued.
















 Ezra F. Knapp..
A.J. Merrell, M.
James Harrigan
David C. Scott ..
TABLE No. 42.-Stutietics of public high schools in the United States for the scholastic year 189S-99-Continued.


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Table No. 42.-Statistics of public high schools in the United States for the scholastic year 1898-99—Continued.

|  | State and postoffice. | Name. | Principal. | Department or inde-pendent. |  |  | Students. |  |  |  |  |  |  |  |  |  |  |  |  |  | Number of volumes in the library. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Secondary students. |  | Ele-mentary students. |  | Preparing for college. |  |  |  | Graduates in 1899. |  | College preparatory dents in the class that graduated in 1899. |  |  |  |  |  |
|  |  |  |  |  |  |  | $\begin{gathered} \text { Clas- } \\ \text { sical } \\ \text { course. } \end{gathered}$ | Seicn-tific courses. |  |  |  |  |  |  |  |  |  |
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|  | 1 | 2 | 3 | 4 | 5 | ¢ | 7 | 8 |  |  | 9 | 10 | 11 | 12 | 13 | 19 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |
|  | NEW York-cont'd. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3541 | New Rochellc | High Scheol...... | Miss Ida Mr. Babcock. | Dept.. | 1 | 5 | 51 | 62 | 0 | 0 | 2 | , | 5 | 1 | 8 | 0 | 3 | 3 | 4 |  | 1,140 | \$14,100 |
| 3542 | New York | Boys' High Sehool........ | John T. Buehanan ... | pept.. | 36 | 10 | 1,600 | ${ }^{0}$ | 0 | 0 |  | 0 |  |  | 0 | 0 | 0 | 0 | 4 |  | 2, 000 |  |
|  |  | Boys and Girls High | Edward J. Goodwin ... | Dept.. | 19 | 19 |  | 726 | 0 | 0 | 133 | 48 |  |  | 0 | 0 | 0 | 0 | 4 |  |  |  |
| 3544 | do | Evening High School for | Niss Mary E. Tate. | Dept.. | 0 | 16 | 0 | 928 | 0 | 0 |  |  |  |  |  |  |  |  |  |  |  |  |
| 3545 |  | Girls' High School. | John G. Wight. | Dept.. | 1 | 37 | 0 | 1,327 | 0 | 0 | 0 | 87 |  |  | 0 | 3 | 0 | 3 | 4 |  | 500 | 140, 500 |
| 3546 |  | Harlem Evening High | Edward A. Page | Dept.. | 24 | 0 | 1,500 | ${ }^{1} 0$ | 0 | 0 |  |  |  |  | 35 | 0 |  |  | 3 |  |  |  |
| 3547 | New York Mills .- | School. Union School. | Lester G. Wauful | Dept.. | 1 | 0 | 8 | 12 | 0 | 0 |  |  |  |  | 0 | 0 |  |  | 3 |  | 1,000 | 8,500 |
| 3548 | Niagara Falls..... | High School (Fifth street) | R.A.Taylor . | Dept.. | 2 | 6 | 55 | 86 | 0 | 0 | 1 | 2 | 2 | 0 | , | , | 1 | 2 | 4 |  |  |  |
| 3549 | Nichols........... | Union School............. | Edson L. Moore | Ind... | 1 | 0 | 12 | 10 | 50 | 40 | 0 | 0 | 0 | 0 | 0 | 1 | , | 0 | , |  | 400 | 4,700 |
| 3550 | North Brockficld. | emy. <br> Union School and Acad- | Homes T. Case. | Dept.- | 1 | 0 | 20 | 10 | 40 | 30 | 0 | 0 | 0 | 0 | 0 | 2 | - | 0 | 4 |  | 700 | 4,111 |
| 3551 | North Cohocton .. | North Cohocton and Atlanta High Sehool. | Albert H. Watkins. | Dept.. | 1 | 2 | 83 | 44 | 0 | 0 | 2 | 1 | 1 | 0 | 4 | 3 | 2 | 1 | 4 |  | 683 | 9, 120 |
| 3552 | North Tarrytown. | Union School.......... | Nathan H. Dumond... | Dept. | 1 | 2 | 15 | 14 | 0 | 0 |  |  |  |  | 0 | 0 | 0 | 0 | 2 |  | 1,361 | 25, 852 |
| 3553 | North Tonawanda | High School. | Clinton S. Marsh, A. B | Dept.. | 3 | 6 | 130 | 101 | 0 | 0 | 6 | 2 | 15 | 0 | ס | 10 | 4 | 4 | 4 |  | 547 | 40,350 |
| 3554 | Northville........ | Union School | F. Johnson | Dept.. | 1 | 1 | 12 | 25 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 1 | 3 |  | 700 | 10,000 |
| 3555 3556 | Norwich.. | High School. | B. C. Van Ingen | Dept.. | 1 | 5 | 70 | 144 | 0 | 0 | 4 | ${ }_{5}^{6}$ |  |  | 8 | 15 | 4 | 6 | 4 |  | 4,000 |  |
| 3556 3557 | Norwood | . . ${ }^{\text {d }}$ do | A. W. Morehouse | Dept.. | 1 | 1 | 37 | 48 | 0 | 0 | 4 | 5 |  |  | ${ }_{5}^{0}$ | 1 | - | 1 | 4 |  | 966 | 425 |
| 3558 | Nyack O - | - Union School | Ira H. Lawton. A. H. Downey | Dept.. | 1 | 5 | 60 21 | 83 | ${ }_{66}^{0}$ | ${ }^{0} 5$ |  |  |  |  | 5 | 12 0 | 1 | 2 | 4 |  | 1,000 |  |
| 3559 | Olean | High School. | Olin W. Wood |  | 2 | 0 | 79 | 140 | 0 |  | 6 | 4 | 25 | $\because$ |  | 10 | 7 | 10 | 4 |  | 2, 800 |  |
| 3560 | Oneida | . . . do .. | Frank W.Jennings. | Dept.. | 1 | 0 | 124 | 171 | 0 | 0 | 10 | 4 | 46 | 28 | 6 | 14 | 6 | 14 | 4 |  | 5,000 | 35,862 |





Table No．42．－Statistics of mublic high schools in the United States for the scholastic year 1898－99－Continued．

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Tamen No．42．－Stutislics of public high schools in the United Siates for the scholastic year 189S－99—Continued

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|  | State and post－ office． | Name． | Principal． | $\begin{gathered} \text { ment } \\ \text { orinde- } \\ \text { pend- } \\ \text { ent. } \end{gathered}$ |  |  |  |  |  | nts． |  | as－ ise． |  |  |  |  | $\left\lvert\, \begin{gathered} \text { the } \\ \text { th } \\ \text { gra } \\ \text { ated } \\ \text { at } \end{gathered}\right.$ | $\begin{aligned} & \text { class } \\ & \text { at } \\ & \text { du- } \\ & \text { d 1u. } \\ & 99 . \end{aligned}$ | $\begin{aligned} & \text { B } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |
|  |  |  |  |  | $\begin{aligned} & \dot{\text { ® }} \\ & \stackrel{\text { ت゙ }}{2} \end{aligned}$ |  | 畄 | ¢ | $\stackrel{\otimes}{\underset{\sim}{x}}$ | $\left\lvert\, \begin{gathered} 0 \\ \text { 岂 } \\ \text { g } \\ \text { Hu } \end{gathered}\right.$ | $\stackrel{\text { 采 }}{\sim}$ |  | $\underset{\sim}{\underset{\sim}{\Xi}}$ |  | $\underset{\sim}{\approx}$ |  | $\stackrel{\text { 总 }}{\underset{\sim}{3}}$ |  |  | $\begin{aligned} & \text { u } \\ & \text { 呂 } \\ & \text { 品 } \end{aligned}$ | $\begin{aligned} & \text { 筑 } \\ & \text { ह } \end{aligned}$ |  |
|  | 1 | 2 | 3 | 4 | 5 | ${ }^{\text {di }}$ | 7 | 8 | 9 | 10 | 11 | 12 | 113 | 14 | 1 18 | 16 | 17 | 18 | 15 | 20 | 21 | 22 |
|  | оніо． |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3738 | Aberdeen． | High School． | C．F．Hanselman． | Dept．． | 1 | 0 | 13 | 12 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 2 | 2 | 0 | 3 |  |  | \＄10，000 |
| 3739 | Adamsville |  | Geo．Edgar Kreag | Dept． | 1 | 0 | 28 | 14 | 40 | 28 | 0 | 0 | 0 | 0 | 5 | 3 | 0 | 0 | 4 |  | 50 | 4，000 |
| 3740 | Akron． | ．．．do．＊ | Wilbur V．Rood． | Dept．． | 5 | 11 | 223 | 260 | 0 | 0 | 10 | 12 | 15 | 5 | 8 | 22 | 3 | 4 | 4 |  | 450 | 160，000 |
| 3741 | Albany． | do | A．II．Dixon．．． | Dept．． | 2 | 0 | 16 | 9 | 63 | 47 |  |  |  |  |  |  |  |  | 3 |  |  | 3，000 |
|  | Alliance．．．．．．．．．．． | ．do ． | d．W．Guthrie | Dept．－ | 2 | 2 | 71 | 96 | 0 | 0 |  |  |  |  | 8 | $1{ }^{1}$ |  |  | 3 |  | 2，000 |  |
| 3743 | Alpha ．．．．．．．．．．．． | Beaver Creek Township High School． | F．C．Hubbell | Dept．． | 1 | 1 | 18 | 22 | 0 | 0 | 3 | 2 | 4 | 6 | 4 | 5 | 3 | 2 | 4 |  | 320 | 4，500 |
| 3744 | Andover． | Higli School．．． | R．P．Clark． | Dept． | 2 | 2 | 52 | 53 | 0 | 0 | 14 | 17 |  |  | 2 | 7 | 0 | 3 | 4 |  | 250 | 12，000 |
| 3745 | Anna．． | ．．．do | S．E．Pearson | Dept．－ | 1 | 0 | 10 | 12 | 52 | 70 |  |  |  |  | 0 | 4 |  |  | 4 |  | 200 | 7，500 |
| 3746 | Antwerp ．． | do | J．H．Secrest | Dept． | 2 | 0 | 28 | 50 | 0 | 0 | 1 | 2 |  |  | 3 | 9 | 1 | 2 | 3 |  | 200 | 15，000 |
| 3747 | Applecreek | do | II．D．Wile | Dept．． | 2 | 1 | 21 | 15 | 43 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |  | 25 | 3，000 |
| 3748 | Arcanum． | do | W．O．Smith | Dept．． | 1 | 1 | 20 | 20 | 0 | 0 |  |  |  |  | 4 | 1 | 1 | 0 | 4 |  | 200 | 15，000 |
| 3749 3750 | Archbold． | do | C．G．Miller | Dept．． | 1 | 0 | 11 | 9 | 0 | 0 |  |  | 10 | 1 | 3 | 1 |  |  | 4 |  | 100 | 20，000 |
| $\begin{array}{r}3750 \\ 3751 \\ \hline\end{array}$ | Ashland | do | W．S．Robinson | Dept．－ | 3 | 2 | 51 | 81 | 0 | 0 | 12 | 14 | 6 | － | 11 | 16 | 6 | 8 | 4 |  | 1，200 | 30， 000 |
| 3752 | Ashley Ashabu． |  | W．E．Maddock | Dept．． |  | 0 | $\stackrel{20}{6}$ | 28 | 9 | 0 | 5 | 7 | 3 <br> 2 | 0 | 2 | 3 | 1 | 11 | 3 |  | 300 | 5,000 30 |
| ${ }_{3753}$ | Ashtabula（Sta－ tion A）． | Harbor High school | W．H．King ． | Dept．． | 1 | － | 66 33 | 70 40 | 0 | 0 0 | 0 <br> 8 | 10 | 2 | 0 | 5 | $\stackrel{11}{3}$ | 5 | $\begin{array}{r}11 \\ 3 \\ \hline\end{array}$ | 4 |  | 75 400 | 30,000 30,000 |
| 3754 | Ashville．．．．．．．．．． | Harrison Township High School． | E．C．Myers | Dept．． | 1 | 1 | 22 | 17 | 0 | 0 | 0 | 1 |  |  | 2 | 2 | 0 | 1 | 4 |  | 100 | 15，000 |
| 3755 | Athens | High School．．．．．．．．．．．．．． | Miss Kate Boyd | Dept．． | 1 | 2 | 18 | 30 | 0 | 0 | 9 | 17 |  |  |  | 3 | 3 | 3 | 4 |  | 500 | 85， 000 |
| 3756 | Attica | ．．．．do | J．Ross Hoffman | Dept．． | 2 | 0 | 20 | 27 | 0 | 0 | 3 | 2 | 2 | 0 | 3 | 4 | 2 |  | 4 |  | 350 | 12，500 |
| 3757 | Bainbridge． | do | J．A．Shanmon | Dept．． | 1 | 0 | 7 | 8 | ${ }_{0}^{0}$ | 0 |  |  |  |  | － | 0 | 0 | 0 | 4 |  | 0 | 12， 000 |
| 3758 3759 | Bairdstown | do | J．W．Insley | Dept．． | 1 |  | 9 | 11 | 13 | 12 |  |  |  |  |  |  |  |  |  |  |  | 1，500 |
| 3759 | Baltimore | ．．．do | E．C．Hedrick | Dept． | 1 |  | 24 | 18 | 33 | 67 | 0 | 0 | 1 | 0 | 4 | 2 | 1 | 0 | 3 |  | 175 | 6，000 |













Table No. 42.-Siatistics of public high schools in the Inited Sintes for the scholastic year 1898-99-Continued


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Table No. 42.-Statistics of public high schools in the Lnitcd States for the scholastic year 1898-99—Continued.


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Table No. 42.-Statistics of public high schools in the United Staies for the scholastic year 1898-99-Continued.


Tible No. 42.-S'atistis of public high schools in the Thited States for the seholastic year 1898-92-Continued.

|  | State and postoffice. | Name. | Principal. | Depart-mentor inde-pend-ent. | $\begin{aligned} & \text { Sccond- } \\ & \text { ary in- } \\ & \text { struct- } \\ & \text { ors. } \end{aligned}$ |  | Students. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  | Secondary student:. |  | Ele-mentary students. |  | Preparing for college. |  |  |  | Graduates in 1899. |  | College preparatory dents in the elass that gradu1899. |  |  |  |  |  |
|  |  |  |  |  |  |  | Classieal course. | $\begin{aligned} & \text { Scien- } \\ & \text { tific } \\ & \text { courses. } \end{aligned}$ |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | $\stackrel{\stackrel{8}{\underset{\sim}{c}}}{\stackrel{y}{c}}$ | $\begin{gathered} \dot{\oplus} \\ \stackrel{\rightharpoonup}{\tilde{\pi}} \\ \stackrel{y}{\square} \end{gathered}$ |  |  |  |  | $\frac{8}{x_{x}^{x}}$ |  | $\frac{\stackrel{0}{\pi}}{\sqrt[3]{4}}$ |  | $\underset{: \underset{\sim}{\mathrm{J}}}{\stackrel{y y}{*}}$ | $\begin{gathered} \dot{9} \\ \text { g } \\ \text { g } \\ \text { an } \end{gathered}$ | $\stackrel{\bullet}{\dddot{y y}}$ |  |  |  |  |  | $\frac{\stackrel{2}{\Xi}}{\underset{\sim}{c}}$ |  |
|  | 1 | 2 | 3 | 4 | 5 | $6^{6}$ | \% | 8 |  |  | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 12 |
|  | orio-continued. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4085 | Mentor... | Special School. District High | Frank G. Houle | Ind... | 1 | 0 | 2 | 4 | 30 | 24 | 0. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |  | 50 | \$7,000 |
| 4086 | Mesopotamia | High School.......... | E. A. Barnes |  | 2 | 1 | 12 | 13 | 33 | 23 | 1 | 2 | 1 | 0 | 0 | 3 | 0 | 2 | 3 |  | 50 | 800 |
| 4087 | Metamora ... | ...... do ........ | C. O. Castle | Dept. | 1 | 0 | 3 |  |  |  |  |  |  |  | 3 | 3 |  |  |  |  |  | 1,000 |
| 4088 | Miamisburg | ......do.* | J.C. Conway..... | Dept.. | 3 | , | 41 | 60 | ${ }^{0}$ | 0 |  |  | 1 | 3 | 2 | 11 | 1 | 3 | 4 |  | 800 | 2,000 |
| 4089 | Middleburg | Zane Township High School. | O. E. Van Voorhis | Ind... | I | 0 | 14 | 9 | 11 | 16 | 1 | 0 |  |  | 1 | 4 | 1 | 0 | 4 |  | 200 | 1,200 |
| 4090 | Middlecreek. | Middleburg High School. | J. W. Watson. | Ind... | 1 | 0 | 8 | 7 | 43 | 31 |  |  |  |  | 0 | 0 |  |  |  |  |  |  |
| 4091 | Middleficld...... | High School..... | J. E. Antram. | Dept.- | 1 | 0 | 10 | 20 | 30 | 35 | 1 |  |  |  | 3 | 4 |  |  | 3 |  | 200 | 7,000 |
| 4092 4093 | Middlepoint |  | H.F. Ireland | Dept.. | 1 | 0 | 4 | 3 | 62 | 63 | 4 | 3 | 2 | 0 |  |  |  |  |  |  |  |  |
| 4093 4094 | Middleport... Middletown. | . do | J. P. West...... | Dept.- | 2 | 0 | 21 | 46 | 0 0 | 0 | 2 | 1 |  |  | 4 | 8 |  |  | 4 |  | 100 1,000 | 40,000 40,000 |
| 4095 | Midland. | .do | T. L. H. Daggy . | Dept.. | 1 |  | 16 | 14 | 59 | 51 |  |  |  |  | 0 | 2 | 0 | 2 | 4 |  | 1, 40 | 40,000 1,800 |
| 4095 | Milan | . do.* | J. J. Houser | Dept.. | 1 | 1 | 20 | 36 | 0 | 0 |  |  |  |  | 2 | 10 |  |  | 4 |  | 100 | 15,000 |
| 4097 | Milford. | do | G. W. Witham | Dept.. | 2 | 0 | 20 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 4 |  |  | 3 |  | 100 | 10,000 |
| 4098 | Milford Center | do | J. A. Runyan | Dept.. | 1 | 0 | 20 | 25 | 0 | 0 | 1 | 2 | 2 | 2 | 4 | 5 | 1 | 1 | 4 |  | 300 | 25, 000 |
| 4099 | Millbury .. | do | D. S. Black. | Dept.. | 1 | 0 | 4 | 4 | 67 | 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |  |  | 2,500 |
| 4100 | Millersburg ..... | do | C. M. Swingle | Dept.. | 2 | 1 | 36 | 46 | 0 | 0 | 8 | , | 6 | 3 | 8 | 14 | 2 | 1 | 3 |  | 400 |  |
| 4101 | Mineral Point... | do | J. M. Richardson | Dept.. | 1 | 0 | 23 | 22 | 0 | 0 |  |  |  |  | 4 | 3 |  |  | 4 |  | 150 | 20,000 |
| 4102 | Mincral Ridge |  | J.C.York. | Dept.. | 1 | 1 | 17 | 30 | 0 | , |  |  |  |  | 0 | 2 |  |  | 3 |  | 200 | 8,000 |
| 4103 | Mincrva.. | do | O. W. Kurtz, supt | Dept.. | 2 | 0 | 28 | 30 | 0 | 0 |  |  |  |  | 3 | 3 |  |  | 4 |  | 1,000 | 20,000 |
| 4104 | Minster. | do | F. J. Boerger | Dept.. | 1 | 0 | 12 | 18 | 0 | 0 |  |  |  |  | 1 | 1 |  |  | 3 |  | 275 | 22, 000 |
| 4106 | Mogadore Monroc. |  | W.H.Anderson | Ind... | 1 | 0 | 11 | 8 | 0 | 0 |  |  |  |  | 4 | 3 |  |  | 3 |  |  | 2,800 |
| 4107 | Monroevilie. | do. | Ralph S. Leonard | Dept.. | ${ }_{2}$ | 1. | 24 | 15 | 0 | 0 | 4 | 3 | 1 | 0 | 8 | 6 | 3 | 2 | 4 |  | 325 | 32,000 |


Table No. 42.-Statistics of public high schools in the United States for the scholastic year 1898-92-Continued.



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Table No. 42.-Statistics of mablic high schools in the United States for the scholastic year 1898-99-Continued.


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Table No．42．－Statistics of public high schools in the United States for the scholastic year 1898－99—Continued．

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Table No. 42.-Statistics of public high schools in the Lnited States for the scholastic year 1898-99-Continued.






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Table No. 42.-Statistics of public high schools in the Lnited States for the scholastic year 1898-99-Continued










Table No. 42.--Statistics of public high schools in the United States for the scholastic year 1598-99-Continued.



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Table No. 42.—Statistics of public high schools in the United States for the scholastic year 1898-99—Continued




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[^49]Table No．42．—Statistics of public high schools in the United States for the scholastic year 1838－93－Continued．

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Table No. 42.-Statistics of public high schools in the United States for the scholastic year 189S-99-Continued.


Table No. 42.-Stalistics of public high schools in the United States for the scholastic year 1898-99-Continued.



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Table No. 42.-Statistics of public high schools in the United States for the scholastic year 189S-99—Continued.










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Table No.42.-Statistics of public high schools in the United Slates for the scholastic year 1898-39-Continued.


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| E．F．Clanton |
| J．V．Curlin． |
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| E．P．Thomas |
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Table No. 12.—Staisties of public high schools in the United States for the scholastic year 1898-99—Continued.


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Table No. 42.-Statistics of public high schools in the Urited States for the scholastic year 1898-99-Continued.


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Table No. 42.—Statistics of public high schools in the United States for the scholastic year 1898-99—Continued


Table No．42．－Statistics of public Thigh schools in the Inited States for the seholastic year 1893－32－Continued．

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Thble No. 42.-Statistics of public high schools in the United States for the scholastic year 1898-99—Continued


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Table No. 42.-Statistics of pritic Jigh schaols in the United Stater for the scholaslic year 1898-99-Continued.


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Table 43.-Statistics of pricate high schools, entoued uculemies, seminaries,

and other private secondary schools for the scholustic year 1898-99.


Tabin 43.-Stalistics of pricate high schools, endowed acudemies, semmarios,

and other priate secondary schools for the scholastic yeur 1898－99－Continued．

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|  |  |  | $\begin{gathered} \text { Sccond- } \\ \text { arystu- } \\ \text { dents. } \end{gathered}$ |  |  |  | Preparing for college． |  |  |  | $\begin{gathered} \text { Gradu- } \\ \text { atcs in } \\ 1899 . \end{gathered}$ |  | College preparia－ tory stu－ dents in the class that gradu－ ated in 1899. |  |  |  |  |  |  |
|  |  |  | Elen <br> tary dei | $\begin{aligned} & \text { nen- } \\ & \text { siu- } \\ & \text { its. } \end{aligned}$ | Clas－ <br> sical course． |  | Scien－ <br> tific courses． |  |  |  |  |  |  |  |  |  |  |
|  | 袻 | ｜c｜c |  |  | $\stackrel{\text { B }}{\stackrel{\text { B }}{\text { E }}}$ |  | 袻 | 它 |  |  | $\underset{\underset{y y y}{c}}{\stackrel{0}{5}}$ | $\begin{aligned} & \text { む̈ } \\ & \text { む̈ } \\ & \text { घु } \\ & \text { En } \end{aligned}$ |  | 家 |  |  |  |  | $\frac{\mathrm{J}}{\mathrm{E}}$ |  |  |
| 4 | 5 | 6 | 7 | 3 | 3 | 10 | 1214 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 14 | E0 | 22 | 32 |  |
| Nonsect． | 2 | 0 | 76 | 0 | 30 | 0 | 40 | 0 | 40 | 0 |  |  |  |  | 0 |  |  | \＄10，000 | 51 |
| Monsect．． | 2 | 1 | 20 | 4 | 15 | 3 |  |  | 15 | 4 |  | 0 | 4 | ， |  | 24 | 700 | 15，00： | 52 |
| Nonsect ．． | $\checkmark$ | 2 | 40 | 38 | 44 | 68 | 20 | 20 | 19 |  | 6 |  | 0 | 0 | 4 | 0 | 0 | 5，000 | 53 |
| Nonsect．． | 1 | 2 | 20 | 15 | 20 | 20 |  |  | 3 | 2 | 0 | 0 | 0 | 0 |  |  |  | 500 | 54 |
| Nonsect．． | 1 | 1 | 48 | 38 | 36 | 32 | 12 | 7 | 3 | 2 | 5 | 0 |  | － | 4 |  | 1，000 | 3， 000 | 55 |
| II．E．So． | 1 | 3 | 23 | 14 | 86 | 64 |  |  |  |  | 3 | 2 | 3 | 1 |  |  |  | 3，000 | 56 |
| R．C | 0 | 2 | 0 | 10 | 20 | 40 |  |  |  |  | 0 | 0 | 0 | 0 |  |  |  |  | 57 |
| Nonsect | 3 | 0 | 30 | 38 | 40 | 46 | 0 | 0 | 2 | 3 | O | 0 | 0 | 0 | － | 42 | 378 | 8，000 | 58 |
| Nonsect | 2 | 0 | 38 | 22 | 40 | 27 | 9 | 7 | 3 | 2 | 0 | 0 | 0 | 0 | 3 | 0 | 43 | 3 ，000 | 59 |
| Nonsect． | 2 | 0 | 37 | 38 | 70 | 65 | 1 | 0 | 4 | 2 | 1 | 0 | 4 | 0 | 4 | 0 | 75 | 3,000 | 60 |
| Nonsect． | 1 | 1 | 25 | 20 | 15 | 15 |  |  |  |  |  |  |  |  |  |  |  |  | 61 |
| Nonsect． | 1 | 0 | 18 | 11 | 27 | 27 |  |  |  |  | 2 | 3 | 2 | 3 |  | 0 |  |  | 6.2 |
| M．E．So．．． | 2 | 1 | 50 | 45 | 20 | 20 | 35 | 30 |  |  | 1 | 2 | 1 | 2） |  | 0 | 400 | 4，000 | 63 |
| Nonsect | 1 | 5 | 100 | 110 | 75 | 80 | 2 | 3 | 0 | 5 | 4 | 5 | 1 | 1 | 4 | 0 |  | 12，000 | 64 |
| Nonsect ．． | 1 | 0 | 17 | 12 | 32 | 21 |  |  |  |  |  |  |  |  |  |  |  |  | 65 |
| Nonsect ．． | 2 | 1 | 13 | 15 | 25 | 29 | 1 | 1 |  |  | 0 | 4 | 0 | 4 | 3 | 0 |  | 4，000 | 66 |
| $\mathrm{R} . \mathrm{C}$ | 0 | 1 | 2 | 11 | 32 | 40 | 0 | 0 | 0 | 0 | 0 | 2 | 0. | 0 |  | 0 | 700 |  | 67 |
| Nonsect－－ | 1 | 1 | 19 | 20 | 24 | 20 | 2 | 1 | 1 | 0 | 1 | 2 | 1. | 2 |  | 0 | 75 | 2，500 | 68 |
| Bapt． | 2 | 2 | 23 | 17 | 59 | 46 |  |  |  |  |  |  |  |  |  |  |  |  | 69 |
| Bapt． | 1 | 1 | 2 | 40 | 40 | 21 | 1 | 0 |  |  | 1 | 0 | 1 | 0 |  | 0 | 40 | 2，000 | 70 |
| Nonscet ．． | － | 2 | 35 | 23 | 2 | 1 | 12 | 14 |  |  | 2 | 2 | 2 | 0 | 4 | ， | 87 | 7，000 | 71 |
| M．E．SO．．． | 2 | 0 | 13 | 15 | 26 | 30 |  |  |  |  | 0 | 0 | 1 | 0 |  | 0 | 1，400 | 10，000 | 72 |
| Nonsect | 2 | 1 | 44 | 39 | 5 | 8 | 5 | 4 | 1 | 2 | － | 0 | 1 | ， |  | 0 | 500 | 2，00\％ | 73 |
| Nonsect ．． | 5 | 2 | 32 | 35 | 111 | 47 | 23 | 13 | 27 |  | 5 | 3 | 5 | 3 |  | 0 | 200 | 5，000 | 74 |
| Nonsec | 0 | 3 | 25 | 10 | 15 | 20 | 8 | 3 | 9 | 2 | 0 | 1 | 0 | 1 | 5 | 0 | 600 | 25，000 | 75 |
| Cong．．．．． | 4 | 1 | 29 | 33 | 13 | 20 | 6 | 4 | 10 | 22 | 1 |  |  |  | 4 |  | 1，400 | 15，000 | 76 |
| Nonscet | 5 | 0 | 55 | 0 | 18 | 17 | 20 | 0 |  |  |  |  |  |  |  | 55 | 1，500 | 40，000 | 77 |
| Nonsect | 3 | 0 | 19 | 20 | 60 | 65 | 2 | 3 |  |  |  |  |  |  |  | 0 | 100 | 500 | 78 |
| Friends．．－ | 1 | 2 | 29 | 37 | 24 | 45 | 0 | 0 | a |  | 9 | 4 | 0 | 1 | 4 | 0 |  | 20,000 | 79 |
| R．C ．．．．．． | 5 | 0 | 22 | 0 | 12 | 0 |  |  |  |  |  | 0 |  |  |  |  | 4，000 |  | 80 |
| Fonsect | 4 | 0 | 50 | 65 | 65 | 58 | 6 | 15 | 30 | 85 | ， | 5 | 4 | 5 | 3 | 30 | 50： | $\overline{\mathrm{j}}$ ，000 | 81 |
| R．C ．．．．．． | 0 | 4 | 0 | 17 | 42 | 30 |  |  |  |  | 0 |  |  |  | 3 | 0 | 20 |  | 82 |
| Nonsect ．－ | 3 | 0 | 28 | 0 | 19 | 0 | 1 | 0 | 17 | 0 | 8 | U | 8 | 0 | 4 | 0 | 500 | 8，U000 | 83 |
| Cong ．．．．． | 7 | 0 | 77 | 0 | 38 | 0 | 12 | （ | 40 |  | 15 | 0 | 15 | 0 | 4 | 93 | 1，200 | 150，000 | 81 |
| Monsect ．． | 5 | 0 | 45 | 0 | 5 | 0 | 0 | 0 | 45 | 0 | 16 | 0 | 16 | 0 | 4 | 0 | 5，000 | 20，000 | 85 |
| Epis ．．．．．－ | 1 | 13 | 0 | 48 | 15 | 49 | 0 | 22 |  |  | 0 | 12 | 0 | 7 | 4 | 0 | 1，800 | 35，000， | 86 |
| İ．C | 0 | 5 | 0 | 12 | 30 | 103 | 0 | 0 |  | 0 | 0 | 2 | 0 | 1 | 3 | 0 | 290 |  | 87 |
| I．C．．．．．． | 0 | 1 | 0 | 14 | 75 | 101 | 0 | 4 |  |  | 0 | 4 | 0 | 4 | 3 | 0 | 1，004 | 100，000 | 83 |
| $7 \mathrm{D} . \mathrm{Adv}$ ． | 3 | 2 | 42 | 39 | 67 | 74 | 11 | 7 |  |  | 5 | 2 |  |  |  | 0 | 612 | 42， 485 | 89 |
| Christian． | 2 | 6 | 0 | 45 | 0 | 40 |  |  |  |  | 0 | 3 | 0 | 2 |  |  |  |  | 90 |
| Nousect．． | 1 | 1 | 15 | 22 | 0 | 0 | 1 | 1 | 4 |  | 1 | 1 | 1 | 1 | 4 | 0 | 403 | 5，000 | 91 |
| Nonsect ．－ | 1 | 0 | 10 | 0 | 11 | 0 | 1 | 0 | 1 |  |  |  |  |  |  |  |  |  | 92 |
| Nonsect．． | 3 | 1 | 15 | 0 | 45 | 0 | 6 | 0 |  |  |  |  |  |  | 4 |  | 2，000 | 10，000 | 93 |
| Nonsect－－ | 1 | 5 | 0 | 80 | 0 | 23 | 0 | 5 | 0 |  |  |  | 0 |  |  | 0 |  | 15,000 | 91 |
| I．C | 0 | 3 | 0 | 50 | 75 | 50 |  |  | 36 |  |  |  | 0 | 2 | 4 |  | 100 | 1C， 000 | 95 |
| 12．C | 0 | 5 | 0 | 25 | 50 | 125 |  |  |  |  |  |  |  |  | 4 |  |  |  | 96 |
| Nonsect ．－ | 3 | 0 | 15 | 0 | 30 | 0 | 0 | 0 | 7 |  |  |  |  |  | 4 | 0 | 1，000 |  | 97 |
| Nonsect ．－ |  | 0 | 22 |  | 11 |  | 10 |  |  |  |  |  |  |  | 4 | 0 | 300 | 20， 000 | 98 |

Table 43.-Siutislics of private high schools, endoued acudemies, seminurics,

and other private secondary schools for the scholustic ypar 1898-99—Continued.

$a$ See University table for statistics of Chafiey College.

Table 43.-Statistics of private high schools, endowed academies, seminaries,

|  | State and post-uffice. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
|  | califurnia-continued. |  |  |
| 137 | Santa Clara | Notre Dame Academy | Sister Louis de Gonzagu |
| 138 | Santa Cruz | School of the Holy Cross. | Sister Mary Joseph ....... |
| 139 | Santa Rosa | Ursuline Academy of the Sacred Heart. | Mother Agatha... |
| 110 | Shorb | Academy of the Fioly Names..... | Sister Mary, superior |
| 111 | Stockton | St. Agnes Academy | Sister M. Rose |
| 112 |  | St. Mary's College | Brother Charles Aul |
| 143 | Vallej | St. Vincent's Convent School. | Sister M. Agnes.. |
| 141 | Woodland COLORADO. | Academy of the Holy Rosary.... | Sister Earbara, superior |
| 145 | Boulder | Mount St. Gertrude's Academy ... | Sister M. Marguerit |
| 146 | Canyon City | Mount St. Scholastica's Academy. | Sister M. Callista. |
| 147 | Del Norte... | The Presbyterian Collcge of the Southwest. | Rev. J. E. Weir. |
| 148 | Denve | Wolfe Hall. . . . . . . . . . . . . . . . . . . . | Lucia Olco |
| 149 | Leadville | St. Mary's School ...... | Sister M. Evangelist............ |
| 150 | Montclair $\qquad$ connecticur. | Jorvis Hall Military Academy... | Rev. H. Kay Coleman, M. A.. |
| 151 | Baltic | Academy of the Holy Fam | Sister M. Carine. . |
| 152 | Black Hiall | Black Fiall School (Boys) . | Charles G. Bartlett ...... ...... |
| 153 | Bridgeport (263 Golden Lill) | Courtland School (Girls) .-....... | Frances A. Niarble, Mary J. Miner. |
| 151 | Bridgeport (688 Park ave.) | Park Arcnue Institute. | Seth B. Jones. |
| 155 | Bridgcport ( 416 Fairfield ave.). | The University School.............. | Vincent C. Peck |
| 156 | Brookficld Center ........... |  | Frederick S . Cur |
| 157 | Cheshire..... | Episcopal Acatemy of Counccticut | E. D. Woodbury |
| 158 | Clinton | Morgan School . . . . . . . . . . . . . . . . . . | Dwight Holbrook |
| 159 | Colchester | Bacon Academy*. | James R. Tucker |
| 160 | Cornwall | The Cornwall Schoo | F. M. Megraw. |
| 161 | Laston.. | Easton Academy.. | Wm. M. Gallup................ |
| 162 | Fairfield | Frirneld Academy .-................ | Francis H. Buewer . . . . . . . . . |
| 163 | Farmington | Porter (Miss) and Dow's (Mrs.) Echool. | Miss Porter and Mrs. Dov.... |
| 161 | Greenwich | Greenwich Academy . . . . . . . . . . . . | J. H. Poot . . . . . . . . . . . . . . . . . |
| 165 | Hamden. | Hamden Hall.................... | Wm. C. Raymond . . . . . . . . . . |
| 166 | Hartiord | Mount St. Josepli's Seminary . . . . | Sister Mary Cecilia .............. |
| 167 | ITartford (1204 Asylumave.) | Woodside Seminary ............... | Sara J. Smith. |
| 168 | Lakeville..-....-.......... | The Hotchkiss School. ........ | E. G. Coy ....................... |
| 169 | -....do | The Taconic School for Giris | Eliza Hardy Lord . . . . . . . . . . |
| 170 | Lyme.. | The Boxwood Schood \%............. | Mrs. R. S. Griswold............. |
| 171 | Mystic. | Mystic Valley English and Classical Institute. | John Knight Bucklyn, LL. D. T. B. Willson. |
| 172 | New Haven. | Gile Grammar School. . . . . . . . . . |  |
| 173 | New Maven . . . . . . . . . . . . . | Hopkins Grammar School ........ | George L. Fox, rector. . . . . . . |
| 17 | New Haven (97 Whitney ave.). | Johmstone's (Miss) School.......... | Miss Mary Sibyl Johnstone. -- |
| 175 | New Haven (57 Elm st.).... | Orton and Nichols (Misses) School. | Rebecca Orton and Emily I?. Nichols. |
| 176 | New Haven (56 Hillhouse ave.). | West End Institute. | Mrs. andi Miss Cady........ |
| 177 | New Haven (33 Wall st.)... | Whedon's (Miss) School for Girls and Boys. | Susan H. Whedon |
| 178 | New Mayen (96 Mansfield st.). | Willard's (Miss) School. .-........ | Miss Charlotte A. Willard. |

and other private secondary sehoo's for the scholastic year 1898-99--Continued.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

|  | State and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
|  | convecticut-continued. |  |  |
| 150 | New London | Williams Memorial In | Colin S. Bue |
| 181 | New Milford | Ingleside School... | Mrs. Win. D. |
| 182 | d | Rectory School | H. L. Everest |
| 183 | New Preston | Upson Seminary | Rev. Henry Upson. |
| 184 | Newtown. | Newtown Academy | H. B. MacFarland, S. B |
| 185 | Norfolk | The Robbins School | Howard Willeston Carter |
| 186 | North Stonington | The Edgar Wheeler Sch | Susic M. Lindsey ......... |
| 187 | Norwalk . | Baird's (Miss) Institute. | Miss Cornelins Baird |
| 188 |  | Norwalk Preparatory Sc Norwalk University Sch | W. G. Chase |
| 190 | Norwalk Hillside | Young Ladies' Seminary | Mrs. M. E. Mead |
| 191 | Norwich (280 Broadway) | Norwich Free Academy | Robert P. Keep, Ph. D |
| 192 | Pomfret . . . . . . . . . . . . . . | Pomfret School . .................... | Wm. Beach olmstead......... |
| 193 | Putnam. | Academy of Our Lady of Perpetual Succor. | Sister M. Paula, superior...... |
| 194 | Redding | Hill A cademy - .-. .-. .-.............. |  |
| 195 | Saybrook | Shepard's (Miss) F. C., Private | Miss F.C.Shepard.............. |
| 196 | Simsburg | McLean Seminary | J. B. McLean . . . . . . . . . . . . . . |
| 197 | Stamford | The Catharine Aiken School | Mirs. Harriet Beecher Scoville Devan. |
| 198 |  | The King School. . . . . . . . . . . . . . . | Hiram U. King ................ |
| 199 | Stamford (5 and 7 Willow st.). | Low's (Miss) Boaraing and Day Scheol for Girls. | Miss Low and Miss Haywood. |
| 200 | Suffield........................ | Connecticut Literary Institution. | Marry L. Thompson |
| 201 | Wallingfor | Rosemary Hall ...................... | Caroline Runtz-Rees |
| 202 | Washington | The Gunnery ...................... | John C. Brinsmade. |
| 203 | Wateroury . | Academy of the Congregation de Notre Dame. | Siste, St. Stanislaus ............ |
| 204 |  | St. Margaret's Diocesan School.... | Mary R. Hillard |
| 205 | Watertown | Taft's School for Boys. | Horace D. Taft. |
| 206 | Westport | Staples High School .-...... | Bessie R. Taylor ..... |
| 207 | Wilton .-.. | Wilton Educational School | Charles W. Whitlock .......... |
| 208 | Woodstock ......... <br> DELAWARE. | Woodstock Academy ............. | E. R. Hall |
| 209 | Dover ............................. | Wilmington Conference Academy | Vaughan S. Collins. |
| 210 | Wilmington (4th and West sts.). | Friends School......................... | Enes L. Doan |
|  | DIStrict of collumbia. |  |  |
| 211 | Georgetown .-............... | The Linthicum Institute .......... | R. C. Balinger, curator........ |
| 212 | Washington (cor. Maryland ave. and 8th st. SW.). | Academy Immaculate Heart of Mary. | Sister Mary Wilford, O.S. D .. |
| 213 | Washington . . . . . . . . . . . . . - | Academy of the Visitation.. | Mother Mary Agnes Mathaney. |
| 214 | Washington (1342 Vermont ave. and Iowa Circle). | Chenoweth Institute. | Miss Mary D. Chenoweth..... |
| 215 | $\begin{aligned} & \text { Washington (2520-2522 13th } \\ & \text { st. NW.). } \end{aligned}$ | Columbian Seminary - .-.......... | A. T. Ramsey |
| 216 | Washington (914 14th st. NW.). | Emerson Institute . . . . . . . . . . . . . . | Charles Bedford Young |
| 217 | Washington (1811 I st.NW.) - | Friends Select School | T. W. Sidwell and Mrs. T. W. Siduell. |
| 218 | $\begin{aligned} & \text { Washington (1212-1214 14th } \\ & \text { st. NW.). } \end{aligned}$ | Gunston Institute (Girls) .......... | B. R. Mason and Mrs. B. R. Mason. |
| 219 | Washington (1312 Massachusetts ave.). | Holy Cress Academy............... | Sister M. Angelica.............. |

* Statistics of 1897-98.
and other private secondary schools for the scholastic year 1898-99-Continued.


Table 43.-Statistirs of prixate high schools, ondourd academics, semimiricis,

|  | State and post-offiee. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
| 220 | DISTRICT OF COLUMBIAcontinued. <br> Washington (1305 17th st.).. | The McDonald-Ellis Sehool. | Rev. Edwin R. Lewis, A. M., and Mrs. Rose Baldwin Lewis, A.B. |
| 221 | Washington (1100 M st. NW.). | Mt. Vernon Seminary............... | Mrs, Elizabeth J. Somers..... |
| 229 223 | Washington (822 Conneeticut ave. NW.). Washington | National Capital University....... Notre Dame Aeademy . ............. | Warren Waverly Phelan. A. M. |
| 224 | Washington (1205 Connectieut ave.). | Olney Institute . . . . . . . . . . . . . . . . . . . - | V. M. Dorsey and L. L. Dorse: |
| 225 | Washington (1409 Corcoran st.). | Putnam's English and Classical Sehool for Boys. | Wilhiam H. Putnam |
| 226 | Washington (601 East Capitol st.). | St. Cecilia's Aeademy - . . . . . . . . . . | Mother M. Augusta. . . . . . . . . |
| 227 | Washington (1310 18th st. NW.). | The University School (Bors) | Robert L. Preston, A. B. |
| 228 | Washington (3d and T sts. NE.). | Washington College for Young Ladies. | Rev. F. Mencfee |
| 229 | Washington ................ | Wayland Seminary.. | George Rice Hoyey. |
|  | FLORIDA. |  |  |
| 230 | Gainesville | Tebeau's (Miss) Doarding and Day Sehcol.* | Miss Tebear1. |
| 231 | Jacksonvi | Edward-Waters College............ | A. St. Gcorge Richardson |
| 232 | do | St. Joseph's A eademy . . . . . . . . . . . | Sister M. Claverie........ |
| 233 | Key West.... | Convent of Mary Immaeulate... |  |
| 234 | San Antonio. <br> Tampa | Holy Name Acadcmy* ${ }^{\text {co..... }}$ Convent of the Holy Names.. | Mother Bonifaee, O. $\ddot{\mathrm{S}} . \ddot{\mathrm{B}}$ |
|  | GEORGIA. |  |  |
| 236 | Arabi. . | Houston High Sehool* | J. E. Powell. |
| 237 | Athens (312 Prinee ave.) | Home Sehool for Young Ladics... | Miss Sosnowsl |
| 238 | Athens (415 Baxter st.). | Jeruel Aeademy . . . . . . . . . . . . . . . | J. H. Brown.... |
| 239 | Athens | Knox Institute........................... | L.S. Clark, A. M |
| 240 | Atlanta (99 Leonard st.) .- | Spelman Seminary <br> Washington Seminary: | Miss Harrict E.Giles Mrs. W. T Chandler |
| 241 | Atlanta (363 North are.) .- Auburn................... | Washington Seminary ............. | Mrs. W. T. Chandler ...- |
| 243 | Augusta | Aeadeny of Riehmond County | Charles H. Withrow. |
| 214 | . . . do | St. Mary's Aeademy*. | Sister Mary Peter... |
| 245 | -..do...... | Summerville Aeademy .... | Arthur Grabowskie, Pli. I). |
| 246 | Birmingham | Birmingham High Sehool* | J. O. Brand . . . . . . . . . . . . . |
| 247 | Canton | Etowah Institute | W. L. Abbot |
| 248 | Carnesville | Carnesville High Sehool* | W. H. Cobb |
| 249 | Cartersville. | W'est End Institute . . . . . . | Mrs. Florence C. Harris. |
| 250 | Cave Spring. | Hearn Institute for Boys and Girls. | Hugh H. White |
| 251 | Cedartown . | The Samuel Benediet Memorial Sehool. | ErncstM. Bcnedict, president. |
| 252 | Cleveland | Cleveland $\Lambda$ eademy*.............. | A. E. Lashley |
| 253 | Columbus | Moore's (Miss) Sehool* | Miss Ruth Moore |
| 251 | . . . . do | St. Elmo Institute .... | James J. Slade....... |
| 25.5 | . . . . do | St. Joseph's A eademy | Sister M. Berchmans |
| 256 | ....do | Wynnton College ... | J. E. MeRee. |
| 257 | Crawfordville. | Stephen's High Sehool* | Jordan H. Saniord |
| 258 | Dalton.. | MeLellan Sehool..... | J. G. MeLellan ... |
| 259 | Decatur | Agnes Seott Institute Donald Fraser High | F. H. Gaines, D. D |
| 261 | EverettSprings | Everett Springs Seminary | W.J. Moore. |
| 262 | Fairburn . | Fairburn Institute. | John E. Pendergrast. |
| 263 | Fairmount | Fairmount College.................. | Rev.J.A.Sharp. |

and other prime secondar！sehook for the scholastic yeai 1898－99－Continued．

| Religious denomina－ tion． | $\begin{gathered} \text { Sec- } \\ \text { ond- } \\ \text { ary } \\ \text { in- } \\ \text { struct- } \\ \text { ors. } \end{gathered}$ |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  | Number of volumes in library. | Value of grounds， build－ ings， furni－ ture， and sci－ entific appa－ ratus． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Second－ ary stu－ dents． |  | Elemen－ tarystu－ dents． |  | Preparing for college． |  |  |  | Gradu－ ates in 1899. |  | College prepara－ torystu－ dentsin the class that gradu－ ated in 1899. |  |  |  |  |  |  |
|  |  |  | Clas－ sical course． | $\begin{gathered} \text { Scien- } \\ \text { tific } \\ \text { courses. } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |
|  | $\underset{\sim}{\underset{\sim}{\underset{\sim}{3}}}$ | （ |  |  |  | 家 | $\frac{\stackrel{0}{3}}{\tilde{x}_{1}^{3}}$ |  | $\frac{3}{3}$ |  | 感 |  | $\stackrel{\oplus}{\underset{\sim}{c}}$ | 它 |  |  |  |  |  |  |  |
| 4 | 5 | 6 | 7 | 8 |  |  | 9 | 10 | 11 | 13 | 13 | 111 | 15 | 16 | 19 | 18 | 19 | 23 | 21 | 22 |  |
| N゙onsect | 1 | 10 | 0 | 44 | 0 |  | 0 |  |  |  |  |  |  |  |  |  | 2， 000 |  | 220 |
| Nonsect | 0 | 20 | 0 | 124 | 0 |  |  |  |  |  | 0 |  |  |  |  |  | ${ }^{2}-500$ |  | 221 |
| Nonsect．－ | 3 | 0 |  | 0 |  |  | 8 |  |  |  | 4 |  |  | 0 |  |  |  |  | 222 |
| R．，C．．．． | 0 | ， | 0 | 30 | 0 |  | 0 |  |  |  |  |  |  | ， |  |  | 4，000 |  | 223 |
| Protestant | 2 | 6 | 0 | 11 | 0 |  | 0 |  |  |  | 0 |  |  | 0 | 3 | 0 |  | \＄300 | 224 |
| Nonsect | 2 | 1 | 14 | 2 |  |  | 5 |  |  |  | 0 |  |  |  | 4 | 0 |  |  | 225 |
| R．C | 0 | 4 | 0 | 29 | 30 | 140 | 0 | 7 |  |  | 0 | 2 |  | 2 | 4 |  | 1，150 |  | 226 |
| Nonsect | 4 | 0 | 19 | 0 | 23 | 0 |  | 0 |  |  | 3 | 0 | 3 | 0 |  | 0 |  |  | 227 |
| Nonsect | 4 | 3 | 0 | 5 |  | 20 | 0 |  |  |  | 0 |  |  |  |  |  | 1，200 | 140， 000 | 228 |
| Baptist | 4 | 2 | 45 | 23 | 47 | 42 | 23 |  |  |  | 16 |  |  | 0 | 4 | 0 | 2，060 | 60，000 | 229 |
| P．E | 0 | 2 | 0 | 15 | 0 | 40 |  |  |  |  | 0 |  |  |  |  |  |  | 10，000 | 230 |
| A．M．E | 1 | 2 | 15 | 12 | 89 | 97 | 10 |  |  |  | 3 | － | 3 | 0 |  | 0 | 100 | 26，000 | 231 |
| R． C | 0 | 6 | 0 | 36 | 63 | 92 | 0 | ， | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 300 | 30，000 | 282 |
| R．C | 0 | 3 | 0 | 30 | 97 | 295 |  |  |  |  | 0 |  |  |  |  |  |  |  | 23 |
| R．C | 0 | 5 | 0 | 14 | 8 |  | 0 |  |  |  |  |  |  |  | 0 |  | 300 | 10，000 | 234 |
| I．C | 1 | 3 | 3 | 25 |  |  |  |  |  |  | 0 | 3 |  |  | 4 |  | 1，000 | 50， 000 | 2.5 |
| Bapt．． | 1 | 4 | 66 | 44 | 65 | 27 | 5 | 2 |  |  | 7 | 6 | 7 | 6 | 3 | 0 | 300 | 3，000 | 236 |
| Nonsect | 0 | 7 | 0 | 35 | 0 | 0 | 0 | 15 |  |  |  |  |  |  |  |  |  |  | 237 |
| Bapt． | 1 | 3 | 14 | 19 | 67 | 81 | 2 |  |  |  | 2 | 3 | 2 |  | 4 | 0 | 350 | 7，000 | 238 |
| Cong | 2 | 2 | 13 | 16 | 111 | 161 | 13 | 16 |  |  | 1 | 0 | 1 | 0 | ， | 0 | 150 | 5， 500 | 239 |
| Bapt． | 0 | 19 | 0 | 63 | 0 | 0 | 0 |  |  |  | 0 | 9 | 0 | 5 | 4 | 0 | 3，400 | 175， 000 | 240 |
| Nonsect | 2 | 15 | 0 | 132 | 0 | 76 | 0 |  |  |  | 0 | 13 | 0 | 2 | 1 | O | 3， 000 | 20，000 | 241 |
| Bap，t． | 1 | 1 | 20 | 30 | 25 | 26 | 10 | 20 |  |  |  |  |  |  | 1 |  | 1，000 | 10，000 | 242 |
| Nonsect | 5 | 0 | 127 | 0 | 0 | 0 |  |  | 97 |  | 5 | 0 |  |  | 4 | 127 | 32 | 50，000 | 243 |
| R．C | 0 | 4 | 0 | 32 | 0 | 153 |  |  |  |  | 0 | 5 | 0 | 3 |  |  |  | ， | 244 |
| Nonsect | 1 | 2 | 28 | 18 | 45 | 40 | 12 |  | 12 |  | 4 | 2 | 4 | 2 |  | 0 | 1，200 | 15，000 | 245 |
| II．E．So． | 1 | 1 | 17 | 24 | 33 | 30. | 3 |  |  |  | 3 | 1 | 3 | 1 |  |  | こ00 | 2，000 | 246 |
| Nonsect | 1 | 1 | 17 | 15 | 55 | 53 |  |  |  |  |  |  |  |  | 1 |  | 150 | 2，000 | 247 |
| Nonsect | 1 | 1 | 26 | 18 | 57 | 73 | 4 |  |  |  |  |  |  |  |  |  |  | 1，600 | 248 |
| Nonsect | 0 | 3 | 10 | 28 | 18 | 17 | 0 |  | 2 |  | 1 | 3 | 1 | 3 | 4 | 0 | 500 | 6， 000 | 249 |
| Papt． | 1 | 0 | 16 | 10 | 30 | 31 | 4 |  |  | 6 | 0 | 0 | 0 | 0 |  | 0 | 50 | 5，200 | 250 |
| Bapt | 3 | 2 | 51 | 30 | 33 | 22 | 1 |  |  |  | 4 | ， | 4 | 0 | 4 | 0 | 1，200 | 700 | 251 |
| Nonsect | 1 | 1 | 13 | 20 | 54 | 52 | 3 |  |  |  |  |  |  |  |  |  |  |  | 252 |
| Nonsect | 0 | 1 | 8 | 13 | 13 | 6 |  |  |  |  | 0 | 0 |  |  |  |  |  |  | 253 |
| Nonsect | 1 | 3 | 0 | 17 | 0 | 10 | 0 |  |  |  |  |  |  |  | 4 | 0 | 500 | 12，000 | 251 |
| R．C． | 1 | 2 | 0 | 17 | 50 | 18 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | ．．． | 0 | 500 | 4，000 | 25.5 |
| Nonsect | 1 | 1. | 15 | 10 |  |  | 5 | 2 |  |  | 0 | 2 |  |  | 4 | 0 | 0 | 5，000 | 256 |
| Nonsect | 1 | 1 | 42 | 14 | 34 | 38 | 42 | 14 |  |  | 0 | 0 | 0 | 0 |  | 0 | 2， 000 |  | 257 |
| Nonsect | 1 | 0 | 25 | 0 | 5 | 0 |  |  |  |  | 0 | 0 | 0 | 0 | 4 | 0 | 125 |  | 258 |
| Presb | 4 | 12 | 0 | 118 | 0 | 125 |  |  |  |  | 0 | 6 |  |  | 4 | 0 | 1，200 | 125，000 | 259 |
| Presb．．．． | 2 | 1 | 41 | 0 | 50 | 0 | 16 |  |  |  | 1 | 0 |  | 0 | 3 | 0 | 600 | 6， 000 | 260 |
| Nonsect．． | 2 | 0 | 27 |  |  |  |  |  |  |  | 4 | ， |  |  |  | 0 | 60 | 1，500 | 261 |
| Nonsecti． | 2 | 0 | 20 | 25 | 48 | 57 | 12 | 20 |  | 0 |  |  |  |  | 3 | 0 | 50 | 5，000． | 262 |
| M．E．So．．． | 1 | 2 | 70 | 70 | 53 | 47 | 5 | 0 | 0 | 0 | 2 | 2 |  | 0 | 4 | 0 |  | 5，000 | 263 |

Table 43.-Statistics of pricate high schools, endowed academies, seminaries,


[^51]and other pricate secondary schools for the scholustic year 1898-92-Continued.


Table 43.-Statistics of private high schools, endoued academies, seminaries,

\begin{tabular}{|c|c|c|c|}
\hline \& State and post-offiee. \& Name.

2 \& Principal. <br>
\hline \& 1 \& 2 \& 3 <br>
\hline \& illinois-eontinued. \& \& <br>
\hline 315 \& Anna. \& Union Aeademy of Southern Illinois. \& E. Wevel <br>
\hline 316 \& Auror \& Aurora College ..................... \& Edwin Maxey, Ph. B., LL. D.. <br>
\hline 317 \& \& Young Woman's school. (Jennings Seminary.) \& Charlotte A. Codding, superintendent. <br>
\hline 318 \& Belleville. \& Academy of the Immaculate Conception.* \& Sister M. Magdalen............ <br>
\hline 319 \& Bourbonnais \& Notre Dame Aeademy ............ \& Sister St. Mary of Merey <br>
\hline 320 \& Bunker Hill \& Bunker Hill Military Aeademy... \& S. L. Stiver............... <br>
\hline 321 \& Cairo ....... \& St. Joseph's Female Academy .... \& Sister Mary Thomas. <br>
\hline 322 \& Chicago (95 Throop st.).... \& Aeademy of Our Lady of the Saered Heart. \& Sister M. F'. Seriphiea.......... <br>
\hline 323 \& Chieago (1844 Briar plaee). \& Anable's (Miss) School for Girls. . \& Miss Sara A. An <br>
\hline 324 \& Chieago (4746 Madison ave.) \& Ascham Hall ...................... \& Kate B. Martin.. <br>
\hline 325 \& Chicago (2141 Calumet ave.) \& Dearborn Seminary.. \& Jennie F. Purington........... <br>
\hline 326 \& Chicago (Wabash ave. and 35th st.). \& De La Salle Institute ................ \& Rev, Brother Pius ............. <br>
\hline 327 \& Chieago (4670 Lake ave.)... \& The Harvard School \& J. J. Sehobinger and John C. Grant. <br>
\hline 328 \& Chieago (40 East 47th st.).. \& Kenwood Institute \& Anniee Bradford Butts....... <br>
\hline 329 \& Chicago (40 Scott st.)......- \& Kirkland Sehool................... \& Mrs. Emma S. Adams. ......... <br>
\hline 330 \& Chicago (2535 Prairie ave.). \& The Loring Sehool $\qquad$ St. Franeis Xavier Female Aend - \& Mrs. Stella Dyer Loring ...... Mother M Genevieve <br>
\hline 331 \& Chicago (283! Wabash ave.) \& St. Franeis Xavier Female Aeademy. \& Mother M. Genevieve ......... <br>
\hline 332 \& Chieago .................... \& St. Stanislaus College . . . . . . . . . . . \& Rev.J. Kruszynski, C. R <br>
\hline 333 \& Chicago (485 W. Taylor st.) - \& Seminary of the Sacred Heart .... \& Madame V. Van Dyke......... <br>
\hline 334 \& Chieago (3912 Yincennes ave.). \& Starrett's (Miss) Sehool for Girls. . \& Helen E. Starrett. . . . . . . . . . . <br>
\hline 335 \& Chieago (60 Bellevue plaee) \& University School \& Rebecca S. Rice and Mary E. Beedy. <br>
\hline 336 \& Coffeen \& Coffeen Normal School and Academy. \& Jacob L. Traylor. <br>
\hline 337 \& Crab Orchar \& Crab Orehard Aeademy .......... \& J. C. Blizzard..................... <br>
\hline 338 \& Creal Sprin \& Creal Springs College. \& Howard C. Tilton. <br>
\hline 339 \& Dakota -................... \& College of Northern Illinois ..... \& Rev. H. J. Beam, A. M . . . . . . . <br>
\hline 340
341 \& Decatur (430 E. Eldoradost.) \& St. Theresa's Aeademy.............. \& Rev. J. Murphy ................. <br>
\hline 341 \& Dixon ........................ \& Steinmann Institute and Business University. \& Charles A. Steinmann ......... <br>
\hline 342
343 \& Elgin......... \& Elgin Aeademy. Convent of Visitation \& George Newton Sleight....... <br>
\hline 344 \& Fairficld.............. \& Hayward College and Commereial Sehool.* \& Rev.J.G. Bonnel, D. D. <br>
\hline 345 \& Geneseo \& Geneseo Collegiate Institute. \& J. F. Casebeer <br>
\hline 346 \& Godirey \& Monticello Ladies' Seminary . .... \& Harriet W. Haskell <br>
\hline 317 \& Joliet. \& St. Franeis Aeademy . . . . . . . . . . . . \& Sister M. Stanislas Droesler <br>
\hline 348 \& - .... do .... \& St. Mary's Aeademy . . . . . . . . . . . . . \& Sister M. Canisia <br>
\hline 349 \& Kankakee.. \& St. Joseph's Seminary . . . . . . . . . . . \& Sister St. Zephyrina ............ <br>
\hline 350 \& Kenilworth \& Rugby School. ....................... \& W. A. Trowbridge, F. King Cooke. <br>
\hline 351 \& Knoxville \& St. Albans Sehool ................... \& A. H. Noyes <br>
\hline 352 \& Longwood \& Institute of Our Lady of the Sacred Heart.* \& Mother M. F. Seraphica. <br>
\hline 351 \& Marissa \& Marissa Aeadcmy................... \& C. J. Williamson <br>
\hline 355 \& Media \& Wever-Media Aeademy \& H. W. Bowersmit <br>
\hline 356 \& Mendota \& Mendota College. \& M. L. Gorden <br>
\hline 357 \& Morris .-.....ij \& St. Angela's Academy . . . . . . . . . . . \& Sister M. Jerome <br>
\hline 358 \& Mount Carroll \& Frances Shimer Aeademy of the University of Chieago. \& Wm. P. MeKee.. <br>
\hline 359 \& Mount Morris \& Mount Morris College *............. \& J. G. Royer, president <br>
\hline 360 \& Nauvoo. \& St. Mary's Aeademy ........ \& Mother M. Ótilia, O.S. B <br>
\hline
\end{tabular}

and other micate secomdery schools for the scholastic year 1898-99-Continued.


Table 43.-Statistics of private high schools, endouct acudemies, seminories,

|  | State and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | ${ }^{2}$ | 3 |
|  | illinois-eontinued. |  |  |
| 361 | Onarga | Grand Prairic Seminary | Samtel Van Pelt, A. .1 |
| 362 | Ottawa | Pleasant View Luther College | L. A. Vigness ... |
| 363 | ...do | St. Francis Xavier's Academy | Sisters of Mercy |
| 364 | Paxton | Rice Collegiate Institute. .......... | G. A. Elliot . |
| 365 366 | Peoria (cor. Madison ave. and Eaton st.). | Academy of Our Lady of the Sacred Heart. | Sister Alexandrine |
| 366 367 | Port Byron ........ Princeville | Port Byron Academy ................ <br> Prineeville Academy | Henry A. Ruger |
| 308 | Quincy ... | St. Mary's Institute | Mother M. Bonifaee |
| 369 | Springfield | Academy of Our Lady of the Sacred Heart. | Mother M. Agnes . . . . . . . . . . . . |
| 370 | Springfield (cor. 4th and Jackson sts.). | Bettie Stuart Institute . . . . . . . . . . . | Mrs. A. M. Brooks |
| 371 | Springfield ................... | Concordia Seminar | Rev. Reinhold Picper, A. B .-. |
| 372 | Sycamore.. | Waterman Hall.... | Rev. B. F. Fleetwood, D. D. .-. |
| 373 | Toulon | Toulon Academy | Lewis A. Morrow . . . . . . . . |
| 374 | Upper Alton | Western Military Academy-...... | A. M.Jackson. |
| 375 | Vermilion G | Vermilion Academy .-............. | Geo. H. Moore ... |
| 376 | Warren.-.........-...... | Warren Academy... | Elmer C. Grifnith |
| 377 | Waynesville Academy | Waynesville Academy . .-........... | W. H. Smith |
| 378 | Bloomingdale ......... | Friends' Bloomingdale Academy- | Irving King, |
| 379 380 | Borden.. | Borden Institute...................... | H.A. Buerk. |
| 380 | Bourbon | Bourbon College | J. E. Marsha |
| 382 | Culver. | Culver Military Academy | Col.A. F. Flee |
| 383 | Elkhart | Elkhart Institute . . . . . . . . . . . . . | N.E.Byers.. |
| 384 | Fairmount | Fairmount Academy and Normal School. | Elam Ḣenderson |
| 385 | Ferdinand | A eademy of the Immaculate Conecption. | Benedictine Sisters. |
| 386 | Fort Wayne | St. Augustine's Academy | Sister St. Louise |
| 387 | Indianapolis ( 633 N. Penn st.). | Classical School for Girls | May Wright Sewal |
| 383 | Indianapolis .......-........ | Kniekerbocker Hall | Mary Helen Yerkes, Susan Hill Yerkes. |
| 389 | $\begin{aligned} & \text { Indianapolis( } 1350 \mathrm{~N} . \text { Merid- } \\ & \text { ian st.). } \end{aligned}$ | St. Agnes' Academy | Sister Mary Raphael ........... |
| 390 | Lafayette(229 Columbiast.). | St. Ignatius' Academy |  |
| 391 | Laporte (1011 Ridge st.).... | St. Rose's Academy | Sisters of the Holy Cross....... |
| 392 | Lima........... | Howe School...... | Rev. John H. McKenzie . . . . - |
| 393 | Michigan City ............. | St. Mary's Academy .-.-- | Sister M. Aquinata..............- |
| 394 395 | ```New Albany (622 E. Mar- ketst.). Notre Dame``` | Holy Trinity Academy*. St. Mary's Academy. ..... | Sister Mary Emerita........... <br> Mother M. Pauline |
| 396 | Oakland City | Oakland City College ................... | W.P. Dearing. |
| 397 | Oldenburg | Immaculate Conception Academi | Sister M. Veroni |
| 398 | Plainfield | Central Academy .................. | J. Freeman Cox |
| 399 | -... do | Sugar Grove Academy ---- | William H. Pollard |
| 400 | St. Marys . | St. Mary's Academic Institure | Sister Mary Alma |
| 401 | South Bend | St. Joscph's Academy | Sister M. Ambrose |
| 402 | Spiceland | Spiceland Academy. | Murray S. Wildman |
| 403 | Vincenncs ------------- | St. Rose's Academy ..... | Sister St. Cyrilla ... |
| 404 | Vincennes (234 S. 4th st.).. | Vincennes University *............ | Alber H. Yoder. <br> Murray N. Hadley |
| 405 | Westficld INDIAN TERPITORY. | Union High School ................. | Murray N. Hadley.............. |
| 406 | Ardmore | Hargrove College | J. T. Johnson |
| 407 | Atoka... | Baptist Academy ............-......- | E. H. Rishel .... |
| 408 | Cameron | Cameron Presbyterian Institute*. | Rev. T. B. Lunsford. . . . . . . . . . |
| 409 | Chelsea. | Chelsea Academy ................... | Thomas L. Bates |

and other private secondary schools for the scholastic yeur 1S98－99－Continued．

| Religious denomina－ tion． | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | ＊Siesq！i u！somnton jo aoqumn | Valuc of grounds， build－ ings， furni－ ture， and sci－ entific appa－ ratus． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Sec- } \\ \text { ond- } \\ \text { ary } \\ \text { in- } \\ \text { struct- } \\ \text { ors. } \end{gathered}$ | Sccond－ ary stu－ dents． |  | $\begin{gathered} \text { Elemen- } \\ \text { tarystu- } \\ \text { dents. } \end{gathered}$ |  | Preparing for college． |  |  |  | Gradu－ ates in 1899. |  | College prepara－ tory stu－ dents in the class that gradu－ ated in 1899. |  |  |  |  |  |  |
|  |  |  |  | Clas－ <br> sical course． | Scien－ tific courses． |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | $\underset{\sim}{\underset{\sim}{x}}$ | ¢ | $\frac{0}{\frac{0}{6}}$ | 咸 | 家 | 盛 |  | O |  |  |  |  | $\underset{\sim}{\text { ® }}$ |  |  |
| 2 | 56 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |  |
| M．E | 6 | 145 | 140 | 0 | 0 |  |  | 12 | 10 | 8 | 9 |  |  |  |  | 1，000 | \＄45， 000 | 361 |
| Lutheran． | 30 | 22 | 12 | 87 | 31 |  |  |  |  |  |  |  |  | 3 | 0 | 200 | 30，000 | 362 |
| R．C ． | 0 － 4 | 0 | 36 | 0 | 100 |  |  |  |  | 0 | 6 |  |  |  |  | 500 |  | 363 |
| Cong | 23 | 12 | 18 | 25 | 16 | 6 | 7 | 3 | 0 | 12 | 10 | 4 |  | 3 |  | 200 | 15，000 | 364 |
| I．C | 0.2 | 0 |  | 0 | 25 | 0 |  |  | 0 | 0 | 6 |  |  | 4 | 0 |  | 150， 000 | 365 |
| Cong | 44 | 25 | 32 | 16 | 3 | 5 | ） | 6 | 8 | 1 | 2 | 1 | 2 | 3 | 0 |  |  | 366 |
| Nonscet | 13 | 20 | 19 | 10 | 3 | 3 | 4 |  |  | 4 | ， | 2 | 1 |  | 25 | 200 | 2，500 | 367 |
| R．C | $0 \quad 4$ | 0 | 36 | 0 | 150 |  |  |  |  | 0 | 4 |  |  | 4 |  | 500 | 120，000 | 368 |
| R．C | 05 | 0 | 30 | 0 | 30 | 0 |  |  |  | 0 | 0 |  |  |  | 0 |  |  | 369 |
| Nonsect ．． | 24 | 0 | 55 | 0 | 45 | 0 |  |  | 4 | 0 | 5 |  |  | 4 | 0 | 1，800 | 20，000 | 370 |
| Ev．Luth | 30 | 161 | 0 | 0 | 0 | 57 | 0 |  |  | 33 | 0 | 18 | 0 | 2 | 0 | 2，500 | 135， 000 | 371 |
| P．E．． | 010 | 0 | 65 | 0 | 33 | 0 | 10 |  |  | 0 | 8 |  |  | 4 |  | 2， 500 | 75， 000 | 372 |
| Nonsect | 13 | 23 | 35 | 0 | 0 | 4 | 4 | 2 | 6 | 1 | 8 | 1 | 4 | 4 | 0 | 200 | 20， 000 | 373 |
| Nonsect | 80 | 85 | 0 | 10 | 0 | 1 | 0 | 3 | 0 | 19 | 0 | 6 | 0 | 4 | 85 | 1， 000 | 100， 000 | 374 |
| Friends． | 10 | 20 | 28 | 12 | 18 |  |  |  |  | 5 | 4 | 2 | 3 | 3 | 0 | 400 | 5，000 | 375 |
| Nonsect | $2 \quad 2$ | 55 | 62 | 8 | 2 | 4 | 0 | 5 | 8 | 10 | 12 | 9 | 8 |  | 0 |  | 10，000 | 376 |
| Presb | 20 | 17 | 12 | 8 | 3 | 4 | 0 |  | 0 | 1 | ， |  | 0 | 4 | 20 | 50 | 5，000 | 377 |
| Friends． | 11 | 45 | 28 | 16 | 17 |  |  | 3 | 8 | 5 | 5 |  | 1 | 3 | 0 | 700 | 10，000 | 378 |
| Nonsect ．． | $5 \quad 1$ | 80 | 70 | 0 | 0 | 8 | 2 | 1 | 0 | 15 |  | 4 | 2 | 3 | 0 | 4， 000 | 25，000 | 379 |
| Nonsect | $3 \quad 3$ | 90 | 83 | 20 | 12 | 10 | 10 | 10 | 10 | 0 | 0 | 0 | 0 | 4 | 0 | 175 | 10，000 | 380 |
| R．C． | 30 | 94 | 0 | 46 | 0 | 35 | 0 |  |  | 12 | 0 |  |  | 2 | 39 |  |  | 381 |
| Nonsect | 110 | 82 | 0 | 88 | 0 | 14 | 0 | 60 | 0 | 9 | ， | 8 | 0 | 4 | 82 | 600 | 150， 000 | 382 |
| Mennonite | 6.2 | 100 | 75 | 0 | 0 |  |  | 10 | 0 |  |  |  |  | 4 |  | 400 | 9，000 | 383 |
| Friends．．． | 42 | 58 | 77 | 0 | 0 | 12 | 1 |  |  | 8 | 13 | 3 | 1 | 3 | 0 | 250 | 25，000 | 384 |
| R．C | 0 | 0 | 10 | 0 | 5 |  |  |  |  |  |  |  |  |  |  |  |  | 385 |
|  | 0 － 4 | 0 | 65 | 0 | 300 | 0 | 19 | 0 | 20 | 0 |  |  |  | 4 |  | 200 |  | 386 |
| Nonsect ．． | 012 | 0 | 60 | 7 | 53 |  |  |  |  | 0 | 10 |  |  | 5 |  |  |  | 387 |
| P．E．．．．．． | 0.6 | 0 | 25 | 6 | 45 | 0 | 10 |  |  | 0 |  | 0 | 0 | 5 |  | 1， 500 | 35,000 | 388 |
| I．C． | $0 \quad 2$ | 1 | 14 | 74 | 88 | 1 | 0 |  |  | 0 |  |  |  | 4 | 0 | 100 | 45， 000 | 389 |
| R．C | 0 1 | 0 | 24 | 135 | 106 | 6 | 0 |  | 0 | 0 | 3 |  |  | 4 | 0 | 150 | 25，000 | 390 |
| R．C | 0 | 15 | － | 6 | 36 |  |  |  |  |  |  |  |  |  | 0 | 1，000 |  | 391 |
| P．E | 70 | 43 | 0 | 21 | 0 | 3 | 0 | 11 | 0 | 4 | 0 | 3 | 0 | 4 | 43 | 2， 000 | 100， 000 | 392 |
| R．C | $0 \quad 4$ | 25 | 10 | 155 | 160 | 5 |  |  |  | 0 | 0 |  |  | 4 | 0 | 400 | 12， 000 | 393 |
| R．C | 01 | 0 | 15 | 130 | 125 |  |  |  |  | 0 | － |  |  | 4 |  | 310 |  | 394 |
| R．C | 04 | 0 | 72 | 0 | 104 |  |  |  |  | 0 | 11 |  |  | 4 |  | 4，700 |  | 295 |
| Ger．Bapt． | $4 \quad 2$ | 40 | 30 | 80 | 46 | 15 | 10 |  |  | 1 |  |  |  | 3 | 70 | 4，000 | 10，000 | 396 |
| R．C．．．．．． | 08 | 0 | 50 | 0 | 45 | 0 | 20 | 0 | 14 | 0 | 8 | － | 8 | 3 |  | 2， 100 |  | 397 |
| Friends．．． | $2 \begin{array}{ll}2 & 1\end{array}$ | 41 | 43 | 48 | 57 | 14 | 11 | 5 | 0 | 12 | 12 | 6 | 7 | 4 | 0 |  | 5， 000 | 398 |
| Friends．．． | 0 | 5 | 9 | 6 | 12 | 0 | 0 |  | 6 | 0 | 0 | 0 | 0 |  | 0 | 60 |  | 399 |
| R．C ． | 0 | 0 | 165 | 0 | 10 |  |  |  |  | 0 | 12 | 0 | 12 | 4 |  | 3， 000 | 150，000 | 400 |
| R．C．．．．．． | $0 \quad 2$ | 0 | 50 | 0 | 50 |  |  |  |  | 0 | 0 |  |  |  | 0 | 200 |  | 401 |
| Friends．．． | 31 | 58 | 66 | 12 | 14 |  |  |  |  | 2 | 4 | 2 | 3 | 3 | 0 | 2，300 | 10，000 | 402 |
| R．C ．．．．．． | 0 4 | 0 | 34 | 0 | 141 |  |  |  |  | 0 | － | 0 |  |  |  |  |  | 403 |
| Nonsect ．－ | $10 \quad 4$ | 134 | 103 | 0 | 0 |  |  |  |  | 2 | 4 | 2 | 4 | 6 | 102 | 6，805 | 30， 000 | 404 |
| Friends．．． | 11 | 11 | 20 | － | 10 | 6 |  |  |  | 4 | 1 | 4 | 1 |  | 0 | 1，000 | 10，000 | 405 |
| M．E．So．．． | 22 | 32 | 28 | 96 | 90 | 2 | 1 |  |  | 0 |  | 0 | 2 |  | 0 | 150 | 15， 000 | 406 |
| Bapt． | 1.0 | 18 | 24 | 65 | 84 |  |  |  | 24 |  |  |  |  |  |  | 300 | 8，000 | 407 |
| Presb | 1.2 | 11 | 14 | 52 | 61 |  |  |  |  |  |  |  |  | 4 | 0 | 200 | 1， 800 | 408 |
| Cum．Presb | 11 | 10 | 15 | 55 | 55 |  |  | 10 | 15 |  |  |  |  | ， | 0 |  | 4，000 | 409 |

Table 43.-Statistics of private high schools, endowed uculemies, semimaries,

and other pricate secondary schools for the scholustic year 1898-92-Continued.


Table 43.--Stutistice of pritate high sehools, endorred ractemies, seminaries,

and other private secondary schools for the scholastic year 1898-99-Continued.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

| State and post-office. | Name. | Principal. |
| :---: | :---: | :---: |
| 1 | 2 | 3 |
| Kentucky-continued. |  |  |
|  | Kentucky Home School (Gi | Miss Belle 5. |
| Louisville (cor. 4th and Breckinridge sts.). | Presentation Academy ............ | Sister Eutropia . ................. |
| Louisville ................... | St. Xavier's College . . . . . . . . . . . . . | Brother Lawrence. |
| Louisville (1225-7 $4^{\text {t }} \mathrm{h}$ ave.). | Semple Collegiate School ........... | Patty B. Semple |
| Louisville <br> Lyndon. | State University .................... | Kev. C. L. Purce, D.D . . . . . . . Col. Charles Wesley Fowler... |
| Magnolia | Classical and Normal College*... | S. A. Beauchamp .............. |
| Maysville (84th st.) | Hayswood Female Seminary .... | Miss Fannie L. Hays |
| Maysville........... | St. Frances De Sales Academy*... | Mother Francis Borgia ....... |
| Middlesbor | Middlesboro University School... | J. R. Sterrett |
| Millersburg | Millersburg Training School for Boys and Young Men. | C. M. Best, C.E................... |
| Millerstown Morganfield | Millerstown Seminary .............. <br> St. Vincent's Acadcmy | W. F. Nichols. Sister Mary Da |
| Morgantown | Morgantown Seminary | J. Elmer Turner |
| Mount Sterling | Goodwin's High School | M.J. Goodwin |
| Mount Vernon | Mount Vernon Collegiate Institute. | Rev. L. M. Scroggs . . . . . . . . . . . |
| Nazareth | Nazareth Literary and Benevolent Institution. | Mother M. Cleophas Mills.... |
|  | Mount St. Martin's Seminary ..... | Mother Maria |
| ~...do | University High School ........... | T.J. Dodd, G. H. Van Buren . |
| North Middletown | Kcntucky Classical and Business College. | M. G. Thomson |
| Owenton.. | Owenton High School .............. | Miss Martha Holbrook |
| Owingsvill | Owingsville High School *......... | C. V.Liming, A. M . . . . . . . . . . |
| Paris | Yerke's (W. L.) Private School | W.L. Yerkes. |
| Pikeville | Pikeville Collegiate Institute | Rev. Thos. M. Cornelison .-... |
| Princeton | Princeton Collegiatc Institute.... | Rev. John M. Richmond, D.D. |
| Providence. | Providence Male and Female Academy. | J. Y. Brown..................... |
| St. Joscph | Mount St. Joseph Academy ...... | Sister M. Augustine |
| St. Vincen | St. Vincent's Academy. | Sister Mary David |
| Scottsville | Scottsville Seminary................ | J. Virgil Chapman.--......... |
| Sharpsburg | Sharpsburg Male and Female College | Mrs. Fannie B. Talbot ........ |
| Shelbyville. | Science Hill School................. | Mrs. W. T. Poyn |
| Slanghtersvill | Van Horn Institute*.. | J. L. Tait.... |
| Stanford.... | Stanford Male Academy*. | Hardin Craig........... |
| Taylorsville | Spencer Institute . . . . . . . . . . . . . . . | Rev. Gco. C. Overstreet |
| Vanceburg Williamsburg | Riverside Scminary . .-............ - . Williamsbury Academy ....... | Lawrence Rolfe Charles M. Stevens |
| Williamsburg LOUISIANA. | Williamsburg Academy | Charles M. Stevens |
| Arcadia | E.A.Scminary* . | R. A. Smith .... |
| Baldwin. | Gilbert Academy .-. .-. .-. - - - - . - | Rev.A.E.P. Albert, A.M.,D.D. |
| Crowley | Acadia College........................... | J. F. Barrett |
| - ... do do.......ile | Beach's (Miss) Scliool . . . . . . . . . . . | Ellen P. Beach |
| Donaldsonville | St. Vincents' Franklinton Central Institute..... | Sister M. Clotild |
| Gibsland | Gibsland Institute *................. | J. A. Robinson, M. A |
| Grand Coteau | Sacred Heart Convent . . . . . . . . . . . | Madam H. Sarens. |
| Houma | Houma Academy*................. | D. F. Ross, A. M |
| Jackson | Feliciana F єmale Collegiate Institute. | Rev.D.O. Byers, A. M |
| Jackson | Millwood Female Institute . . . . . . | Miss A. M. C. Pearce |
| Marksville | Marksville High School ........... | V.L. Roy, B. S. |
| Monroc | St. Hyacinth's Boarding and Day School. | Sister St. Ignatius. |

and other private secondary schools for the scholastic year 1898-99-Continued.


Table 43.-Statistics of private high schools, endowed academies, seminaries, and

561
562
563

and other private secondary schools for the scholastic year 1898-99-Continued.


Table 43. -Statistices of private high schoots, endowed academies, seminaries,


[^52]and other private secondary schools for the scholastic year 1S9S-39-Continued.


Table 43.-Statistics of private high schoots, end ued academies, seminaries,

and other private secondary schools for the scholastic year 1898-99—Continued.


Table 43.-Statistics of private high schools, endowed academies, seminaries,


[^53]and other private secondary schools for the scholastic year 1898-99-Continued.


Table 43.-Statistics of prirate high schools, endowed academies, seminaries,

and other private secondary schools for the scholastic year 1898-99-Continued.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

and other private secondary schools for the scholastic year 1898-99-Continued.


Table 43.-Statistics of pricate high schools, endowed academies, seminaries,

and other private secondary schools for the scholastic year 1898－99－Continued．

| Religious denomina－ tion． | $\begin{array}{\|c} \text { Sec- } \\ \text { ond- } \\ \text { ary } \\ \text { in- } \\ \text { struct- } \\ \text { ors. } \end{array}$ |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  | -Imap ítzit!!ur u! xaqumN |  | Valuc of grounds， build－ ings， furni－ ture， and sci－ entific appa－ ratus． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Second－ ary stu－ dents． |  | Elemen． tary stu－ dents． |  | Preparing for collcge． |  |  |  | Gradu－ atesin 1899. |  | College prepara－ tory stu－ dents in the class that gradu－ ated in 1899. |  |  |  |  |  |  |
|  |  |  | Clas－ sical course． | Scien－ tific courses |  |  |  |  |  |  |  |  |  |  |
|  | 家 | ｜c｜c |  |  | 岕 | 㥻 | $\stackrel{\otimes}{\underset{\sim}{\Xi}}$ | $\left\{\begin{array}{l} \stackrel{\otimes}{c} \\ \frac{0}{\pi} \\ i=1 \end{array}\right.$ | $\frac{\stackrel{y}{3}}{\text { 岕 }}$ | 这 | 它 |  | $\frac{\underset{3}{3}}{\underset{\sim}{3}}$ | 込 |  |  |  |  | $\frac{\dot{0}}{\stackrel{0}{3}}$ |  |  |
| 4 | 5 | 6 | 7 | 8 |  |  | 5 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |  |
| Nonsect | 0 | 3 | 0 | 50 | 0 | 30 |  |  |  |  |  | 0 |  |  | 1 | 0 | 150 | \＄7， 000 | 842 |
| Nonsect | 3 | 0 | 25 | 20 | 90 | 90 | 0 | 1 | 1 | 1 | 5 | 1 | 1 | 2 | 3 | 0 | 300 | 3，500 | 843 |
| Nonsect | 1 | 0 | 22 | 12 | 45 | 49 | 5 |  |  |  |  |  |  |  |  |  |  | 2，500 | 844 |
| Nonsect | 1 | 0 | 14 | 13 | 48 | 30 |  |  | 3 | 1 | 0 | 0 | 0 | 0 | 3 |  | 250 | 1，200 | 845 |
| Nonsect | 1 | 1 | 38 | 29 | 85 | 92 |  |  | 5 | 3 | 8 |  | 4 | 2 | 3 | 0 | 400 | 2，500 | 846 |
| Nonsect | 1 | 1 | 14 | 16 | 4 | 10 | 3 | 0 |  |  |  |  |  |  | 4 |  |  |  | 847 |
| Nonsect | 1 | 2 | 14 | 16 | 19 | 20 | 3 | 5 |  |  |  |  |  |  | 3 |  |  | 4，000 | 848 |
| Presb． | 0 | 3 | 0 | 26 | 0 | 92 |  |  |  |  |  |  |  |  | 4 |  | 500 | 40，000 | 849 |
| Nonsect | 1 | 1 | 40 | 25 | 50 | 42 | 5 | 3 | 20 | 10 | 16 |  | 8 | 5 | 3 | 0 | 800 | 2，000 | 850 |
| R．C． | 0 | 1 | 0 | 14 | 37 | 54 |  |  |  |  |  |  |  | 4 | 4 |  | 1，250 |  | 851 |
| Nonsect | 3 | 1 | 31 | 28 | 34 | 17 |  |  |  |  | 5 | 7 |  |  | 4 | 40 | 400 | 3，400 | 852 |
| Nonsect | 0 | 1 | 0 | 32 | 0 | 11 | 0 | 11 |  |  |  |  |  |  |  |  | 1，200 |  | 853 |
| Nonsect | 1 | 1 | 35 | 45 | 5 | 5 | 6 | 8 |  |  | 0 | 2 | 0 | 2 | 4 |  | ］， 200 | 10，000 | 854 |
| Nonsect | 1 | 1. | 22 | 27 | 11 | 10 | 0 | 2 | 0 | 0 | 3 |  | ， | 1 | 4 |  |  |  | 855 |
| Nonsect | 5 | 0 | 45 | 0 | 38 | 0 | 0 | 0 | 4 |  | 8 | 0 | 4 | 0 | 4 | 45 | 2，000 | 60，000 | 856 |
| Nonsect | 0 | 4 | 0 | 25 | 0 | 25 | 0 | 3 | 0 | 0 | 0 | 7 | 0 | ， | 4 | 0 | 800 | 20，000 | 857 |
| Presb． | 2 | 2 | 21 | 25 | 40 | 48 |  | 5 | 4 | 2 | 4 | 5 |  |  | 4 |  | 500 | 18，500 | 858 |
| Nonsect | 1 | 1 | 12 | 14 |  |  |  |  |  |  | 2 | 2 |  |  | 4 | 0 | 490 | 12， 000 | 859 |
| Nonsect | 2 | 0 | 35 | 0 | 10 | 0 |  |  | 7 |  | 7 | 5 | 0 | － |  | 35 | 250 | 2，500 | 860 |
| Christian ． | 0 | 3 | 0 | $9 \pm$ | 0 | 13 | 0 | 10 |  |  | 0 | 5 | 0 |  |  |  | 1，200 | 30，000 | 861 |
| R．C | 0 | 4 | 0 | 22 | 0 | 78 | 0 | 0 | 0 | 8 | 0 | 8 | 0 | 8 | 4 |  |  |  | 862 |
| M．E．So． | 1 | 1 | 19 | 21 | 16 | 15 |  |  |  |  | 1 | 0 |  |  | 4 |  | 300 | 10，000 | 863 |
| Nonsect | 2 | 2 | 24 | 10 | 25 | 16 | 4 | 0 | 5 | 0 | 5 | 2 |  |  |  |  | 200 | 5，000 | 864 |
| Nonsect | 5 | 1 | 86 | 18 | 4 | 0 | 13 |  | 20 | 6 | 9 |  | 9 | 1 | 4 |  | 1，000 | 4，000 | 865 |
| R．C | 6 | 0 | 35 | 0 | 14 | 0 | 4 | 0 |  |  | 3 | 0 |  |  | ， |  | 1，500 |  | 866 |
| Ev．Luth．． | 4 | 0 | 41 | 0 | 0 | 0 | 20 | 0 | 21 | 0 | 11 | 0 | 11 | 0 | 3 | 0 | 400 | 16，000 | 867 |
| Nonsect | 2 | 1 | 20 | 29 | 13 | 14 |  |  |  |  | 7 | 1 | 3 | 0 | 4 | 0 | 400 | 7，000 | 868 |
| Nonsect | 1 | 1 | 10 | 30 | 2 | 8 | 4 | 10 |  |  | 2 | 0 |  |  |  | 0 | 500 | 5，000 | 869 |
| M．Epis | 2 | 5 | 41 | 67 | 0 | 0 |  |  |  |  | 1 | 4 | 3 | 2 |  |  | 1，328 | 25，000 | 870 |
| Bapt． | 1 | 1 | 11 | 18 | 9 | 6 |  |  |  |  |  |  |  |  | 4 | 0 | 17 | 5，000 | 871 |
| M．E．So．．． | 3 | 3 | 58 | 54 | 12 | 18 |  |  |  |  | 3 | 1 | 0 | 0 | 4 | 0 | 1，000 | 30，000 | 872 |
| Christian． | 0 | 6 | 0 | 51 |  | 75 | 0 | 10 |  |  |  | 14 |  |  |  |  | 1，000 | 40，000 | 873 |
| Bapt． | 3 | 2 | 40 | 40 | 60 | 50 |  |  |  |  | 2 |  |  |  | 4 | 0 |  | 30，000 | 874 |
| Nonsect | 2 | 0 | 22 | 20 | 20 | 10 |  |  |  |  | 8 | 0 |  |  |  |  |  |  | 875 |
| R．C | 0 | 3 | 7 | 18 | 26 | 53 |  |  |  |  | 0 |  |  |  |  |  | 500 |  | 876 |
| M．E．So | 3 |  | 105 |  |  | 0 |  |  |  |  |  | 4 | 3 | 0 | 4 | 0 | 300 | 10，000 | 877 |
| Cong ．．．．． | 1 | 3 | 40 | 35 | 0 | 0 |  |  | 10 | 8 | 0 | 0 |  |  | 4 | 0 | 2，000 | 5，000 | 878 |
| Christian． | 2 | 1. | 25 | 33 |  |  |  |  |  |  | 3 | 8 |  |  | 4 | 0 | 1，200 | 20，000 | 879 |
| Nonsect．． | 3 | 0 | 43 | 18 | 10 | 15 | 0 |  | 1 | 0 |  |  |  |  | ， |  | 400 | 11，000 | 880 |
| R．C ． | 2 | 2 | 0 | 14 | 0 | 42 | 0 |  |  |  | 0 | 1 | 0 | 1 | 4 |  | 200 | 40，000 | 881 |
| R．C | 0 | 5 | 0 | 25 | 0 | 150 | 0 | 0 |  |  |  |  |  |  | 4 | 0 | 250 |  | 882 |
| Cong ．．．．． | 2 | 2 | 50 | 60 | 10 | 3 | 10 | 8 | 8 | 12 | 8 | 7 | 4 | 5 | 4 | 0 | 1，500 | 2， 500 | 883 |
| Nonsect ．． | 2 | 1 | 32 |  | 20 | 0 | 4 | ， |  |  | 2 | 0 | 2 | 0 | 4 | 35 | 300 | 2－5， 000 | 884 |
| Nonsect ． | 1 | 0 | 7 | 9 | 9 | 10 |  |  |  |  | 0 | 2 |  |  |  |  |  |  | 885 |
| Nonsect ．． | 1. | 1 | 18 | 17 | 7 | 5 |  |  |  |  | 3 | 0 |  |  | 4 | 0 | 500 | 2，500 | 886 |
| Nonscet． | 7 | 0 | 107 | 0 | 8 | 0 | 12 |  |  | 0 | 14 | 0 | 6 | 0 | 4 | 107 | 800 | 25，000 | 887 |
| Bapt．．．．．－ | 3 | 0 | 58 | 25 | 12 | 8 | ${ }^{6}$ |  |  |  | 2 | 0 | 2 | 0 | 3 | 0 | 200 | 5，000 | 888 |
| M．Epis．．． | 4 | 1 | 47 | 36 | 4 | 0 | 8 |  |  |  | 5 |  | 5 | 2 | 4 | 0 | 500 | 8，000 | 889 |
| R．C | 0 | 2 |  | 20 | 0 | 40 |  |  |  |  |  |  |  |  | 3 |  |  |  | 890 |
| M．E．So．． | 5 |  | 204 | 190 | 0 | 0 |  |  |  |  | 13 | 15 |  |  | 4 | 0 | 1，000 | 18，000 | 891 |
| R．C ． | 2 |  | 0 | 40 | 0 | 35 |  |  |  |  |  |  |  |  |  | － | 300 |  | 892 |

Table 43.-Statistics of private high schools, endowed academies, seminariee,

|  | State and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
|  | missouri-continued. |  |  |
| 893 | Moundviile.. | Cooper College. | C. H. Miles (president) |
| 894 | Mount Vernon | Mount Vernon Aeademy | Elizabeth Park.... |
| 895 | Nevada. | Nevada Seminary*..... | Mrs. Lulu G. Elliott. |
| 896 | Odessa. | Odessa College..... | J. R. MeChesney . ............... |
| 897 | O’Fallon | Woodlawn Institute | V. T. Howison, A. M . . . . . . . . |
| 898 | Palmyra | Centenary College... | James A. Lanius . . . |
| 899 900 | Pierce City | Pierce City Baptist College* | R. D. Swain (president) |
| 900 | Platte City | Gaylord Institute......... | Mrs. S. W. Park . . . . . . |
| 901 | Portland. | Plattsburg College | S. Z. Sharp James H. Gill |
| 903 | Rensselaer | Van Rensselaer Aeademy | Miss Ayers . |
| 904 | Ríchmond | Woodson Institute*. | B. G. Shaekelford |
| 905 | St. Charles | Aeademy of the Sacred Hear | Madame Kavanagh |
| 906 | St. Joseph. | Academy of the Sacred Hear | Madame O'Meara. |
| 907 | St. Louis (Cabanne plaee) | Aeademy of the Visitation.... |  |
| 908 | St.Louis (5577 Calumet ave.). | Ball's (iIrs.) School for Young Ladies. | Mrs. Ida M, Ball . . . . . . . . . . |
| 909 | St. Louis (1607-1617 Compton ave.). | Bishop Robertson Hall . . . . . . . . . | Sister Catharine (superior)... |
| 910 | St. Louis (4296 Washington st.). | Hosmer Hall. | Miss Martha H. Mathews . . . . |
| 911 | St. Lonis . . . . . . . . . . . . . . . . | Loretto Aeademy |  |
| 912 | St. Louis (3817 Olive st) | Rugby Aeademy. | Denham Arnold. . . . . . . . . . . . |
| 913 | Et. Louis . .-................. | Smith Aeademy .-.-................ | Charles P. Curd................ |
| 914 | St. Louis (2140 and 2337 Lafayette ave.). | Toensfeldt's Edueational Institute | Johann Toensfeldt........... |
| 915 | St. Louis (South 12th st.) ... | Ursuline Aeademy and Day Sehool |  |
| 916 | St. Louis (1033 South 8th st.) - | Walther College ....................... | August C. Burgdorf............ |
| 917 | Salisbury .................... | North Missouri Institute* | G. C. Briggs and B. F. Heaton |
| 918 | Sedalia | George R.Smith College.......... | Rev.E.A.Robertson, A. M.... |
| 919 | South St. Louis (Meramec st.). | Aeademy of the Sacred Heart .... | Mother Mary Burke.......... |
| 920 | Spring Garden............... | Miller County Instituke.......... | J. I. Lumpkin.................... |
| 921 | Sweet Springs .............. | Sweet Springs Aeademy......... | J. E. Barnett . . . . . . . . . . . . . . . |
| 922 | Troy | Buehanan College. | W. F. Roberts |
| 923 | Weaubleau. | Weaubleau Christian College .... |  |
| 924 | Webb City | Webb City College..................... | J. F. Cook, A. M., LL. D. . . . . . . |
| 925 | West Plains. montana. | West Plains College................... | J. T. Outen |
| 926 | Helena . . . . . . . . . . . . . . . . | St. Vineent's Aeademr゙............ | Sister Anacleta. |
| 927 | Missoula................... NEBRASKA. | Sacred Heart Aeademy ........... | Sister Hilarion |
| 928 | Chadron. | Chadron Academy. . . . . . . . . . . . . . | Winfred Chesmer Rhoades. |
| 929 | Columbus | St. Francis Aeademy................. | Rev. M. Kollmeyer . |
| 930 | Franklin | Franklin Aeademy ...................... | Alexis C. Hart .......... |
| 931 | Grand Island. | Grand Island College ............... | George Sutherland |
| 932 | Jackson | St. Catherine's A eademy .... |  |
| 933 | Kearney . .-..................... | Kearney Military Aeademy . . . . . | E. P. Chittenden. |
| 934 | North r'latte................. | Sehool of the Nativity -............ | Sister Franeis ................. |
| 935 | Omaha ....................... | Aeademy of the Sacred Heart .... | Madame Elise Miltenberger.. |
| 936 |  | Brownell Hal ................... | Louise R. Upton .............. |
| 938 | Orleans....- | Orleans Seminary....... | C. E. Anderson..... |
| 939 | Pawnee City | Pawnee City Academy.............. |  |
| 940 | Wahoo........... . . . . . . . . . | Luther Aeademy .................... | Samuel M. Hill.... |
| 941 | Weeping Water.............. | Weeping Water Aeademy.......... | Frank C. Taylor ............... |
| 942 | York ......................... | School of the Holy Family, ........ | Superioress of Ursuline Convent. |

and other private secondary schools for the scholastic year 1898-99-Continued.


Table 43.-Statistics of private high schools, endoued academies, seminaries,


[^54]and other private secondary schools for the scholastic year 1s38－90—Continued．

| Rcligious denomina－ tion． | Sce－ ond－ ary in－ struct． ors． |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Value of grounds， build－ ings， furni－ ture， and sci－ entific appa－ ratus． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Sccond－ ary stu－ dents． |  | Elemen． tary stu－ dents． |  | Preparing for collcge． |  |  |  | Gradu－ ates in 1899. |  | College prepara－ tory stu－ dentsin the class that gradu－ ated in 1899. |  |  |  |  |  |  |
|  |  |  | Clas－ sical course． | Scien－ tific courses |  |  |  |  |  |  |  |  |  |  |
|  | 药 | ｜c｜c｜c |  |  | 完 |  | $\stackrel{\oplus}{\underset{\sim}{c}}$ | $\begin{aligned} & \dot{0} \\ & \text { む゙ } \\ & \text { g్ర } \\ & \text { Ex } \end{aligned}$ | 家 | c | 守 |  | $\frac{\underset{1}{c}}{\underset{\sim}{c}}$ |  |  |  |  |  | $\underset{\underset{\sim}{\Xi}}{\stackrel{y}{\Xi}}$ |  |  |
| 4 | 5 | 6 | 7 | 8 |  |  | ¢ | 10 | 111 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 13 | 20 | 21 | 29 |  |
| Unitarian |  | 12 | 9 | 25 | 17 | 15 | 1 | 0 |  | 0 | 0 | 1 | 0 |  | 3 | 0 | 1，471 | \＄9，000 | 943 |
| Free Bapt． |  | 01 | 7 | 6 | 10 | 7 |  |  |  |  | 0 | 0 | 0 | 0 | 4 |  | 30 | 6，000 | 944 |
| Nonsect．． |  | 1.0 | 17 | 11 | 3 | 4 | 3 | 0 | 2 | 0 | 4 | 3 | 0 | 0 | 3 | 0 |  | 4，000 | $9+5$ |
| Epis |  | 38 | 0 | 23 | 0 | 2 | 0 |  |  |  | 0 | － |  |  |  | 14 | 900 | 26，000 | 946 |
| Epis | 38 | 8.0 | 356 | 0 | 0 | 0 | 118 | 0 | 52 | 0 |  |  |  |  |  |  |  |  | 947 |
| Nonsect |  | 3 3 | 32 | 52 | 18 | 18 | 5 | 3 | 11 | 7 | 3 | 4 | 3 | 2 | 4 | 0 | 3， 927 | 65， 000 | 918 |
| R．C |  | 2.2 | 70 | 0 | 130 | 10 |  |  |  |  |  | 0 | 1 | 0 | 3 |  |  |  | 949 |
| Nonsect | 13 | 30 | 263 | 0 | 0 | 0 | 250 | 0 | 60 | 0 | 70 | 0 | 60 | 0 | 4 | 0 | 1，700 | 200，000 | 950 |
| Nonsect |  | 0 | 0 | 126 | 0 | 110 | 0 | 11 | ， | 0 |  | 28 | 0 |  |  | 0 | － 900 | 100，000 | 951 |
| Nonsect |  | 1.1 | 15 | 30 | ， | 10 |  |  |  |  |  |  |  |  |  | 0 | 300 | 3，000 | 952 |
| Cong |  | 21 | 28 | 23 |  |  | 2 | 3 | 2 | 1 | 5 | 4 | 2 | 2 | 4 | 0 | 200 | 25，000 | 953 |
| Nonsect |  | $0 \quad 2$ | 9 | 7 | 3 | 3 | 0 | 2 | 3 | 0 | 1 | 0 |  |  | 4 | 0 | 600 | 8，000 | 954 |
| Nonsect |  | 1.0 | 15 | 15 | 0 | 0 |  |  |  |  | 2 | ， |  |  | 3 | 0 | 50 | 10，000 | 955 |
| Nonsect |  | 13 | 26 | 30 | 17 | 8 | 3 | 1 |  |  | 5 | 3 | 0 | 0 | 4 | 0 | 1，600 | 70，009 | 956 |
| R．C |  | 04 | 0 | 100 | 0 | 250 |  |  |  |  |  |  |  |  |  |  |  |  | 957 |
| R．C |  | 30 | 76 | 0 | 419 | 0 | 5 | 0 | 4 | 0 | 8 | 0 | 8 | 0 | 3 |  | 560 | 20，000 | 958 |
| R．C |  | 30 | 68 | ， | 296 | 0 | 5 |  |  |  | 8 | 0 | 6 | 0 | 4 | 0 |  | 50，000 | 959 |
| Cong |  | 27 | 115 | 65 | 0 | 0 | 25 | 7 | 32 | 13 | 16 | 11 |  |  | 4 | 0 |  |  | 960 |
| Nonsce |  | $1 \quad 2$ | 27 | 24 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 1 | 0 | 1 | 4 | 0 | 2，500 | 40， 000 | 961 |
| Cong |  | 10 | 4 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 4 | ， | 900 | 35， 000 | 962 |
| R．C |  | 20 | 28 | 0 | 320 | 0 |  |  |  |  |  |  |  |  | 4 | 28 |  | 25， 000 | 963 |
| R．C |  | 0 | 0 | 10 | 0 | 43 |  |  |  |  | 0 | 3 |  |  |  |  |  | 50， 000 | 964 |
| Free Bap． |  | 56 | 105 | 93 | 14 | 6 |  |  |  |  | 10 | 19 | 8 | 0 | 3 |  | 11，000 | 30， 000 | 965 |
| Bapt． |  | 43 | 44 | 35 | 3 | 2 | 2 | 3 | 1 |  |  | 9 | 1 | 1 | 4 | 0 | 3， 700 | 25，000 | 966 |
| Cong |  | 1.2 | 33 | 30 | 3 | 0 | 1 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 4 | 0 | 850 | 10， 000 | 967 |
| Nonsect |  | 1.2 | 14 | 21 |  | 0 | 0 | 0 | 0 | 0 | 0 | ， | 0 | 1 |  | 0 | 1，600 | 5， 000 | 968 |
| P．E． |  | 40 | 30 | 0 | 5 | 0 | 21 | 0 | ， | 0 | ， | 0 | 8 | 0 | 4 | 0 | 1，700 | 45，000 | 969 |
| Nonsect |  | 12 | 13 | 15 | 4 | 3 |  |  | 2 | 0 |  | 6 | 0 | 0 | 4 | 0 | 150 |  | 970 |
| M．E |  | 5 \％ | 73 | 76 |  | 0 | 10 | 10 | 10 |  | 8 | ， | 6 | 0 | 4 | ， | 3， 000 | 75，000 | 971 |
| Nonscet． |  | 1 | 10 | 0 | 42 | 0 | 5 | 0 | 5 | 0 | 3 | 0 | 8 |  | 4 | 10 | 100 |  | 972 |
| Nonsect |  | 4 | 7.3 | 58 | 0 | 0 | 15 | 7 | 14 | 5 | 9 | 5 | 5 |  |  | 0 | 1，500 | 70，060 | 973 |
| Nonsect ．． |  | 27 | 0 | 20 | 0 | 0 | 0 | 1 |  |  |  |  |  |  |  |  |  | 12，000 | 974 |
| Nonsec |  | 1.3 | 18 | 45 | 53 | 36 |  |  |  |  | 5 | 16 |  |  | 5 | 0 |  | 20，000 | 975 |
| Presb |  | 5.5 | 62 | 54 | 11 | 1 | 20 | 5 | 50 | 41 | 11 | 5 | 10 | 1 | 4 |  | 3,000 | 200，000 | 976 |
| Nonsect |  | $8 \quad 0$ | 50 | 0 | 36 | 0 | 20 | 0 |  |  | 5 | 0 | 4 | 0 | 4 | 50 | 1，000 |  | 977 |
| Nonscet |  | 1． 3 | 0 | 15 | 0 | 10 | 0 |  |  |  |  |  |  |  | ， |  | 500 |  | 978 |
| R．C |  | 0 0 | 0 | 12 | 3 | 33 | 0 | 0 |  | 0 | 0 | 8 | 0 | 0 | 4 | 0 | 300 | 75，000 | 979 |
| Nonsect |  | 06 | 0 | 15 | 0 | 10 | 0 | 5 |  |  |  |  |  |  | 4 |  | 500 |  | 980 |
| Nonsect |  | 0.4 | 0 | 20 | 0 | 20 | 0 | 5 |  |  | 0 | 6 | 0 | 2 |  |  |  |  | 981. |
| Bapt． |  | 3 3 | 79 | 49 | 20 | 5 | 21 |  |  | 7 | 15 | 10 | 7 | 4 | 4 | 75 | 2， 500 | 150，000 | 982 |
| Presb |  | 4.1 | 59 | 0 | 4. | 0 | 25 | 0 | 30 | 0 | 15 | 0 | 15 | 0 | 4 | 59 | 2，000 | 60， 000 | 983． |
| Presb． |  | 03 | 19 | 13 | 0 | 0 |  |  |  |  | 1 | 1 | 0 | 0 |  | 0 |  |  | 984 |
| Friends． |  | 0.2 | 3 | 9 | 8 | 6 |  |  |  |  | 0 | 1 | 0 | 1 |  | 0 |  |  | 985. |
| Nonsect |  | 11 | 4 | 8 | 2 | 4 | 0 | 2 | 1 |  |  |  |  |  | 4 |  |  | 8，000 | 986 |
| Nonsect ． |  | 1.6 | 10 | 18 | 10 | 22 | 0 | 2 |  |  |  |  | 0 | 0 | 4 | 0 |  | 15， 000 | 987 |
| Nonsect ．． |  | 30 | 52 | 0 | 54 | 0 | 20 | 0 | 20 | 0 |  |  | 7 | 0 | 5 | 0 | 600 | 35， 000 | 988 |
| Nonscet ．． |  | 16 | 0 | 49 | 4 | 37 |  | 1 | 0 | 6 |  |  |  |  | 5 | 0 | 800 |  | 989 |
| Nonsect ．． |  | 0 7 | 0 | 34 | 0 | 16 | 0 | 20 | 0 | 0 | 0 | 8 | 0 |  |  | 0 |  |  | 990 |
| Nonscet ．． |  | 310 | 0 | 70 | 10 | 40 | 0 | 1 | 0 | 5 | 0 | 2 | 0 |  | 4 |  |  |  | 991 |
| Nonsect |  |  | 35 |  |  | 0 | 15 | 0 | 20 | 0 | 7 | 0 |  |  | 5 | 35 |  |  | 992 |
| R．C |  | ${ }_{0}$ | 0 | 30 | 0 | 39 | 0 |  |  |  |  |  |  |  |  |  |  |  | 993 |

Table 43.-Statistics of private high schools, endowed academies, seminarips,

and other private secondary schools for the scholastic year 1898-99-Continued.



[^55]and other private secondary schools for the scholastic year 1898－1899－Continued．

| Religious denomina－ tion． | $\begin{gathered} \text { Sce- } \\ \text { ond- } \\ \text { ary } \\ \text { in- } \\ \text { struct- } \\ \text { ors. } \end{gathered}$ | Students． |  |  |  |  |  |  |  |  |  |  |  |  | ‘truap R.xeqt!!ux ut səqunN | Number of volumes in library． | Value of grounds， build－ ings， furni－ ture， and sci－ entific appa－ ratus． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Second－ ary stu－ dents． |  | Elcmen－ tary stu－ dents． |  | Preparing for college． |  |  |  | Gradu－ ates in 1899. |  | College prepara－ tory stu－ dents in the class that gradu－ ated in 1899. |  |  |  |  |  |  |
|  |  |  |  | Clas－ sical course． | Scien－ tific courses． |  |  |  |  |  |  |  |  |  |  |
|  |  |  | $\begin{aligned} & \text { ভ } \\ & \text { む̈ } \\ & \text { gu } \\ & \text { En } \end{aligned}$ |  |  | $\underset{\sim}{\text { sis }}$ | 淾 |  | 这 | 觘 | 这 | 家 |  |  |  |  |  | $\frac{\text { 采 }}{\text { 空 }}$ |  |  |
| 4 | 56 | $\%$ | 8 | 3 | 10 | 11 | 12 | 13 | 11 | 15 | 16 | 1.8 | 18 | 19 | 20 | 21. | 22 |  |
| Nonsect | $2 \quad 2$ | 10 | 6 | 20 | 6 | 6 |  | 1 | 1 | 1 | 1 | 1 | 0 | 5 |  | 250 | \＄20，000 | 1037 |
| Nonsect． | 05 | 8 | 33 | 34 | 20 | 0 |  |  |  |  |  |  |  |  |  |  |  | 1038 |
| Nonsect | 07 | 0 | 44 | 0 | 32 | 0 |  | 0 | 21 | 0 | 4 | 0 | 4 |  |  |  | 46，000 | 1039 |
| P．E | 50 | 16 | 0 | 25 | 0 | 7 | 0 | 8 | 0 | 11 | 0 | 6 | 0 | 4 | 0 | 3，500 | 50， 000 | 1040 |
| Nonsee | 51 | 19 | 0 | 10 | 0 |  |  |  |  |  |  |  |  |  | 0 | 300 |  | 1041 |
| R．C | 40 | 27 | 0 | 8 | 0 |  |  |  |  |  |  |  |  | 4 |  | 3，537 |  | 1042 |
| Nonsect | 0 1 | 6 | 9 | 10 | 11 |  |  |  |  |  |  |  |  | 3 |  | 200 |  | 1043 |
| Friends． | 02 | 18 | 12 | 12 | 19 | 2 | 0 |  |  |  |  |  |  | 3 | 0 | 150 |  | 1044 |
| Nonsect | 20 | 6 | 0 | 17 | 0 | 6 | 0 |  |  | 1 | 0 |  |  | 4 | 6 | 500 |  | 1045 |
| R．C | 0 － 5 | 0 | 30 | 0 | 20 |  |  |  |  |  |  |  |  |  | 0 | 200 | 30，000 | 1046 |
| R．C | 0 ） 3 | 0 | 22 | 0 | 90 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 4 | 0 | 550 | ， | 1047 |
| R．C | 20 | 25 | 0 | 108 | 0 |  |  |  |  |  |  |  |  |  |  | 1，650 |  | 1048 |
| Nonsect ．． | $2 \quad 2$ | 41 | 35 | 4 | 5 | 2 | 1. |  | 5 | 4 | 5 | 4 | 0 | 3 | ， | 1，500 | 40， 000 | 1049 |
| Nonsect ．－． | $7 \quad 2$ | 144 | 0 | 66 | 0 | 90 | 0 |  | 0 | 20 | 1 | 20 | 0 | 6 | 144 | 600 | 100， 000 | 1050 |
| Nonsect ．． | 5.10 | 0 | 66 | 0 | 62 | 0 | 0 | 0 | 0 | 0 | 11 | ， |  | ， | 0 | 2，600 | 83， 800 | 1051 |
| R．C | $4 \quad 0$ | 76 | 0 | 126 | 0 | 12 |  |  | 0 | 8 | ， | 0 | 0 | 4 | 76 | 2，000 | 32，000 | 1052 |
| R．C | $0 \begin{array}{ll}0 & 11\end{array}$ | 0 | 55 | 0 | 27 | 0 | 0 | 0 | 0 | 0 | G | 0 | 0 |  | 0 | 3，698 | 400， 460 | 1053 |
| Epis | $0 \quad 20$ | 0 | 100 | 0 | 50 | 0 | 2 |  |  | 0 | 17 |  |  | 4 |  | 4，500 | 250， 000 | 1054 |
| R．C | $4 \quad 7$ | 50 | 32 | 260 | 248 | 2 | 0 |  |  | 2 | 2 |  |  | 4 |  | 1，055 | 46，465 | 1055 |
| R．C | 0.10 | 0 | 57 | 0 | 16 | 0 | 5 | 0 | 5 | 0 | 7 | 0 | 4 | 4 | 0 | 2，312 | 91，900 | 1056 |
| I．C | 30 | 24 | 0 | 26 | 0 | 0 | 0 | 24 | 0 | 7 | 0 | 7 | 0 |  | 24 | 3，000 | 175， 000 | 1057 |
| R．C | 1.2 | 25 | 30 | 277 | 270 |  |  |  |  | 6 | ， |  |  | 4 | 75 | 1，300 | 97， 816 | 1058 |
| Meth | 0 | 3 | 21 | 9 | 0 | 0 | 2 | 2 | 2 |  |  |  |  | 4 | 0 | 592 | 39， 192 | 1059 |
| Nonsect | 20 | 34 | 0 | 6 | 0 | 6 | 0 | 3 | 0 | 6 | O | 6 | 0 | 4 | 34 | 3，000 | 20，000 | 1060 |
| R．C．．．．．． | 0 － 3 | 9 | 11 | 163 | 155 | 0 | 0 | 0 | 0 | 2 | 2 | 1 | 0 | 4 | 0 | 700 | 39， 100 | 1061 |
| Nonsect | 4 3 | 36 | 55 | 0 | 0 | 7 | 4 | 6 | 2 | 8 |  | ， | 2 | 4 | 0 | 2，300 | 23，000 | 1062 |
| Nonsect | 25 | 0 | 35 | 2 | 23 | 0 | 10 | 0 | 8 | 0 | 2 | 0 | 1 |  |  | 1，000 | 30，000 | 1063 |
| R．C | 0 － 3 | 10 | 35 | 140 | 190 |  |  |  |  | 0 | ， |  |  | 4 | 0 | 600 | 30， 286 | 1064 |
| Nonsect | 1.1 | 17 | 9 | 2 | 0 | 4 |  |  | 0 | 2 | ， | 2 | 0 |  | 0 | 200 | 3，960 | 1065 |
| Nonsect | 20 | 21 | 0 | 26 | 28 | 2 |  | 4 |  |  |  |  |  |  | 21 | 280 | 30，000 | 1056 |
| Nonsect ．． | 26 | 0 | 38 | 16 | 185 | 0 |  | 0 | 0 | 0 | 3 | 0 | 1 | 5 | 0 | 2， 669 | 67， 625 | 1067 |
| Nonsect ．． | $1 \begin{array}{ll}1 & 1\end{array}$ | 7 | 4 | 36 | 5 | 1 |  | 2 | 0 |  |  |  |  | 4 | 0 |  | 15， 000 | 1068 |
| Nonscet | $0 \quad 10$ | 0 | 27 | 0 | 25 |  |  |  |  | 0 | 2 | 0 | 0 | 4 | 0 |  |  | 1059 |
| R．C | $0 \quad 7$ | 0 | 35 | 0 | 49 |  |  |  |  | 0 |  |  |  | 4 |  | 2，000 | 75，000 | 1070 |
| Nonsect ．． | $\begin{array}{ll}0 & 3\end{array}$ | 0 | 12 | 10 | 13 | 0 |  | 1 |  |  |  |  |  |  |  |  |  | 1071 |
| Nonsect ．． | 1.4 | 0 | 16 | 0 | 12 | 0 |  |  |  | 0 |  | 0 | 1 |  |  | 1，800 | 35， 000 | 1072 |
| Nonscet ．． | $8 \quad 0$ | 60 | 0 | 40 | 0 | 20 |  |  |  | 20 | 0 | 16 | 0 |  | 0 |  | 35， 000 | 1073 |
| Nonsect ．． | 13 | 0 | 11 | 31 | 38 | 0 |  |  | 0 | 0 | 4 | 0 | 0 | 3 | 0 |  |  | 1074 |
| R．C． | $3 \begin{array}{ll}3 & 7\end{array}$ | 0 | 75 | 175 | 205 |  |  |  |  | 0 | 30 |  |  | 4 |  | 530 |  | 1075 |
| Nonsect ．． | 1212 | 85 | 115 | 0 | 0 | 18 | 17 | 20 | 20 | 13 | 21 | 9 | 7 | 4 |  | 59，599 |  | 1076 |
| Nonsect ．． | $0 \quad 12$ | 0 | 45 | 0 | 48 | 0 | 16 | 0 | 1 | 0 | ， | 0 | 2 | 4 | 0 | 1，500 | 70，000 | 1077 |
| R．C．．．．．． | 03 | 0 | 35 | 35 | 45 | 0 | 0 | 0 |  | 0 | 9 | 0 | 0 | 4 | 0 | 1，023 | 29， 262 | 1078 |
| R．C | 16 | 0 |  | 0 | 76 | 0 | 0 |  |  | 0 | 5 |  |  | 4 | 0 | 1，000 | 94，000 | 1079 |
| Nonsect ．． | 111 | 0 | 80. | 0 | 35 | 0 | 0 | 0 | 0 | 0 | 30 | 0 | 4 | 4 | 0 | 1，954 | 98，661 | 1080 |

Table 43.-Statistics of private high schools, endoued academies, seminaries,

and other private secondary schools for the scholustic year 1898-99-Continued.


Table 43.--Statistics of private high schools, endowed academies, seminaries,

and other private secondary schools for the scholaslic year 1598－99－Continued．

| Religious denomina－ tion． | $\begin{gathered} \text { Sec- } \\ \text { ond- } \\ \text { ary } \\ \text { in- } \\ \text { struct- } \\ \text { ors. } \end{gathered}$ |  | Students． |  |  |  |  |  |  |  |  |  |  |  | －sabəí u！asanoo jo पº．ouวT |  |  | Value of grounds， build－ ings， furni－ ture， and sei－ entific appa－ ratus． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Second－ arystu－ dents． |  | Elemen－ tary stu－ dents． |  | Preparing for college． |  |  |  | Gradu－ ates in 1899. |  | College prepara－ tory stu－ dents in the class that gradu－ ated in 1899. |  |  |  |  |  |  |
|  |  |  | Clas－ sical course． | Scien－ tific courses． |  |  |  |  |  |  |  |  |  |  |
|  | $\frac{\dot{3}}{\frac{3}{4}}$ |  |  |  | $\frac{\dot{0}}{\text { 完 }}$ | $\begin{aligned} & 0 \\ & \text { む } \\ & \text { g } \\ & \text { U } \end{aligned}$ | $\frac{\stackrel{ \pm}{*}}{\underset{\sim}{*}}$ | $\begin{aligned} & \stackrel{0}{\pi} \\ & \text { g } \\ & \text { d } \\ & \text { n } \end{aligned}$ | $\frac{\stackrel{0}{c}}{\frac{\text { cin }}{4}}$ |  | 通 |  | 采 |  |  |  |  |  | $\stackrel{\stackrel{0}{3}}{\underset{\sim}{x}}$ | $\stackrel{\stackrel{\Xi}{\tilde{g}}}{\stackrel{y}{\Xi}}$ |  |
| 4 | 5 | 6 | 9 | 8 |  |  | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 29 |  |
| Ev．Luth | 3 | 0 | 28 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 3 | 0 | 625 | \＄65， 000 | 134 |
| Epis | 1. | 6 | 0 | 23 | 3 | 43 | 0 | 6 | 0 | 0 | 0 | 1 | 0 | 1 | 4 | 0 | 200 | 10， 000 | 1135 |
| Nonscet | 5 | 6 |  |  | 75 |  | 35 |  |  |  | 7 | 4 | 8 | 2 | 4 | 0 | 7，000 | 10， 400 | 1136 |
| Nonsect | 0 | 6 | 0 | 60 | 0 | 20 | 0 |  |  |  | 0 | 5 | 0 | 3 |  |  |  |  | 1137 |
| R．C | 0 | 3 | 0 |  | 12 | 30 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 2 | 4 | 0 | 1，500 | 26，000 | 1138 |
| Nonsect | 1 |  |  |  | 1 | 26 | 0 |  |  |  | 0 | 1 | 0 | 1 |  |  | 2，000 |  | 1139 |
| R．C | 4 | 16 | 0 |  | 0 | 49 | 0 |  |  |  | 0 | 4 | 0 | 0 | 4 | 0 | 6，914 | 352， 583 | 1140 |
| Nonsect | 4 | 0 | 10 | 0 | 24 | 0 | 8 |  | 1 | 0 | 1 | 0 | 1 | 0 |  | 0 | 200 |  | 1141 |
| Nonsect | 9 | 7 |  |  | 80 | 0 | 14 |  |  |  | 14 | 0 | 8 | 0 |  |  | 5， 000 | 70，000 | 1142 |
| Nonsect ．． | 1 | 7 | 0 | 22 | 20 | 80 | 0 | 4 |  | 0 | 0 | 0 | 0 | 0 | 4 |  | 200 | 1，000 | 1143 |
| Nonsect | 10 | 4 | 120 | 0 | 70 | 0 | 70 | 0 |  | 0 | 24 | 0 | 19 | 0 | 4 | 120 | 1，200 | 700，000 | 1144 |
| Nonsect | 3 | 7 | 0 | 20 | 2 | 18 | 0 |  | 0 | 0 | 0 | 5 | 0 | 0 | 2 | 0 | 300 |  | 1145 |
| Nonsect | $\because$ | 22 | 0 | 137 | 0 | 60 | 0 | 10 | 0 | 0 | 0 | 22 | 0 | 5 | 4 | 0 | 4，000 | 220， 000 | 1146 |
| Nonscet | 0 |  | 0 | 55 | 3 | 135 | 0 |  |  | 48 | 0 | 32 | 0 | 7 |  |  |  |  | 1147 |
| Nonsect | 5 | 0 | 30 | 0 | 10 | 0 | 10 | 0 |  | 0 | 8 | 0 | 8 | 0 | 4 | 0 | 400 | 30,000 | 1148 |
| Nonsect ．． | 5 | 1 | 28 | 0 | 37 | 0 | 15 | 0 | － 4 | 0 | 4 | 0 | 1 | 0 | 4 | 0 |  |  | 1149 |
| Nonsect ．－ | 4 | 8 | 0 | 30 | 6 | 10 | 0 | 2 | 0 | 3 | 0 | 4 | 0 | 1 | 3 | 0 | 500 |  | 1150 |
| Nonsect | 6 | 1 | 70 | 0 | 90 | 0 | 15 | 0 |  | 0 | 5 | 0 | 5 | 0 | 4 | 70 | 500 |  | 1151 |
| Nonsect ．． | 10 | 0 | 86 | 0 | 71 | 0 | 28 | 0 | 30 | 0 | 32 | 0 | 21 | 0 | 4 | 0 | 400 |  | 1152 |
| Nonsect ．． | 9 | 1 | 80 | 0 | 67 | 0 | 48 | 0 |  | 0 | 14 | 0 | 6 | 0 | 4 | 80 |  | 3,000 | 1153 |
| Nonsect ．－ | 0 | 6 | 0 | 30 | 0 | 35 | 0 |  |  |  | 0 | 2 |  |  |  |  |  |  | 1154 |
| Nonsect ．． | 4 | 0 | 19 | 0 | 6 | 0 | 4 | 0 | 6 | 0 | 1 | 0 | 1 | 0 | 3 | 10 | 800 | ．30，000 | 1155 |
| Nonsect ．． | 12 | 0 | 96 | 0 | 111 | 0 | 60 | 0 | 30 | 0 | 22 | 0 | 20 | 0 | 4 | 0 | 500 | 125，000 | 1156 |
| R．C | 15 | 0 | 150 | 0 | 75 | 0 | 50 | 0 | 50 | 0 | 22 | 0 | 10 | 0 | 1 | 150 |  | 125， | 1157 |
| Nonsect ．． | 7 | 0 | 35 | 0 | 26 | 0 |  |  | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  | 1158 |
| Nonsect ．． | 6 | 6 1 | 55 | 0 | ｜ 34 | 0 | 41 | 0 | 20 | 0 | 21 | 0 | 21 | 0 | 3 | 0 | 500 | 1，000 | 1159 |
| Nonsect．． | 1 | － 9 | 0 | 60 | 0 | 50 |  |  | O | 15 | 0 | 7 |  |  |  |  | 1，500 | 600， 000 | 1160 |
| S．C |  | 14 | 0 | 102 | 0 | 158 | 0 |  | 0 | 0 | 0 | 10 | 0 | 10 | 4 | 0 | 5，265 | 990， 825 | 1161 |
| Friends．．． | 3 | 8 | 11 | 22 | 60 | 6 | 2 | 7 | 6 | 0 | 2 | 3 | 1 | 2 | 3 | 0 | 0 | 200，000 | 1162 |
| Nonsect ．－ | 4 | 42 | 26 | 0 | 51 | 0 | 10 | － 0 | 15 | 0 | 6 | 0 | 5 | 0 | 4 | 26 | 500 |  | 1163 |
| Nonscet ．－ | 2 | 21 | 0 | 16 | 15 | 31 | 0 | 1 |  | 4 | 0 | 5 | 0 | 2 | ， | 0 |  | 30， 000 | 1164 |
| R．C |  |  | 0 | 26 | 51 | 120 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 4 | 0 | 1，859 | 268， 033 | 1165 |
| Nonsect | 0 | － 7 | 0 | 22 | 0 | 14 |  |  |  |  | 0 | 0 | 0 | 0 |  |  | 12，000 |  | 1166 |
| Nonsect | 5 | 51 | 31 | 0 | 39 | 0 | 13 | 0 | 14 | 0 | 8 | 0 | 7 | 0 | 5 | 0 | 500 | 37，500 | 1167 |
| R．C ．．．．．． | 6 | 6 － | 75 | 0 | 100 | 0 |  |  |  | ．．． | 9 | 0 | 9 | 0 | ． | 0 |  |  | 1168 |
| Nonsect ．－ |  | 2 | 8 | 8 | 27 | 7 | 3 | 2 | 2 | 0 | 0 | 2 | 0 | 0 | 4 | 0 |  | 40， 000 | 1169 |
| Nonsect ： | 3 | 311 | 0 | 47 | 22 | 53 | 0 | 3 |  | 5 | 0 | 4 | 0 | 0 | 4 | 0 | 100 |  | 1170 |
| Nonsect． |  | 43 | 0 | 20 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  | 0 |  |  | 1171 |
| Nonsect ．． |  | － 15 | 0 | 50 | 0 | 50 | 0 |  |  |  |  |  |  |  |  |  |  |  | 1172 |
| Nonsect ．． |  | 80 | 18 | 0 | 14 | 0 | 16 | 0 |  |  |  | 0 |  | 0 |  |  |  |  | 1173 |

Table 43.-Statistics of private high schools, endowed academies, seminaries,

and other private secondary schoots for the scholastic year 1898-99-Continued.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

|  |  |  |  |
| :---: | :---: | :---: | :---: |
|  | State and post-office. | Name. | Principal. |
|  | 1 | 2 | 3 |
| 1214 | NEW YORK-continued. <br> Rochester (211-218 Cutler Building). <br> Rochester (86 East ave.) .. | Bradstreet's Classical School The Cruttenden School * .... | J. Howard Bradstreet Miss L. H. Hakes .. . |
| 1216 | Rochester................... | Female Academy of the Sacred Heart. | Madame Amelia Schulten... |
| 1217 | do | Livingston Park Seminary*...... | Miss Georgia C. Stone ........ |
| 1218 |  | Nazareth Academy . | Rev. Thomas F. Hiekey ...... |
| 1219 | Rochester ( 77 and 81 South Fitzhugh st.). | Nichols' (Mrs.) School | Misses J.H. and M.D. Nichols. |
| 1220 | Rochester (330 Central ave.) | Wagner Memorial Lutheran College. | J. Nicum, D. D |
| 1221 | Rome... | St. Peter's Academy ............... | Sister Holy Family. |
| 12223 | Rondout. | St. Mary's.Academy Roslyn Heights Semin | Sister Frances Regis. Rev. James Hall |
| 1224 | Round Lake | Round Lake Academy.. | M. D. Losey. |
| 1225 | Sag Harbor. | Academy of the Sacred Heart of Mary. | Mother Basil |
| 1226 | Sherwood | Sherwood Select Sehool .......... | A. Gertrude Flanders . . . . . . |
| 1227 | Sing Sing | Holbrook's Military School | D. A. Holbrook, Pl. D |
| 1228 |  | Mount Pleasant Military Academy | Charles F. Brusie, Arthur 7. Emory. |
| 1229 1230 | ....do do | Ossining Seminary for Girls ...... Sodus Aeademy | Clara C. Fuller <br> Elisha Curtis. |
| 1231 | Southold | Southold Academy * | William F. Mets, A. ${ }^{\text {a }}$ |
| 1232 | Suffern | Herbart Preparatory School | William J. Eekoff. |
| 1233 | Syraeuse | Academy of the Sacred Heart | Rev.John F. Mallany, LL. D |
| 1234 |  | St. John's Catholic A cademy ..... | Rev. Michael Clune .......... |
| 1235 | Tarrytown (53 Broadway).. | Bulkley's (Miss) School for Young Ladies. | Miss H. L. Bulkley. |
| 1236 | Tarrytown | Irving, Institute. | J. M. Furman, A. M |
| 1237 |  | Mason's (Miss) School ......... | Miss C. E. Mason |
| 1238 | - | Metcali's (Miss) Home Institute.. | Miss M. W. Metcalf .... |
| 1239 | Troy (514 Fulton st.) | Emma Willard School | Miss Mary Alice Knox |
| 1240 | Troy (237 4th st.)...) | La Salle Institute. St. Peter's Academy | Rev. Brother John Sister ML Odilia |
| 1242 | Troy................ | Troy Academy ...... | Frank C. Barnes, M. |
| 1213 | Utiea | School for Young Ladies | Julia C. G. Piatt. |
| 124 | - $\mathrm{w}^{\text {d }}$ do | Utica Catholic Academy | Rev.J.S. M. Lyneli, D. D |
| 1245 | Walworth.. | Walworth Aeademy ... | John R. Palmer ........ |
| 1216 1217 | West Chester West New Br | Saered Heart Academy St. Austin's School .... | Brother August Rev Geo. E. Quai |
| 1213 | Whitestone (Bayside). | Saered Heart Seminary | Sister Mary Perpetua |
| 1249 | Yonkers (221 North Broadway). | The Halsted School. | Miss Mary Sicard Jenkin |
| 1250 | Yonkers $\qquad$ north carolina. | Kingsley School. | Charles B. Ames |
| 1251 | Advanee | Advanee High School | C. M. Sheets |
| 1252 | Arnold | Arnold Academy *. | Miss Minnie D. Everhart |
| 1253 | Asheville.................... | Bingham School.................... | Robert Bingham ........... |
| 1254 | Asheville (261 Chestnut st.) | Home and Day Sehool for Girls .. | Miss Harriet A. Champion ... |
| 1255 | Ashpole <br> Atlantic. | Ashpole Institute <br> Atlantie Academy | G. E. Lineberry <br> G. W. Mewborn |
| 1257 | Auburı | Mt. Moriah Male and Female Academy. | Wm. H. Penney, jr .............. |
| 1258 | Augusta | Hodges' School ....... | J. D. Hodges, A. M ............ |
| 1259 | Autryville | South River Baptist Institute*.. | Rev.C. M. McIntosh, A. B..... |
| 1260 | Barnardsville | Mountain Dale Seminary.......... | G. H. Blankenship. |
| 1261 | Bayboro..................... | Pamlico Male and Female Institute. | Wingate Underhill ........... |
| 1263 | Beauiort | Sacred Heart Academy. | Sister Mary Aga |
| 1264 | Belvidere | Belvidere Academy ... | Mary J. White................ |

and other private secondary schools for the scholastic year 1898-99-Continued.


Table 43.-Statistics of private high schools, endowed academies, seminarles,


* Statistics of 1897-98.
and other private secondary schools for the scholastic year 1598-93-Continued.

| Religious denomination. | $\begin{gathered} \text { Sec- } \\ \text { ond- } \\ \text { ary } \\ \text { in- } \\ \text { struct- } \\ \text { ors. } \end{gathered}$ |  | Students. |  |  |  |  |  |  |  |  |  |  |  |  |  | Number of volumes in library. | Value of grounds buildings, furniture, and scientific apparatus. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Secondary students. |  | Elementary students. |  | Preparing for college. |  |  |  | Graduates in 1899. |  | College preparatory students in the class that graduated in 1899. |  |  |  |  |  |  |
|  |  |  | Clas- <br> sical <br> course. | Scientific courses. |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | $\stackrel{0}{\stackrel{0}{*}}$ |  |  | $\begin{aligned} & \text { © } \\ & \text { む. } \\ & \text { gu } \\ & \text { When } \end{aligned}$ | $\frac{\stackrel{0}{E}}{\underset{y}{E}}$ |  | $\underset{=1}{\underset{\sim}{\underset{\sim}{x}}}$ |  |  |  |  |  |  | $\begin{aligned} & \dot{\Xi} \\ & \text { g్j } \\ & \text { gu } \\ & \hline \end{aligned}$ |  |
| 4 | 5 | 6 | 7 | 8 |  |  | 9 | 10 | 11 | 1.2 | 18 | 14 | 15 | 16 | 1\% | 18 | 13 | 20 | 21 | 22 |  |
| M. E. So. | 0 | - 2 | 25 | 25 | 70 | 77 | 5 |  |  |  | 2 | 0 | 2 | 0 |  | 0 | 0 | \$3,000 | 1265 |
| Nonsect | 1 | 1 | 41 | 26 | 45 | 23 | 10 | 8 | 4 | 3 | 8 | 4 | 4 | 2 |  | , | 150 | 2,000 | 1256 |
| Nonsect | 1 | 1 | 15 | 18 | 25 | 7 | 3 | 2 |  |  |  |  |  |  |  | 0 | 0 | 200 | 1267 |
| Miss. Bapt | 2 | 1 | 18 | 15 | 63 | 38 |  |  |  |  |  |  |  |  | 4 |  |  | 6, 000 | 1268 |
| Nonscet | 1 | 1 | 46 | 20 | 30 | 30 | 10 | 6 |  |  |  | 0 |  |  |  | 0 |  | 1,000 | 1269 |
| Nonscet | 3 | 3 | 40 | 25 | 98 | 50 | 12 | 3 | 6 | 0 |  |  |  |  | 5 | 0 | 370 | 2,500 | 1270 |
| Nonsect | 1 | 0 | 2 | 8 | 73 | 63 |  |  |  |  |  |  |  |  |  |  |  |  | 1271 |
| Nonsect | 5 | 2 | 50 | 40 | 80 | 60 |  |  |  |  | 30 | 0 | 10 | 0 | 2 | 75 | 1,200 | 2,500 | 1272 |
| Meth | 1 | 1 | 25 | 30 | 15 | 25 | 5 |  |  |  |  |  |  |  | 4 |  | 95 | 4,000 | 1273 |
| Nonsect | 2 | 0 | 20 | 15 | 10 | 25 | 4 |  | 9 | 7 |  |  |  |  | 2 | 0 | 100 | 5,000 | 1274 |
| Nonsect | 1 | 12 | 13 | 10 | 52 | 17 |  |  |  |  | 1 | 1 | 1 | 1 | 4 | 0 |  |  | 1275 |
| Nonsect | 2 | 1 | 20 | 10 | 75 | 80 | 9 | 1 | 11 | 9 |  | 3 |  | 3 | 3 | 0 |  | 800 | 1276 |
| Nonscet | 2 | 0 | 65 | 0 | 5 | 0 | 25 | 0 | 10 | 0 |  | 0 |  | 0 |  | 65 |  | 2,500 | 1277 |
| Epis | 2 | 2 | 21 | 8 | 31 | 19 | 11 | 4 |  |  |  |  |  |  | 4 | 19 | 150 | 3,000 | 1278 |
| Bapt | 0 | 1 | 8 | 11 | 0 | 0 |  |  |  |  |  |  |  |  |  | 0 |  |  | 1279 |
| Bapt | 1 | 12 | 7 | 5 | 93 | 102 | 0 | 0 |  |  |  |  |  |  | 3 | 0 |  | 1,000 | 1280 |
| Presb | 1 | 1.4 | 0 | 18 | 0 | 273 |  |  |  |  |  |  |  |  |  |  | 1, 800 | 65,000 | 1281 |
| Luth ..... | 3 | 3 | 13 | 5 | 12 | ${ }^{6}$ | 3 | 1 | 0 | 0 |  | 0 | 2 | 0 | 2 | 0 |  |  | 1282 |
| Nonsect .- | 1 | 10 | 2 | 8 | 13 | 17 |  |  |  |  |  |  |  |  |  |  |  |  | 1283 |
| Reformed | 4 | 43 | 35 | 21 | 35 | 36 | 10 |  |  |  |  |  |  |  |  | 0 | 1,000 | 4,000 | 1284 |
| Nonsec | 1 | 1.0 | 17 | 20 | 18 | 20 | 4 |  |  |  |  |  |  |  |  |  |  | 1,600 | 1285 |
| Meth | 6 | 6 | 43 | 10 | 0 | 0 | 36 | 10 | 1 | 0 | 19 | 4 | 19 | 4 | 3 |  |  | 18,000 | 1286 |
| Friends... | 0 | 1 | 20 | 25 | 20 | 20 |  |  |  |  |  |  |  |  |  | 0 |  | 1,200 | 1287 |
| Nonscet | 2 | 2 | 35 | 30 | 70 | 85 | 15 |  |  |  |  |  | 5 | 0 |  | 0 | 400 | 5,000 | 1288 |
| Nonsect | 1 | 1.0 | 14 | 4 | 35 | 48 | 0 |  |  |  | 0 |  |  |  |  | 0 | 0 | 500 | 1289 |
| Nonsect . . | 1 | 1 | 10 | 5 | 60 | 29 |  | 3 |  |  | 0 | 1 | 0 | 1 | 3 | 0 |  | 1,500 | 1290 |
| Christian. | 2 | 2 | 26 | 25 | 57 | 51 |  |  |  |  |  |  |  |  |  |  |  |  | 1291 |
| Presb... | 2 | 21 | 46 | 34 | 55 | 52 | 5 | 7 | 4 |  | 5 | 4 | 4 | 3 | 4 | 0 | 50 | 3,000 | 1292 |
| Nonsect | 1 | 1. | 6 | 5 | 50 | 40 | 1 | 0 | 1 |  |  |  |  |  |  | 0 | 300 | 700 | 1293 |
| Nonsect | 1 | 1 | 12 | 12 | 25 | 23 | 4 |  | 2 | 0 | 0 | 0 | 0 | 0 | + | 0 | 0 | 600 | 1294 |
| Nonsect. | 2 | 2 | 30 | 20 | 90 | 85 | 4 |  |  | 0 |  |  |  |  |  |  |  |  | 1295 |
| Nonsect .- | 2 | 2 | 80 | 75 | 10 | 15 |  |  |  |  |  |  |  |  |  | , | 300 | 1,500 | 1296 |
| Presb. | 1 | 11 | 40 | 0 | 0 | 0 | 6 |  |  |  |  |  |  |  |  |  |  |  | 1297 |
| Nonsect | 1 | 1.1 | 15 | 20 | 25 | 20 | 7 | 10 | 7 | 10 |  |  |  |  | 3 | 0 |  | 3, 000 | 1298 |
| Nonsect | 0 | 0 | 3 | 2 | 18 | 12 | 2 | 2 | ( | , | 0 | 0 | 0 |  | 1 |  |  |  | 1299 |
| Nonsect | 1 | 1 | 18 | 20 | 5) | 7 | 2 |  |  |  | 1 |  |  |  |  | 0 |  | 750 | 1300 |
| Presb | 1 | 11 | 20 | 25 | 35 | 40 | 4 |  |  |  | 1 | 3 | 1 |  | 3 | 0 |  | 5, 000 | 1301 |
| Luth. | , | 10 | 12 | 6 | (i) | 2 |  |  | 2 | 0 | , | 0 | 1 | 0 | 2 | 0 |  | 500 | 1302 |
| Nonsect |  | 1 | 20 | 19 | 0 | 0 |  |  |  |  |  |  |  |  |  | 0 | 300 | 300 | 1303 |
| Nonsect.- |  | 1 | 20 | 20 | 20 | 20 |  | \| 4 | 5 | 4 |  |  |  |  |  | 0 | 0 | 1,000 | 1304 |
| M. E. So... | 1 | 10 | 10 | 20 | 10 | 20 |  | 3 | 0 |  | 0 | 0 | 0 | 0 | 4 |  |  | 1,000 | 1305 |
| Nonsect | , | 12 | 20 | 18 | 20 | 21 | 3 |  | 3 | 0 |  |  |  |  |  | 0 | 100 | 2,000 | 1306 |
| Nonsect | 1 | 12 | 4 | 6 | 86 | 94 |  |  |  |  |  |  |  |  | 4 | 0 | 150 | 3. 500 | 1307 |
| Nonsect | 1 | 10 | 12 | 0 | 15 | 0 | 3 |  | 2 | 0 | '2 | 0 |  |  | 2 | 0 | 0 | 3, 000 | 1308 |
| Bapt...... | 1 | 12 | 37 | 42 | 45 | 35 |  |  |  |  | 0 | 0 | 0 | 0 |  | 0 | 100 | 5,000 | 1309 |
| Meth. Epis | 1 | 1 1 | 10 | 3 | 40 | 42 | 8 |  |  |  |  |  |  |  |  |  |  | 2,000 | 1310 |
| Bapt..... | 1 | 10 | 28 | 16 | 75 | 70 | 8 |  |  |  | 0 | 0 | 0 | 0 | 3 | 0 | 425 | 8,000 | 1311 |
| Nonsect | 1 | 1 | 25 | 30 | 75 | 70 | 4 | 5 | ? | 3 | 4 | 3 | 4 | , | 4 | 0 | 0 | 2,000 | 1312 |
| Nonsect .. | 9 | 9 | 70 | 0 | 10 | 0 | 20 |  | 15 |  |  |  |  |  | , | 0 | 900 |  | 1313 |
| Nonsect .. | 1 | 1.0 | 8 | 7 | 32 | 31 |  |  |  |  |  |  |  |  |  | 0 | 30 | 2,000 | 1314 |
| Nonsect .. | 0 | 03 | 4 | 35 | 16 | 25 |  |  |  |  |  |  |  |  |  |  | 200 |  | 1315 |
| Nonsect .- | 2 | 21 | 19 | 22 | 91 | 102 |  |  |  |  |  |  | 4 | 7 | 4 |  | 60 | 7,000 | 1316 |
| Presb. |  | 1.2 | 50 | 50 | 20 | 30 |  |  |  |  |  |  |  |  |  |  |  | 1,000 | 1317 |
| Nonsect | 1 | 11 | 14 | 16 | 41 | 29 |  |  |  |  |  |  |  |  |  |  |  | 1.000 | 1318 |
| Nonsect | 1 | 1.0 | 15 | 0 | 40 | 0 | 8 |  |  |  |  |  |  |  | 5 | 0 | 200 | 2,000 | 1319 |
| Nonsect | 1 | 1.1 | 40 | 25 | 0 | 0 | 12 |  | 4 | 0 |  |  |  |  |  | 0 |  |  | 1320 |
| M.E So. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1321 |

Table 43.-Statistics of prizate ligh schools, pndowed academies, seminaries,

and other pricate secondury schoole for the schotastic yeter 189S－39－Continued．

| Rcligious denomina－ tion． | $\begin{gathered} \text { Sce- } \\ \text { ond- } \\ \text { ary } \\ \text { in- } \\ \text { struct- } \\ \text { ors. } \end{gathered}$ |  | Students． |  |  |  |  |  |  |  |  |  |  |  | Length of eourse in years. |  | －Airaqir u！somintoa jo roqunn | Value of grounds， build－ ings， furni－ ture， and sei－ entific appa－ ratus． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Second－ ary stu－ dents． |  | $\begin{gathered} \text { Elemen- } \\ \text { tarystu- } \\ \text { dents. } \end{gathered}$ |  | Preparinz for college． |  |  |  | Gradu－ ates in 1899. |  | College prepara－ tory stu－ dents in the class that gradu－ ated in 1899. |  |  |  |  |  |  |
|  |  |  | Clas－ sical coursc． | Scien－ tific courses． |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | $\frac{\underset{y y}{c}}{\underset{\sim}{c}}$ |  | 淢 | 守 | 閏 | ¢ | 㳫 |  | $\begin{aligned} & \text { © } \\ & \text { 霛 } \end{aligned}$ |  |  |  |  |  | $\frac{\stackrel{y}{3}}{\underset{\sim}{3}}$ |  |  |
| 4 | 56 | 6 | 7 | 8 |  |  | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |  |
| Luth | 5 | 8 | 0 | 71 | 0 | 30 | 0 | 30 |  |  | 0 |  |  |  |  |  | 1，000 | \＄8， 000 | 1322 |
| Bapt． | 1 | 1 | 20 | 14 | 20 | 15 | 16 | 10 | 4 | 0 |  |  |  |  |  |  | 150 | 500 | 1323 |
| Nonsect | 1 | 3 | 32 | 26 | 15 | 16 | 6 | 3 | 5 | 2 | 3 | 5 | 2 | 5 | 2 | 0 | 300 |  | 1324 |
| Nonsect | 5 | 0 | 182 | 0 | 90 | 3 | 5 | 0 | 35 | 0 | 60 | 0 | 18 | 9 | 3 | 0 | 2， 500 | 35， 000 | 1325 |
| Epis ．．． | 1. | 3 | 0 | 18 | 7 | 17 | 0 | 0 |  |  | 0 | 1 |  |  | 4 |  | 850 | 5，000 | 1326 |
| Nonsect ．． | 5 | 0 | 98 | 0 | 53 | ¢0 | 19 | 0 |  | 0 | 9 | 0 | 9 | 0 | 4 | 70 |  | 50，000， | 1327 |
| Nonsect | 3 | 1 | ＇26 | 30 | 25 | 30 | 4 | 0 |  |  |  |  |  |  |  | 0 | 300 | 5，000 | 1328 |
| Bapt． | 1 | 1 | 13 | 19 | 10 | 8 | 3 | 5 |  |  |  |  |  |  |  | 0 |  | 450 | 1329 |
| Nonsect | 2 | 0 | 10 | 10 | 15 | 20 | 10 | 5 |  |  |  |  |  |  | 4 | 0 | 250 | 2，000 | 1330 |
| Nonsect | 1 | 1 | 30 | 35 | 35 | 30 | 5 | 5 |  |  |  |  |  |  | 4 | 0 | 250 | 500 | 1331 |
| Nonsect． | 1 | 9 | 0 | 152 |  |  |  |  | 0 | 8 |  |  | 0 | 4 |  |  |  |  | 1332 |
| Nonsect．． | 3 | 0 | 45 | 0 | 40 | 0 | 30 | 0 | 15 | 0 | 8 | 0 | 8 | 0 | 4 | 0 |  | 6，000 | 1333 |
| Epis | 1 | 5 | 0 | 170 | 0 | 70 |  |  |  |  | 0 | 11 | 0 | 2 |  |  | 3，500 | 50， 000 | 1334 |
| Nonsect． | 1 | 1 | 40 | 30 | 32 | 42 | 5 | 3 |  |  |  |  |  |  | 4 | 0 | 1，000 | 2，500 | 1335 |
| Nonsect ．． | 4 | 0 | 22 | 0 | 41 | 0 | 4 | 0 | 2 | 0 | ．．．． |  |  |  |  | 22 | 94 | 3， 000 | 1336 |
| Nonscet．． | 0 | 2 | 70 | 65 | 20 | 25 | 11 | 11 | 2 | 0 |  |  |  |  |  |  | 800 | 2，000 | 1337 |
| Nonsect．． | 0 | 2 | 20 | 25 | 28 | 29 | 3 | 6 | 0 | 0 |  |  |  |  |  |  |  | 5， 000 | 1338 |
| Nonsect．． | 1 | 2 | 30 | 24 | 40 | 36 |  |  |  |  |  |  |  |  |  |  |  |  | 1339 |
| Moravian． | 3 | 0 | 67 | 0 | 58 | 0 | 11 | 0 |  |  | 15 | 0 | 8 | 0 | 4 |  |  | 10， 000 | 1340 |
| Nonsect ．． | 2 | 1 | 40 | 35 | 25 | 20 | 5 | 6 |  |  |  |  |  |  |  | 0 | 150 | 500 | 1341 |
| Cong ．． | 0 | 2 | 2 | 15 | 54 | 57 |  |  |  |  |  |  |  |  |  | 0 | 500 | 4，500 | 1342 |
| Nonsect ．． | 1 | 1 | 55 | 0 | 20 | 0 | 15 | 0 | 7 | 0 | 3 | 0 | 3 | 0 |  | 0 | 600 | 15，000 | 1343 |
| Nonsect | 1 | 1 | 25 | 15 | 68 | 62 | 2 | 3 |  |  |  |  |  |  | 3 |  | 100 |  | 1344 |
| Nonsect | 1 | 1 | 30 | 30 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |  |  |  | 1345 |
| Nonsect | 1 | 1 | 10 | 4 | 34 | 22 | 4 | 2 | 2 | 1 |  |  |  |  | ， 2 |  |  | 1，200 | 1346 |
| Nonsect | 1 | 2 | 20 | 14 | 14 | 21 | 3 | 4 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 100 | 1，000 | 1347 |
| Nonsect．． | 1 | 1 | 50 | 30 | 60 | 40 | 8 | 8 | 5 | 10 | 4 | 2 | 4 | 2 | 4 |  |  | 1，500 | 1348 |
| M．E．So． | 1 | 1 | 60 | 48 | 27 | 30 | 5 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 400 | 2，500 | 1349 |
| Nonscet | 3 | 1 | 75 | 28 | 70 | 42 | 5 | 0 | 5 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 500 | 4，000 | 1350 |
| Nonscet | 1 | 1 | 29 | 26 | 30 | 25 | 3 | 3 |  |  | 2 | 1 | 2 | 0 | 2 | ， | 100 | 4，000 | 1351 |
| M．E．So． | 2 | 1 | 60 | 10 | 28 | 21 | 60 | 10 |  |  |  |  |  |  | 3 | 0 | 1，000 | 200， 000 | 1352 |
| Nonsect | 1 | 1. | 9 | 6 | 20 | 15 | 0 | 0 | 3 | 2 |  |  |  |  |  | 0 |  | 400 | 1353 |
| Nonscet ．． | 1 | 0 | 15 | 14 | 17 |  |  |  |  |  | 2 |  |  |  |  | 0 |  |  | 1354 |
| Nonsect．． | 1 | 2 | － | 5 | 69 | 66 | 1 | 2 | 0 | 1 | 0 |  |  | 0 |  | 0 | 300 | 1，200 | 1355 |
| Nonsect | 1 | 1 | 20 | 10 | 40 |  |  |  |  |  |  |  |  | 2 |  |  |  | 3，000 | 1356 |
| Bapt． | 1 | 0. | 15 | 10 | 11 | 10 | 2 | 0 | 0 | 0 | 0 | 0 |  | 0 |  |  |  | 1，000 | 1357 |
| Nonsect ．． | 6 | 1. | 110 | 20 | 50 | 20 | 20 | 5 | 10 | 5 | 20 | 5 |  | 5 | d |  | 1，000 | 15，000 | 1358 |
| Cong ．．． | 2 | 0 | 10 | 6 | 47 | 43 | 1 |  |  |  | 0 | 0 |  |  |  |  | 150 | 1，000 | 1359 |
| Nonsect | 1 | 1 | 15 | 12 | 20 | 24 | 2 |  |  |  |  |  |  |  |  |  |  | 500 | 1360 |
| Nonsect | 1 | 1 | 19 | 24 |  |  | 9 | 13 | 10 | 11 | 0 | 0 |  |  |  | 0 |  | 2，000 | 1361 |
| Nonscet．． | 0 | 1. | 11 | 12 | 12 | 20 | 5 | 0 | 6 | 0 |  |  |  |  |  |  | 100 |  | 1362 |
| Nonsect．． | 1 | 0 | 30 | 3 | 15 | 2 | 1 | 0 | 10 | 0 | 1 | 0 |  |  |  | － 0 | 500 | 3， 000 | 1363 |
| Nonsect ．－ | 0 | 8 | 0 | 78 | 0 | 20 |  |  |  |  | 0 | 2 |  |  |  | 0 | 400 | 20，000 | 1364 |
| Bapt．．．．．． | 1 | 0 | 10 | 20 | 25 | 30 |  |  |  |  |  |  |  |  |  |  |  | 1，000 | 1365 |
| Nonsect ．． | 1 | 2 | 7 | 11 | 22 | 35 | 0 | 0 | 0 | 0 |  |  |  |  |  |  | 700 | 6，000 | 1366 |
| Bapt．．．．．． | 3 | 2 | 29 | 65 | 52 | 65 | 10 | 4 |  |  |  |  |  |  | 4 |  | 500 | 11，860 | 1367 |
| Meth．Prot | 2 | 0 | 10 | 8 | 61 | 41 | 1 | 0 |  |  |  |  |  |  | 4 | － | 500 | 8， 000 | 1368 |
| Nonsect ．． | 1. | 2 | 20 | 24 | 47 | 41 | 10 |  |  |  |  |  |  | 1 |  | － | 400 | 2，500 | 1369 |
| R．C | 0 |  | 5 | 36 | 25 | 83 | 4 | 4 | 3 | 0 |  | 0 |  |  | 4 |  | 700 | 1，200 | 1870 |
| Luth | 3 |  | 15 | 12 |  |  | 9 |  |  |  |  | 0 |  |  |  | 0 | 346 | 25，000 | 1371 |
| Nonsect ． | 3 | 4 | 20 | 25 | 12 |  |  |  |  |  |  | 2 |  | 2 | 3 | 0 | 2，000 |  | 1372 |
| Friends．． | 2 | 2 | 37 | 45 | 2 |  |  |  |  |  |  |  |  |  |  | 0 | 600 | ．50，000 | 1373 |

Table 43. -Siatistics of private high sehools, endowed academies, seminarics,


[^56]and other private secondary schonts for the scholastic year 189S－99—Continued．

| Religions denomina－ tion． | Sec－ ond－ ary in－ struct－ ors． | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  | Number of volumes in library． | Value of grounds， build－ ings， furni－ ture， and sei－ entific appa－ ratus． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Second－ arystu－ dents． |  | Elemen－ tary stu－ dents． |  | Preparing for college． |  |  |  | Gradu－ ates in 1859. |  | College prepara－ tory stu－ dents in the class that gradu－ ated in 1899. |  |  |  |  |  |  |
|  |  |  |  | $\begin{aligned} & \text { Clas- } \\ & \text { sical } \\ & \text { course. } \end{aligned}$ | Scien－ tific courses． |  |  |  |  |  |  |  |  |  |  |
|  |  | $\underset{\underset{-1}{\underset{\sim}{c}}}{\underset{\sim}{0}}$ |  |  |  |  | $\begin{aligned} & \text { © } \\ & \text { む̈ } \\ & \text { gi } \\ & \text { m } \end{aligned}$ | $\frac{\underset{1}{\tilde{\pi}}}{\frac{1}{\sim}}$ | $\begin{aligned} & \text { 家 } \\ & \text { gु } \\ & \text { H } \end{aligned}$ | $\frac{\stackrel{3}{3}}{\frac{3}{3}}$ |  | $\frac{\underset{y y y}{c}}{\underset{\sim}{c}}$ | $\begin{gathered} \dot{0} \\ \text { cis } \\ \text { g } \\ 0 \end{gathered}$ |  |  |  |  | $\underset{\sim}{\underset{\sim}{*}}$ | $\begin{aligned} & \text { d } \\ & \text { 岂 } \\ & \text { H } \end{aligned}$ |  |
| 4 | 56 | \％ | 8 | 9 | 10 | I 1 | 13 | 13 | 131 | 15 | 16 | 17 | 18 | 19 | 20 | 81 | 28 |  |
| Nonsect ．． | $0 \quad 5$ | 0 | 18 | 0 | 0 |  |  |  |  |  |  | 0 | 7 |  |  |  |  | 1874 |
| R．C | 80 | 84 | 0 | 7 | 0 |  |  |  |  | 14 | 0 |  |  | 4 | 41 | 2，000 |  | 1375 |
| R．C | $0{ }_{0} 6$ | 0 | 22 | 0 | 35 |  |  |  |  | 0 | 3 |  |  |  | 0 | 600 |  | 1376 |
| P．E | 010 | 0 | 78 | 5 | 18 |  |  |  |  | 0 |  | 0 | 10 | 5 | ， |  |  | 1377 |
| Nonsect ． | 07 | 0 | 22 | 6 | 24 | 0 |  |  | 0 | 0 | 3 | 0 | 2 | 4 | 0 | 1，000 |  | 1378 |
| Nonsect ．． | $0 \quad 8$ | 0 | 31 | 7 | 34 | 0 |  |  |  | 0 | 5 | 0 | 2 |  |  | 1，200 |  | 1379 |
| Nonsect ．． | 3.1 | 16 | 0 | 16 | 0 | 0 |  |  | 0 |  |  |  | ． | 1 | 0 |  | $\$ 300$ | 1380 |
| Nonsect | 06 | 0 | 25 | 0 | 0 | 0 |  |  |  |  |  |  |  |  | 0 | 700 | 30，000 | 1381 |
| Nonscet | $1 \quad 3$ | 14 | 3 | 2 | 0 | 14 |  |  |  | 2 | 0 |  | 0 | 3 | ， |  |  | 1382 |
| Nonsect ．． | 50 | 57 | 0 | 28 | 0 | 32 | 0 |  | 0 | 22 | 0 | 20 | 0 | 4 | 0 | 1，000 | 20，000 | 1383 |
| Nonsect ．． | 03 | 0 | 15 | 1 | ， | ， |  |  |  |  |  | 0 |  |  | 0 | 3，000 |  | 1384 |
| Nonsect | 011 | 0 | 65 | 0 | 10 | 0 |  |  |  |  |  |  |  | 4 |  |  |  | 1385 |
| R．C | 0 | 0 | 30 | 0 | 150 |  |  |  |  |  |  |  |  | 4 | 0 |  |  | 1386 |
| Nonsect | 40 | 40 | 0 | 10 | ， | 3 | 0 | 9 | 0 |  |  | 3 | 0 | 4 | 40 | 500 |  | 1887 |
| R．C | $8_{1} 0$ | 90 | 0 | 0 | 0 |  |  |  |  | 10 | 0 |  | ． | 5 | 0 | 1，300 | 60， 000 | 1388 |
| R．C | 0.8 | 0 | 60 | 0 | 100 |  |  |  |  | 0 | 7 |  |  |  |  |  |  | 1389 |
| R．C | 0 － 4 | 0 | 35 | 5 | 20 |  |  |  |  | 0 | 1 |  |  | 4 |  |  |  | 1390 |
| Nonsect | $0{ }^{-1} 3$ | 0 | 34 | 0 | 8 |  |  |  |  | 0 | 7 | 0 | 3 | 4 | 0 | 200 | 8，000 | 1391 |
| Nonsect | 1.13 | 0 | 46 | 20 | 54 | 0 | 0 | 0 |  | 0 |  | 0 | ， | ， | － | 1，500 |  | 1392 |
| Nonsect | 210 | 0 | 76 | 0 | 40 | 0 |  |  |  | 0 |  | 0 | 9 | 4 | 0 | 2，500 |  | 1383 |
| Nonsect ．． | 44 | 123 | 0 | 85 | ， |  |  |  |  | 22 |  |  | 0 | 4 | 0 |  | 300，000 | 1394 |
| R．C | $0 \quad 4$ | 0 | 35 | 5 | 20 |  |  |  |  | ， |  |  |  | 4 |  |  |  | 1395 |
| Nonscet ．． | 31 | 14 | 4 | 4 | 0 | 5 |  | 8 |  | 7 |  |  | 0 | 4 | 0 | 800 |  | 1396 |
| Lpis ．．．．．． | $3 \quad 9$ | 0 | 70 | 10 | 70 | 0 |  |  |  |  |  | 0 | 4 | 4 |  | 1， 600 | 7，000 | 1397 |
| R．C | $0 \quad 5$ | 0 | 28 | 40 | 102 | 0 |  |  |  |  |  |  |  | 1 | 0 | 1，500 | 60，000 | 1398 |
| Nonsect ．． | 10 | 29 | 23 | 8 | ， | ， |  |  |  |  |  |  |  |  | 0 | 200 | 120 | 1399 |
| Nonsect ．． | 12 | 28 | 21 | 2 | 19 | 5 | 6 |  | 10 | 0 |  |  |  | 4 |  | 100 | 25， 000 | 1400 |
| Friends ．－ | 31 | 0 | 67 | 0 | 21 |  |  |  |  | 3 | 1 |  |  | 3 | 0 |  | 5， 000 | 1401 |
| Nonsect ． | 11 | 32 | 55 | 4 | I |  |  |  |  |  |  |  |  |  |  |  |  | 1402 |
| R．C | 02 | 0 | 28 | 0 | 90 |  |  |  |  | 0 |  | 0 | 0 | 4 | 0 | 500 |  | 1103 |
| R．C | 12.0 | 138 | 0 | 120 | 0 |  |  |  |  | 11 | 0 |  |  | 5 | 0 |  |  | 1404 |
| Nonsect．． | $1{ }^{1} 1$ | 23 | 15 | 36 | 17 | 3 | 2 |  | 3 | 5 | 3 | 2 | 1 | 4 |  | 100 | 12，000 | 1405 |
| Epis | 012 | 0 | 74 | 5 | 2 | 0 |  |  | 19 | 0 | 13 | 0 | 9 |  | ， | 1，000 | 100，000 | 1400 |
| Nonsect． | 30 | $\because 6$ | 0 | 0 |  |  |  |  |  | 2 | O |  |  |  | 26 |  |  | 1407 |
| Nonsect | $0 \quad 2$ | 52 | 16 | 13 | 1 |  | 1 |  |  | 4 | 2 | 4 | 2 | 4 | 0 | 1，000 | 25，000 | 1408 |
| Nonsect． | 10 | 8 | $8^{\prime}$ | 87 | 45 | 3 | 2 |  | 5 | 2 | 0 |  | 0 | 3 |  | 260 | 2，000 | 1109 |
| R．C | 0 － | 0 | 20 | 0 | 50 |  |  |  |  | 0 | 2 |  |  | 4 |  |  |  | 1410 |
| Nonsect ．－ | $0 \quad 2$ | 0 | 10 | 0 | 1 | 0 |  |  |  |  |  |  |  |  |  | 1，360 | 20，000 | 1411 |
| Nonsect ．． | 11 | 30 | 10 | 15 | 10 | 3 | 0 | 12 | 0 | 11 | 1 | 8 | 0 | 3 |  | 100 | 10，000 | －1412 |
| Presb．．．． | 11 | 15 | 20 | 5 | 5 | 1 |  |  |  | 0 | 2 |  |  | 3 |  | 100 |  | 1413 |
| R．C．．．．．． | 0 \％ | 0 | 15 | 0 | 75 | 0 | 0 |  | 0 | 0 | 3 |  |  | 4 | 0 | 3， 000 |  | 141 |
| R．C ．．－．． | 08 | 0 | 36 | 0 | 20 |  |  |  |  | 0 | 5 |  |  |  |  | 4， 000 |  | 1415 |
| Nonsect ．． | 31 | 41 | 57 | 0 | 0 | 41 | 50 | 0 | 7 | 2 | 1 | 2 | 1 | 4 | 0 | 1，000 | 7，000 | 1416 |
| Nonsect ．． | 4.4 | 74 | 87 | 8 | 12 | 2 | 2 | 6 | 8 | 12 | 15 | 4 | 6 | 3 | 0 | 400 | 20，000 | 1417 |
| Presb．．．．． | 11 | 16 | 16. | 0 | 0 |  |  |  | 0 | 1 | 2 | 4 | 0 | 3 | 0 | 1，000 | 5，000 | 1418 |

Table 43.-Statistics of priate high schools, endowed academies, seminaries,

ancl olher priate secometary schoots for the scholustic yen 1898-92-Contimed.


Table 43.-Statisties of private high schools, endoued accademies, seminaries,

|  | State and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
|  | PENNSTLTANTA-continued. |  |  |
| 1465 | Concordville | Maplewood Institute*............ | Joseph Shortlidge . . . . . . . . . . |
| 1466 | Cresson. | Mount St. Aloysius Academy .... | Sister M.Josephine |
| 1467 | Darlington | Greesburg Academy .......... | C. A. Simonton, M. S. D |
| 1468 | Dayton..... Doylestown | Union Academy ...... | G. U. Davis, A. M ............ |
| 1469 1470 | Doylestown <br> Dryrun..... | National Farm School | G. S. Voorhees, E. E. Faville .. |
| 1471 | Easton. | Easton Academy*... | Samuel R. Park, A |
| 1472 | . ....do | Lerch's School. | Charles H. Lerch . .-............ |
| 1173 | Eau Claire | Eau Claire Academy | Miss Rose Stewart.............. |
| 1474 | Elders Pidge | Elders Ridge Academy | N. B. Kelly, A. M |
| 1475 | Factoryville | Keystone Academy | Elkanah Hulley |
| 1476 | Fredericksburg | Schurlkill Seminary | C. W. Hensel. |
| 1477 | Fredonia ...... | Fredonia Institute.. | S. H. Miller, A. M |
| 1178 | Freeburg | Freeburg Acaderny | Geo. W. Walborn |
| 1479 | George School | George School | Geo. L. Maris . |
| 1480 | Germantown . .-.............. | Friends' School ...................... | Davis H. Forsythe............... |
| 1181 | Germantown (Shoemaker lane). | Germantown Academy ........... | William Kershaw, Ph. D....... |
| 1482 | Germantorm (211 West Chelten street). | The Stevens School . . . . . . . . . . . . . | Mrs. Emily D. Dripps .......... |
| 1483 | Glenville . . . . . . . . . . . . . . . . | Glenville Academy . ................ | E. M. Stahl |
| 1484 | Greensburg | Greensburg Seminary................... | J. C. Hoch, A. M., Ph. D |
| 1485 | .....do ..... | St. Joseph's Academy for Young Ladies. | Mother Mary Josephine....... |
| 1486 |  | Eichelberg Academy ............. | John E. Bohn. ..................... |
| 1457 | Harrisburg (401 North Front st.). | Harrisburg Academy - .............. | Jacob F. Seiler, Pl.D........... |
| 1488 | Hazleton | Hazleton Seminary*............... | S. C. Jack |
| 1489 | Hickory | Hickory Academy .................. | A. M. Reed ........................ |
| 1490 | Jenkintown .... | Abington Friends School |  |
| 1491 | Kennett Square | Martin Academy ... | Edgar Stinson, M. Sc ............. |
| 1492 | Kingston . . . . . | Wroming Seminary . . . . . . . . . . . . | Rer. L. L. Sprague, D. D . . . . . |
| 1493 | Kittanning. | Kittanning Academy.............. | Rer. Robert Barner ........... |
| 1494 | Lancaster . <br> Lancaster (305 North Duke | Sacred Heart Academy ............. <br> The Yeates Institute | Sister M. Stanislaus.............. |
| 1495 | Lancaster (305 North Duke st.) <br> Tigonier | The Yeates Institute <br> Ligonier Classical Institute | W. F. Shero and Frederic Gardiner. <br> E.H. Dickinson |
| 1497 | Lititz... | Linden Hall Seminary | Charles D. Kreider |
| 1498 | Littlestown. | Edge Hill Institute | Walter E. Krebs, A. M |
| 1499 | Londongrofe | Friends' School. | Jane P. Rushmore. |
| 1500 | Lorreto..... | St. Francis College............... | Brother Angelus, O.S. F...... |
| 1501 | McAlevys Fort. | Stone Valley Acadcmy* | Y. A. Green. A. II ............... |
| 1502 | MeSherrystown ............. | St. Joseph's Academy .-...-....... | Mother M.Ignatius |
| 1503 | Mechanicsburg. | Normal and Classical School ..... | D.E.Kast |
| 1504 | Media......... | Friends' Select School ............. | Emma Fell Paxson. |
| 1505 | -...do..... | Shortlidge's Academy for Boys... | Charles W. Stuart . . . . . . . . . . |
| 1505 | Mercersburg | Mercersburg Academy.............. | William Mann Irvine, Ph. D.. |
| 1507 | Mifflintown | Mifflin Academy * ................. | J. Harry Dysinger ........... |
| 1508 | Mount Pleasant | Western Pennsylyania Classical and Scientific Institute. | Henry C. Dixon ............. |
| 1509 | Murrysville | Laird Institute.................... | John R. Steeres, A. MI. |
| 1510 | Nazareth ....... | Nazareth Hall Military Academy . | S. J. Blum . . . . . . . - . |
| 1511 | New Bloomfield | Bloomfield Academy ............ | H. C. Mohm, A. M |
| 1512 | New Lebanon <br> Northeast.... | McElwain Institute... <br> St. Mary's College. | H. Alfred Steele Caspar G. Ritter |
| 1514 | North Hope | North Washington Academy | Kinter Hawilton |
| 1515 | North Wales. | North Wales Academy*...... | Samuel U. Brunner. |
| 1516 | Ogontz | Cheltenham Military Academy* | John C. Rice, Ph. D |
| 1517 | Oley. | Oley Academy | Howard Mitman, A. M |
| 1518 | Oxford | Oxford Academy | Slater C. Garver. |

[^57]und other pricate secondury schools for the scholestic year 1898-99-Continued.


Table 43.-Statistics of private high schools, endoued academies, seminaries,

and other private scomdary schoo7s foi the schatasir yetr 1898-29-Continned.


Table 43. -Statistics of pricate high schools, endowed actemies, seminaries,

|  | state and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
|  | pexastlvagla-contimued. |  |  |
| ${ }_{1558}^{155}$ | Sharon $\qquad$ | Hall Institute | S. L. Cover, A. M |
| 1599 | Sugar Grove.. | Sugar Grove seminary. | D. H. Seneff, A . B |
| 1560 | Swarthmor | Swarthmore Preparatory School. | Arthur H. 'Tomlinson |
| 1562 | Townda... | Susquehanna College Institute... | Padget and Belcher. |
| 1563 | Washington | Trinity Hall. | Wm.W. Smith. |
| 156 | Wiateriord | Waterford Academy . | J.J.Palmer, G. A. Perseil |
| 1566 | West Chest | Darlington Seminary for Young | Richard Darling |
| $\begin{aligned} & 1567 \\ & 1568 \end{aligned}$ | West Ne....... | Friends' school. | Frances Darlington <br> Geo. D. Crissman, |
| 1569 | West Stunbury | West Sunbury Acadeniy | A. Bruce Giil |
| 1570 | Westorn | Westtown Boarding school | Wm.F.Wichers |
| 10.1 | Wilkesbarre | Harry Hillman icademy | Harry C. Dari |
| 15. | .....do | Wilkestare Fernaie Institute.... | Miss Elizabeth F. |
| 157 | Williamsport. | Williamsport Dickinson Seminary | Edward J.Gray, |
| 1515 | York... | York Collegiate Institute. | E. T. Jeffers. |
|  | rhode islayd. |  |  |
| 1577 | Fast Greenwich | The East Greenticli Academy | Rer. F. D. Blakeslee, D. |
| 1579 |  | Engish and Classical sch | John |
| 15 | Providence (ts Snow st.)... | English and Classical School. | Chas. B. Goff, Ph. ${ }^{\text {d }}$ |
| 1581 | Providence (Elmhurst, 736 Smith st.). | Female Academy of the Sacred Heart. | Amelia Chulten |
| 1582 | Providence (119 Franklin | La Salle Academy | Brother Peter |
| 1583 | Providence (223 Thayerst.). | The Lincoln School | Ednah G. Borven, Margaret |
| 1584 | Providence .............. | Slade Míansion Select School. | Fannie E. Wood |
| ${ }_{1586}^{1585}$ | $\begin{aligned} & \text { Providence (Broad st.)..... } \\ & \text { Providence ( } 15 \text { Greene st.). } \end{aligned}$ | St. Francis Xavier's Academy - ${ }^{\text {a }}$ | Abister M. F. Southwic |
| 1587 | Providence (26 Cabot st.) | Wheeler's (Miss) School for Girls. | Mary C. Wheeler |
| 1588 | Woonsocket (Park ave.).... south carolina. | Convent of Jesus and Mary. | Mother St. Stepher |
| 1589 | Adamsrill | Palmetto High School | R.S. Flete |
|  | Anderson | Patrick Military Ins | Johnl |
| 1591 | Ashlarid. | Ashland High schoo | P.P. Bethea |
| 1593 | Camden. | Browning Industrial Home and | Miss N.A.Crouc |
| 1591 | Charleston (38 Corning st.). | Gilibee (Misces) Private Schoo | Misses S P. and |
|  |  | High school of Charleston. | W. M. |
| 159 |  | Porter A cademy | charies J.coico |
| 1597 | Charleston (47 Mceting st.). | Simith (rrs. Private | Mrs.1.A.smith |
| 1.599 | Chester ( (1. O. box 230).... | Bravinerd Institute | J. S. Marquis. |
| 1600 | Ciinton............... | The Thornwell Orphanage | Wm. P. Jacobs |
| 1601 | Columbia | Benedict college | Winiam B. |
| 1602 | Gafiney | Gatine H High school | S. A. chamber |
| $160 \pm$ | Hrarsy | Honea Path High school | W. P Coker |
| 1605 |  | The Johnston | W. D. Holland ................. |

and other private secondary schools for the scholastic year 1898－29－Continued．

| $\begin{aligned} & \text { Religious } \\ & \text { denomina- } \\ & \text { tion. } \end{aligned}$ | $\left\lvert\, \begin{gathered} \text { Sec- } \\ \text { ond- } \\ \text { ary } \\ \text { in- } \\ \text { struct- } \\ \text { ors. } \end{gathered}\right.$ |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Value of grounds， build－ ings， furni－ ture， and sci－ entific appa－ ratus． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Second－ ary stu－ dents． |  | Elemen－ tary stu－ dents． |  | Preparing for college． |  |  |  | Gradit－ ates in 1899. |  | College preparid－ tory stu－ dentsin the class that gradu－ ated in 1899. |  |  |  |  |  |  |
|  |  |  | $\begin{aligned} & \text { Clas- } \\ & \text { sieal } \\ & \text { course. } \end{aligned}$ | $\begin{gathered} \text { Scien- } \\ \text { tific } \\ \text { courses. } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | $\frac{\stackrel{0}{\Xi}}{\underset{\sim}{\Xi}}$ |  | $\frac{\dot{3}}{\underset{\sim}{c}}$ |  | $\frac{\underset{\sim}{x}}{\underset{\sim}{x}}$ |  |  |  |  |  |  |  | $\frac{\stackrel{0}{3}}{3}$ |  |  |
| 4 | 56 | 6 | $\%$ | 8 |  |  | 9 | 10 | 11 | 夏思 | 13 | 14 | 13 | 16 | 18 | 13 | 13 | 20 | 21. | 意》 |  |
| Bap | 1 | 1 | 20 | 25 | 10 | 25 |  |  |  |  | 12 | 17 |  |  |  | ） | 1，000 | 75，000 | 15.57 |
| Epis | 1 | 3 | 0 | 30 | 0 | 38 | 0 | 2 |  |  | 0 | 3 | 0 | 1 | 4 |  | 1，000 |  | 1558 |
| United Br． | 3 | 3 | 58 | 69 | 0 | 0 |  |  | 14 | 19 | 2 | 3 | 2 | ， | 4 | 0 | 2，000 | 30， 000 | 1559 |
| Triends．．． | 3 | 3 | $3 \pm$ | 26 | 36 | 39 | 34 | 26 |  |  | 3 | 6 | 3 | ， | 5 | 0 | 250 | 50，000 | 1560 |
| R．C | 01 |  | 0 | 100 | 0 | 30 |  |  |  |  | 0 | 6 |  |  |  |  | 1，000 |  | 1561 |
| Presb | 1 | 1 | 10 | 16 | 10 | 24 | 4 | 4 |  |  | 3 | 4 | 3 | 2 | 3 | 0 | 1，000 |  | 1562 |
| Epis | 4 | 0 | 39 | 0 | 0 | 0 | 0 | 0 |  | 0 | 2 | 0 | 2 |  |  | 39 | 3， 000 | 150， 000 | 1563 |
| Nonsect ．． | 0 | 6 | 0 | 90 | 0 | 85 | 0 | 12 |  |  |  | 29 | 0 | 2 |  |  | 2， 500 | 50，000 | 1564 |
| Nonsect ．． | 1 | 0 | 19 | 19 | 0 | 0 | 0 | 0 | 1 | 1 |  | 0 | 1 | 0 | 3 | 0 | 800 | 6，000 | 1505 |
| Nonsect ．－ | 0 | 2 | 0 | 35 | 1 | 25 | 0 | 2 |  |  | 0 |  |  |  | I | 0 | 1，000 | 25，000 | 1 a 66 |
| Friends． | 0 | 2 | 11 | 11 | 4 | 5 | 0 |  |  |  | 0 | － |  | 1 | 4 | 0 |  |  | 1567 |
| Nonseet | 2 | 1 | 23 | 27 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | $\vartheta$ | 20 | 60 | 1568 |
| Nonscet | 1 | 1 | 48 | 47 | 15 | 20 |  |  |  |  | 0 | 2 |  |  | 3 | 0 | 400 | 6， 000 | 1569 |
| Friends ．－ | 9 | 9 | 80 | 82 | 10 | 11 |  |  |  |  | 13 |  | 5 |  | ． | 0 | 5，200 |  | 1570 |
| Nonsect．． | 5 | $\stackrel{0}{0}$ | 70 | ${ }^{0}$ | 30 | 0 | 20 | 0 | 16 | 1 | 10 | 0 | 9 |  | 6 | 0 | 309 | 70，000 | 1571 |
| R．C． | 0 | 2 | 8 | 16 | 192 | 38. |  |  |  |  | 0 |  |  |  | ， |  | 100 |  | 1572 |
| Nonsect | 0 | 7 | 0 | 50 | 0 | 40 | 0 | 8 |  |  | 0 | 11 |  |  |  |  |  |  | 1573 |
| M．E | 5 | 3 | 67 | 49 | 45 | 118 | 2 | 1 | 2 | 0 | 9 | 13 | 2 | 0 |  | ， |  | 150，000 | 1574 |
| Nonsect | $0$ |  | 9 | 21 | 4 | 14 |  |  |  | ． | ， | 4 |  |  | － | 0 |  | 10，000 | 1575 |
| Presb | $4$ | 3 | 56 | 26 | 0 | ， | 14 |  | 17 | 6 | ， |  |  |  | 5 |  | 3，000 | 105， 000 | 1576 |
| Meth | 5 | 7 | 38 | 48 | 54 | 37 |  |  |  |  | 5 | 9 |  |  | 4 | 0 |  | 68，650 | 1577 |
| Nonsect | 4 | 1 | 12 | 0 | 18 | 0 | 9 | － |  | 0 | 1 | 0 | 1 |  |  | 0 | 200 |  | 1578 |
| Nonsect．． | 2 | 1 | 29 | 5 | 42 | 7 | 3 | 1 | 7 | 0 | 14 | ， |  |  |  | 3 | 300 | 6，000 | 1579 |
| Nonsect．． | 8 | 1 | 70 | 0 | 71 | 0 |  |  |  | ， | 16 | 0 |  | 0 | ， | 70 | 200 | 1， 400 | 1580 |
| K．C． | 0 | 1 | ， | 40 | 0 | 30 |  |  |  |  | ， |  |  |  | ， | 40 |  | 100， 000 | 1581 |
| R．C | 5 | 0 | 85 | 0 | 85 | 0 | 55 |  |  |  | 8 |  |  | 0 | 4 | 0 | 1，200 |  | 1582 |
| Nonsect ．． | 0 | 6 | 0 | 51 | 0 | 41 | 0 | 12 |  |  | 0 |  |  |  | 4 |  | 500 | 2，000 | 1583 |
| Nonsect | 1 | 3 | 0 | 7 | 51 | 78 |  |  |  |  | 1 |  |  |  |  |  |  |  | 1.584 |
| R．C | 0 | 5 | 0 | 50 | － 9 | 37 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 0 |  |  | 674 |  | 1585 |
| Epis | 0 | 7 | 0 | 25 | － | 15 | 0 |  | 0 |  | 0 |  |  |  | 4 | 0 |  |  | 1586 |
| $\begin{aligned} & \text { Nonsect .. } \\ & \text { R.C ...... } \end{aligned}$ | $\begin{aligned} & 5 \\ & 0 \end{aligned}$ | $\begin{aligned} & 8 \\ & 2 \end{aligned}$ | 0 0 | $\begin{gathered} 48 \\ 6 \end{gathered}$ | 0 215 | 20 473 | 0 |  |  |  | 0 | 4 |  | 3 | 5 |  |  | 30，000 | $\begin{aligned} & 1587 \\ & 1588 \end{aligned}$ |
| Nonsect ．． | 1 | 1 | 10 | 14 | 25 | 12 |  |  | 5 | 3 | 0 |  |  | 0 |  | 0 | 125 | 800 | 1589 |
| Nonsect ．． | 4 | 0 | 54 | 0 | － 3 | 0 | 2 | 0 |  |  | 3 | 0 | ．．．． |  | 4 | 54 | 1，200 | 10，000 | 15.90 |
| Nonsect．． | － 1 | 1. | 30 | 33 | 10 | 10 | 3 | 0 |  | 38 | 3 | 2 | 3 | 2 | 2 | 0 | 180 | 1，000 | 1591 |
| Nonsect．． | 1 | 2 | 20 | 20 |  |  |  | － |  | 3 |  |  |  |  | $\frac{1}{4}$ | 0 | 200 | 3，000 | 1592 |
| M．E．－．－． | 0 |  | 10 | 20 | 40 | 80 |  |  |  |  |  |  |  |  | 3 | 0 | 200 |  | 1593 |
| Nonsect ．． | 0 | 7 | 0 | 14 | 0 | 28 |  |  |  |  |  |  |  |  | 4 |  | 200 | 800 | 1594 |
| Nonsect ．． | 7 | 0 | 185 | 0 | ） 0 | 0 |  |  |  |  | 16 | 0 |  | 0 | 0 |  |  | 20， 000 | 159.5 |
| Epis ．－．．．－ | ． 5 | 0 | 52 | 0 | ） 18 | 0 | 1 |  |  | 0 | 16 | 0 |  | 0 | 3 | 33 |  |  | 1595 |
| Nonsect | 0 | 8 | 0 | 39 | 0 | 41 | 0 |  |  | 0 | 0 | － | 0 | 2 | 5 | 0 |  |  | 1597 |
| Nonsect | 2 | 0 | 16 | 0 | 0 | 0 | 5 |  |  |  |  |  |  |  |  |  |  |  | 1598 |
| Nonsect | 2 | 1 | 4 | 13 | 89 | 105 | 2 |  | 0 | 1 | 0 | 3 |  |  |  |  | 200 | 10，000 | 1599 |
| Presb | 5 | 8 | 31 | 49 | 32 | 60 |  |  |  |  | 2 | 13 |  |  |  |  | 6，000 | 60，000 | 1660 |
| Bapt． | 5 | 3 | 22 | 29 | － 60 | 81 | 13 | G | 0 | 0 | 12 | 11 | 5 | 3 | 2 | 0 |  | 74， 000 | 1601 |
| Bapt．．．．．．． | 0 | 3 | 11 | ？ | 30 | 26 |  | 3 |  | 0 | 0 | 1 |  | I | 4 |  | 324 | 2，500 | 1602 |
| Bapt．．．．．． | 2 | 2 | 30 | 35 | 35 |  |  |  |  |  | 1 | 0 |  |  | 4 | 50 | 100 | 20， 000 | 1603 |
| Nomsect ． | 1 |  | 20 | 25 | 30 |  |  |  |  |  | 1 | 5 |  | 5 | 3 | 0 | 250 | 1，500 | $160 \frac{1}{2}$ |
| Nonsect．． | ． 4 |  | 80 | 79 | ， 50 | 40 | 15 |  |  |  | 0 | 1 | 0 |  | 4 | 40 | 150 | 5，000 | 1605 |

Tabie 43 .-Sthistics of private high schools, endoured actultmics, seminaries,

and other private secondary schools for the scholasie yerts 1838-99--Continued.


Table 43.-Statistics of private high schools, endowal actidemies, seminaries,

and other private secondary schools for the scholastic yenr 1SOS-92-Continued.


Table 43.-Statistics of private high schools, endoued academies, seminaries,

|  | State and post-office. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
| 1715 | TENNESSEE-continued. <br> Shelbvville | Dixon Academy | GeorM. Edga |
| 1716 | Smyrna... | Smyrna Fitting School | W. H. Bates . . . |
| 1717 | Southside | Southside Preparatory School * | P. L. Harned |
| 1718 | Sweetwater | Sweetwater Seminary* | J. H. Richardson. |
| 1719 | Tazewell | Tazewell College ...... | J. C. Brogan .... |
| 1720 | Trezevant. | Male and Female Academy | J. R. Garrett |
| 1721 | Union City | Union City Training School*.... | D. A. Williams |
| 1722 | Viola .... Walter Hi | Viola Normal School*........ | C. J. Denton . . |
| 1724 | Wartrace | Brandon Training School | A. J. Brandon |
| 1725 | Watertown | Watertown School .. | F. M. Bowling |
| 1726 | Wellspring | Powells Valley Seminary | Rev. M. H. Monroe |
| 1727 | Wheat...... Whitepine | Roane College ..... <br> Edwards Academy | J. P. Griffitts, D. Sc., |
| 1728 | Whitepine $\qquad$ TEXAS. | Edwards Academy | J. D. Droke, D. D ... |
| 1729 | Abilene . | Simmons College . . . . . . . . . . . . . . | O. C. Pope, president . |
| 1730 | Albany .. | Reynolds Presbyterian Academy. | O. E. Arbuckle...... |
| 1731 | Arlington | Arlington College................... | L. M. Hammond, M. |
| 1732 | Athens - ............... | Bruce Academy.. | V. H. Bruce ....... |
| 1733 | Austin (202 West 8th st.) | Hood Seminary *.... | Mrs. E. N. Hood. |
| 1734 | Austin..................... | St Mary's Academy | Sister Superior..... |
| 1735 | .....do Beckville | Tillotson College . Hewitt Insitute.. | Marshall R. Gaines <br> W.J. Gayden ...... |
| 1787 | Belton... | Belton Academy | C. H. Wedemeyer |
| 1738 | Brenham | Blinn Memorial College . ........ | C. Urbautk ... |
| 1739 | ..... do ..... | Evangelical Lutheran College.... | Rev. J. Romberg. . |
| 1710 | Brownsville | St. Joseph's College.................. | Rev. E. M. Chevrier |
| 1741 | Buffalo Gap. | Buffaio Gap College. | John Collier, D. D |
| 1742 | Burleson .. | Red Oak Academy * |  |
| 1743 | Celeste... | Elmwood Institute | B. A. Stafford .... |
| 1744 | Cleburne | Cleburne Academy | K. A. Berry . |
| 1745 | Commerce | East Texas Normal Colleg | M.L. Mayo |
| 1746 | Corsicana | Seminary for Girls. | Mrs.R.T. Miiler |
| 1747 | Dallas | Central Academy...... | Walter Malcolmson |
| 1748 | Decatur | Decatur Baptist College............ | B. T. Giles .......... |
| 1749 | Denison | Harshaw's Academy................. | George L. Harshaw |
| 1750 | Eddy | Literary and Scientific Institute.. | J. M. Bedichek..... |
| 1751 | Ferris | Ferris Institute *..................... | A. C. Speer . . . . . . |
| 1752 | Forney ..... | The Lewis Academy................ | E. C. Lewis. |
| $1753$ | Fort Worth . | St. Ignatius Academy................. | Sister Louise. |
| $175 \frac{1}{4}$ | Galveston . | St. Joseph's Academy............... | Sister Mary....... |
| 1755 1756 | - Glenrose | Ursuline Convent.............. Glenrose Collegiate Institute | Mother St. Agnes... L. F. Bickford, Ph. |
| 1757 | Greenwood. | Greenwood Male and Female College. | M. L. Arnold. . . . . . |
| 1758 | Hearna. | Hearne Academy................... | John F. Anderson |
| 1759 | Jacksonville | Alexander Collegiate Institute ... | E. R. Williams |
| 1760 | Jasper...... | Southeast Texas Male and Female College. | J. H. Synnott . . . . . |
| 1761 | Laredo | Laredo Seminary | Miss N. E. Holding. |
| 1762 |  | Ursuline Academy* .-. .-. .-. .-. | MotherSt. Paul.... |
| 1763 | Marshall. | Bishop College.......................... | Albert Loughridge |
| 1764 | ..... do . <br> Minden | Masonic Female Institute ......... <br> Rock Hill Institute | W. D. Allen . . . . . . . <br> G. I. Watkins |
| 1765 | Minden -.... | Rock Hill Institute.... Rose Dale High School | G. I. Watkins <br> J. S. Magee |
| 1767 | Omen ........ | Summer Hill School .. | A.W.Orr . . |
| 1768 | Paris. | East Side Boys' School | J. P. Downer. |
| 1769 | ... do | Paris Female College ............... | T.J.Sims. |
| 1770 | Peaster | Peaster College ...... | F. H. Bagby, B. A |

and other private secondary schools for the scholastic year 1898－99－Continued．

| Religious denomina－tion． | $\begin{gathered} \text { Sec- } \\ \text { ond- } \\ \text { ary } \\ \text { in- } \\ \text { struct- } \\ \text { ors. } \end{gathered}$ |  | Students． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Value of grounds， <br> build－ ings， furni－ ture， and sei－ entific appa－ ratus． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Seeond－ ary stu－ dents． |  | Elemen－ tary stu－ dents． |  | Preparing for collegc． |  |  |  | Gradu－ ates in 1899. |  | College prepara－ tory stu－ dents in the elass that gradu－ ated in 1899. |  |  |  |  |  |  |
|  |  |  | $\begin{gathered} \text { Clas- } \\ \text { sical } \\ \text { course. } \end{gathered}$ | $\begin{gathered} \text { Scien- } \\ \text { tific } \\ \text { courses. } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |
|  | $\frac{\stackrel{y y}{\Xi}}{\underset{\sim}{z}}$ |  |  |  | $\stackrel{\otimes}{\stackrel{\oplus}{\tilde{y}}}$ |  | $\frac{\text { 荗 }}{}$ |  | $\begin{aligned} & \text { 追 } \\ & \text { ت゙ } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { 完 } \\ & \text { gid } \\ & =1 \end{aligned}$ |  |
| 4 | 5 | 6 | 7 | 8 |  |  | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | \＆1 | 22 |  |
| Nonsect | 0 | 11 | 12 | 26 | 14 | 15 | 2 |  |  |  |  |  |  |  |  | 0 | 0 | \＄6，000 | 1715 |
| Nonsect | 1 | 1 | 19 | 14 | 6 | 10 | 9 |  |  |  | 4 |  | 4 | 0 | 4 | 0 | 700 | 4， 000 | 1716 |
| Nonsect |  |  | 35 | 30 | 65 |  | 5 | 0 |  | 0 |  |  |  |  | 4 | 0 | 100 | 2，500 | 1717 |
| Bapt．． |  | 2 | 0 | 21 | 0 |  |  |  |  |  |  |  |  |  |  |  | 1，100 | 30,000 | 1718 |
| Nonsect | 1 |  | 19 | 17 | 61 |  | 11 | 7 |  | 10 | 12 |  |  |  | 3 | 0 |  | 8，000 | 1719 |
| Nonscet | 1 | 1 | 53 | 48 | 82 |  |  |  |  |  |  |  |  |  | 4 | 0 | 200 | 5，000 | 1720 |
| Nonsect | 2 | 1 | 35 | 45 | 0 |  | 4 | 4 |  |  | 2 | 2 | 1 | 1 | 4 | 0 | 525 | 6，500 | 1721 |
| Nonsect | 2 | 1 | 40 | 46 | 60 | 40 | 8 | 2 |  |  | 1 | 1 | 1 | 1 | 3 | 0 | 100 | 6，000 | 1722 |
| Nonsect | 1 | 1 | 14 | 12 | 34 |  |  |  |  |  |  |  |  |  |  |  |  | 1，500 | 1723 |
| Nonsect | 3 | 0 | 36 | 27 | 117 | 84 | 8 | 8 | 12 | ， | 4 | 3 | 3 | 2 | ${ }_{4}^{4}$ | ${ }^{0}$ | 25 | 6，000 | 1724 |
| Nonsect | 2 | 2 | 18 | 14 | 67 | 81 | ${ }_{2}^{2}$ |  | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 150 | 2， 100 | 1725 |
| M．E．．．． | 1 |  | 48 | 16 | 48 | 57 |  |  |  |  |  |  |  |  | 4 | 31 | 113 | 4， 000 | 1726 |
| Nonsect U．Breth | 3 | 32 | 30 | 15 | 50 | 30 |  | 4 | 8 | 4 | 10 |  | ${ }_{3}^{3}$ | 2 | 4 | 0 | 400 | 5， 000 | 1727 |
| U．Breth |  |  | 31 | 28 | 91 | 101 |  |  | 26 | 19 |  |  | 2 | 3 | 4 | 0 | 300 | 5，500 | 1728 |
| Bapt．．． | 3 | 3 | 40 | 35 | 5 | 20 | 15 | 18 | 0 | 0 | 0 | 5 |  |  |  | 0 | 3，500 | 25， 000 | 1729 |
|  |  | ${ }^{2}$ | 25 | 25 | 13 |  |  |  |  |  |  |  |  |  |  | 0 | ． 20 |  |  |
| Nonsect |  | 2.0 | 48 | 53 | 60 | 40 |  |  |  |  | ${ }^{0}$ |  |  |  | 4 | 0 | 40 | 6， 000 | 1731 |
| Nonsect | ${ }_{1}^{2}$ | $1{ }_{1}{ }^{2}$ | 4 | 29 | 0 | 7 | ${ }_{2}^{4}$ | 2 | 8 | 0 |  |  |  |  | 1 | 0 | 300 | 3，000 | 732 |
| R．C |  | 05 | 0 | 30 | 0 | 170 |  |  |  |  | 0 |  |  |  | ， |  |  |  | 1734 |
| Cong | 2 | 26 | 26 | 20 | 61 | 88 | 1 | 0 |  |  | 6 | 2 | 1 | 0 | 4 | 0 | 2，000 | 40.000 | 1735 |
| Nonsect． |  | 11 | 23 | 31 | 52 | 56 |  |  |  | 1 |  |  |  |  | 2 | ， |  | 2，5¢0 | 1736 |
| Nonsect． | 3 | 33 | 90 | 55 | 0 | 0 | 25 | 15 | 10 | 0 | 5 |  | 3 | 1 | 4 | ， | 500 | 10，000 | 1737 |
| M．E． | 4 | 40 | 65 | 13 | 21 |  |  |  | 1 | 1 | 15 | ， |  |  | 3 | 0 | 1，200 | 18，000 | 1738 |
| Luth |  | 30 | 22 | 12 | 22 | 1 |  |  |  |  |  | ， |  |  | 4 | 0 | 225 | 10，000 | 1739 |
| R．C．．．．．．． |  | 20 | 16 | 0 | 114 |  |  |  | 1 | 0 |  |  |  |  |  |  |  |  | 1740 |
| Cum．Presb |  | 20 | 14 | 18 | 14 | 18 |  |  |  |  |  |  |  |  | 4 | 0 | 100 | 8，000 | 1741 |
| Cum．Presb | ， | 11 | 29 | 39 | 39 | 30 | 4 |  |  |  | 8 | 3 |  |  | 3 |  | 160 | 4，0c0 | 1742 |
| Nonsect ．． |  | 21 | 24 | 20 | 51 | 47 | 14 | 10 | 3 | 2 | 0 | 0 | 0 | 0 | 4 | 0 | 500 | 12， 500 | 1743 |
| Nonsect ．． | 1 | $1{ }_{1}^{1}$ | 37 | 20 | $2{ }^{2}$ | 7 |  |  |  |  | 0 | 0 |  |  | 4 | 0 | － 200 | 4,000 | 1744 |
| Nonsect． | 4 | $4{ }^{4} \stackrel{1}{2}$ | 130 | 48 | 21 | 35 | 35 | 18 | 23 | 17 | 10 | 1 | ${ }^{6}$ | 1 | 4 | 52 | 3， 500 | 2，000 | 1745 |
| Nonsect． | 1 | 1.2 | 0 | 28 | 3 | 20 | 2 | 10 | 0 | 15 | 0 | 0 | 0 | 0 | 4 | 0 | 300 | 6：000 | 1746 |
| Nonsect | 2 | 20 | 32 | 6 | 4 | 1 | 5 | 0 | 6 | 0 | 5 | 3 | 4 | 0 | 4 |  | 2， 200 | 5：000 | 1747 |
| Bapt．．．． |  | 21 | 41 | 20 | ${ }^{61}$ | 23 |  |  |  |  | 0 |  |  |  | 4 | 50 | 100 | 50，c00 | 1748 |
| Nonsect Nonsect | 2 | 20 | 35 | 20 | 15 | 10 |  |  | 3 | 0 | 4 | 2 | 4 | 2 | 4 |  |  |  | 1749 |
| Nonsect． |  | 01 | 19 | 15 | 23 |  |  |  |  |  |  |  |  |  |  |  | 300 | 3，0c0 | 1750 |
| Nonsect． | 3 | 31 | 89 | 107 | 142 | 112 | 7 |  |  |  | 3 | 8 | 2 | 2 | 5 | 0 | 1，300 | 25， 000 | 1751 |
| Nonsect | 2 | 21 | 34 | 14 | 22 | 20 | 10 |  |  | 1 | 1 | 2 | 1 | 1 | 4 | 0 | 600 | 6，800 | 1752 |
| R．C． | 0 | 010 | 0 | 100 | 0 | 150 | 0 | 10 | 0 | 8 | 0 | 10 | 0 | 10 |  |  | 600 | 50， 000 | 1753 |
| R．C | 0 | 04 | 23 | 68 | 65 | 67 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 | ．．．．．．．．．． | 1754 |
| $\underset{\text { Presb }}{\text { R }}$ ． | 1 | 06 | 0 | 50 | 0 | 75 | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |  | 0 | 3， 000 | 500,000 | 1755 |
| Presb ．．．．． Nonsect ．． |  | 13 | 16 | 23 | 8 | 10 | 7 | 14 | 0 | 0 | 0 | 0 |  | 0 |  | 0 | 200 | 8，000 | 1756 |
| Nonsect ．． |  | 20 | － 3 |  | 97 | 98 |  |  |  |  | 1 | 1 | 1 | 1 | 4 | 0 | 300 | 4，0 | 1757 |
| Miss．Bapt． | 2 | 23 | 25 | 40 | 5 | 10 |  |  |  |  |  |  |  |  |  |  | 200 | 5,600 | 1758 |
| M．E．So．． | 3 | $3{ }^{3} 1$ | 38 | 20 | 13 | 15 |  |  |  |  | 1 |  |  |  | 4 | ， |  | 13， 500 | 1759 |
| Nonsect ．－ | 2 | 21 | 25 | 30 | 55 | 40 |  |  |  |  | 0 | 0 | 0 | 0 | 4 | 0 | 400 | 5， 000 | 1760 |
| M．E．So．． |  |  | 12 | 26 |  |  |  |  |  |  |  |  |  |  |  |  | 800 | 80，300 |  |
| R．C |  | 04 | 0 | 12 | 12 | 38 | 0 |  |  |  | 0 | ， | 0 |  | 5 |  |  |  | 1762 |
| Bapt．．．．．． |  | $4{ }^{4}$ | 66 | 49 | 108 | 129 | 0 |  | 31 | 8 | 7 | $\stackrel{2}{6}$ | 7 | 2 | 4 | 0 | 2， 100 | 101， 000 | 1763 |
| Nonsect ．－ |  | 13 | ${ }_{40}^{0}$ | 60 | ${ }_{40}$ | 55 | 0 |  |  |  | 0 | 6 |  |  |  |  | 100 | 15， 0 00 | 1764 |
| Nonsect ．${ }^{\text {Nonsect }}$ |  | 1 | 40 | 35 | 40 | ${ }_{34}^{35}$ | 1 | ${ }_{2}^{1}$ | 2 | 4 |  |  | 1 | 0 | 4 | 0 | 250 | ${ }_{3}, 000$ | 1765 |
| Nonsect．．． | 3 | 31 | 55 | 60 | 65 | 75 | 6 | 4 | ， | 2 | 7 | 4 | 7 | 4 | 4 | 0 | 1，200 | 6，000 | 1767 |
| Nonsect ．． | 1 | 10 | 19 | 0 | 23 |  | 0 |  | 4 | 0 |  |  |  | 0 |  |  |  | 2，500 | 1768 |
| Bapt．．．．． |  | 04 |  | 35 | 0 | 75 | 0 | 20 | 0 | 15 |  |  |  |  | 4 |  | 1，500 | 18， 000 | 1769 |

Table 43. -Statislies of pricute high schools, endored academies, seminaries,

*Statisties of 1897-93.
and other private secondary schoo's for the scholustic yeur 1898-99-Continued.


Table 43.-Statistics of private high schools, endowed academies, seminaries,

| - | State and post-offiee. | Name. | Principal. |
| :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 |
|  | vermont-eontinued. |  |  |
| 1823 | Thetford | Thetford Academy | Herman Dunham |
| 1824 | Townshen | Leland and Gray Seminary | Eli Edgecomb |
| 1825 | West Brattleboro.. virginia. | Brattleboro Academy *..... | H. E. Miller. . |
| 1826 | Abingdon | Abingdon A eademy | B. R.Smith |
| 1827 | Abingdon (Villa Maria) | Aeademy of the Visitation. | Sister Mary Agnes Broughton (Direetress). |
| 1828 | Achillcs | Alpha Academy. | Rev. R. A. Folkes.............. |
| 1829 1830 | Alexandr Amherst. | Potomac Academy -....* | John S. Blaekburn ............ |
| 1831 | Arvonia | Seven Islands School. | Philip B. Ambler |
| 1832 | Bedford City | Randolph-Macon Aeademy | E, Sumter Smith |
| 1833 | Bellevuc. | Bellevue High Sehool | Wm. R. Abbott |
| 1834 | Berkley | Berkley Institute* | J. W. Roberts |
| 1835 |  | Ryland Institute. | A E. Owen, D. D |
| 1836 | Berryvi | Gold's (Míss) School............... |  |
| 1837 | ....do | Shenandoah University School*.- | W. N. McDonald. |
| 1838 | Bethel Aeademy | Bethel Military Aeademy...... | R. A. McIntyre |
| 1839 | Blaekston | Blackstone Female Institute..... | Rev. James Cannon, jr., A. M |
| 1840 | Bonair | Hoge Military Aeademy.......... | T. P. Epes, D. D |
| 1841 | Bonair ....... Bowling Gre | Bonair Sehool ..... <br> Southern Seminary | William D.Smith Rev.E. H. Rowe. |
| 1843 | Bruington. | Bruington A eademy | Alex. Fleet .... |
| 1844 | Burkeville | South Side Female Institute | R. W. Cridlin |
| 1845 | Cappahosie. | The Gloucester Agrieultural and Industrial School. | W.G. Price |
| 1846 | Chase City. | Southside Aeademy............... | Edward C. James |
| 1847 | Churchland | Churchland Aeademy ............ |  |
| 1848 | claremont.. | Temperanee Industrial and Collegiate Institute. | John J.Smallwood, president. |
| 1849 | Covesville | Cove Aeademy .............. | Rev. Daniel Blair.............. |
| 1850 | Culpeper Danville | Culpeper Female Seminary *. <br> Danville Institute (Military) | Mrs. S.C. Biggers <br> I. H. Saunders |
| 1852 |  | Randolph-Macon Institute . | William Holmes Davis, A. B.. |
| 1853 | Dayton | Shenandoah Institute | E. U. Hoenshel |
| 1854 | Effna | Sharon College Sehool | J. T. Crabtree |
| 1855 | Farnham | Farnham Aeademy | Rev. R.Williamson. |
| 1856 | Floyd C. H | Oxford A eademy * | Rev. John K. Harris |
| 1857 | Fort Defia | Augusta Military Academy | Charles, S. Roller, M. A........ |
| 1858 | Franklin | Franklin Academy <br> Frantin | J. G. Mills. |
| 1859 1860 | Friends Mission | Franklin Female Academy* Blue Ridge Aeademy*...... | Miss Eunice MeDowell........ |
| 1861 | Front Royal. | Randolph-Maeon Aeademy | W. W. Smith |
| 1862 | Gloncester. | Summerville Home Sehool | John Tabb |
| 1863 | Hampton. | Hampton College. | Miss Fitehett |
| 1864 | Herndon | Herndon Seminary*. | Misses Castleman |
| 1865 | Lebalion | The Russell College. | R.M. Copenhaver ............. |
| 1866 | Lewiston | Bel-air School |  |
| 1867 | Locustdal | Locustdale Aeademy ........ | W. W. Briggs. |
| 1868 | Lodi. | Liberty Hall Home Sehool..... | W. G. Edmondson |
| 1869 | Lynchburg | Virginia Baptist Seminary* | G. W. Hayes |
| 1871 | Millwood | Clay Hill Academy . | W. H. Whitney, jr., M. |
| 1872 | Mt. Clinton | West Central Academy | I. S. Wampler. |
| 1873 | Newport New | Newport News Military Aeademy. | E. W. Huffman |
| 1874 | Norfolk (138 Granby st.) | Leaeh-Wood-"School for Young Ladies."* | Agnes Douzlas West........... |
| $\begin{aligned} & 1875 \\ & 1876 \end{aligned}$ | Norfolk. | Norfolk A Academy ............... | Robert Tunstall <br> TVm. MeKirahan |

and other private secondary schools for the scholastic year 1898-99-Continued.


Table 43. -Statistics of pricate high schools, cendowed acudemies, seminaries,

and other private secomelary schools for the scholastic year 1S9S-92-Continned.


Table 43. -Statistics of private high schools, endowed academies, seminaries,


* Statistics of 1897-98.
and other private secondary schools for the scholustic yeur 1898-99-Continued.


Table 44.-Public and private high schools for boys only, for girls only, and for both sexes.


## CHAPTER XLII.

MANUAL AND INDUSTRIAL TRAINING.

References to recent Reports of the United States Commissioner of Education, in which this subject has been treated or statistics published: Annual Report for 1888-89, pages 411-428, 13ú2-1367; 1889-90, pages 1148, 1209-1212, 1371-13n̆6; 1891-92, page 1197; 1892-93, pages 186-188, 569$575 ; 1893-94$, pages $877-949,2093-2169 ; 189 \frac{1}{2}-95$, page $2100 ; 1893-96$, pages $989-922,1001-1150,1321-$ 1399, 1510-1521 (column 8); 1596-97, pages 193-197, 699-703, 2211-2222 (column 8), 22\%9-2294; 1897-88, pages 141, 194, $723,23 \% 0-2382$ (columi 8), 2419-2440.

The number of manual or industrial training schools reporting statistics to this offee for the school year 1898-99 was 123, an increase of 11 over the preceding year. This inciudes the 24 industrial schools for Indian children.

The 125 schools have 1,077 teachers in the mannal and industrial training departments, $i 8$ men and 50, women, as shown in Table 3. This was an increase of 132 in the number of teachers orer the previous year. The number of pupils receiving manual training in these schools was 38,621 , an increase of 7,938 . The number of boys receiving manal training was 33,009 , an increase of 3,850 , and the number of girls 15,619, an increase of 4,088 .

The total expenditure for manaal training by 96 of the 125 schools was $\$ 913,450$, as comeared with $\$ 655,24 \%$ expended by 83 schools the year before. Of the aggre-gate-of expenditure for 1893-99 the sum of $\$ 6 \% 6,478$ was paid teachers, $\$ 98,507$ for materials, $\$ 53,18 \%$ for new tools and repairs, and $\$ 81,9 \% 8$ for incidentals and for items not classified.

The statistics in detail for the 101 manaal and industrial training schools other than Indian schoois will be found in Table 4. In these 101 schools there were employed 815 teachers, 432 men and 383 women. In the same schools there were $33,2.57$ pupils, 19,926 boys and 13.331 girls.

Table 5 gives in detail the statistics of the 24 Indian schools. There were 262 teachers employed in these schools, 116 men and 146 women. The number of pupis was 5,364 , the number of boys being 3,026 and girls 2,288 .

The branches of manual training or the trades taught 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 Table 6.

This office did not attempt to ascertain the number of pupils receiving manual or induatrial training in 1898-99 in institutions not distinctively mantal 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 1890 in 121 cities, in 1898 in 146 cities and in 1899 in 170 cities.

Table 2 gives a list of the $1 \tau 0$ cities in whose public schools manual training (other than drawing) was given in 1898-99, and indicates the grades in each city system in which such instruction was given.

Table 1.-Cities of $s, 000$ population and over in each State, in which manual training was given.

| Geographical location. | 1890 | 1.894 | 1896 | 1898 | 1899 | Geographical location. | 1890 | 1894 | 1896 | 1898 | 1899 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| United States . | 37 | 95 | 121 | 146 | 170 | S. Central Division: |  |  |  |  |  |
| N. Atlantic Division.- | 23 | 52 | 72 | 80 | 97 | Louisiana |  |  |  | 1 |  |
| S. Atlantic Division.- | 3 | 3 | 6 | 5 | 6 | Texas... |  |  |  | 1 | 1 |
| S. Central Division --- | 1 | 2 | 2 | 5 | 6 | Arkansas. |  |  |  |  |  |
| N. Central Division.- | 10 | 30 | 31 | 45 | 48 | Oklahoma |  |  |  |  |  |
| W. Division......----- |  | 8 | 10 | 11 | 13 | Indian Tex |  |  |  |  |  |
| N. Atlantic Division: |  |  |  |  |  | Ohio | 2 |  |  |  |  |
| Maine -. |  | 2 | 1 | 4 | 4 | Indiana |  | 1 | 2 |  | 3 |
| New Hampshire. | 1 | 1 | 3 | 2 | 4 | Illinois | 2 | 7 | 5 | 9 | 8 |
| Vermont |  |  |  |  |  | Michigan | 2 | 2 |  |  |  |
| Massachusetts | 6 | 17 | 22 | 33 | 39 | Wisconsi | 2 | 5 | 5 | 8 | 9 |
| Rhode Island | 1 | $\stackrel{2}{3}$ | 7 6 | ${ }_{7}^{3}$ | 3 <br> 8 | Mowa | 1 | 4 | 5 <br> 3 | 5 4 4 | 4 |
| New York. | 6 | 10 | 18 | 16 | 16 | Missouri |  | 2 |  |  | 4 |
| New Jersey | 4 | 12 | 8 | 10 | 13 | North Dakota |  |  |  |  |  |
| Pennsylvania .-.-- | 5 | 5 | 7 | 15 | 9 | South Dakota |  |  |  |  |  |
| S. Atlantic Division: |  |  |  |  |  | Nebraska | 1 | 2 | 1 | 1 | 1 |
| Maryland | 1 | 1 | 1 | 1 | 1 | Western Division: |  |  |  |  |  |
| Dist. Columbia | 1 | 1 |  | 1 | 2 | Montana. |  |  |  |  |  |
| Virginia -- |  |  | 2 | 1 | 1 | Wyoming |  |  |  |  |  |
| West Virginia |  |  |  |  |  | Colorado |  | 2 | 3 | 3 | 3 |
| North Carolina |  |  | 2 | 1 | 1 | New Mexico |  |  |  |  |  |
| South Carolina Georgia |  |  |  |  |  | Arizona |  |  |  |  |  |
| Florida |  |  |  |  |  | Nevada |  |  |  |  |  |
| S. Central Division: |  |  |  |  |  | Idaho --- |  |  |  |  |  |
| Kentucky <br> Tenvessee | 1 | ${ }^{2}$ | 2 | 3 | 3 | Washing |  | 2 | 1 | 1 | 2 |
| Alabama |  |  |  |  | 1 | California |  | 4 |  | 7 | 8 |

Table 2.-Cities in which manual training (other than drawing) was given in the public schools in 1898-99.

| Cities. | Grades in which manual training was given. | Cities. | Grades in which manual training was given. |
| :---: | :---: | :---: | :---: |
| Alabama. | All. | DISTRICT OF COLUM- <br> BIA. <br> Washington: <br> 7th to 8th divisions | 3, through high school. |
| New Decatur--. california. |  |  |  |
| Fresno | \%, 8,9 , and 10 . $6,7,8$, and 9. | 9 th to 11 th divisions |  |
| Los Angeles |  |  |  |
| San Diego | 6,7, and 8.High scliool. | St. Augustine ...... |  |
| San Francisco |  |  | Grammar school. |
| Santa Cruz. | $\begin{aligned} & 3,4,5,6,7, \text { and } 8 \text {. } \\ & 1,2,3,4,5,6,8,8 \text { and } 9 . \\ & 9,10,11, \text { and } 1: 2 \text {. } \end{aligned}$ | GEORGIA. |  |
| Stockton |  |  | $\begin{aligned} & 1, \stackrel{2}{3}, 3,4,5, \text { and } 6 . \\ & 1, \stackrel{2}{2}, 3,5,6,7, \text { and } 8 . \end{aligned}$ |
| Colorado. |  | Columbu |  |
| Colorado Springs... | 1, $2,3,4,5,6$, and $\%$. | milinots. |  |
| enver: <br> District No. 1 | $\begin{aligned} & 1,2,3, \frac{4}{2}, 6,6,7,8,9,10,11, \\ & \text { and } 1 \text {. } \end{aligned}$ | Canton <br> Champaign | 4,5,6, and 7. High school. |
| District No. 1 |  |  |  |
| ueblo: |  |  | 9,10 and 11 . <br> 7, 8, 9, and 10 . <br>  |
| District No. $1 .$. District No. | 4,5 , and 6 . <br> $6,7,8,9$, and 10 . |  |  |
| District No. $20 .-$ |  | Oakparir------------ | $7 \mathrm{H}, 8$, and high school. |
| connecticut. |  | Springfield ........- | $\tau, 8$, and 9 . |
| Bristol. |  | indiana. |  |
| Manchester (South) | $5,6,7,8$, and 9 . <br> $7,8,9$, and high school. <br> 8 and 9. <br> 4, 5,6 , and 7. <br> 6, 7, and $\delta$. <br> $6,7,8$, and high school. |  | Primary. 4, 5, 6, 7, and 8. All. |
| Naugatuck --..-.... |  | Frankfort <br> Indianapolis <br> Laporte |  |
| New Britain |  |  |  |
| New Haren. |  | Iow |  |
| Stamford |  | Davenpo | 9 and high schoo |
|  |  | Des Moines (West) | $5,6,7,8,9,10,11$, and 12. <br> $7,8,9,10,11$, and 12. |
|  |  | Mason City |  |

Table 2.-Cities in which manual training (other than drawing) was given in the public schools in 1898-99-Continued.


Table 2．－－Cities in which manal training（other than drawing）uas given in the public schools in 1898－99－Continued．

| Cities． | Grades in which manual training was given． | Cities． | Grades in which manual training was given． |
| :---: | :---: | :---: | :---: |
| south dakota． |  | wisconsin． |  |
| Sioux Falls | All grades． | Appleton | High school． |
| texas． |  | Eat Claire | 7.8 ，and hiph school． |
| Austin ． | 9，10，and 11. | Janesville．．． | High school． |
| VERMONT． |  | La Criosse． | Do． |
| St．Johnsburg ．．．．．． | 7 and 8. | Milwaukee． | 2 high schools． |
| virginta． |  | Oshkosh | All． |
| Staunton． | 1， $2,3,4,5,6, \tau, 8$ ，and 9. | Portag |  |

Table 3．－Summary of statistics of manual and industrial training schools in the United States in 1898－99．

| State or Territory． |  |  |  |  | Different pupils who received manual and in custrial train－ ing． |  |  | Expenditure for manval and indus． trial training during 1898－99 for 96 schools． |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{gathered} \stackrel{\rightharpoonup}{0} \\ \stackrel{0}{0} \end{gathered}$ | $\begin{aligned} & \dot{⿹ 勹 巳 匕} \\ & \text { 部 } \end{aligned}$ |  | $\begin{aligned} & \text { Tin } \\ & \text { Ei } \\ & \text { E- } \end{aligned}$ |  |  |  |  | i \％ |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| United State | 125 | 518 | 5291 | 1，07\％ | 23，002 | 5， 619 | 8， 621 | \＄6\％6，4\％8 | 998， 807 | \＄53， $18 \%$ | \＄81，97 | \＄913，450 |
| North Atlantic Division．－ South Atlantic Division．－ South Central Dirision North Central Division Western Division． | 50 15 61 31 23 | 260  <br> 41  <br> 14  <br> 136  <br> 94  | 223 29 | 483 83 54 264 182 18 | 10，43010 <br> 1,483 <br> 516 <br> 7,374 <br> 3,219 | 6,800 902 438 5,439 2,039 | 17.230 2,366 12,94 12,13 5,258 | 300,883 33,536 10,576 156,363 105,060 | 34,238 12,683 1,914 36,67 13,278 | 30,02 5,296 12,56 12,683 5,031 | ［ $\begin{array}{r}40,700 \\ 1,740 \\ 700 \\ 18,519 \\ 23,319\end{array}$ | 465,837 53,315 13,495 $23+115$ 146,688 |
| North Atlantic Division： <br> Massachusetts | 10 |  |  | 146 | 1，88．5 | 1，658 | 3，543 | 57，969 | 3， 685 | 6， 210 | 1，079 | 68，949 |
| Rloode Island |  | 17 | 15 | 32 |  | 951 | 1，87： | 10， 390 |  |  |  |  |
| Connecticut． | 19 | 109 | 4 | 169 | 345 3,819 | － 2227 | 6， 52 | 769，640 | 187 16.181 | 5 30 | 5， 066 | 12， 598 |
| New York． | 19 | 109 | 19 | 169 28 | 3，819 116 | 2,804 190 | －6， 63 | 169,710 12,885 | 16,131 4,582 | 5，651 | 24， 271 | 206,986 29,788 |
| Pennsylrania | 9 | 6. | 28 | 97 | 3， 344 | 970 | 4， 314 | 111，289 | 9，467 | 6， 100 | 9，781 | 136，637 |
| South Atlantic Division： <br> Delaware |  |  |  |  |  |  |  |  |  |  |  | $\begin{array}{r} 3,559 \\ 22,584 \end{array}$ |
| Maryland－－．．．．．．．．．．． | $8$ | 18 | ${ }_{6}^{1}$ | ${ }_{24}^{9}$ |  | 285 | 1，${ }_{2}^{58}$ | 2,800 16,600 | 600 $3,05 \%$ | 2，767 | 50 150 |  |
| District of́ Columbia－ | 2 | 3 | 13 | 16 | 46 |  | 128 | 1，096 | 5，916 |  |  | 7， 041 |
| Virginia． | 1. | ， | 14 | 11 | 115 | 65481 | 180 | 10，000 | 3，000 | 2，000 | 1，500 | 16,5003,640 |
| North Carolina．．．．．．． | 5 | －9 |  | 23 | 251 |  | 72. | 3， 100 | 100 |  |  |  |
| South Central Division： <br> Kentucky | 31111 | ¢ | ， | 361 | 340 | 378 |  |  | 1，644 | 125 | 600 | 10,055900 |
| Alabama |  |  |  |  |  |  |  |  |  |  |  |  |
| Louisiana |  |  | 10 | 12 | 100 | 0 | 100 |  |  | 150 | 100 | 1,0001,540 |
|  | 1 | 1 | 2 |  |  |  | 120 | 1.510 |  |  |  |  |
| North Central Division： Ohio | 29 |  | 21 | ${ }_{20}^{50}$ | 3，308 | 2，978 | 6，286 | 32，302 | 7．619 | $\begin{array}{r} 4,056 \\ 317 \end{array}$ | 1，093 | 45,07017,841 |
| Indiana |  |  | 8 |  | 596 |  | 1，125 | 16， 500 | 926 |  | 98 |  |
| Illinois | 7 | 7 | 13 |  | 1，803 | 615 | 2，478 | 43，950 | 2， 25.3 | $89 \pm$ | 4， 969 | 52， 765 |
| Michigan | 2 |  |  |  |  |  |  | 2， 210 | 1，200 | 100 |  |  |
| Wisconsin | 4 | 6 | 18 | 2428 | 89 | $2 \% 9$ | 368 |  |  |  | （ $\begin{aligned} & 300 \\ & 600\end{aligned}$ | 14，540 |
| Minn | 4 | 6 |  |  | ${ }^{817}$ |  | 660 | 13，216 | 76 | ${ }^{358}$ |  |  |
| Iowa | 1 | 1 | 1 | $\stackrel{2}{6}$ |  | 343 17 | 112 | 2， 6,800 | 20050385 |  | 1600 | 14,874 3.150 |
| Missouri | 1 |  |  |  |  | 0100 | 234 |  |  | $\begin{array}{r}-113 \\ +500 \\ \hline\end{array}$ | 104 | 7， 60014,060 |
| North Dak | 1 | ， | ， | 15 | 124 |  | 225 | 8，060 | 5，000 |  | 500 |  |
| South Dakot | $\stackrel{2}{3}$ |  | 1 | 1139 | 568 | 439 | 121 | 7， 100 | 1，500 | 200 | 150 | 8,950 |
| Western Division：－－．．．．．．．．．．．．．．．．．．．．． |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Colorado | ${ }_{3}$ | 15 | 13 | 28 | 1，034 | 335 | 1，369 | 25，498 |  |  | 29.3 | 9,440 49,117 |
| New Mex | 2 | 14 | 12 | ${ }_{38}^{23}$ | $\begin{aligned} & 400 \\ & 8 \\ & 8 \end{aligned}$ | 205 | 605519 |  | 12，800 |  | 10 | $\begin{gathered} 15,942 \\ 11,350 \\ 5,000 \end{gathered}$ |
| Arizona |  |  |  |  |  |  |  | $\begin{array}{r} 1 \pm, 392 \\ 7,490 \end{array}$ |  | 1，050 |  |  |
| Nevada | 1 | $\begin{array}{r} 4 \\ 2 \\ 2 \end{array}$ | ${ }_{1}^{4}$ | 8 | $\begin{gathered} 100 \\ 30 \\ 30 \end{gathered}$ | 45 30 | 14.9 60 | 4，000 | 1，000 |  |  |  |
| California | 10 |  | 1 88 |  |  | 1，061 | 60 2,260 | 44， 280 | 7，695 | $-2,83$ | 991 |  |
|  |  |  |  |  |  |  |  |  |  | $2,013$ | ${ }^{1}$ | 1 52， 839 |

Table 4.-Statistics of manual and industrial schools in the United States in 1898-99.

| Different teachers of industrial training. |  |  | Different pupils who received industrial training. |  |  | Expenditure for industrial training during 1898-99. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Fin } \\ \text { تì } \\ \text { E } \end{gathered}$ |  |  | $\begin{aligned} & \text { تָixi } \\ & \text { E } \end{aligned}$ |  |  |  |  | تु 0 0 |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 | 19 | 13 | 14 | 15 |
| 3 | 0 | 3 | 16 | 0 | 16 | \$900 |  |  |  | $\$ 900$ |
| 4 | 2 | 6 | 29 | 19 | 48 | 1,080 | 1,400 | \$200 |  | 2, 680 |
| 2 | 1 | 3 | 242 | 175 | 417 | 3,600 | 336 | 153 | 82:1 | 4,310 |
| 5 | 2 | - | :28 | 8; | 310 | 9,000 | 3,984 | 400 | 720 | 14.0.5 |
| 1 | 0 | 1 | 40 | 30 | 70 | 540 | 0 | 0 | 0 | 510 |
| 10 | 15 | 8 | 110 | 250 | 360 | 6, 400 | 100 | 300 | 50 | 6,850 |
| 0 | 6 | 6 | 0 | 50 | 50 |  |  |  |  |  |
| 0 | 3 | 3 | 265 | 315 | 580 | 2, 900 |  | 1,300 |  | 4,200 |
| 13 | 1 | 14 | 141 | , | 141 | 18,360 | 1,895 | 500 |  | 20,795 |
| 5 | 5 | 10 | 650 | - 0 | 650 |  |  |  |  |  |
| 3 | 3 | 6 | 189 | 195 | 384 | 6,300 | 583 | 718 |  | \%,601 |
| 4 | 0 | 4 | 112 | 0 | 112 | 760 | 110 |  |  | 11810 |
| 3 | 3 | 6) | 238 | 157 | 390 | 6,5.50 |  |  | 5,000 | 11, 530 |
| 0 | 1 | 1 | 0 | 80 | 70 | 390 | 57 | 30 | 60 | 537 |
| $\stackrel{7}{7}$ | 1 | 8 | 35 | 0 | 35 | 2,000 |  |  |  | 2, 000 |
| 1 | O | 1 | 24 | 0 | \%f | 800 | 600 | 100 | 50 | 1, 2.50 |
| 3 | 6 | 9 | 46 | 14 | 60 | 1,096 | $8 \% 6$ |  |  | 1,9332 |
| 0 | 7 | 7 | 0 | (68 | 68 |  | 5,090 | 29 |  | \%, 119 |
| 8 | 0 | 8 | 578 | 0 | $5 \%$ | $1 \sim 2,000$ | 250 | 150 | 4,500 | 16,900 |
| 5 | 0 | 5 | 258 | 0 | 258 | 7,800 | 502 | $4 \frac{1}{1}$ | 304 | 8,700 |
| 0 | 1 | 1 |  | 10 | 10 |  |  |  |  |  |
| 3 |  |  | 350 | 360 | 710 | 3, 000 | - 200 | 50 | 15 | 3,963 |

Table 4.-Statistics of manual and industrial schools in the United States in 1898-93-Continued.

| Location. | Name of institution. | President or director. | Grade of literary instruction. | Different teachers of industrial training. |  |  | Different pupils who received industrial training. |  |  | Expenditure for industrial training during 1898-99. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { 岂 } \\ & \text { 岂 } \end{aligned}$ | - |  |  |  | $\begin{aligned} & \text { تin } \\ & \text { Hin } \\ & \text { H. } \end{aligned}$ |  |  |  |  | +in |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| Chicago, Il | Lewis Institute ......... | George N. Carman .. | Secondary -- | 8 | 3 | 11 | 400 | 150 | 5.5 | 120,200 | \$500 | \$500 | \$100 | 13,300 |
| Peoria, 11. | Bradley Polytechnic Institute --....... | Edward O. Sisson.... | --.-do .-....- | 4 | 4 |  | 180 | 95 | 275 | 7,850 | 1.200 |  |  | 9,0\%0 |
| Springfield, Ill | Springfield Manual Training School...- | J. H. Collins.......... | Elementary Secondary | $\%$ |  |  | 47\% | 459 | 978 9 | 10, ${ }^{400}$ | 310 $y_{2} 0$ | 100 315 | 50 98 |  |
| Knightstown, Ind.. | Indiana Soldiers and Sailors' Orphans' Home. | A. İ. Graham........ | Elementary | 10 |  |  | 119 | 7 | $19 \%$ | 6,300 |  |  |  | 6,300 |
| Des Moines, Iowa | West Des Moines High and Industrial | W. O. Riddell | Secondary .. | 1 |  |  | 95 | 17 | 112 | 2,800 | 200 | 25 | 125 | 3,150 |
| Frankfort, Ky | Manual Training School* .-.-.-........- | James E. Givens. | Collegiate.-- | 2 |  |  | 70 | 68 | 138 | 2,366 | 52. | 0 | 0 | 2,890 |
| Louisville, Ky. | Hope Presbyterian Mission and Industrial School. | Mrs.Andrew Cowan | Elementary |  |  |  | 30 | 310 | 340 | 20 | 70 |  |  | 90 |
| Do | Manual Training High School -..--..... | H. G. Brownell | Secondary .- | 6 |  |  | 210 | 0 | 240 | 5,300 | 1,050 | 125 | 600 | 7,075 |
| New Orleans, La | Home Institute (free night school) | Sophie B. Wright | ---. do . | $\stackrel{2}{2}$ | 10 | 12 | 100 | 0 | 100 | 450 | 1,300 | 150 | 100 | 1,000 |
| Baltimore, Md. | Baltimore Polytechnie Institute.--.... | William R. King, | Secoudary and collegiate. | 9 |  |  | 5 | 0 | 525 | 9,600 | 1,195 | 369 |  | 11, 164 |
| Do | House of Refuge | Joshua Levering | Elementary | 3 |  |  | 185 | 0 | 12.5 | 2,200 | 500 | 200 | 100 | 3,000 |
| Do | Samuel Ready School | Miss Helen J. Rowe. | Elementary and secondary. | 0 |  |  |  | 60 | 60 |  |  |  |  |  |
| McDonogh, Md. | McDonogh Educational Fund and Institute. | Sidney T. Moreland. | .... do.... | 4 |  |  |  | 0 |  |  |  | 200 |  | 1,6\% |
| Port Deposit, Md......... | Jacob Tome Institute (manual training department). | William P. Eveland - | do | $\stackrel{2}{2}$ |  |  | 130 | 225 | 355 | 3,8u0 | 900 | 2,000 | 50 | 6,750 |
| Boston, Mass --17---...- | Friendford Industrial School | Mrs HenryHinckley | Elementary | 16 |  | 79 | 110 | 420 | 536 |  |  |  |  |  |
| Boston, Mass. (17 Allen street). | Hebrew Industrial School. | Mrs, J. H. Hecht ..... |  |  |  |  |  |  |  |  |  |  | 125 | 4,050 |
| Boston, Mass -- --- ${ }^{\text {Boston, }}$ Mass | Mechanic Arts High School* | Chas. W. Parmenter | Secondary <br> Elementary |  |  |  |  | 0 360 |  | 12,000 4,955 | 1,200 | 200 | 50 |  |
| Boston, Mass. (39 North Bennet street). | North BennetStreetIndustrial School- | Mrs. Quincy A.Shaw | Elementary |  |  |  | 843 |  | 1,203 | 4,955 | 483 |  |  | $5,561$ |


|  <br> －Mryis | 伿 |  | 80 | $\begin{aligned} & \text { 筑 } \\ & \end{aligned}$ |  | $\begin{gathered} \text { 留 } \\ \text { Oi } \end{gathered}$ |  |  | 8 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 8 |  | 客 |  | \％ | 俞 |  |  |  | 碞骂 | \％ |  |
| 盛 |  | 摂筬 | $\stackrel{\text { m }}{\sim}$ |  | 感 | \％ |  | \％ |  |  | 袊奇 | \％ |  |
| 侵石品 | 雨 | 枟信 | 䈃 | \％ | － | 8 | － | 员 |  |  |  | 筞 |  |
|  | 滑 | 潋票 | 镯 |  | 敫会 | O |  | ${ }_{8}$ | － |  | 䇝类 | 食 | 䙲 |
|  |  |  | 管 | 笭 | 豆离 |  | Sivis | \％ |  |  | 等 | 佥 | 产 |
|  |  | 515 |  | Eit | sさ | 5 |  |  |  | 旱 | $8{ }^{\circ}$ | $=$ | － |
|  |  | 曻 | 范 |  | 8 \％ | Sec |  | \％ |  |  | \％ | 客 | 8 |
| － |  |  |  | \％ | $\hat{H}^{\circ}$ | Tx | $\infty$ ¢ | $\bigcirc$ |  |  |  | $\overline{\bar{\circ}}$ | 0 |
| ＋ 70100 |  |  | － | － | $3^{\circ}$ | － | Ho |  |  |  | $\rightarrow 0$ | － | － |
| 102 | － |  | $=$ | $\cdots$ | －is |  | ＋¢¢ | $\cdots$ |  |  | －${ }^{\text {全 }}$ | $\stackrel{\square}{8}$ |  |


| Boston，Mass．（38 Boyls－ ton street）． | Woman＇s Educational and Industrial Union．＊ | Mrs．E．F．Osborn |  |
| :---: | :---: | :---: | :---: |
| Cambridge，Mass．－．．．．．．－ | Manual Training School ．．．．－．．．．．．－．．．－－ | Charles H．Morse． | Secondary ．－ |
| Lowell，Mass | Trustees of the Lowell Tertile School | Wm．Wyman Crosby | Collegiate．．－ |
| Roxbury，Ma | South End Industrial School | Miss Louise Howe．．． |  |
| Salem，Mass | Plummer Farm ．School | C．A．Johnson |  |
| Springtield， | High School of Mechanic |  |  |
| Battle Creel | James White Memorjal Home |  |  |
| Lansing，Mj．ch | Lansing Industrial Aid Society | Mrs．F．A．Wood－ worth． |  |
| Minneapolis， 1 | Household Economic Association＊ | Mrs．B．Y．Coffin |  |
| Do | James Industrial Training School＊ | Mrs．Mary B．James． | Secon |
| St．Paul，Min | Mechanic Arts High School | George Weitbrecht |  |
| Columbus，Miss | Mississippi Industrial Institute and College for Girls．a |  |  |
| St．Louis， | Manual Training School of Washing－ ton University． | Calvin M．Woodward | Secondary ．－ |
| Carson， N | New State Orphans＇Home＊ | A．M．Beebe | do |
| Bordentown，I | Manual Training and Industrial School for Colored Youth． | James M．Greg | －＿do ．－－．－．． |
| Hoboken， N | Trinity Industrial School＊－．－．－．．．．．．－ | Mrs．J．F．Dalrymple |  |
| Wood bine，N．J | Baron de Hirsch Agricultural and Industrial School． | H．L．Sabscvich，A． M． | Elementary and sec－ ondary． |
| Binghamton，N．Y | Barlow School of Industrial Arts | Vinton S．Paessler | Secondary ．－ |
| Bronklyn，N．Y．（21\％Ster－ ling place）． | Brooklyn Industrial School Associa－ tion． | Mrs．William H． Lyon． | Elementary |
| Brooklyn，N．Y．（141 South 3d street）． | Industrial Sehool Association（E．D．）＊． | M．E．Whittelsey ． |  |
| Brooklyn，N．Y．． | Manual Training Sch | Charles Larki | Secondary－ |
| Do | Pratt Institute（Department of Science and Technology）． | Arthur L．Williston | Secondary and nor－ mal． |
| Fordham Heights，N．Y | Webo＇s Academy and Home for Ship－ builders． | Stevenson Taylor． | Collegiate ． |
| New York，N．Y．（140－142 | Artist Artisans＇Institute．．－．．．－．．．． | Geo． |  |
| West 23d street）． <br> New York，N．Y．（109 West 54th street）． | Ethical Culture School | John F．Reigar＇t | Elementary and sec－ ondary． |
| New York，N．Y．（13 East 16th street）． | General Society of Mechanies and Tradesmen．＊ | Robert Christie | None－．．． |
| New York，N．Y．（36 | Hebrew Technical Institute | Edgar S．Barney | Secondary |
| Stuyyesant street） New York，N．Y．（1260 | New York Trade Scho | R．Fulton Cuttin |  |
| 1st avenue）． |  |  |  |
| New York，N．Y．（5：2 East 11th street）． | St．George s Evening Trade School | Arthur A．Hamer－ schlag． | Secondary－ |

Talle 1.-Statisties of manual and industrial schools in the United States in 1808-99-Continued


Table 5.-Industrial schools for Indian children.


Table 6.-Statistics of manual and industrial training-Branches taught.

| Name of institution. | Branches of instruction. | Number of instructors. | Number pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 宊 |  |
| 1 | \% | 8 | 4 | 5 | 6 |
| The Southern Industrial College, Camp Hill, Ala. | Carpentry Farm or garden work | 1 | 10 | 0 0 | 36 36 |
| Heald̄sburg College, Healdsburg, Cal.... | Printing | 1 | 1. | 0 | 36 |
|  | Sewing- | 1 | 0 | 1 | 30 |
|  | Cooking-... | 1 | 0 | 1 | 38 |
|  | Tent making --.-.-. | 1 | 1 | 0 0 | 38 38 |
|  | Broom making --.---- | 1 | 1 | ${ }_{0}^{0}$ | 33 38 |
|  | Printing -...----....- | 1 | 1 | 0 | 29 |
| Central School (public), Oakland, Cal...- | Free hand drawing | , | 20 | 20 | 40 |
|  | Mechanical drawing | 1 | 170 | 5 | 40 |
|  | Sewing--------- | 1 |  | ${ }_{175}^{17 \%}$ | 80 |
|  | Carpentry |  | 24 |  | 80 |
|  | Wood turning | 1 | 125 |  | 40 |
| California School of Mechanical Arts, San Francisco, Cal. |  | 1 | 242 158 158 |  | 40 |
|  | Free-hand drawing | $\stackrel{3}{1}$ | 1168 | 64 | 80 80 |
|  | Clay modeling-.-- | 1 | 99 | 36 | 40 |
|  | Sewing--- | 1 |  | 64 | 80 |
|  | Cooking -.. | 1 |  | 11 | $\stackrel{40}{40}$ |
|  | Carving | 1 | 69 | 謁 | 40 |
|  | Pattern making | 1 | 99 |  | 20 |
|  | Forging - | 1 | 69 |  | 30 |
|  | Molding (metal | 1 | 69 |  | 10 |
| Mechanics’ Institute, San Francisco, Cal. | Free hand drawing | 1 | 2. | 30 | 40 |
|  | Mechanical drawing | 1 | 30 |  | 40 |
|  | Electricity-.......... | 1 | 40 |  |  |
| Polytechnic High School, San Francisco, Cal. | Mechanical drawing | 2 | 88 | 0 | 120 |
|  | Clay modeling-...... | 1 | 40 |  | 40 |
|  | Carpentry -.... | 1 | 60 | 0 | 40 |
|  | Wood turning | 1 | 25 | 0 | 2 |
|  | Carving--.-- | 1 | 40 | 90 | 40 |
|  | Pattern making | 1 | 35 | 0 | 20 |
|  | Forging --- | 1 | 60 | 0 | 40 |
|  | Vise work --.-.-.-.- | 1 | 40 | 0 0 | 20 80 |
| Anna S. C. Blake Manual Training School, Santa Barbara, Cal. | Free-hand drawing |  |  | 0 |  |
|  | Mechanical drawing |  |  |  |  |
|  | Clay modeling...------- |  |  |  | 120 |
|  | Paper cutting and folding |  |  |  | 120 |
|  | Sewing-... | 1 |  | 60 | 160 |
|  | Sloyd | 2 | 265 | 5 | 200 |
| Preston School of Industry (boys), Waterman, Cal. | Sewing. | 1 | 13 | 0 |  |
|  | Cooking..- | 1 |  | 0 |  |
|  | Carpentry | 1 | 3 | 0 |  |
|  | Laundry | 1 | 13 | 0 | --- |
|  | Baking- .i..... | 1 | 6 | 0 |  |
|  | Machine-shop work | 1 | 8 | ${ }_{0}^{0}$ |  |
|  | Shoemaking .... | 1 | 10 | 0 |  |
|  | Farmor garden work | 2 | 27 | 0 |  |
|  | Bricklaying - | 1 | 11 | 0 |  |
|  | Printing - | 1 | 2 | 0 |  |
|  | Housework | 2 | 27 | 0 |  |
| Brightside Industrial School, Denver, Colo. | Sowing-... | 1 | 10 |  |  |
|  | Carpentry | 1 | 10 |  |  |
|  | Farm or garden work | 3 | 60 |  |  |
|  | Printing | 1 | 3 |  |  |
|  | Laundry | 1 | 18 |  |  |
|  | Shoemaking | 1 | 1 |  |  |

Table 6.-Statistics of manual and industrial training-Bianehes taught-Cont'd.

| Name of institution. | Branches of instruction. |  | Num <br> of <br> pu1 $\frac{\dot{0}}{\underset{\sim}{3}}$ | ber ils. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Manual Training High School, Denver, Colo. | Free-hand drawing | 1 | 189 | 195 | 114 |
|  | Mfechanical drawing | 1 | $183^{\circ}$ | 195 | 114 |
|  | Clay modeling-....- | 2 | 54 | 65 | 16 |
|  | Sewing-....-. | $\stackrel{\sim}{2}$ |  | 185 | \%6 |
|  | Cooking | 1 |  | 50 | 38 |
|  | Carpentry | 1 | 80 |  | 16 |
|  | Wood turning | 1 | 80 |  | $1 \%$ |
|  | Carving. - | : | 80 | 90 | $\because 0$ |
|  | Pattern makins |  |  |  | 19 |
|  | Folging-...... | 1 | 34 |  | 20 |
|  | Sheet-metal work | 1 | 3 |  | 9 |
|  | Molding (metal) |  |  |  | 4 |
|  | Vise work Machine-shop work | 1 | 31 |  | 8 30 |
| Trade School and Institute of the Y. M. C. A., Bridgeport, Conn. | Free-hand drawing | 1 | 19 |  | 20 |
|  | Mechanical drawing | 1 | 615 | --.- | 20 |
|  | Carpentry | 1 | 11 |  | 30 |
|  | Plumbing. | 1 | 13 |  | 30 |
|  | Free-hand drawing | 2 | $23: 3$ | 1.7 | 180 |
| School, New Haven, Conn. | Hechanical drawing | 1 | 233 | \% 5 | 150 |
|  | Sewing ------------- | 1 |  | 157 | $160)$ |
|  | Cooking- | 1 |  | 157 | 160 |
|  | Carpentry --- | 1 | 135 |  | 40 |
| - | Wood turwing |  |  |  |  |
|  | Carving .-.... |  |  | $15 \%$ | 160 |
|  | Basket weaving |  |  | 87 | 1:0 |
|  | Pylography .. |  |  |  |  |
|  | Pattern making | 1 | 46 |  | 49 |
|  | Forging --.--- | 1 | 30 | ---.-- | 40 |
|  | Sheet metal work Mrolding (metal) | 1 |  |  |  |
|  | Machine-shop work | 1 | 20 |  | 40 |
| Manual Training School, Ridgefield, | Serwing--...-.---. - | 1 | 0 | 38 | 24 |
| Coun. | Cooking | 1 | 0 | $3{ }^{3}$ | 48 |
| St. Joseph's Industrial School for Colored Boys, Clayton, Dei. | Clay modeling | 1 | 4 | 0 |  |
|  | Carpentiry .- | 1 | 2 | 0 | - |
|  | Farm or garden wor | 3 | 12 | 0 | - |
|  | Printing | 1 | 6 | 0 | - |
|  | Painting | 1 | $\frac{1}{2}$ | 0 | - |
|  | Tailoring -- | 1 | 4 | 0 | - |
|  | Shoemaking -....-... | 1 | , 3 | 0 | - |
| Ferris Industrial School, Marshallton, Del. | Free-hand drawing | 1 | \% $\%$ | 0 | ------ |
|  | Wood turnino | 1 | 21 | 0 | - |
| Industrial Home School, Georgetown, D. C. | Free-band drawing- | $\stackrel{\sim}{\sim}$ | ----. |  | .-... |
|  | Clay modeling ---------- | 1 | ----. |  | ------ |
|  | Paper cutting and folding | 1 |  |  |  |
|  | Sewing - | 4 |  |  |  |
|  | Cooking. | 1. |  |  |  |
|  | Carpentry | 1 |  |  |  |
|  | Wood turning------- | 1 |  |  | $5{ }^{3}$ |
| St. Rose's Industrial School, Washingtom, D. C. <br> Chicago English High and Manual Training School, Chicago, Inl. | Sewing----------.- | E | () | 65 | 36 |
|  | Cooking -- | 1 | 0 | 3 | 5 S |
|  | Free-hand drawing. | 2 | \%i8 | 0 | $1: 0$ |
|  | Mechanical drawing | 吕 | $5 \% 8$ | 0 | $1: 0$ |
|  | Carpentry |  |  |  |  |
|  | Wood turning | 4 | 308 | 0 | 40 |
|  | Pattern making.... Forging | 1 | 165 | 0 | 20 |
|  | Molding (metal) | 1 | 165 | 0 | 20 |
|  | Vise Work, machine-shop in | 2 | 105 | 0 | 40 |
| ```Chicago Mantual Training School, Chi- cago, Ill.``` | Free-hand drawing --..--... | 1 | 194 | 0 | 20 100 |
|  | Mechanical drawing | $\ddot{1}$ | 208 | 0 | 100 10 |
|  | Carpentry -...-- | 1 | 124 | 0 | 10 |
|  | Wood turluing .- | 1 | 124 | 0 | 10 10 |
|  | Pattern making | 1 | 124 | 0 | 10 |
|  | Forging -.....-.-. | , | 75 | 0 | 10 |

Table 6.-Statistics of maneal and industrial training-Branches targht-Conéd.


Table 6.-Statistics of manual and industrial training-Branches taught-Contd.

| Name of institution. | Branches of instruction. | Number of instructors. | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { pupils. } \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 营 |  |  |
| 1 | \% | : 8 | 4 | 5 | 6 |
| Manual Training School, Frankfort, Ky- | Free-hand drawing | 1 | 35 | 22 | 36 |
|  | Mechanical drawing | 1 | \% | 0 | 36 |
|  | Clay modeling---- | 1 | 15 | 16 |  |
|  | Paper cutting and folding Sewing ---............... | 1 | 15 0 | 16 |  |
|  | Cowing | 1 | 0 | 6 | 36 |
|  | Carpentry | 1 | 7 | 0 | 36 |
|  | Wood turning | 1 | 7 | 0 | 36 |
|  | Carving-. | 1 | $\tau$ | 0 |  |
|  | Farim or garden wor | 1 | 50 | 0 | 33 |
| Hope Presbyterian Mission and Industrial School, Louisville, Ky. | Sewing - ${ }_{\text {Cooking }}$ | 24 | 0 | 310 |  |
|  | Cooking....--...- | $\stackrel{1}{2}$ | 0 0 | 30 30 |  |
|  | Iron-wire work. | 2 | 0 | 12 |  |
| Manual Training High School, Louisville, Ky. | Free-hand drawing |  | 125 |  | 30 |
|  | Mechanical drawing |  | 240 140 |  | 130 |
|  | Wood turning | $\stackrel{2}{2}$ | 120 |  | 12 |
|  | Carving - | $\stackrel{2}{2}$ | 109 |  | 7 |
|  | Pattern making | 2 | 75 |  | 40 |
|  | Forging Sheet-metal work | 1 | 60 |  | 35 |
|  | Molding (metal) | 1 | 75 |  | 40 |
|  | Vise work -.....- | 1 | $3 \pm$ |  | 38 |
| Home Institute-Free night school, New Orleans, La. <br> Baltimore Polytechnic Institute, Baltimore, Md. | Free-hand drawing | 2 | 100 | 0 |  |
|  | Mechanical drawing. |  | 50 | 0 |  |
|  | Free-hand drawing | 1 | 202 | 0 | a 160 |
|  | Mechanical drawing | 1 | 139 | 0 | 230 |
|  | Carpentry -....... | 1 | 279 114 | 0 0 | 80 50 |
|  | Carving----.. | 1 | 107 | 0 | 60 |
|  | Pattern making | 1 | 114 | 0 | 120 |
|  | Forging - | 1 | 69 | 0 | +90 |
|  | Sheet metal work --.....-- Molding (metal), theoretica | 1 | 258 | 0 0 | 100 10 |
|  | Vise work --- .--- | 1 | 70 | 0 | 90 |
| House of Refuge, Baltimore, Md........ | Machine-shon work | 1 | $\%$ | , | 120 |
|  | Sewing........... | 1 | 12 | 0 | -.... |
|  | Cooking-. | 1 | 6 | 0 |  |
|  | Wood turining | 1 | 47 | 0 | -..... |
|  | Forging --.....- |  |  |  |  |
|  | Sheet-metal work | 1 | 52 | 0 |  |
|  | Vise work ....-. |  |  |  | .-.... |
|  | Machine-shop work |  |  |  |  |
|  | Farm or garden wor | 1 | ${ }^{3}$ | 0 | $\ldots$ |
|  | Printing --..-.-- | 1 | 15 | 0 |  |
|  | Painting -........ | 1 | 3 | ${ }^{4}$ | ...... |
| Samuel Ready School, Baltimore, Md..- | Free hand drawing | 1 | --- | 39 | - |
|  |  | 1 |  | 18 |  |
|  | Sewing...... | 1 |  | 60 |  |
|  | Cooking -.... | 1 | --. | 27 | -..... |
|  | Typewriting | 1 |  | 21 |  |
|  | Vocal music | 1 |  | 60 |  |
|  | Piano -... | 2 |  | 12 |  |
|  | Pipe organ --.-.... | 1 | 123 | 4 |  |
| MoDonogh Educational Fund and In. stitute, McDonogh, Md. | Mechanical drawing | 1 | 24 |  | 80 |
|  | Carpentry -... | 1 | 15 |  | 30 |
|  | Wood turning | 1 | 15 |  | 15 |
|  | Carving -.-.-...- | 1 | 15 |  | 15 10 |
|  | Machine-shop work | 1 | 10 |  | 30 |
|  | Printing .-.... |  | 18 |  | 100 |

$a$ Number of 100 -minute periods in entire course.

Table 6.-Statistics of manual and industrial training-Brenches tanght-Cont'd.

| Name of institation. | Branches of instruction. |  | $\begin{aligned} & \text { Number* } \\ & \text { of } \\ & \text { pupils. } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\frac{\dot{\oplus}}{\stackrel{y}{y}}$ |  |  |
| 1 | ${ }^{2}$ | ; | 1 | 5 | 6 |
| Jacob Tome Institute (manual training department). | Free hand drawing | 2 | 130 | 225 | 194 |
|  | Mechanical drawing | 1 | (6.) | : | 152 |
|  | Clay modeling...-... | 1 | $4 i$ | 39 | 76 |
|  | Sewing | \% | 131) | 23 | 494 |
|  | Cooking | 1 |  | 25 | \% 6 |
|  | Sloyd, or linife wo | 1 | $\%$ | - 40 | 114 |
|  | Carpentry | , | 44 |  | 76 |
|  | Wood turning | $\ldots$ | 21 |  | 38 |
|  | Carving------ | 1 | 44 |  | 86 |
|  | Pattern making |  | 13 |  | 24 |
|  | Sheet-metal work | 1 | 13 |  | 6 |
|  | Miolding----.- | 1 | 13 |  | 10 |
| Friendford Industrial School, Boston, Mass. | Free hand dra wing - .-- --- --. -- | 2 | 20 |  | ?\% |
|  | Mechanical drawing---------- | 4 | 15 |  | 27 |
|  | Paper cutting and folding | 3 | 10 |  |  |
|  | Sewing - | $5 \%$ |  | 315 | 27 |
|  | Cooking | 1 |  | 18 | 27 |
|  | Sloyd, ori knife work ---- ------- | \% | 12 |  | 27 |
|  | Carpentry ------------------ | 1 | 12 |  | 27 |
|  | Wood turning <br> Carving | 1 | 12 |  | 27 |
|  | Embroidery | 1 | 1. | 9 | $2 \%$ |
|  | Millinery | 1 |  | 11 | 27 |
|  | Housekeepers | 3 |  | 70 | 27 |
| Hebrew Industrial School, Boston, Mass. | Sewing ------------------- -- -- | 10 | ---- | 400 | 40 |
|  | Cooking <br> Printing | $\stackrel{3}{0}$ |  | 75 | 40 |
| Mechanic Arts High School, Boston, Mass. | Printing ------------------------------ | ? | 343 | 45 0 | 30 40 |
|  | Mechanical drawing | 2 | 343 | 0 | 80 |
|  | Carpentry .----.... | 2 | 185 | 0 | 30 |
|  | Wood turning ------------------ | 1 | 123 | 0 | 16 |
|  | Carving---- | 2 | 185 | 0 | 10 |
|  | Pattern making | T | 123 | 0 | 4 |
|  | Forging --... | 1 | $1 \% 3$ | 0 | 20 |
|  | Machine-shop work | 1 | 35 | 0 | 40 |
| North Bennet Street Industrial School, Boston, Mass. | Clay modeling .---- | 4 | 35 | 0 | ------ |
|  | Sewing -....- - | 1. | ----- |  | --.--- |
|  | Cooking | 1 |  |  |  |
|  | Sloyd, or knife work | , | 215 |  | --.. |
|  | Leather work. | 1 | 175 |  | ---- |
|  | Millinery --- | , | 21 |  | --- |
|  | Dressmaking | 1 | 27 |  | --- |
|  | Printing -----.------------------- | 1 | 807 |  |  |
| Woman's Educational and Industrial Union, Boston, Mass. <br> Rindge Manual Training School, Cambridge, Mass. | Sewing --------------------------------- | 4 |  | 800 | 36 |
|  | Tree-hand drawing ---.------. | 1 | 175 | 0 | 40 |
|  | Mechanical drawing ---..-.----- | 1 | 175 | 0 | 40 |
|  | Carpentry | 1 | 67 | 0 | 20 |
|  | Wood turning ---------------- | 1 | 58 | 0 | 20 |
|  | Patter making ---------------- | 1 | 58 58 | 0 | 20 |
|  | Forging <br> Machine-shop work first year | 1 | 58 50 | 0 | 20 20 |
|  | Machine-shop work, first year- Machine-shop work, second | 1 | 59 60 | 0 | 20 20 |
|  | year. | ${ }^{8}$ | 11 | - | 0 |
| Trustees of the Lowell Textile School, Cambridge, Mass. | Free-hand drawing ---.-.---- | $\%$ | 14 | 9 0 | 90 90 |
|  | Mechanical diawing | 2 | 85 | 0 | 90 90 |
|  | Handloon weaving. | 1 | 80 | 6 | 90 |
|  | Cotton spinning .------.-. --.-- | 2 | 74 |  | 90 |
|  | Woclen and worsted spinning- | 2 | 60 |  | 90 |
|  | Dyeing | 3 | 50 |  | 90 |
|  | Textile designing -------------- | 2 | 118 |  | 90 |
| South End Industrial School, Roxbury, Mass. | Fl'ee hand drawing ----------- | 1 | 14. | 16 | 44 |
|  | Mechanical drawing ----.----- | 1 | 14. |  | 40 |
|  | Sewing - |  |  | 100 | 31 |
|  | Cooking--.-- | 1 |  | 32 |  |
|  | Carpentry --------------------- | 1 | 12 |  | 40 |
|  | Dressmaking ---------------------- | 2 |  | 36 | 40 |
|  |  | 1 | 10 | 16 | 40 48 |

Tabee 6.-Statistics of manual and industrial training-Branches taught-Cont'd.


Table 6.-Statistics of manual and industrial iraining-Branches; taughi-Contd.

| Name of institution. | Branches of instruction. |  | $\begin{gathered} \text { Fumber } \\ \text { of } \\ \text { pupils. } \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\stackrel{\text { 采 }}{\substack{~}}$ |  |  |
| 1 | 2 | 3 | 4 | \% | G |
| Manual Training High School, Brooklyn, N. Y. | Wood turning | 2 | 100 |  | 100 |
|  | Carring...-.- | 2 | 40 | $4)^{1}$ | 80 |
|  | Patternmaking | 1 | (6) |  | ¢0 |
|  | Forging--------------------- | 1 | 100 |  | 100 |
|  | Sheet-metal work ----------- | 1 | 40 0.4 | 110 | 80 |
| Prat Institute (department of science and technology), Brooklyı, N. Y. | Free-hand draving --.--- | 4 | $\begin{array}{r}64 \\ 230 \\ \hline\end{array}$ | ${ }^{110}$ | 141 |
|  | Clay modeing .-.... |  |  |  |  |
|  | Cowing .- | 2 |  | 58 | 36 |
|  |  | 1 | 5 | 25 | 86 |
|  | Carpentry --.-... | 1 | 120 | 60 | 43 |
|  | Wood turning | 1 | 120 | 60 | $1: 3$ |
|  | Evening carpentry -------...- |  | 29 | 0 | 48 |
|  | Carpentry and house bailding. |  | 18 | 0 | 6 |
|  |  | 1 | \% 8 | 0 0 | 24 |
|  | Sheet-netal worls | 1 |  | 0 | 19 |
|  | Molding (metal) | 1 |  | 0 | 24 |
|  | Vise work -..... | 1 | 52 | 0 | 26 |
|  | Rvening machino work |  | 45 | 0 | 48 |
|  | House and sign painting-.....- | 1 | 16 | 0 | 43 |
|  | Frescoing (evening painting) |  | 10 | 0 0 | 48 |
| Webb's Academy anci Home for Ship. builders, Fordham Leights, N. Y. |  | $\stackrel{\text { ard }}{ }$ | 33 |  | ${ }^{48}$ |
|  | Carpentry ---.........------. | 1 | 33 |  | 33 |
| Artist Artisan Institute, New York..... | Clay modeling.-----..----------- | 1 | 23 | 5 | 428 |
|  |  | 1 | ${ }^{6}$ | 0 143 | 5 |
| Ethical Culture Schools, New Yoriz, N. Y. |  | 1 | 2\% 20 | 143 | 35 |
|  | Paper cutting and folding--.--- | 4 | \% $\%$ | 75 | 35 |
|  | Sewing ----....-------- ----- | 1 | $7 \%$ | 143 | 35 |
|  | Carpentry ${ }^{\text {Coy }}$ ( |  |  | 8 |  |
|  | Wood tuming | , | 15 | 0 | 135 |
|  | Bentiron --.. | 1 | 16 |  | 35 |
|  | Basket making ------------------ | 1 | 36 | 23 | 18 |
|  | Carving. | 1 | 8 | 13 | 7 |
|  | Card board | 1 | 13 |  | 15 |
| General Society of Mechanics and Tradesmen, New York, N. Y. | Froe-hand drawing-- -------- | 1 | 123 |  | 69 |
|  | Mechanical drawing --........- | 3 | 107 |  | 90 |
|  | Architectural ${ }^{\text {crawing }}$ |  | 1\%0 |  | 00 |
| Eebrew Technical Institute, New Yorls, N. Y. | Free-hand drawing .-......-..- | 1 | 131 |  | 93 |
|  | Mechanical drawing .-...-....... | 1 | 210 | () | 1.11 |
|  | Carpentry ------------------. | 3 | 210 | (1) | 1.15 |
|  | Wood turning --.-------------- | 1 | 80 | 0 | 45 |
|  | Carving. | 1 | 65 | 0 | 13 |
|  |  | 1 | 30 | 0 | 48 |
|  | Physics .-. |  |  |  |  |
|  | Pattern making | 1 | 5 | 0 | 4 |
|  | Forging -- | 1 | 5 | 0 | 24 |
|  |  | 1 | 60 | 0 | 43 |
|  | Machine slop work ----------- | 1 | 80 | 0 | 48 |
| Neit York Trade School, New York, N. Y. | Architectural and mechanical drawing. | $\stackrel{2}{2}$ | 15 | 0 |  |
|  | Carpentry --.--------------.- | , | 20 | 0 | - |
|  | Electrical work- ---------------- | 4 | 50 | 0 | - |
|  |  | 1 | 39 | 0 | ----- |
|  | Forging--... | 1 | 13 | , |  |
|  | Sheet metal work ..-..-----...-- | 3 | 26 | 0 | --... |
|  | Plumbing-...----..----------- | 5 | 25 | 0 | - |
|  | Bricklaying-----------------. | ${ }_{2}^{2}$ | 39 | 0 | - |
|  | Printing ---.-- | ${ }_{2}^{2}$ | 14 | ${ }_{0}^{0}$ | - |
|  | Painting, sign. | 1 | 22 | 0 |  |
|  | Painting, fresco |  | 3.) |  |  |

Table 6.-Statistics of mamual and industrial training-Branches taught-Cont d.

| Name of institution. | Branches of instruction. |  | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { pupils. } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 |
| St. George's Evening Trade School, New York, N. Y. | Free-hand drawing | 2 | 30 | 0 | 80 |
|  | Mechanical draving | ¹ | 80 | 0 | 33 |
|  | Paper cutting and folding | 1 | 81 |  |  |
|  | Sloyd, or knife work -.... | 1 | 81 | 0 |  |
|  | Carpentiry | 1 | \% 6 | 0 |  |
|  | Wood turning | , | 10 | 0 |  |
|  | Pattern making | 1 | 20 | 0 | ------ |
|  | Plumbing ----- | 1 | 48 | 0 | ----- |
|  | Printing | 1 | $4: 3$ | 0 |  |
| School of Industrial Art and Technical Design, New York, N. Y. | Free-hand drawing- | 1 | 1 | 78 | 24 |
|  | Mechanical drawing | 1 | 1 | 78 | 24 |
|  | Practical designing ----- | 1 | 1 | 78 | 24 |
| Senior Evening School for Girls, New lork, N. Y. | Sewing-------------- -- | 2 |  |  |  |
|  | Cooking -- | 1 |  |  |  |
|  | Vise work |  |  |  | 18 |
|  | Machine shop --- |  |  |  | 18 |
| 'Teachers' College, New Yol'k, N. Y....- | Free-hand drawing- | 4 | 4 | 55 | 160 |
|  | Mechanical draving | 2 | 48 | 55 | 200 |
|  | Clay modeling-------- | 1 | 3 | $2 \%$ | 40 |
|  | Paper cutting and folding | $\stackrel{3}{7}$ | 13 | $1 \%$ | 33 |
|  | Sewing--.-- | 5 | 40 | 156 | 145 |
|  | Cooking - | \% |  | 62 | 30 |
|  | Sloyd - .... | 1 | 3 | 59 | 38 |
|  | Carpentry --- | 1 | 63 68 | 9 | 34 |
|  | Carving | 1 | 3 | 5.) | 80 |
|  | Pattern making | 1 | 68 |  | 13 |
|  | Forging----. | 1 | 45 |  | 8 |
|  | Vise work ---. - - | 1 | 45 |  | 4 |
|  | Machine-shop work | 1 | 4.5 |  | 18 |
| Technical School for Carriage Draftsmen and Mechanies, New York, N. Y. | Free-hand draving- | 1 | 10 | --- | 10 |
|  | Mechanical draving | 1 | 14 |  | 28 |
| Wilson Industrial School for Girls, New York, N. Y. | Sewing---..-. --- - | 1 |  |  | 10 |
|  | Cooking------------ | 1 |  |  | 4 |
|  | Kitchen gardening - | 1 |  |  | 8 |
| Rochester Athenæum and Mechanics Institute, Rochester, N. Y. | Free-hand drawing- | 6 | $14 \%$ | 154 | 30-90 |
|  | Mechanical drawing | 7 | 200 | 10 | 90 |
|  | Clay modeling --- | 1 | 10 | 10 | 30 |
|  | Sewing---. | \% |  | 403 | 36 |
|  | Cooking----------- | 3 |  | 400 | 36 |
|  | Sloyd, or knife work | 1 | \} 240 | 38 | 34 |
|  | Dressmaking | 1 4 1 | ------ | 268 | 36 |
|  | Shirt waists | 1 | - | 59 | 36 |
|  | Millinery | 2 |  | 81 | 36 |
|  | Lettering | 1 |  | 6 | 30 |
| Rochester Athenæum and Mechanical Institute, Rochester, N. Y. <br> Herbart Preparatory School, Suffern, N. Y. | Electricity | 1 | 49 | 6 | 30 |
|  | Telegraphy----- | 1 | 9 | 9 | 30 |
|  | Free-hand drawing |  |  | 4 | 40 |
|  | Carpentry |  |  |  |  |
|  | Wood turning Carving. | 1 | 1 |  | 40 |
|  | Farm or garden volk | 1 | 1 |  | 40 |
| Skyland Institute, Blowing Rock, N. C. | Sewing ---.-.-....--- | 1 |  | 29 | 30 |
|  | Cooking--- | 1 |  | 22 | 30 |
| Dorland Institute, N. C.-------------.-. -- | Sewing -... | 1 |  | 75 |  |
|  | Cooking | 1 | 50 |  |  |
|  | Laundry work | 1 | 50 |  |  |
|  | Farin or garden work |  | 10 | 25 |  |
| Asheville Farm School, Denmark, N. C. | Free-hand drawing Mechanical drawing | 1 | 30 12 18 | 0 0 | 38 38 |
|  | Cooking. | 1 | 18 | 0 |  |
|  | Carpentry ----- | 1 | 20 | 0 | 38 |
|  | Laundry work...-- | 1 | 30 | 0 |  |
|  | General housework | 1 | 98 | 0 |  |
|  | Farm or garden work | 2 | 98 | 0 |  |
| Academical and Industrial Institute, North Wilkesboro, N. C. | Free-hand drawing | 1 | 12 | 10 |  |
|  | Sewing -. |  |  | 4 | 28 |
|  | Cooking-. . | 1 | ----- | $\stackrel{8}{8}$ |  |
|  | Carpentry . | 1 |  | 3 |  |

Table 6.-Statisties of manual and industrial training-Branches taught-Contid.

| Namo cif institution. | Branches of instruction. |  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { pupils. } \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Academical and Industrial Institute, North Wilkesboro, N.C. | Laundrying . <br> Housekeeping <br> Farm or garden work |  |  | 3 4 4 |  |
| Ohio Mechanics' Institute, Industrial and Art School, Cincinnati, Ohio. | Frim-hand drawing - | 3 | 185 | 4 | 28 |
|  | Mechanical drawing | 3 | 29.3 |  | 75 |
|  | Arcnitectural arawin | 3 1 | ${ }_{6}^{82}$ |  | 50 |
| Technical School of Cincinnati, Cincinnati, Ohio. | Free-hand drawing | 1 | 136 | 1 | 40 |
|  | Mechanical drawing |  | 136 | 1 | 30 |
|  | Sloyd, or knife work |  | 18 |  | 20 |
|  | Carpentry -.... | 1 | 50 | 1 | 30 10 |
|  | Forging-...---- | $1{ }^{-}$ | 41 | 0 | 40 |
|  | Vise work ........ | 1 | f 31 | 0 | 20 |
|  | Machine shop work | 1 | ! 31 | 0 | 20 |
| Jewish Orphan Asylum, Cleveland, Ohio. | Free-hand drawing ........ Mechanical drawing ---.... | $\stackrel{4}{2}$ | $\stackrel{208}{65}$ | 90 | 38 40 |
|  | Paper cutting and folding. Sewing | $\stackrel{3}{2}$ | 74 | 42 | 0 |
|  | Cooking. | 1 |  | 36 | 30 |
|  | Sloyd, or knife work | 1 | 36 |  | 30 |
|  | Carpentry <br> Wood tarning | 1 | 127 |  | 38 <br> 38 <br> 8 |
|  | Carving-... | 1 | 12 |  | 16 |
|  | Vise work | 1 | 12 |  | 16 |
|  | Machine-shop work | 1 | 12 |  | 16 |
|  | Printing ---------- | 1 | 6 | 117 | 21 30 |
| Young Women's Christian Association, Cleveland, Ohio. | Cooking- | 1 |  | 21 | 30 |
|  | Millinery --....... | 1 | 1 | 55 | 30 |
|  | Domestic training ${ }^{\text {Free-hand drawing }}$ | 1 |  | ${ }_{7}^{7}$ | 24 30 |
| Toledo University Manual Training School, Toledo, Ohio. | Free-hand drawing. | $\stackrel{?}{2}$ | 143 | 113 | 10 10 |
|  | Clay modeling-.... | 1 | 15 | 134 | 10 |
|  | Dressmaking |  |  | 65 | 10 |
|  | Sewing-. | 1 | , | 193 | 10 |
|  | Carpentry | 2 | 174 |  | 0 |
|  | Wood turning | 1 | \% |  | 6 |
|  | Carving.-...-- | 1 |  | 35 | ${ }_{3}^{6}$ |
|  | Venetian iron | 1 | 9 | 6 |  |
|  | Pattern making | 1 | 10 |  |  |
|  | Forging --..... | 1 | 38 |  |  |
| Central Manual Training School, Philadelphia, Pa. | Free-hand drawing | 1 | 430 | 0 | 40 |
|  | Mechanical drawing | 1 | 430 |  | 40 |
|  | Clay modeling | 1 | 430 | 0 | 40 |
|  | Carpentry | 1 | 430 | 0 | 40 |
|  | Wood turning | 1 | 430 | 0 | 46 |
|  | Carving - | 1 | 430 | 0 | 40 |
|  | Pattern making | 1 | 430 | , | 40 |
|  | Forging --.......- | 1 | 430 | 0 | 40 |
|  | Sheet metal work | 1 | 430 | 0 | 40 |
|  | Molding. | 1 | 430 | 0 | 40 |
|  | Vise work ........ | 1 | 430 | 0 | 40 40 |
|  | Machine-shop work | 1 | 430 | ${ }^{0}$ | 40 |
| Friends' SelectSchool, Philadelphia, Pa- | Free-hand drawing - | 1 | 58 19 | $\begin{array}{r}136 \\ 3 \sim \\ \hline\end{array}$ |  |
|  | Sloyd, or knife work | 1 | 43 | 6.3 |  |
|  | Mechanical drawing | 1 | 572 |  | 210 |
| Girard College, Philadelphia, Pa........ | Sloyd, or knife work | 1 | $3: 1$ |  | 164 |
|  | Warpentry | 1 | 50 |  | 210 |
|  | Pattern making | 1 | 578 |  | 210 |
|  | Forgiug-...--- | 1 | 572 |  | 210 |
|  | Molding (metal) | 1 | 572 |  | 210 |
|  | Vise work | 1 | $5 \%$ | --.-- | 210 |
|  | Electricity -. - | 1 | 572 |  | 210 |
|  | Plumbing-. | 1 | 572 |  | 210 |

TABIE (9.--Statistics of manual andindustrial training-Branches taught-Contid.

| Name of institution. | Branches of instruction. | ‘s.roұən.xұsu!̣ јo .xəqum | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { pupils. } \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\underset{\text { 恖 }}{\substack{4}}$ | 砣 |  |
| 1 | 9 | :3 | 4 | 5 | 6 |
| Northeast Mannal Training School, Philadelphia, Pa. | Free-hand drawing | 1 | 348 |  | 80 |
|  | Mechanical drawing | 1 | 318 |  | 12. |
|  | Clay modeling-- | 1 | 109 |  | 13 |
|  | Carpentry --- | 1 | 167 |  | 28 |
|  | Wood turning | $\frac{1}{1}$ | 157 109 |  | 14 |
|  | Pattern majing | 1 | 109 |  | 14 <br> 88 <br> 8 |
|  | Forging --...... | 1 | 169 |  | 28 |
|  | Sheet-metal work | 1 | $16 \%$ | --.-- | 23 |
|  | Molding (metal) | 1 | $1{ }^{10 \%}$ |  | 14 |
|  | Machine-shop work | 1 | \% |  | 40 |
| Pennsylvania Museum and School of Industrial Art, Philadelphia, Pa. | Free-hand drawing | 10 | 500 | 30 | 36 |
|  | Mechanical drawing | , |  |  |  |
|  | Clay modeling. | 1 |  |  |  |
|  | Vise work | 1 |  |  |  |
|  | Painting -- | 2 |  |  |  |
|  | Weaving | 3 |  |  |  |
|  | Dyeing --.-.-. | 4 |  |  |  |
|  | Textile designs...... Carding and spinning | 3 |  |  |  |
| Spring Garden Institute, Philadelplia, Pa. | Mechanical drawing | 2 | 18 |  | ¢0 |
|  | Pattern making | 1 | 111 |  | 80 |
|  | Vise Work ...-.-.-k | 2 | 30 |  | 80 |
|  | Electricity ........ | 2 | 114 |  | $5:$ |
| School of Design for Women, Pittsburg, Pa. <br> Williamson Free School of Mechanic Trades, Williamson School, Pa. | Free-hand drawing | 5 |  |  |  |
|  | Mechanical drawing | 2 | 186 |  | 156 |
|  | Carpentry --...... | 1 | 32 |  | 155 |
|  | Pattorn making -- | 1 | 37 |  | 156 |
|  | Vise work <br> Machine-shop work | 1 | " |  | 12 |
|  | Bricklaying...-.-. | 1 | 38 |  | 132 |
|  | Electrical machinist | 1 | 110 | - | $1{ }^{1}$ |
| Miss Sayer's School, Newport, R. I--.-- | Sering......-...... |  |  | 1 | 83 |
|  | Painting - | 1 |  | 1 | 86 |
| Townsend Industrial School, Newport. R. I. | Free-hand drawing | 1 | 89 | 25 | 80 |
|  | Mechanical drawing | 1 | 19 | ${ }^{10}$ | 141 |
|  | Sewing. | 2 | 0 | 408 | 160 |
|  | Carpentry --...-...- | İ | 8 | 0 | $\begin{array}{r}160 \\ 30 \\ \hline 10\end{array}$ |
|  | Wood turning | 1 | 8 |  | 10 |
|  | Pattern making | 1 | 6 |  | 10 |
|  | Forging. .-. | 1 | 20 | () | 24 |
|  | Miolding (metal) | 1 | ${ }_{5}$ | 0 | ${ }^{6}$ |
|  | $V$ ise work | 1 | 5 | 0 | 10 |
|  | Machine-shop work | 1 | 5 | 0 | 51 |
| Proridence Manual Training High School, Providence, R. I. | Free-land drawing | 3 | $\%$ | 0 | 40 |
|  | Mechanical drawing | : | 2 | 0 | 40 |
|  | Clay modeling. | 1 | 1 | 0 | 20 |
|  | Carving-..... | 2 | 0 |  |  |
|  | Cooking. | 1 | 0 | 1 | 2 |
|  | Carpentry --. | 1 | 1 |  | 20 |
|  | Wood turning | 1 |  |  | 20 |
|  | Dressmaking - | 1 |  | 1 | 20 |
|  | Millinery --...-. | 1 |  | 1 | 20 |
|  | Pattern making | 1 | 1 | --.. | 10 |
|  | Molding (metal) | 1 | 1 |  | 10 |
|  | Vise work ...... | 1 |  |  | 10 |
|  | Machine-shop work | 1 | 31 |  | 40 |
| Rhode Island School oî Design, Providence, R. I. | Mree-hand drawing |  | 31 138 | 8 1 | 323 |
|  | Clay modeling....... |  | 12 | 4 | 32 |

TABLE 6.-Statistics of manual and industrial training-Bianches taugl:-Cont d.


Table 6.-S'atistics of manualand industrial training-Branches taught-Cont'd.

．Table G．－Statistics of manual and industraitraining－Branchestanght－Contd．

| Name of institution． | Branches of instruction． |  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { purils. } \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { 荧 } \\ \text { 荧 } \end{gathered}$ |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 |
| Fort Shaw Indian Training School，Sun River，Mont． | Forging <br> Wheet－metal work Vise work <br> Slioe and harness inaking <br> Farm and gavden wonk． <br> Bricklaying | 1 <br> 1 | 8 13 36 | 0 0 0 | 40 20 40 |
| Carson Indian Industrial School，Car－ son City，Nev． | Tailoring－－－－－－－－－－－－－－ | 1 | $\because$ | 4 | 30 40 |
|  | Sowing | 1 |  | 40 | 40 40 |
|  | Carpentry | 1 | 20 |  | 40 |
|  | Wood turning | 1 | 5 |  | 40 |
|  | Lamdering．．． | 1 | 1 | 20 | 40 40 |
| － | Forging | 1 | 4 |  | 40 |
|  | Vise work | 1 | 20 |  | 4 |
|  | Machine shop work | 1 | 3 |  | 40 |
|  | Farmor garden work | 1 | 25 |  | 40 40 |
| United States Indian Industrial School， Albuqzerque，N．Mex． | Free hand drawing Mechanical drawing | 1 | 60 | 40 | 40 |
|  | Clay modeling ．．．－． Paper cutting and foling | 1 | 14 | 12 | 40 |
|  | Sewing－－－－－－－－－－．－．－－ |  |  |  | 40 |
|  | Cooking．．． | 3 | 4 | 枵 | 40 |
|  | Carpentry |  | 14 |  | 40 |
|  | Tailoring－－－ | 1 | 19 | 0 | 40 |
|  | Harmess making | 1 | 13 | ${ }_{0}^{6}$ | 40 |
|  | Blacksmithing．． | 1 | $\stackrel{3}{3}$ | 0 | 40 |
|  | Farmor garden work | 1 | 26 | 0 | 40 |
|  | Painting．－．．．．．．－ | 1 | 14 20 | 0 | ${ }_{40}^{40}$ |
| United States Indian Industrial School， Santa Fe，N．Mex． | Paper cutting and foding | 1 |  | 3 | 52 |
|  | Sewing．．．．．．．．－ | $\stackrel{2}{2}$ |  | 0 | 52 |
|  | Sloyd cr knife work |  | 35 | 5 | 52 |
|  | Woarpentry Wrining－－ | 1 | 14 |  | 52 |
|  | Carving ．．．．．． |  |  |  |  |
|  | Tailoring | 1 | 15 | 0 |  |
|  | Baking－．．．． | 1 | $\stackrel{\sim}{3}$ | 0 |  |
|  | Shoemaking－．．． Pattern making | 1 | 12 |  |  |
|  | Forging－－－－－－－ |  |  |  |  |
|  | Sheet－metal work | 1 | 7 | 0 |  |
|  | Molding（metal） | 1 | $\%$ | 0 |  |
|  | Machine－shop work |  |  |  |  |
|  | Farm or garden work | 1 | 2 | 0 |  |
|  | Painting－－．．．．． |  |  |  |  |
| Cherokee Training School，Cherokee， N．C． | Engineering－－－．．．－ | $\frac{1}{3}$ | 8 | 0 |  |
|  | Clay modeling ．．．． | 1 | 13 | 12 |  |
|  | Paper cutting and folding | 3 | 20 | 23 |  |
|  | Sewing－ | 2 |  | \％ |  |
|  | Carpentry．．．．．．．．． | 1 |  | ${ }_{2}$ |  |
|  | Farm or garden work． | $:$ |  |  | 28 |
|  | Painting－－－－－－－－． | 1 | 6 |  | 10 |
| United States Indian Industrial School， For＇t Totten，N．Dak． | Sewing | $\stackrel{\square}{5}$ |  |  |  |
|  | Carpentry | 1 |  |  |  |
|  | Farm or garcen work | 2 |  |  |  |
| Seger Colony School，Colony，Okla．．．．．． | Painting－－．．．．．．．． | 1 |  |  |  |
|  | Paper cutting and folding | 1 | 10 | 3 | 4 |
|  | Sowing ．－．．．．． | 1 | 3 | 30 | 40 |
|  | Cooking． | 1 |  | 30 | 40 |

Table 6．－Statistics of manual and industrialtaining－Branchestaught－Contd．

| Name of institation． | Branches of instruction． |  | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { pupils. } \end{aligned}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 告 | 等 |  |
| H | ${ }^{3}$ | 3 | 4 | 5 | 6 |
| Seger Colony School＇Colony，Okla | Farm or garden work | 1 | 40 |  | 10 |
| United States Indian Industrial School， Carlisle，Pa． | Free－hanldirawing－ | 1 | ［ 608 | 487 | 40 |
|  | Clay modeling－．．．．－． | $\frac{1}{1}$ | 吕 | 0 |  |
|  | Saper cating and ford | 18 | 21 | $40 \%$ | 40 |
|  | Cooking－．．．．．．．．． | 3 | 12 | 404 | 52 |
|  | Sloyd or knife wo | 1 | \％${ }_{6}$ | 28 | 40 |
|  | Tailoring | $\underline{1}$ | $4{ }^{5}$ |  | 40 |
|  | Plastering | 1 | $1: 3$ |  | 16 |
|  | Forging－．．．．．．．．． | $\frac{1}{1}$ | ${ }^{2}$ |  | 5 |
|  | Sheet－metal work | 1 | 15 |  | 5 |
|  | Machine－shop work，steare－fit ting． | 1. | 10 |  | 40 |
|  | Farmor carden work．．．．．．．．．． |  | 603 |  | 5. |
|  | Bricklaying | 1 | 12 |  | 16 |
|  | Printing | 1 | 30 | 1 | 53 |
|  | Paintirg．－．． | $\frac{1}{5}$ | 12 |  | $5{ }_{5}$ |
|  | Harness making | 1 | 60 | 401 | 0.3 |
| Pierre Indian School，Pierre，S．Dak．．．． | Free－hand drawing |  |  | 121 |  |
|  | Prper cutting and rolding |  |  | 20 |  |
|  | Sewing－－－－－－－－－－ |  |  | 43 |  |
|  | Cooking <br> Form or garden wori | 13 |  | 43 |  |
| Tomah Itdian Industrial School，To－ mah，Wis． | Sewing ．．．．．．．．．．．．－ | 2 |  | 36 |  |
|  | Cooking－．．．．．．．．．．． | － |  | 36 |  |
|  | Sloyd or knife work |  |  |  |  |
|  | Carpentry－－． | 1 | 15 |  |  |
|  | Carving．．．．．．．．．－． |  |  |  |  |
|  | Farm orgarden work | 1 | 24 |  |  |
| United States Indian Industrial School， Wittenberg，Wis． | Sewing－${ }^{\text {Cooking }}$－ | $\stackrel{1}{2}$ |  | 50 | 12 |
|  | Carnentiy | 1 | 21 |  | 20 |
|  | Laundering | 1 |  | 30 | 26 |
|  | Farm or garden work | 2 | 50 |  | 26 |

## CHAPTER XLII.

## COMMERCTAL AND BUSINESS SCIIOOLS.

## REPORT OF THE COMMITTEE OF TEE DEPARTMENT OF BUSINESS EDUEATION OT THE NATIONAL EDUCATIONAL ASSOCIATION ON A COURSE OF STUDY FOR COMMERCIAL CULLEGES.

The Correlation of Studies in the Conmercial Course.
The term correlation, as used in this report, your committee understands to refer not only to the co-relation of the studies in the commercial course, but also to the relation of the school to the offce and to the relation of the training and conduct of the student in the school to the conditions he will meet in the business house in which he is to begin his career as a business man, it being deemed of the utmost importance that the step the student must take between the business school and the husiness office be made as short and easy as possible.

Much assistance and information have leen received by this committee from the commercial school people not of the committee, and, in addition to this, the former reports of the proceedings of this body have been freely drawn upon, for all of which the members of this committee hereby render their acknowledgment and express their thanks.

## CORRELATION.

Whatever else may be said of the business college curriculum, there are, perhaps, no other schools that possess a course of stndy the several branches of which are so unified and correlated.
It has for its foundation bookkeeping, which requires a knowledge of arithmetic, in order that the computation necessary to its conduct may ba performed with accuracy and dispatch.
The bookkeeper who does not know the legal rules governing business transactions and who does not understand the penalties for their violation would certainly be unfit to manage the affairs of a modern business office. Therefore no one can lay claim to the titie of bookkeeper, or, rather, accountant, in the true sense of the word without a reasonably accurate knowledge of commercial law; and thus we have a third element in the course.
Further, bookkeeping as an art depends largely upon good handwriting, and thas the fourth element in the course of stady is brought into close connection with the three branches already named.

Again, bookkeeping, as a record of business transactions, is closely allied to business correspondence, and the bookkeeper, as well as the correspondent, reruires a knowledge of English, including grammar, spelling, and composition; thus these branches are intimately connected with the other subjects of the course.
Since the introduction of the typewriter into the business house, no one having
any considerable amount of correspondence can dispense with its use, and hence shorthand and typewriting have been added to the commercial course.

As the work of the business correspondent and amantuensis requires accuracy and close discrimination, punctuation assumes the importance of a separate branch of study, and some knowledge, at least. of rhetoric becomes necessary.
To enforce and fix in the student's mind the principles of bookkeeping, and to assist in giving him a knowledge of business methods and customs, a course in business practice has been introduced. This feature of the course, in connection with intercommunication, or trading between colleges in different parts of the country, is an excellent introduction to commercial geography, another branch of study of great importance to the future business man.
Inasmuch as the education of a business man is not complete withorat the ability to stand before his peers in public and express his views, public speaking becomes a branch of buainess training of no little importance.
A knowledge of the laws relating to production, distribation, and consumption is necessary to an understanding of the facts of commerce in their true light and to a correct view of their relations to each other. A place for economics must, therefore, be found in the business course.

Whether we regard the principal work of the business college to be the training of young men and women for positions in business houses, thereby opening the avenue of business life to them, or look beyond this work to broader fields of usefulness, we must, through a series of lectures, if not in some more formal manner, strive to teach the elements of basiness ethics.

Further, it is none the less our duty than that of other schools to prepare young men and women for intelligent citizenship: for this reason the subject of civil government must be given a place in the curriculum of the business school.

Your committee is aware that this outline will appear to many to be too comprehensive. It is not claimed by your committee that these several branches of study shall be considered to be of equal importance; some of them may, and indeed must, be taught incidentally, but they all, none the less, belong to the education of the modern American business man.

## SUGGESTIVE OUTLINE OF BUSINESS COLLEGE STUDIES.

Mathematics:
(a) Bookkeeping.
(b) Arithmetic, including rapid calculation.

Writing:
(a) Penmanship.
(b) Shorthand.
(c) Typewriting.

Business:
(a) Business practice, including business methods and customs.
(b) The history of commerce.
(c) Commercial geography.

English:
(a) Spelling.
(b) Grammar and punctuation.
(c) Business correspondence.
(d) Composition and rhetoric.
(e) Public speaking.

Civics:
(a) Commercial law.
(b) Civil government.
(c) Economics.

Suggestions on the Outline.

TMME RDQUIRED.
The time mentioned under each topic in this outline is the probable time requived, but it inust be borne in mind that in commercial or business schools the qualifications of students vary greatly, and the $r$ fitness for business life must be measured by their attainments and not by the time they have spent in school.

The ability or power to do certain thing neatly and accurately in a limited time alone decides the student's qualifications. and he should be graduated when he can meet these requirements, regardless of the time he has spent in securing this attaimment.

## ELEMENTARY BOOKKEEPING.

Time, three hours (by hours is here meant periods of siaty minutes) aaily fos two months, excusive of the time spent on bookkeeping in business and office practice.

As before stated, your committee assumes bookkeeping to constitute the basis of the commercial course. The student should begin the study of bookkeeping only when he writes sufficientiy well, and can perform ordinary computations under the fundamental rules of arithmetic, including interest, with a reasonable degree of accuracy. It may be necessary, therefore, for the incoming student to pass through a preparatory course of stady before entering apon the course here described.

Bookkeeping should be taught inuividually. Drills and lectures may be given in classes, but each pupil should pursue the course in bookkeeping independently of other students, except in so far as is necessary to carry out a scheme of practice as hereinbefore mentioned.

This plan of individual study has many advantages:
First. The bright student is not held back by others who are slow, but is allowed to proceed as fast as he can do his wori well.

Second. The slow student is not pushed ahasd of his ability by those who are more rapid in their work, but is allowed to understandingly master the work as he progresses.

Third. This individual work in bookkeeping renders the course flexible; the student may devote all the time he can spare from other studies to this subject, and therefore may be always kept busy. Where this arrangement is made no student need be idle at any time, and as bookkeeping is the groundwork of the course of study, it is eminently fitting that it should be thus made the subject of special individual instruction.

Special test exercises in this subject, illustrating various applications of the principles of bookkeeping and fixing, by review, the work the student has already gone over. may be given to advantage throughout the course. In these tests the student should be thrown upon his own resources. and he shouid satisfy both himseif and his teacher as to his ability to work independently of aids of any kind.

Here, as elsewhere, weekly class drills or oral quizzes are recommended as valuable in assisting to fix in the minds of students the principles underlying the subject taught.

## BUGINESS PRACTICE AND ADVANCED EOOK耳EEPING.

Time: Three hoars of sisty minutes, daily for six months.
Before entering upon what is usually known as "business practice" pupils should have in some measure the qualifications that they would be required to possess before beginning actual work. These should include order, neatness,
good penmanship. etc. In correspontence and business forms they should have a clear idea of the mechanical arrangement of a letter and a knowledge of the forms and uses of checks, noter, drafts, etc., with a fair understanding of the use of the daybook, journai. ledger, cashbook, sales book, and bill book. They should be quiciz an l apt in journalizing, and should have at least passed the test in the first division of arithmetic.

Your committee will not undertake to designate what the course in business practice shall or shall not be but takes the liberty of submitting the following propositions:

First. As the courss in business practice is especialy designed to correlate the school work with the work of the office, the business transactions in the businesspractice course slould come to the student bookkeeper for record in the came way they come to the bookkeeper in the business house; and the business done by the student, and the transactions made and booked by him, should be done and recordel as neariy as possible as they would be done and recorded in a first-class business house.
Second. The books. Stationery, and appliances used in the school shonld be modern in form. well bound, of good material, well printed or engraved, and in every respect the equal, at least, of those found in use in business houses. Good boois and stationery tend to the formation of habits of neatness and accuracy.

Third. A reasonable variety of books should be used, in order that the student may. When going out of the business-practice department of the school, pass in to the actual work of the office withoutfeeling that books of account are all fashioned alike, but h"should rather go out with a fair degree of knowledge enncerning various forms of books of account, especially those that may be considered standard. But, on the other hand, this variety of forms should not be so great as to confuse and annoy the student. Whatever is undertaken should be well done. And here, as elsewhere, one thing done well is better than any number of things poorly or lonsely done.

Fourth. The student should remain a sufficient time in each office or subdivision of the lusiness practice work to gain a fair knowledge of the detail of such office or employment. Your committee believes that a weels in a bank, for instance, is almost futile, and tends rather to confuse the student than to make plain the principles and modes of modern banking. Nut less than a month shotid be given to the actual work in the bank, and $r$, proportionate time should be spent in the other offices. Nothing should be attempted that can not be done thoroughly and well.

Fitth. From the time assigned to bookkeeping and business practice in this report it will be seen that your committee believes that from two-thirds to threeforirths of the whole time given to bookkeeping in the commercial course should be deroted to this business-practice work.

Sixth. Accuracy in this department should be insisted upon to the letter, and all the "checks" possible should be placed upon the student, that his work may be done thoroughly and accurately. All loose and haphazard work should he rewritten, and neatiess and accuracy should be insisted upon. Let all this work be done under an experienced and competent supervisor.
Seventh. The student in the business-practice department should be taught to conscientiously care for at original documents coming into his hands, to fie letters and papers with care and accuracy, and to keep everything in and about his office neat, clean, and orderly.

Eighth. The strictest attention should be given to correspondence, and, as the intercommon cation wori usually connected with this department gives rise to a large amount of correspondence, which, in the nature of things, no other plan can secure, the student should be made to profit by this opportunity to develop his ability 10 write a grod business letter. All work in this line should be performed
with care and fidelity, and erery letter and document written in this depariment should pass under the eye of a careful teacher, who should firmly decline to accept anything but reasonably good work.
Ninth. A plain, easy, rapil style of business writing, without shade or fourish, should be taught in this departwent, and students not meeting a reasonabie requirement in handwriting should be debarred from the work in bookkeeping, and should receive special attention in penmanship until stuch a handwriting is acquired. A constant improvement in the student's handwriting during the whole course should be insisted upon.
Tenth. Special attention should le given in th's department to the art of bookkeeping, such as indexing, the arrangement of accounts in the ledger, the proper manner of closing accounts, forwarding, etc.; the handling and care of booss, the filing of papers, and every detail connected with office work.
Eleventh. The student should be taught to be exhaustive in the examination of statements and accounts; to check his books when balancing, even though they balance after the first addition; to check all statements received, and bo carefully go over a second time all statements rendered. He shomld be tanght to examine and audit books, and should acquire the shill necessary to perforn these operations with reasonable dispatch.
Tweinth. The order and discipline in this department should be that of a wellconducted modern offce; communication between students should be allowed concerning the business in hand only. Necessary conversation should be carried on only in a low, soft tone of voice, and no unnecessary noise, heavy walking, or irregularities in deportment should be permitted.

## ARITMMTTIC.

Time: Five periods a week for six months.
To facilitate coordination with bookkeeping, the work in arithmetic may be arranged in four divisions, as follows:
First. The fundamental rules, United States money, factoring, common and decimal fractions, and denominate numbers.
Second. Percentage, with its applications, profit and loss, discounts, commission and brokerage, simple and compound interest, and partial payments.
Third. Insurance, exchange, equation of accounts, and stocks and bonds.
Fourth. Taxes, partnerskips, national and sawings banks, etc.
Tests or examinations should be given as these parts of the arithmetic are severally completed, and the student's progress in arithmetic should ke nade to keep pace with his advancement in booklreeping.
Rapid calculation shonld include addition, substraction, multiplication, extension, cancellation, and interest and discount, by sho t and rapid methods.
"Mental arithmetic," whether formally or incidentally taught, should have a place in all arithmetic work.

A brief practical course in mensuration should be given to all students in the bu iness course, either in classes or as a general exercise.
The metric system, longitude and time, marine and life insurance, foreign exchange, and general average may usually be cmitted; not beca se they are not important, but because other more important subjects dernand all the time that can be given to arithmetic in these schools. It is urged by some teachers that the metric system should be taught, but, for the reason given, your committee suggests that it be omitted.

Equation of payments should be performed by the "interest method," in order to aford additional practice in interest comprataces and to insure a rational view of the subject.
The work in partnership settlements should be performed, as far as possible, on
paper ruled by the students in the form of statements, trial balances, etc. This work, done in such manner, tends to greatly incease the student's efficiency in the practice of accounting.
Students failing to pass the tests in arithmetic may proceed with their work and be given such tests again when time has been afforded them for review or private study, providing, however, that t'ee student shall not be allowed to advance in his bookkeeping beyond the point where such test in arithmetic is required to be passed.

Your committee recommends the analytic method, and the avoidance of formulas of all kinds throughout the whole course in arithmetic. If it be thought best to use a formula, it should be thoroughly explained, that each student may fully understand the process upon which such formula is based. The fact that the arithmetic of business is preeminently the arithmetic of common sense shonid not for a moment be lost sight of in drilling classes in this branch in our schools.

## PENMANSHIP.

Time: Five periods a week throughout the course.
Your committea believes that nothing bat plain, prastical business writing should be taught in these schools except to those taking a special course in ornamental penmanship (and ornamental pemmanship constitutes no part of a commercial course). A student whose writing is below a reasonable standard should be made to discontinue work in bookkeeping until his writing is improved. Figures should receive close attention, and students should be drilled in both their form and their rapid execution. Skill in accommodating writing to the space to be occupied should be carefuly cultivated. An easy arm movement should be early acquired. Unnatural and rnhealthful positions of the body should be guarded against. Every teacher in the school should give attention to the correction of the writing of students as to position, movement, and form in the branches taught by him, and nothing but the best work of the student should be accepted anywhere. The student should be induced to writa to the best of his abiiity always, and always in a correct position.

No criticism upon the usual methods of teaching this branch is here intended, but it is the opinion of your committee that there is generally too mucin of oral explanation attempted by teachers of penmanship, an effort to hold the attention of pupils to extended and minute descriptions of form, when the students are not prepared for such explanations. As a rule but a few moments should be devoted to any explanation in this branch until the student has attempted to write the copy. After making such attempt his attention should be again called to the form for a short time, and he should again be allowed to attempt its reproduction. All long and tedious analysis should be avoided. Especially is this true concerning the teaching of those who are beginning the systematic study of penmanship. Persistent practice under careful direction is what is needed to produce good basiness penmanship.

> COMMERCIAI، LAW.

Time: Three periods a week for four months.
It is the sense of your committee that commercial law should be taught as a regular class recitation. The student should be provided with a text-look and be required to prepare his lessons es in other branches. Lectures on lavy are valuable, but lectures shou'd not be depended upon to the excinsion of regular textbook work. The application of business law to bookkeeping should be most carefully enforced, and the student's knowledge of business law should be carefully correlated with his work in business practice. While the teacher of this branch shouid be well acquainted not only with the facts in the book he is using, but be
well informed in law generally and acarainted with the rules of pleading and practice in the courts, it is by no means necessary that he should be a lawyer. Lawyers are often not teachers, and move often they are not disciplinarans, and when employed to teach commercial law in business colleges they are not likely to give sufficient attention to the order and discipline of their classes. For this reason what is gained in the direction of law is often lost or more than lost in other directions.

The common forms of legal and business documents shonid be exhibited in tho classes as the subject of the lesson deals with them, and it is better to use forms that are now or have been used in the regular course of business. For instance, the policy of insurance, the protested bill, the deed, the mortgage, etc.

An occasional "moot court." judicionsly conducted, may be made very useful in illustrating the practical details of lawsuits and the practice of law. Sach "' moct courts" must, however, be managed with the greatest care to prevent them degenerating into a mere ainusement.

CIVIL GOVERNMENT, INCLUDING CIVICS.
Time: Two periods a week for four months.
These subjects are sometimes taught in our schools incidentally and through lectures, but many schools use a text-book and do regular class work in these branches. Your committee recommends that these branches be tanght formaliy, even if they are made elective. No finishing school can afford to assume the business education of young men and women to be complete till they have acquired a reasonable knowledge of the methods by which our government is conducted and have also a fair comprehension of the rights and duties of citizenship.

## ECONOMICS.

Time: Two periods a week for three months.
The subject of e:onomics should find a place in schools devoted to the training of young men and women for business life. However this branch may be taught, its teaching should so impress the stadent that he will desire to continue reading and thinking on the subject.

## SPELLING.

Time: Three to five periods a week till excused by meeting the requirements.
The following is a very exce.lent method of teaching spelling:
The pupil studies fifty words from a text-book on spelling; the teacher pronounces these, and the student writes them in a blank book kept for that purpose. When this is done the misspeiled words are checked by the students as they are spelled by the teacher. The words checked are immediately afterwards written correctly by the student on a separate slip of paper. At the opening of the next lesson they are copied from this slip into the back of his blank speller. But whatever method may be used, no student should be graduated from any course in our schools who has not attained a reasonable degree of proficiency in this branch. The passing grade shouid not be less than 95 per cent in the shorthand course and 90 per cent in the commercial course, but students should not be excused from spelling until they reach a grade of 9 per cent. All misspelled words in any work the student may do should be marked by the teacher and corrected by the stradent by rewriting.

GRAMMAR.
Time: Three periods a week for four months.
Grammar should be taught with a view to the correction of errors in speech and writing. The subtleties of the subject may well be avoided, but much that
is usually termed "technical grammar," but which is necessary to the understanding of our language. shonld be carefully taught and persistently drilled upon. The test of all instruction should be, "Will it aid the student in the construction of the English sentence?" Blunders should not be allowed to pass without correction, either in class recitations, written exercises or ordinary conversation, and all papers containing inaccuracies in language should be corrected and rewritten. Care must be taken and tact used that the spontaneity of students be not suppressed by this work.

It has been suggested that the student should learn grammar by copying rules, etc. on the typewriter, but while the typewriter is an important aid in the improvement of language, nothing but careful, formal instruction, persistent and regular, can be depended upon to secure good results in the teaching of this subeect.

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BUSINESS CORRESPONDENCE.
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Time: Two periods a week for four months.
Business correspondence should receive most careful attention:
(1) As to mechanical arrangement. (2) As to style. A text-book on this subject should be used, and, in addition to the work of the text-book, many letters should be written by the student, criticised by the teacher, and returned to be rewritten, if deemed necessary. The letters of the entire class should be read in the class, signatures omitted, and comments and criticisms should be made upon them by the class and the teacher. applying the principles of grammar and rhet. oric to their correction where those principles have been violated. Such work affords excellent additional drill in composition and rhetoric, but this work should not be relied on exclusively for instruction in those subjects. A good collection of husiness letters from good business houses may be profitably used in this work to inspire and encourage students to excellence in letter writing.

COMPOSITION.
Time: Two periods a week throughout the course.
Composition should receive attention in an incidental way through every paper in school. Not less than twice each week every student in the school should submit to his teacher in this branch a paper in his own language of not less than one page in length of ordinary letter paper. The teacher should correct this paper with reference to grammar, spelling, arrangement, etc., or rather suggest the correction with red ink, and return the paper for the students examination and correction. If thought necessary. it should be rewritten.

As much instruction on various topics must be given in the form of lectures, abstracts of these lectures should be written by the student, and when criticised by the teacher, they form the best means for the composition work mentioned.

## RHETORIC.

Time: Two periods a week throughout the course.
This branch. with ferv exceptions, must be taught incidentally in cur schools; but nevertheless it may be well taught, and that, too, without consuming much time.

## PUBLIC SPEAKING.

Time: One period a week throughout the course.
Students should receive, through lectures and familiar talks, instruction in public speaizing and should be required to take part in exercises that will give them opportunity for practical training. Every student should le required to stand while reciting and to clothe his thoughts in the best language he can command. This alone will aid him greatly in the art of public speaking. It is a very
important thing that men and women of affairs should be able to appear to advantage when presenting their business, and mblio speaking is one of the best means to acquire this ease and grace of manner. Students should be encouraged to form societies for practice in problic debating and parliamentary practice, and to take part in them.

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BUSINESS MENHODS AND CUSTOIIS.
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Time: Two lectures a week throughout the course.
In addition to the work done in this line in the practice department, business methods and customs should be taught through lectures and familiar talls. An important feature in connection with this instruction as well as in commercial law, and a vary interesting one, is the use of original documents in connection with the subject, such as the freight receipt and bill of lading in shipping, the deposit slip, check, and draft in banking, etc. In addition to such methods of giving instruction on these subjects, the various departments of arithmetic and commercial law aford a most excellent opporturity to acquaint strudents with the inethods adopted and employed in the conduct of business.

The history of commerce will occupy a place under this head, as, for the present at least, it must be taught through lectures.

## COMIIERCIAS GEOGRAPHY.

Time: Two periods a week for three months.
This branch may be taught through lectures and general eiercises, though your committee advises that. where possible, it be taught formaily in classes. There is no subject connected with commerce more interesting than this. Just now the acquisition of islands by our Government, the extension of our trade, the compefition between our Gulf and Eastern ports, and many other matters of commercial interestare attracting the attention of the business men of the entire country, and the teacher who reads and thinks will not want for material to make this sub. joct attractive.

## Shorthand Course.

## SHORTHAND STUDI.

Time; Five periods a week for eight months,
Each lesson in shorthand should be thoroughly understood by the pupil before advancing to the next. The principles contained in the lesson shonid be fixed upon the mind of the student by reading exercises illustrative thereof. Such exercises should be copied by the stadent with the greatest accuracy a sufficient number of times to enabie him to commit not only the matter but the shorthand characters contained therein to memory. It is suggested that not less than ten times is usually sufficient. The esercisea should then be read to the sindentatan increasing speed until he has reached the limit of his ability to make good nntes; illegibe characters showd never be allowed under any circumstances. Accuracy and not speed is the great desideratum in early work in shorthand.

## READING SHORTHAND NOTES.

The student should never be permitted to write anything in shorthand which he does not thereafter read; and shouid read each exercise often enough to enable him to give fuency and expression to the reading. He shonld not be permitted to hesitate over his notes, but should translate them at once with good expression and in a clear tone.

SPEED WORK.
The student should not be allowed to use any new matter, for speed or other work, until the text-book has been mastered. But the speed work outlines under
"Sborthand study" shoud be carried through to the end of the book. The "writing exercises" should be translated into shorthand by the student, and, when they have been corrected by the teacher, should be used the same as the "reading exercises" spoken of under the head last mentioned.

DICTATION.
Time: Throughont the course.
The strdents should be arranged in couples or groups, in each of which the students will have as nearly as possible the same speed ability. A selection should be given to the group, and they should read it arcund, tum about. When it is read, the reader shonld call upon the one to the left to read his notes, and at the very first error made the reader shonid call "next." If the next does not at once respond, "next" should le again called, and so on, until some one corrects the error made by the first one who read, and proceeds. If no one reads, the reader shond correct the error and proceed as before. When the matter has been read back correctly, the one to the left becomes the reader and proceeds as before; and so on, round and round, until all have the matter by heart, and the notes as well. Then another selection shouid be given them, and the work shou'd proceed as before.

The matter used in these groups should be engraved matter furnished by the anthor of the text-book or by the teacher, and iefore it is used in the groups it shon!d have been copied by each member of the group in the manner outlined ander "Shorthand study."

No new matter should be used until each member of a group has reached a speed of at least 150 words per minute upon the copied matter.

Note: By "new matter" is meant that which the student has not copied and as to which he forms the outlines upon his own responsibility as it is being read to him.

GHORTHAND TESTS.
Your committee would recommend the following tests:
First, to write 300 words in three minutes and read it back without a mistake in the same length of time.

Second, to write 300 words in three minutes and make a transcript of the same on the typewriter in thirty minates.

Third, to write 300 words in three minutes and make a transcript of the same on the typewriter in twenty minutes.

## TYPEWRITKNG.

Time: Five periods a week for six months.
The student should complete some good typewriting manual, containing, in addition to the usual drill for fingering, etc., all the ordinary business and legal forms in common use, and hand each lesson to the teacher without an error or erasure. After completing the manual, from five to ten pages of typewritten maiter should be handed to the teacher daily for correction. The typewriter manual having been completed and the foundation for accuracy laid, the student should copy from new matter a stated number of words per minute, and unon reaching the required speed, dictation should be given direct to the machine, and letters should be taken in shorthand and transcribed upon the typewriter. He should be required to arrange and tabulate figures in statements and to correct and improve mattex from "rough draft" where the maiter is poorly arranged and impronerly tabulated.

Your committee would recommend the following tests:
First, to copy from manuscript at the rate of 30 words per minate for three
minutes, returning a neat, accurate page, free from erasures or letters struck orer each other.

Second, to copy manuscripe at the rate of ais words per minute for three minutes.
Third, to write from dictation at the rate of 45 words per minute for three minutes.

COLLATERAL BRANCHES.
Penmanship, speling, grammar and punctuation, composition and rhetoric, whd rapid calculations, as recommended for the student of the commercial course, with equal proficiency therein, are absolutely necessary for the graduate of the shorthand course. Especially should all the branches necessary to give the student a good understanding of the English langmage receive the chosestattention in all cases where such student is not well qualified in English before entering on the study of shorthand. In the latter case, such students should pass the test in grammar before being excused from the study of this branch.

## BOOKKEEPING.

At least such a knowledge of bookkeeping as will enable the student to act as assistant bookkeeper is recommended to be required of all taking this course.

OTHER TESTS.
In addition to the tests in shorthand and typewriting, students shouid be required before graduating to pass examinations in grammar and punctuation with grades of not less than 85 per cent, and to correctly spell at least 95 reasonably diffcult common woras oat of a possible 100. Daily dxilis in penmanship and rapid calculation should be given from the time the stadent enters until he leaves the school.

## General Reciarks.

ARRANGEMENT OE CLASSES, THME, TERMS, ETC., OT SCHOOL。
As most commercial schools in this country continue in session throughout the entire year, admit students at any time, and teach bookkeeping, at least individually, but little can be profitably said in this report concerning the above-named subjects. These matters must be left to the management of the individual schoo-s as their needs seem apparent.

## PROGRAMTMS.

It must not be forgotten that (unlike the public schools, where students usually enter at the beginning of a term and continue throughout the course) in commercial schools stadents are coming and going constantly; some for a month's instruction only, others for two, many for three, and some for aful course. It would seem, therefore, useless to give in this report any outlines even of programmes, arrangement of studies, or order of classes, further than to say that all work should be done by schedule and all classes called and dismissed regulary and promptly.

LIBRARIES, NAGAZINES, ETC.
It is pertinent to suggest that all schools should contain libraries for the use of students, and the commercial school is no exception to the rule. Students, in addition to the use of the library, should be urged to subscribe for and read some of the best periodicals published on the subjects they are studying.

A MORE COMPLETE REPORT.
It is confidently hoped that ere long a more complete and more advanced course of study than this now submitted will be required for the use of the commercial
schools of America, and if this elementary effort shall afiord any help in that direction it will amply re ompense this committee for the labor expended.
Respectffully submitted.
J. in. Mehan.

## STATISTICS OF COMMERCIAL AND BUSINESS SCHOOLS.

There are 2,300 institutions of various gralies in the United States in which there were 181,018 students reported as pursuing commercial or business studies in the scholastic year 1598-99. The number of each class of institution and the number of basiness and commercial students in each of the five classes is shown in the foilowing summary:

| Class of institution. | Number schools. | Nales. | Females. | Total. |
| :---: | :---: | :---: | :---: | :---: |
| Universities and colleges | 191 | 5. $19 \%$ | 1.305, | 6, 463 |
| Public and privato noimal senools | 10.3 | 4, 63:3 | 2.103 | 6,126 |
| Privato high srhools and academie | $6{ }^{6} 0$ | \%, 180 | 3, 4\%3 | 10,609 |
| Pablie high sehools | 1,06t | 19,89\% | 18,73\% | 38, 131 |
| Commercial and business schocls | 3.50 | 40,401 | 83,66 | \% 6,186 |
| Total | 2,350 | $8: 3,10 \frac{1}{x}$ | 43, 414 | 131,518 |

The number of students in each State pursuing business or commercial studies in the fire classes of institutions naned abore will be found in Table 6.

Table 1 gives the number of commercial students in universities and colleges in each State. The same table shows the number of such students in pubic and private normal schools in each Stare.

Table a summarizes by States the number of business and commercial students in private high schools and academies. The number of such students in the public high schools in each State is given in the same table.

Table 3 is the first of a series of three tables summarizing the statistics of the 320 commercial and business schools reporting to this ofice for 1898-99. These schools eraployed 1,781 instractors- 1,196 men and 585 women. Of the $\% 0,183$ students earolled, there were 46,421 males and 23,r65 females. Nany of these institutions hare both day and evening schools. The number of students enrolled in the day s: hools was 58,109, the number of males leing 30,185, fema'es 19,924. The number of students in the evening schools of these institutions, and not attending any of the day schools, was $12,0 \% 1$, the number of males being 8,679 , females 3,392 , as shown in Tabie 4. A number o the schools reported only total enrollnent. without dividing day and evening attendance.
Tabe 4 shows that the $3=0$ commercial and business schools had 8,449 graduates from commercial courses and $\tau, 75$ graduates from amanuensis courses during the year 1898-99.

The number of students in each of four courses of study in each State as reported by the 320 husiness and commercial schools is shown in Table 5. The number of students in each course is summarized as fol.ows:

|  | Male. | Female. | Total. |
| :---: | :---: | :---: | :---: |
| Commercial course | 25,439 | ${ }^{7}, 241$ | 32. 680 |
| Amanuensis course | 5,916 | 2, 215 | 8,531 |
| Course in telegraply | 721 | 2100 | 981 |
| Total. | 41,993 | 20,86 ${ }^{\text {\% }}$ | 64, 861 |

On accomt of incomplete reports from many of the schools several thousand students enrolled are not accounted for in the above summary.

Table 6 summarizes the momber of commercial and basiness students in various institutions. As mentioned aiready, the grand total for 1898-99 was 131,518, an increase of 7.605 . The commercial and business schools did not contribute to this increase, as the followiag comarative statement shows:


TabiE 1. -Students in commercial and business courses in universitics and colleges and pubise ancl private normal scilools im 1898-3n.

| State or Territory. | Unirersities and colleçes. |  |  |  | Pablic and private nomal schools. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Students. |  |  | Ninm. <br> ber of <br> srhools. | Students. |  |  |
|  |  | Miale. | Female. | Total. |  | Male. | Female. | Total. |
| United States | 191 | 5, 12\% | 1,336 | 6,463 | 105 | 4,0:3 | 2,103 | 6,1:6 |
| North Atlantic Division. South Atlantic Division. South Central Division.. North Central Division Westerm Division. | $\begin{aligned} & 21 \\ & 20 \\ & 3 ? \\ & 96 \\ & 20 \\ & 20 \end{aligned}$ | $\begin{array}{r} 68 \\ 316 \\ 6103 \\ 2,982 \\ \hline 448 \end{array}$ | $\begin{array}{r} 83 \\ 66 \\ 86 \\ 1,031 \\ 120 \end{array}$ | $\begin{array}{r} 811 \\ 3 \times 2 \\ 6 \times 9 \\ 4,013 \\ 688 \end{array}$ | $\begin{gathered} 10 \\ 13 \\ 27 \\ 50 \\ 5 \\ 5 \end{gathered}$ |  | $\begin{array}{r}185 \\ 380 \\ 181 \\ 1,355 \\ 1,51 \\ \hline\end{array}$ | $\begin{array}{r}440 \\ 462 \\ 453 \\ 4,988 \\ \hline 178 \\ \hline\end{array}$ |
| North Atlantic Division: <br> New Hampshire <br> Rhode Island <br> New York <br> New Jeirsey <br> Pennsylrania <br> South Atlantic Division: <br> Maryland <br> District of Columbia <br> Virginia <br> West Virginia <br> North Carolina <br> South Carolina <br> Georgia <br> Florida. | 1 1 6 1 12 | 9 4 236 14 515 | $\begin{array}{r}0 \\ 9 \\ 0 \\ 0 \\ 0 \\ \hline\end{array}$ | 9 13 836 11 89 | 1 | 50 | 20 | 80 |
|  |  | 110 41 | $2 \pm$ | 509 | 9 | 26 3 | 130 | 00 |
|  | 1 | 21 | 0 | 21 |  | 0 | 0 |  |
|  | 3 | 30 | 5 | 35 | 4 | 35 | 13 | 48 |
|  | 2 | 19 | 36 | 55 | 3 | 80 | 61 | 141 |
|  | 6 | 91 | 11 | 102 | 2 | 0 | 49 | 49 |
|  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | 38 | 0 0 | 3 38 |  | 0 0 | 138 | 188 |
|  | 3 | \% 0 | 14 | 8 | 1 | 11 |  | 18 |
| South Central Division: |  |  |  |  |  |  |  |  |
| Kentracky --......... | $\stackrel{7}{6}$ | ${ }_{101}^{115}$ | $\frac{15}{29}$ | $\begin{aligned} & 130 \\ & 130 \end{aligned}$ | 6 | 130 112 12 | ${ }^{62}$ | 197 |
| Alabama | 4 | 70 | 0 | 70 | 3 | 104 |  | 133 |
| Mississippi | 1 | 10 | 2 | 12 | 5 | 32 | 5 | 87 |
| Louisiana | 3 | 132 | 3 | 189 |  |  |  |  |
| Texas -... | 9 | 105 11 | 35 | 199 | ${ }_{5}^{1}$ | 21 | 25 | 29 |
| North Central Division: |  |  |  |  |  |  |  |  |
| Olio -...- | 13 | 423 | 173 | 596 | $\stackrel{\square}{6}$ | 435 | 133 | 595 |
| Indinois. | 15 | $\stackrel{63}{565}$ | 161 | \% 28 |  |  |  | 1,038 |
| Michigan- | \% | 45 | 3 \% | 82 | 2 | ${ }^{9} 3$ | 50 | 148 |
| Wiscousin | 5 | 136 | 67 | 203 |  |  |  |  |
| Minnesota | 3 | $11:$ | 8 | 120 | 1 | 99 | 4 | $3{ }^{3}$ |
| fowa... | 17 | 420 | 14. | $50 \pm$ | 19 | 301 | 204 | 0.5 |
| Missouri | 14 | 29.2 | 8 | 334 |  | $2 \pi$ | 161 | 435 |
| North Dakota | 1 | 23 | 3 3 | 141 | 1 | 5 | 10 | 85 |
| Sonth Dakota Nebraska | 5 | 105 | 33 | 141 |  |  |  |  |
| Nebraska | ${ }^{6}$ | \% | 30 | 103 | $\%$ | 366 | 21 | 600 |
| Kansas --.....- | 12 | \%99 | 280 | 1,129 | i | 2\% | 105 | 330 |
| Western Division: Montana ...... |  | 49 | 23 |  |  |  |  |  |
| Colorado | 2 | 72 | $1 \%$ | 49 | 1 | 11 | 31 | i. |
| New Mexico | 2 | 23 | 20 | 48 | 1 | 3 | , | \% |
| Arizona | 1 | 12 | 0 | 12 |  |  |  |  |
| Nevada. | 1 | 19 | 15 | 34 |  | 101 | $1 \pm$ | 115 |
| Washington | 5 | 60 | 7 | 6 6\% |  |  |  |  |
| Oregon | 5 3 | 1938 | 27 9 | 120 | 1 | 5 | 0 | 5 |
| Caltornia--- |  |  |  |  |  |  | 2 |  |

Table ․-Students in commercial and business courses in private high schools and academies and in mubiic high schools in 189S-99.

| State or Territory. | Private high schools and academies. |  |  |  | Public high schools. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Num- } \\ & \text { ber of } \\ & \text { sethools } \end{aligned}$ | Students. |  |  | $\begin{aligned} & \text { Num- } \\ & \text { her of } \\ & \text { schools } \end{aligned}$ | Students. |  |  |
|  |  | Male. | Female. | Total. |  | Male. | Female. | Total. |
| United States | 670 | \%,136 | 3,473 | 10,809 | 1,064 | 19,397 | 18, 537 | 38,134 |
| North Atlantic Division | 186 | 2, 236 | 1,161 | 3,39\% | 366 | 8,354 | 8, ¢58 | 17,012 |
| South Atlantic Division. | 112t | 1,098 | 313 | 1,411 | 84 | 1,328 | 1,515 | 2,343 |
| South Central Division | 139 | 1.233 | 531 | 1,769 | 106 | 88.4 | 629 | 1,493 |
| North Central Division | 15 | 2,020 | 1,018 | 3, 038 | 410 | 7, 700 | 6,459 | 14,159 |
| Western Division.. |  |  |  | 994 | 68 | 1,151 | 1,47\% | 2, $22 \pi$ |
| North Atlantic Division: |  |  |  |  |  |  |  |  |
| Thaing $\begin{aligned} & \text { New } \\ & \text { Hampshire }\end{aligned}$ | 11 | 100 | 41 | $14 \%$ | 21 | 219 | 210 | 429 |
| New Hampshire ... | 11 | 159 | +45 | 197 | 188888 | \% 70 | 69 $8 t$ | 141 110 |
| Massachusetts | $1 \%$ | 62 | \% | 141 | 74 | 1,802 | 2, $2: 20$ | 4, 023 |
| Thode Island | 5 | 63 | 59 | 113 | 10 | 265 | 316 | -582 |
| Commeticat | 13 | 78 | 33 | 112 | 24 | 350 | 429 | T79 |
| New York. | 19 | 658 | 217 | 875 | 98 | 3,213 | 2,100 | 5,313 |
| New Jerse\% | 19 | 185 | 101 | 286 | 38 | 839 | 667 | 1,506 |
| South Atlantic Division: | 3 | 69 | 468 | 1,165 | 71 | 1,564 | 2,563 | 4,127 |
| Delaware | 1 | 16 | 9 | 25 | 3 | 63 | 76 | $1+0$ |
| Mraryland | 13 | 168 | 35 | 203 | 11 | 230 | 3\%5 | 555 |
| District of Columbia | 7 | T1 | 24 | 93 |  | 394 | 36. | \% 53 |
| Virginia --- | $\therefore 8$ | 97 | 34 | 131 | 19 | 329 | 416 | 745 |
| West Virginia | 6 | 92 | 18 | 110 | 5 | 35 | 41 | 77 |
| North Carolina | 48 | 538 | 105 | 643 | 3 | 18 | 12 | 30 |
| South Carolina | 8 | 59 | 11 | 70 | 12 | 90 | 64 | 154 |
| Georgia - | 11 | 57 | 59 | 116 | 20 | 95 | 128 | 223 |
|  | 2 | 0 | 13 | 18 | 9 | 72 | 89 | 161 |
| Kentucky ..... | 25 | 247 | 114 | 381 | 11 | 96 | 76 | 172 |
| Tennessee | 28 | 158 | 70 | $2 \geqslant 8$ | : | 182 | 114 | 296 |
| Alabama | 19 | 118 | 94 | 212 | 10 | \% 3 | 9 | 169 |
| Mississippi | 18 | 294 | 48 | 342 | 13 | 83 | 39 | 113 |
| Louisiana | 10 | 95 | 39 | 134 | 5 | $3 \pm$ | 26 | 60 |
| Arlan | $\stackrel{29}{8}$ | ${ }^{252}$ | 158 | 404 78 | 32 | 965 | 179 | 435 |
| Ardian Territory | $\stackrel{8}{2}$ | 7 | $\stackrel{3}{3}$ | 10 | 1 | 1 | 18 |  |
| North Central Division: |  |  |  |  |  |  |  |  |
| Ohio -........... | 12 | 74 119 | ${ }_{94}^{55}$ | ${ }_{204}^{129}$ | ${ }^{65}$ | 1,310 391 | 900 | 2, 210 |
| Illinris | ?8 | 510 | 199 | \% 09 | 61 | 949 | 1,219 | 2,168 |
| Michigan | 8 | 50 | $2: 9$ | 279 | 59 | $96 \pm$ | 743 | 1,708 |
| Wisconsin | 8 | 97 | 54 | 151 | 27 | $47 \%$ | 527 | 1,004 |
| Minnesota | 11 | 258 | 46 | 304 | 17 | 196 | 160 | 336 |
| Iowa. | 23 | 30:2 | \%2 | 374 | 80 | 2,2;5 | 1,163 | 3,388 |
| Missouri | 36 | 392 | 153 | 545 | 32 | 420 | 530 | 950 |
| North Dakota |  |  |  |  | 4 | 16 | 17 | 33 |
| South Dakota | 4 | 33 | $\cdots 3$ | 56 | 3 | 35 | 51 | 86 |
| Nebraska | 108888 | $11 \%$ | 53 40 |  | $\stackrel{29}{44}$ | 285 | ${ }_{4} 91$ | 676 892 |
| Western Division: |  |  |  |  |  |  |  |  |
| Montana | 2 | 0 | 7 | $\gamma$ | 4 |  | 39 | 73 |
| Wyoming |  |  |  |  | 1 | 7 | 8 | 15 |
| Colorado --.. |  |  | 16 | 56 | 9 | 137 | 149 | 286 |
| New Mexico <br> Arizona | 2 | 25 | 3 | 28 | 3 | 12 | $\stackrel{6}{\sim}$ | 18 |
| Utah . | 7 | 186 | 39 | 225 | 2 | 57 | 74 | 131 |
| Nevada |  |  |  |  | 4 | 78 | 133 | 215 |
| Idaho... | 4 | $16^{-}$ | 5 | 21 | 2 | 3 | 11 | 14 |
| Washington | 7 | 67 | 91 | 158 | 9 | 104 | 116 | 220 |
| Oregon. | 11 | $8 \cdot 2$ | \% 5 | 157 | 6 | 139 | 164 | 313 |
| California | 25 | 128 | 214 | 342 | 20 | 570 | 748 | 1,315 |

TABLE 3.-Instmictops and sturdents in commercial and business schoo?s in the United Sicites reporting in 1898-99.


Tabie 4.-Graduates in commercial and business schools and strdents in evening courses reporting in 18:38-59.


a A number of schools reported only total number without dividing day and evening attendance,

TABLE 5．－Students in certain courses of study in commercial and business schools reporting in ISyS－99．

| State or Territory． | Commercial course． |  |  | Amanuensis course． |  |  | English coursc． |  |  | Telegraphy． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { ®. } \\ \text { ت゙ゴ } \end{gathered}$ |  | $\begin{aligned} & \text { Wiy } \\ & \text { Hi } \\ & \text { F-1 } \end{aligned}$ | 㤩 |  | $\begin{gathered} \text { Ti } \\ \stackrel{y}{0} \\ i=1 \end{gathered}$ |  |  | $\begin{aligned} & \text { ت⿹勹巳 } \\ & \text { ci } \end{aligned}$ | $\begin{aligned} & \text { 范 } \\ & \text { 荗 } \end{aligned}$ |  | त्डू H |
| United States | 25， 439 | 7，241 | 33,680 | 9，920 | 12， 219 | 20,669 | 5,916 | 2，015 | 8，231 | \％21 | 240 | ก81 |
| North Atlantic Division | 7，382 | 2，180 | 9，562 | 3，520 | 4，586 | 8，106 | 792 | 37. | 1，144 | 117 | 48 | 165 |
| South Atlantic Division．－ | 1，823 |  | 2，584 | 1，087 | 1．029 | 2，113 | 1，285 | （if） | 1，961 | 33 | 10 | 43 |
| South Central Division－． | 12，725 | 380 | 3， 105 | 776 | 691 | 1，467 | 968 | 31.5 | 1，207 | 81 | 10 | 97 |
| North Central Division－ | 11，06\％ | 2，912 | 13，979 | 3，443 | 5，339 | 8， 78. | 2， 248 | 9.51 | 3，159 | 355 | 1：21 | $17 \%$ |
| Westerin Division．． | 2，4， 42 | 1，01： | 3，454 | 1，094 | 1，107 | 2，201 | 629 | 321 | 950 | 128 | ＇11 | 199 |
| North Atlantic Dirision： <br> Maine | 333 | 305 | 838 | 96 | $21 \%$ | 313 |  | 6 |  |  |  |  |
| New Hampshire |  | 29 | 79 | ， | 21 |  |  |  |  |  |  | 9 |
| Vermont－－－ | 41 | 14 | 51 |  | 25 | 29 | ${ }^{6}$ | 2 |  |  |  |  |
| Massachusett | 631 | 266 | 897 | 156 | 459 | 615 | 15 | 25 | 40 |  |  |  |
| Rhode Island | 225 | 88 | 313 | 15 | 93 | 113 | 16 | 12 | 28 |  |  |  |
| Connecticut | 540 | 102 | 612 | 14.2 | 175 | 317 | 33 | 18 | 51 |  |  |  |
| New York． | 2， 281 | 63 | 3，013 | 1， 198 | 2，108 | 3，316 | 3.3 | 166 | 515 | 11 | 40 | 156 |
| New Jersey－－ | 817 | 185 | 908 | 239 |  | 611 | 207 | 14. | 2 |  |  |  |
| Pemsylrania <br> South Atlantic Division： | 2，265 | 553 | 2，824 | 1，651 | 1， 111 | 2， | 160 | 109 | 249 |  |  |  |
| Delaware．．．．．．．．．．．．．． | 135 | 52 | 187 | 14 | 38 | 59 |  |  |  |  |  |  |
| Maryland | 171 | 50 | 221 | 140 | 14 | 284 | 88 | 50 | 132 |  |  |  |
| District of Columbia | 47 i | 41 | 915 | 38： | 436 | 818 | 584 | 450 | $97 \%$ |  |  |  |
| Virginia | 406 | 79 | 485 | 209 | 163 | 363 | 311 | 89 | 800 | 11. |  |  |
| West Virgini | 173 | 70 | 213 | 65 | 93 | 159 | $12 \times$ | 59 | 181 | 9 | 3 | 12 |
| North Car |  | 0 |  | 10 |  | 3 |  | ？ |  |  |  |  |
| Georgia | 396 | co | 456 | 260 | 10 | 367 | 20 | 17 | 220 | 13 |  | 20 |
| Florida－－－－－．－－－ | 61 | 5 | 69 | 2 | 13 | 67 | 33 | 11 | 44 |  |  |  |
| Sonth Centrol Division： Kentucky | 419 | 82 |  |  | 190 |  |  |  |  | 54 |  | 60 |
| Tennessee | 658 | 128 | \％88 | 161 | 129 | 898 | 12.2 | 53 | 175 |  |  |  |
| Mississippi | 220 | 25 | 245 | 57 | 21 | 78 | 243 | ${ }_{6}$ | 243 | 10 |  | 10 |
| Louisiana | 189. | 6 |  | 58 | 39 | 97 | 190 |  | 196 |  |  |  |
| Texas | 1，12t | 98 | 1，298 | 286 | 249 | 535 | 12.9 | 46 | 175 | 16 |  | 19 |
| Arkansas－－．．－－－－．．． | 115 | 41 | 155 | 59 | 63 | 122 | 153 | 85 | 238 |  |  |  |
| North Central Division： <br> Ohio | 1，4i9 |  |  | 400 | 666 |  | 302 | 150 |  | ¢6 |  |  |
| Indiaita | 1，33： | 551 | 1，858 | 633 | 724 | 1，35i | 104 | 53 | 154 | 108 | 23 | 131 |
| Tllinois | 2，848 | 536 | 3，384 | 637 | 1，326 | 2,023 | 647 | 212 | 859 |  |  |  |
| Michigan | ${ }^{665}$ | 214 | 879 | 221 | 279 | 504 | 166 | ${ }^{44}$ | 21 | 2 | 18 | 46 |
| Wisconsin | 939 | 198 | 1， 137 | 260 | 498 | 758 | 187 | 121 | 258 |  |  |  |
| Minnesot | 718 | 249 | 967 | 208 | $3 \pm 2$ | 548 | $9{ }^{\text {a }}$ | 47 | 14 |  | 11 | 8. |
| Iowa． | 1， 14.2 | 306 | 1，349 | 339 | 584 | 94.3 | 163 | 144 | 330 |  |  |  |
| Missouri | 1，296 | $1: 8$ | 1，474 | $49 \pm$ | 6 | 1，1罟 | 423 | 95 | 521 | 10 | 66 |  |
| North Dako South Dako | 136 | ${ }^{3}$ | ${ }^{4} 43$ | 8 | 34 | 48 | 144 | 3 | 181 | 2 |  |  |
| Nebraska | 461 | 5 | 519 | 102 | 151 | 25 | 51 | 47 |  |  |  |  |
| TKansas | 145 | 74 | 219 | 73 | 97 | 170 | 12 | 0 | 12 |  |  |  |
| Western Division： |  |  |  |  |  |  |  |  |  |  |  |  |
| Colorado | 212 | 105 | 318 | 63 | $1: 1$ | 18i | 3.7 | 138 | 402 | 20 | $\bigcirc$ | 27 |
| Arizona | $30+$ 10 | 113 | 41.0 | 1. | 4 | $\stackrel{4}{4}$ | $1{ }_{1}$ | ${ }_{9}^{11}$ | 23 | 16 | 10 | 20 |
| Utah | 40 | 8 | 18 | 10 | 15 | 25 | 68 | 17 | 85 |  |  |  |
| Washington | 345 | 123 | 470 | 126 | $1 \% 1$ | 297 | $12 \%$ | 110 | 237 |  | 2 |  |
| Oregon | ${ }^{338}$ | 140 | 4， 418 | 122 | 23.2 | 354 | 40 | 25 | 65 | ${ }^{5}$ | 0 |  |
| Calitornia | 1，193 | 518 | 1，714 | 755 | 534 | 1，289 | 24 | 11 | 37 | 43 |  |  |

Table 6.-Number of institutions of all grades in which commercial and business studies were taught and mumber of students in such studies in 1898-99.

| State or 'Territory. | Schools. | Students. |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Male. | Female. | Total. |
| United States. | 2,350 | 82,104 | 49,414 | 131,518 |
| North Atlantic Division | 676 | 20,15\% | 18,101 | 41,258 |
| Soath Atlantic Division. | 261 | 6,299 | 3,857 | 10,155 |
| South Centrai Division.- | 327 | 7,688 | 2.799 | 10,487 |
| North Central Division | 898 | $3 \overline{3}, 442$ | 19, 213 | 55, 355 |
| Western Division-..-.- | 188 | 6,518 | 4, 244 | 11,202 |
| North Atlantic Division: |  |  |  |  |
| Maine--...---... | 47 | 1,086 | 724 | 1,804 |
| New Hampshire | 20 | 304 317 |  | 456 569 |
| Massachusetts | 101 | 3,26* | 3,258 | 6,520 |
| Rhode Island. | 18 | -58t | 565 | 1,151 |
| Connecticut | 49 | 1,659 | 1,06\% | 2,725 |
| New Yor:s- | 197 | 9. 758 | 5,257 | 15.015 |
| New Jersey- | 15 | 3.530 6,651 | 1,531 | 4,061 11,957 |
| South Atlantic Dirision: |  |  |  |  |
| Delaware .-...... | 5 | 388 | 165 | 553 |
| Maryland | 29 | \%06 | 640 | 1,246 |
| Districit of Columbia | 14 58 | 1,369 1,197 | 1.120 | 2, 1,889 |
| West Virginia | 18 | 1,468 | 299 | 1,761 |
| Nortli Carolina | 60 | 653 | 179 | 834 |
| South Carolina | 28 | 15 | 2133 | 395 |
| Georgia | 39 | 1,117 | 405 | 1,572 |
| Florida | 16 | 253 | 194 | 447 |
| South Central Division: |  |  |  |  |
| Kentucky | 59 | 1,213 | 545 | 1,758 |
| Tennessee |  | 1,581 | 619 | 2,243 |
| ATississippi | 42 | 1, ${ }^{4 \times 6}$ | 189 | 1,198 |
| Louisiana. | 19 | 1,687 | 116 | 1,803 |
| Texas...- | \% | 2,244 | 763 | 3,012 |
| Arkansas. | 98 | (45) | 264 | 709 |
| Indian Territory | 3 | 15 | 3 | 18 |
| North Central Division: |  |  |  |  |
| Indiana------ | 129 | 4, 4,859 | 2, | 6,111 |
| Illinois. | $13 i$ | 7,149 | 4,1st | 11,333 |
| Michigan | 74 | 2,18i | 1,031 | -3,818 |
| Wisconsin | 54 | 1,063 | 1,361 | 3,321 |
| Minnesota | 44 | 1,817 | 801 | 2,613 |
| Iowa... | 147 | 5,0\%6 | 2,685 | 7,751 |
| Missouri - | 101 | 4,268 | 2,062 | 6, 330 |
| North Dakota | 7 | 164 | 16 | 210 |
| South Dakota | 14 | ${ }^{32 \%}$ | 181 |  |
| Nebraska... | 51 | 1,991 | 1,159 |  |
|  |  |  |  |  |
| Montana | 13 | 635 | 439 | 1,044 |
| Wyoming | 1 | ${ }^{7}$ | 8 | 15 |
| Colowdo - | 19 | 619 | $\begin{array}{r}339 \\ 33 \\ \hline 3\end{array}$ | 938 |
| A rizona -... | 4 | 47 | 38 | 85 |
| Utah | 12 | 629 | - 248 | 877 |
| Nevada. | 5 | - 97 | 153 | 250 |
| Idaho. | 6 | 19 | 16 | 35 |
| Washington | 25 | 881 | 734 | 1,615 |
| Oregon -... | 29 | \%78 | , 598 | 1,376 |
| California | 69 | 2,738 | 2, 108 | 4,846 |

Table 7.-Statistics of commercial and business

*From 1897-93.
schools in the United States in 1898-99.


Table 7.-Statistics of commercial and business


* From 1897-98.
schools in the United States in 1898－90—Continued．

| Actual number of students enrolled． |  |  |  | Average daily attend－ ance． |  | In com－ mercial course． |  |  |  | English course． |  | $\begin{aligned} & \text { In } \\ & \text { teleg. } \\ & \text { raphy. } \end{aligned}$ |  | $\begin{aligned} & \text { Months } \\ & \text { necessary } \\ & \text { for rradu- } \\ & \text { ation. } \end{aligned}$ |  | Fradu－ ates in com－ mercial course． |  | Giradu－ ates in amanu－ ensis course． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{r} \mathrm{Da} \\ \text { schio } \end{array}$ |  | Eve sch | $\begin{aligned} & \text { ning } \\ & \text { ool. } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 寻 |  |  |  |  |  |  |  | $\stackrel{\text { ci }}{\text { cig }}$ | $\begin{aligned} & \text { 的 } \\ & \text { 品 } \\ & \text { K } \end{aligned}$ | $\begin{aligned} & \text { 要 } \\ & \text { 荧 } \end{aligned}$ |  | $\begin{aligned} & \text { 感 } \\ & \text { 哥 } \end{aligned}$ |  | $\frac{\text { 番 }}{\text { 哥 }}$ |  |  |  | 㡙 |  | $\begin{aligned} & \text { 宽 } \\ & \text { 要 } \end{aligned}$ |  |  |
| צ | 10 | 11 | 12 | 13 | 18 | 13 | 16 | 18 | 18 | T 4 | 90 | 21 | 28 | 38 | 路 | 195 | 26 | 27 | 28 |  |
| 141 | 14.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 37 |
| $\frac{162}{216}$ | $\begin{aligned} & 141 \\ & 311 \end{aligned}$ | 146 | $0$ | 0 480 | 0 | $\begin{aligned} & 113 \\ & 246 \end{aligned}$ | $\begin{array}{r} 65 \\ 3 \pm 1 \end{array}$ | 93 246 | $\begin{array}{r} 68 \\ 341 \end{array}$ | $\begin{array}{r} 97 \\ 226 \end{array}$ | $\begin{array}{r} 63 \\ 311 \\ \hline \end{array}$ | 0 | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ | 10 18 | 12 0 | $\frac{17}{3 \%}$ | $\begin{aligned} & 15 \\ & 64 \end{aligned}$ | $\begin{aligned} & 13 \\ & 37 \end{aligned}$ | $\begin{aligned} & 17 \\ & 64 \end{aligned}$ | 38 |
| 67 | 58 | 30 | 11 | 44 | 20 | 61 | 5 | 24 | 43 | 33 | 11 | 0 | 0 | 6 | 8 | 18 | 5 | 21 | 41 | 40 |
| 210 | 79 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | ${ }^{\circ}$ | 0 | ：－6 |  |  |  |  |  | 41 |
| 180 | 0 | 5 | 0 | 156 | 5 | 20 | 0 |  |  | 154 | 0 |  |  | 3 | 2 | 3 | 0 |  |  | 42 |
| 281 | 枵 | 40 | 0 | O | 0 | 186 | 20 | 9 | 25 | （） | 0 | 0 | 0 | 4 | $6-8$ | 95 | 10 | 15 | 19 | 43 |
| 76 | 64 | 0 | 0 | 68 | 0 | 115 | 23 | 115 | 61 | 49 | 17 | 13 | 7 | 4 | 6 | 23 | c9 | 17 | 9 | 4 |
| 16 | 14 | 0 | 0 | 20 | 0 | 4 | 9 | 7 |  | 12 |  | 6 |  | $\varepsilon$ | 0 |  | 0 | 6 |  |  |
| 55 | 2 | 0 | 0 | 60 | \％ | 0 | 0 | 0 | 0 | 0 | － | 1 | 0 | G | 18 | 0 | a | 0 | 0 | 47 |
| 56 | 15 | 8 | 3 | 48 | 23 | 49 | 6 | 12 | 18 | 40 | 15 | 0 | 0 | 6 6－9 | 12－18 | 4 | 1 | \％ | 8 | 48 |
| 98 | $5{ }^{2}$ | 0 | 0 | 0 | 0 | 73 | 18 | 26 | 41 | 0 | 0 | 6 | 0 |  | 0 | 11 | 5 | ： | 1 | 49 |
| 717 | 356 | 1.5 | 3. |  |  | 56 | 103 | 131 | 29 | $14 \%$ | 27 |  |  | 12 | 16 | 33 | 8 | 16 | 3 | 51 |
| 140， | 188 | 93 | 81 |  |  |  |  |  |  |  |  |  |  | 9 | 1 |  |  |  |  | 52 |
| 19 | 42 | 11 | 6 | 12 |  |  | 1 | 24 | 47 |  |  |  |  | 4 |  | 6 | 0 | 13 | 35 | 53 |
| 62. | 394 | 807 | 71 | 374 | 93 | 560 | 62 | $10 \%$ | 327 | 199 | 42 | 0 | 0 | 12 | 0 | 18 | 3 |  | 15 | 54 |
| 420 | 0 |  |  | 400 | 0 | 120 | 0 | 16 | 61 | \％ | 10 |  |  |  | 20 | 16 | 0 |  |  | 55 |
| 30 |  | 10 |  |  | 10 | 33 |  |  |  |  |  |  |  | 8 | $2!$ |  |  |  |  | \％ |
| 75 | 51 | 19 |  |  |  | 81 | 16 | 14 | 41 |  |  |  |  | $6-9$ |  | 11 | （ |  |  | 58 |
| 45 | 23 | 35 | 25 | 60 | 45 | 60 | ． 30 | 15 | \％ |  |  |  |  | ， | 12 | ． 12 | 5 | 3 | 4 | 59 |
| 36 | 31 | 45 | 39 |  |  | 5 | 38 | 11 | 36 | 8 | 4 |  |  | 8 | 14－16 | 7 | 1 | 3 |  | 61） |
| 75 | 15. | 15 | 15 |  |  | \％ | 10 | 10 | 10 | 8 |  |  |  |  |  | 3 | 0 |  | 1 | 61 |
| 89 | 35 | 8 | 4 | 0 | 10 | 8 | 24 | 40 | 33 |  |  |  |  | 6－15 |  |  |  | 11 | 11 | 62 |
| 103 | 56 |  |  | 85 | ， | 90 | 22 | 13 | $3 \pm$ | 3 |  |  |  | 6－10 |  | 15 | 6 |  | 10 | （3） |
| 24 | 61 | 25 | 15 | 65 | 20 | 10 |  | 15 |  |  |  |  |  | 6－8 |  |  |  |  |  | 61 |
| 37 | 30 | 20 | 8 | 3\％ | 17 | 30 | 10 | 18 | 21 | 21 | 16 |  |  |  | 10 | 11 | 3 |  | 7 | 65 |
| \％ | 33 | 9 | 2 | 38 | 10 | 50 | $1{ }^{6}$ | 3 26 | 19 | 5 | 0 |  |  | －9 | 12 | $1 \ddot{1}$ |  |  | 1 | 66 $1 ; 8$ 608 |
| 110 | $\%$ | 8 | 15 | 95 | 30 | 90 | 20 | 15 | 60 | －－－－ |  |  |  | 11 |  | ${ }_{6}$ | ？ | 2 | 5 | 69 |
| 470 | 190 | 30 | 10 | 400 | 25 | 475 | 2－ |  |  |  |  |  |  |  |  | 123 | 11 | 5.3 | （6） | \％ |
| 250 | 175 |  |  | 24 |  | 15 | 85 | 25 | 50 | 50 | 55 |  |  | ¢－1：2 |  | 21 | 15 | 10 | 31 | 71 |
| 198 | 62 | 86 | 13 |  |  | 10 | 16 | 30 | 5 | Tis |  |  |  | 6－10 |  | 11 | 1 | 1 | 1.1 | 湤 |
| 10 | 20 | 5 |  | 2 | S | 15 |  |  |  | 4 |  |  |  |  | b | 10 | 80 |  |  | 4 |
| 125 | 55 | 15 | 10 |  |  | 110 | 15 |  | ． 40 |  |  |  |  |  |  |  |  |  |  | \％ |
| 55 | 49 | 27 | 19 | 42 | 15 | 60 | 40 | 9 | 15 |  | 10 |  | 3 | 6. | 12－18 | 411 | 2 | （ | 11 | 76 |
| 29 | 20 | 41 | 13 | 4.5 | 45 | 33 | 4 | 14 | $1 \quad 29$ | 23 |  |  |  | 11 | 18 | 11 | 2 | ¢ | 8 | \％ |
| 140 | 100 | 70 | 15 | 102 | 79 | 110 | － 30 | 50 | 71 | － 2 | 15 |  |  | 10 | 20 | 14 | 5 | $\bigcirc$ | 12 | 78 |
| 75 | 7 |  |  |  |  | 2 | 26 |  |  |  |  |  |  |  |  | 18 | 20 | 24 | 19 | 79 |

'siBLE \%.-Statistics of commeraial and business

schools in the United States in 189S-90—Continued.


TABLE 7.-Statistics of commercial and business


* From 189ї-98.
schools in the United States in 1898-99-Continued.


TABLE \%.-Statistics of commercial and business


* From 189~-98.
schools in the Uinited States in 1898-92-Continued.


Table 7.-Statistics of commercial and business

schools in the United States in 1898-99-COntinued.


Table r.-Statistic: of comancrand and business


[^58]schools in the Unitel Stutes in 1898－92－Continued．

| Actual number of students enrolled． |  |  |  | Average daily attend－ auce． |  | In com－ mercial cotirse． |  | $\begin{aligned} & \text { In } \\ & \text { amanu- } \\ & \text { ensis } \\ & \text { conrse. } \end{aligned}$ |  | $\begin{gathered} \text { Ir } \\ \text { English } \\ \text { course. } \end{gathered}$ |  | $\begin{aligned} & \text { In } \\ & \text { teles- } \\ & \text { raphy. } \end{aligned}$ |  | Months necessary for gradu－ ation． |  | Gradu－ atesin com－ mercial course． |  | Gradu－ ates in anmauu－ elisis course． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Dat | y 1 | $\begin{aligned} & \text { Evel } \\ & \text { sch } \end{aligned}$ | $\begin{aligned} & \text { ning } \\ & \text { ool. } \end{aligned}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 采 |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { ® } \\ & \stackrel{3}{\mathrm{H}} \\ & \text { ت } \end{aligned}$ | $\begin{aligned} & \text { on } \\ & \text { 霖 } \\ & \text { E } \end{aligned}$ |  |  | $\begin{aligned} & \text { © } \\ & \underset{\sim}{\sim} \\ & \underset{\sim}{*} \end{aligned}$ |  | $\begin{aligned} & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  | $\stackrel{\underset{\sim}{\sim}}{\underset{\sim}{\sim}}$ |  |  | ¢ |  |
| 9 | 18 | 筫 |  | 显： | 且 9 | $1{ }^{1} 5$ | 星酸 | 号等 | 1 8 | 18 | 20 |  | S ${ }^{\text {c }}$ | 2： | 是是 | 鹪奇 | \％ 6 | 187 | ＇68 |  |
| 34 | 15.5 | 125 | 45 | 280 | 100 |  |  |  |  |  |  |  |  |  | 16 |  |  |  |  | $\because 44$ |
| 45 | 18 | 11 | 11 |  |  | 40 | 15 |  |  |  |  |  |  |  | 12 | 8 | 0 |  |  | 215 |
| 66 | 35 | 14 5 | 75 | 50 | 75 4 | 30 | 7 | 9 | 25 |  |  |  |  |  | 12 | 8 4 | 0 | 1 | $\overline{7}$ | 号16 |
| $8{ }^{3}$ | 20， | 5 | 0 | 38 | 4 | 130 | 20 | 15 | 35 | 2 |  |  |  |  | 7 | 4 14 | 10 | 10 | 8 | ＋7 |
| \％ | 61 | 10 | 6 | 65 | 30 | 42 | $\therefore 6$ | 30 | 35 |  |  |  |  |  |  | 30 | 18 | 20 | 3 | 219 |
| 80 | 0 |  |  | 3：2 |  | 60 | 40 | 10 | 20 |  |  |  |  |  |  | 1. | 12 | 0 | ！ | 25 |
| 10.4 | 20 | 28 | 5 | 65 | 25 | 120 | 20 |  |  |  |  |  |  |  |  | 63 | 10 |  |  | 吅 |
| 14 | 12 |  |  | 10 |  | 18 | 8 | 6 | 10 |  |  |  |  |  |  | 9 | 10 | 4 | 13 | 23： |
| 36 | 6 |  |  |  |  | 91 | 17 | 28 | 31 |  |  | 36 | 6 |  |  |  |  |  |  | 23 <br> 2.3 <br> 20 |
| 30 | 16 | 10 | 4 | 28 | 9 | 35 | 6 | 5 | 16 | 1 | 0 |  |  |  | 12 | 6 |  | $\stackrel{2}{1}$ | 6 | 25 |
| 21 | 30 | 40 | 3 | 43 | 27 | 51 | 8 | $?$ | 33 | 61 | 3 |  |  | 10 | 20 | 25 | 5 | 1 | 20 | 2.3 |
| 31 | 2 | 13 | \％ | $6 \pm$ | 12 | 15 | 10 | j | 48 |  |  |  |  |  | 18 |  |  |  |  | \％ |
| $10 \pm$ | 5 |  |  |  |  | 104 | 5 |  |  |  |  |  |  |  | 18 | －－－－ | －－－ |  |  | 25 |
| $2^{2 \prime}$ | 第 | 15 | 2 | 45 |  | 31 | － | 14 | 29 |  |  |  |  | 1 |  |  |  |  |  | 家0 |
| 4.0 | 30 |  |  | 6.5 |  | 20 | 12 | 15 | 32 |  |  |  |  | 3 |  | 15 | 10 | 12 | 28 | $\because 6$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 26 |
| 200 |  | \％ | 25 | $\begin{gathered} 200 \\ 3! \end{gathered}$ | 75 | 200 | 100 | 100 | 100 | 100 | 100 |  |  | 1 | 30 |  |  |  |  | d |
| $\begin{aligned} & 75 \\ & 80 \end{aligned}$ | $\begin{aligned} & 40 \\ & 45 \end{aligned}$ | 10 | 5 | $\begin{aligned} & 38 \\ & 75 \end{aligned}$ | 10 | 65 | $4 \div$ | 30 | 40 | 12 | 7 |  |  | 1 |  | 31 | 25 | 4 | 14 | 25 |
| 33 | 36 | 15 | 10 | 45 | 18 | 45 | 30 | 35 | 36 |  |  |  |  |  |  | 21 | 2 | 0 | 23 | 260 |
| 6.5 | 50 | 10 |  | 100 | 10 | 60 | 15 | 15 | 40 |  |  |  |  |  |  |  |  | 0 | 30 | 26 |
| 124 | 115 |  |  | 150 |  | 60 | 20 | 40 | 60 | 30 |  |  | 0 | 10 |  | 0 | 10 | 10 | 83 | 268 |
| $2 \pi 5$ $60$ | 109 |  |  | 175 |  | 295 | 100 20 | 75 | 150 20 | 10 | 5 |  |  | 6－9 |  | 50 | 25 | 15 | 40 10 | 265 |
| 391 | 12 | 38 |  |  |  | 23 | 3 | 3： | 8 | 13 | 4 |  |  |  | 15 |  |  |  |  | 27 |
| 1.58 | 34 | 43 | 27 | 95 | 45 | 110 | 42 | 89 | 18 |  | 1 |  |  | 10 | 20 | 23 | 6 | 4 | 2 | 2 |
| 60 | 40 |  |  |  |  | 60 | 40 |  |  |  |  |  |  |  | 10 |  |  |  |  | ${ }^{2} 7$ |
| 22 | 194 | 97 | 30 | 48 | 29 | 114 | 29 | 122 | 128 | 19 |  |  |  |  |  | 81 | 14 | 39 | 93 | 2\％ |
| 3） | 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $2 \%$ |
| 27 | 18 | 8 |  | 30 |  | $3 \pm$ | ） | 2 | 14 | 21 | 9 |  |  | 6－8 |  | © | 2 | 1 |  | 27 |
| 5） | 30 | 32 | 8 |  |  | 55 | 23 | 18 | 15 | 8 | 7 |  |  | 10 | 6 | 30 | － | ${ }^{(1)}$ | 6 | 2 L |
| 34 | 28 |  |  | 30 |  | 34 | 20 | 5 | 23 |  |  |  |  |  |  | 10 | 10 | 5 | 20 | $2 \pi$ |
| 35 | 50 | 5 | 12 | 60 | 5 |  | －－－－ | 4 | 20 |  |  |  |  | 6－9 | 12 | 12 | 15） | 12 | 15 | 280 |
| 31 | 58 | 12 |  |  |  | 40 | 8 | 36 | 5 |  |  |  |  |  |  |  |  |  |  | 281 |
| 50 | 46 | 15 | 10 | 40 | 15 | 50 | 46 | 30 | 25 | 51 | 46 |  |  |  | 14 | 8 |  | \％ | 4 | 28. |
| 59 | 21 | 17 | 8 | 56 | 22 | 50 | 26 | $1{ }^{1}$ |  |  |  |  |  |  |  | 14 | 8 | 6 | 3 | 28 |
| 113 | 29 | 27 | 13 | 124 | 48 | 153 | 43 | 75 | 21 | 17 | 5 |  |  |  | 1： | 38 | 7 | 27 | 5 | 28. |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 281 |
| 136 | 69 | 20 | 11 |  |  | 33 | 0 | 121 | 80 | z | 0 |  |  |  | 24 | 8 | ） | 21 | 26 | 288 |
| 150 | \％ 0 | 60 | 20 |  |  | 195 | 30 | 15 | 60 |  |  |  |  | 6－8 | 21 |  |  |  |  | 28 ！ |
| 426 | 219 | 399 | 113 | 396 | 33 | 675 | 147 | $16 \pm$ | 193 |  |  |  |  | $7-10$ | 18 | 78 | 18 | 64 | 20 | 200 |
| 303 | 52 | 107 |  | 270 | 85 | 36.5 | 28 | 425 | 37 |  |  |  |  |  | $1 \%$ | 143 | 18 | 28 | 25 | 201 |
| 50 | 250 |  | $\because 3$ | 100 | $50$ | $\mid--40$ | $\text { - } 11$ | 125 | $\begin{gathered} 275 \\ 16 \end{gathered}$ | 3 |  |  |  |  | － | －10 | －－－－ | 123 | 275 6 | 29 293 |

Table 7.-Statistics of commercial and Eusiness


* From 1897-98.
schools in the United States in 1898-99-Continued.


TaELE 7.-Statistics of commercial and business

|  | Post-ofince. | Name. | Executive officer. | $\begin{aligned} & \text { In- } \\ & \text { struc- } \\ & \text { tors. } \end{aligned}$ |  | Actual number of students enrolled. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | 蕮 | 淢 | E |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|  | WASHINGTON. |  |  |  |  |  |  |  |
| 331 | Seattle | Seattle Acme Business College. | F. R. McLaren...... | 4 |  | $: 15$ | 185 | 400 |
| 20: |  | Seattle Wilson's Modern Business College. | J. C. Wilson |  |  | 210 | 140 | 3.5 |
| $\begin{aligned} & 383 \\ & 334 \end{aligned}$ | Spokane Walla Walla..... | Spokane Business College Empire Business College | Engelhorn \& Dehuff | 10 |  | 225 | 195 | 420 |
|  | WEST VIRGINIA. |  |  |  |  |  |  |  |
| 335 336 | Wuntington | Huntington Business College* Ohio Valley Business and | W. A. Ripley | 5 |  | $3 \%$ 198 | 11. | 51 |
| 336 | Wheeling .-... WISCONSIN. | Ohio Valley Business and English Academy. | J. M. Frasher | 8 | 1 | 198 | 1.09 | $3 \cdot \%$ |
| 337 | Appleton | De Land's Business Coilege. . - | O. P. De Land | 1 |  | 36 | 26 | 62 |
| 338 | Ashland ----...- | Gordon's Business College * . | E. D. Gordon.. | 1 | 2 | 50 | 35 | 95 |
| 339 | Black River Falls | Black River Falls Business College.* | H. C. Hoffman | 1 |  | 51 | 12 | 66 |
| 340 | Chippewa Falls.. | Chippewa Falls Business Col- | C. H. Howieson..... | 1 | 1 | 49 | 45 | 94 |
|  |  | lege. |  |  |  |  |  |  |
| 341 | Ean Claire---.-- | School of Shorthand and Business. | Mrs. M.J. Lamphear | 0 | 2 | 71 | $1: 0$ | 191 |
| 342 | Green Bay .-....- | Green Bay Business College.. | E. O. Folsom...-.-.- | 4 |  | 250 | 75 | 325 |
| 343 | Kenosha. | Kenosha College of Commerce. | Otis L. Treman....- | 3 |  | 73 | 28 | 101 |
| $3 \pm 4$ | Madison--.---.-.- | Northwestern Business College. | R. G. Deming. .-.... | 4 | 0 | 87 | 75 | 161 |
| 345 | Milwankee | Spencerian Business College.. | Robert C. Spencer-- | 6 |  | 263 | 128 | 391 |
| 316 | Plattsville | Plattville Business College ... | John Alcock | 1 | 0 | 89 | 5 | 34 |
| 317 | Portage | Story's College of Commerce. | H. A. Story | 2 | 3 | 100 | 75 | 175 |
| 348 | Sheboygan | Sheboygan Business College.. | M. C. Patten | 3 | 1 | 82 | 22 | 104 |
| 319 | Waukesha | Waukesha Business College.- | W. A. Pierce | 1 | 1 |  | 6 | 7 |
| 350 | Wausau.. | Wausan Business College and Academy. | C. M. Bayles ......... | 2 | 2 | 108 | 68 | 160 |

[^59]schools in the United States in 1898-09-Continued.


## CHAPTER NLIY.

EDUCATION OF THE COLORED RACE.

References to preceding Reports of the United States Burean of Education in which this subject has been treated: In Ammal Reports-1870, pp. 61, 336-339; 1871; pp. 6, 7, 61-\%0; 1872, pp. xvii, xviii; 18\%, p. lxvi; 18\%, p. xxiii; 18\% 6 , p. xvi; 18\%, pp. xxxiii-xxxviii; 18\%8, pp. xxviii-xxxiv; 18\%9, pp. xxxix-xlv; 1880, p. l̄iii; 1881, p. lxxxii; 1882-88, pp xlviii-lvi, 83̌; 1883-84, p. liv; 1884-8ั, p. 1xvii; 1885-86, pp. 538, 650-656; 1886-8\%, pp. 790, 874-881; 1887-88, pp. 20, 21, 167, 169, 988998; 1888-89, pp. 768, 1412-1439; 1889-90, pp. 620, 621, 624, 634, 1068-1102, 1338-1392, 1395-1485; 1890-91, pp. $620,694,792,808,915,361-980,1469 ; 1891-92$, pp. $8,686,688,713,831-89 \%, 1002,1234-1237 ; 1893-93$, p1. 15, 442, 1551-157.2, 19\%6; 1893-94, pp. 1019-1091; 1894-95, pp. 1331-1424; 1895-93, pp.2081,2115; 1893-97, pp. 220j-2333; 1397-98, pp. 24\%-250\%; Introduction to Annual Report for 1893-99, pp. 1xxxviiixcii; also in Circulars of Information-No. 3, 1883, p. 63; No. 2, 1886, pp. 1资-153; No. 3, 1888, 3. 12?; No. 5, 1888, pp. 53, $24,59,60,80-86$; No. 1, 1892, p. 71 . Special Report on District of Columbia for 1869, pp. 193,300,301-400. Special report, New Orleans Exposition, 1884-85, pip. 453-4 0 , \% \%\%-\%81.
The total enrollment in the public schools of the South (the 16 former s-ave States and the District of Columbia) for the jear 1898-99 was 5, 662,259 , the ummber of white children keing 4,150,641 and the number of negro children 1,511,618. Table 1 of this chapter shows that the estimated number of children in the South retween 5 and 18 years of age was $8,86 \%, 310$. Of this number $5,954,400$, or or per cent, were white children and $2,912,910$, or 33 per cent, were children of the negro race. The same table shows that 69.61 per cent of the white school population was enrolled in the schoo's and 51.89 per cent of the negro school population. The average daily attendance in the white schoo's was $2,669,903$, or 64.32 per cent of the white enrollment, and the average daily attendance in the negro schools was 903,911 , or 64.10 per cent of the colored enroliment.

The total expenditure for the public schools of the South. for the year 1898-99 was $\$ 32,849,892$, as shown in Table 2. It is estimated that about 20 per cen of this sum, or $\$ 6,569,978$, was expendea to sustain the negro schools. Tables presenting estimates of school expenditures in the South for the last thirty years, classfied by race, are given on pages LXXXVIll to XCII of the introduction to this Annual Report.

## SECONDARY AND HIGKER EDUCATION.

Statistical reports were received by this office from $16 \pm$ of the 180 institutions for the education of the colored race for 1898-99. These statistics are summarized in Tables 3 to 8. The information concerning each school is given in deta. in Tables 9 and 10 .

The 164 schools had 43,430 students- 27,971 in elementary grades, 13,302 in secondary grades, and 2,157 in collegiate grades. Of the stadents in the secondary grades 4,061 were in normal or teachers" training courses. In courses of theology, law, medicine, dentistry, pharmacy, and nurse training there were 1,291 students, or about 60 jer cent of the number in the collegiate grades.

Of the total enrollment of 43,430 students in these schools only 14,153 , or less than 33 per cent, received manual or industrial training in 1898-99, and 7,747 of these received instruction in sewing, as shown in Table r.

Table 1.--Common-school statz̈stics, classified by race, 1838-25.

ct Includes only pupils of legal school age ( 8 to 17 years).
cIn 189"-98
dApproximately
b United States Census. $e \operatorname{In}$ 1896-97.

Table 2.-Sixteen former slace States and the District of Columbia.

| Year. | Common-school enrollment. |  | Expenditures (both races). | Year. | Common-school enrollment. |  | Erpenditures (both races). |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White. | Colored. |  |  | White. | Colored. |  |
| 18\%0-\%1 |  |  | \$10, 385, 464 | 1886-87 | 2,975, 773 | 1,118,556 | \$20. 821,969 |
| 18.1-79 |  |  | 11. 603,038 | 1887-88 | 3.110,606 | 1, 140, 405 | 21, 810,158 |
| 180-33 |  |  | 11,1\%6,048 | 1888-89 | 3.197, 830 | 1,213, 092 | 33, 171, 878 |
| 1873-71 |  |  | 11, 823, 775 | 1889-90 | 3. 402,480 | 1,296, 959 | 24, 880, 107 |
| 1874 |  |  | 13, 021.514 | 1890-91 | 3, 570, 624 | 1,3æ9,549 | 26, 690, 310 |
| 1875-\%6 |  |  | 12,033, 865 | 1891-92 | 3, 607,549 | 1,3ŏ4, 316 | 27, 691,488 |
| 1876-7\% | 1, 82\%, 139 | 501,500 | 11.831.0\%3 | 189\%-93. | 3, 69\%, 899 | 1,367,515 | 28, 535, 688 |
| 1827-78 | 2, 1044.946 | 6\%5, 150 | 12, 093. 091 | 1893-94 | 3, 848,541 | 1, 432, 198 | 29.2\%3, 546 |
| 1878-\% ${ }^{\text {\% }}$ | 2, 013, 684 | 685, 942 | $12.174,141$ | 1894-95 | $3,846,267$ | 1,423,548 | 29, 443,584 |
| 1879-80 | 2.215,6\%4 | 784. 709 | 12.678, 685 | 1895-96 | 3. $94.3,801$ | 1,449,325 | 31.149, 7 建 |
| 1880-81 | 2, 2, $34,87 \%$ | 802,3\%4 | 13, 6596,814 | 1896-97 | 3, 937, 992 | 1,460,084 | 31, 144, 801 |
| 1881-8? | 2.249, 263 | 802.98: | $15,2+1,740$ | 1897-98 | 4, 145, 737 | 1,540,749 | 31, 21\%,218 |
| 1882-83 | 2, 3\%0,110 | 81\%,240 | 16, 353, $4 \sim 1$ | 1898-99 | 4, 150, 641 | 1,511, 618 | $32,8 \pm 9,892$ |
| 1887-84 | 2,546, 448 | 1, 002, 313 | 17, 884, 538 |  |  |  |  |
| 1884-85 | 2,6\%6,911 | 1,030, 463 | 19, 253,874 | Tota | 170,57\%,877 | 25, 859, $29 \%$ | $579,5 \cup 9,877$ |
| 1885-86 | $2, \% 3,145$ | 1,046,659 | 20,208, 113 |  |  |  |  |

TABLE 3．－Teachers and students in institutions for the colored race in 1898－99．

| State |  | Teachers． |  |  | Students． |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Elementary． |  |  | Secondary． |  |  | Collegiate． |  |  | ＇Total． |  |  |
|  |  |  |  | $\begin{aligned} & \text { बं } \\ & \text { Tỉ } \\ & \text { E- } \end{aligned}$ | $\frac{\dot{\mathrm{D}}}{\underset{\sim}{\mathrm{G}}}$ |  | $\begin{aligned} & \text { ت゙ } \\ & \text { Hi } \\ & \text { E- } \end{aligned}$ | $\stackrel{\text { 感 }}{\substack{3}}$ |  | W |  |  | त | 袻 | 菏 | － ＋ E |
| Alabama | 12 | 86 | 111 | $19 \%$ | 1，41\％ | 1，364 | 2，781 | $63 \pm$ | 550 | 1，184 | 42 | 22 | 64 | 2,093 | 1，936 | 4.039 |
| Arkansas | r | \％ | 22 | 42 | 449 | 515 | ， 904 | 159 | 138 | 295 | 46 | $1 \%$ | 63 | 654 | 66 | 1， $3: 3$ |
| Delaware． | 1 | 5 | 1 | 6 |  |  |  | 15 | 9 | 24 | 11 |  | 18 | $\% 6$ | 16 | 4\％ |
| Dist Columbia | 4 | 87 | 39 | 114 | $23 \%$ | 309 | 596 | 383 | 56 | $9 \pm 2$ | 331 |  | 35：？ | 081 | 909 | 1，830 |
| Florida－－．－．－－ | 4 | 14 | $\because 8$ | 40 | 401 | 534 | 935 | 69 | 58 | $12 \hat{1}$ | 2 | － | $y$ | 470 | 599 | 1，071 |
| Georgia | 20 | 68 | 119 | 21\％ | 1,45 | 2，775 | 4，2：80 | 515 | 835 | 1，350 | 18. | 41 | 830 | 只14 | 3， 5.31 | 5，79．5 |
| Illinois | 1 | 1. | 1 | 8 |  |  |  | 18 | 33 | 53 |  |  |  | 18 | 3. | 53 |
| Indiana． | 2 | 4 | 2 | 6 | 16 | 24 | 49 | 51 | $7 \%$ | 123 |  |  |  | 67 | 93 | 163 |
| Kentucky | 6 | 22 | 39 | $5 ?$ | $6: 4$ | 794 | 1.418 | 166 | 310 | 476 | 32 | $1 \hat{\sim}$ | 49 | 829 | 1，1：1 | 1，943 |
| Louisiana | 6 | 45 | 51 | 99 | $7 \%$ | 1，065 | 1，887 | 181 | 270 | 451 | 30 | $1 \%$ | $4{ }^{2}$ | 043 | 1， 35 | $\therefore 335$ |
| Maryland | 6 | 12 | 36 | 48 | 34 | 132 | 166 | 104 | 216 | $3: 30$ | 29 | 14 | 43 | 167 | 36\％ | 599 |
| Mississippi | 10 | 42 | 51 | 93 | 380 | 498 | $8 \%$ | 593 | 406 | 999 | 44 | 14 | 58 | 1，01\％ | 918 | 1，93\％ |
| Missouri | 5 | 18 | 18 | 36 | 230 | $23 \tilde{1}$ | 457 | 214 | 303 | 517 | 13 | 4 | 1\％ | 44 | 544 | 991 |
| New Jersey | 1 | 3 | 7 | 10 | 40 | 58 | 98 | 19 | 7 | 26 | 0 | 0 | 0 | 59 | 65 | 124 |
| NorthCarolina | 21 | 89 | 97 | 136 | $9 ? 8$ | 1，633 | $\therefore, 503$ | 638 | $76 \%$ | 1， 405 | $31 \%$ | 98 | 415 | 1，883 | 2，500 | 4，383 |
| Ohio．－－－－－－．－－ | $\cdots$ | 15 | 19 | 31 | $17 \%$ | 196 | 373 | 72 | 85 | 15 | 76 | $8 \%$ | 158 | 325 | 353 | 688 |
| Pennsylvania－ | 3 | 11 | 4 | 20 | 88 | 61 | 89 | 37 | 78 | 115 | 203 | 0 | 203 | 248 | 139 | 407 |
| South Carolina | $1:$ | 51 | 81 | $13:$ | 918 | 1，168 | 2，086 | 388 | 542 | 930 | 103 | 81 | $18 \pm$ | 1，409 | 1，791 | 3，200 |
| Tennessee | 14 | 67 | 97 | 164 | 1，485 | ： 2153 | 3， 648 | 545 | 790 | 1.335 | 89 | 41 | 133 | 2，119 | － 2,99 | 5，116 |
| Texas ．－ | 8 | 24 | 51 | \％8 | 738 | 1，035 | 1， 783 | 只3 | 296 | 519 | 21 | 13 | 34 | 1．012 | 1，344 | 2，356 |
| Virginia | 14 | 81 | 12： | 203 | 1， 278 | 1，60\％ | 2，883 | 574 | 1，081 | 1， 695 | 50 | 35 | 85 | 1，902 | 2，724 | 4， 626 |
| West Virginia． | 3 | 19 | 14 | 33 | 33 | 73 | 166 | 102 | 168 | 261. |  |  |  | 195 | 235 | 430 |



TABLE 4．－Classification of colored studenis，by conrses of study，1898－39．

| State． | Students in clas－ sical courses． |  |  | Students in sci－ entific courses． |  |  | students in Eng－ lish course． |  |  | Stadents in busi－ ness course． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underset{\text { E. }}{\substack{\text { E. }}}$ |  | $\underset{\text { E- }}{\stackrel{\text { eig }}{0}}$ |  | ¢ | ت゙ O E－1 | 告 |  | His E－ E－ | 宗 | cis | － |
| Alabama | 21 | 9） | 30 | 11 | $1 \%$ | 28 | 583 | 668 | 1．231 | 3 |  |  |
| Arkansas | 39 | 47 | 86 | 3 | 1 | 4 | 35 | $5:$ |  |  |  |  |
| Delaware | 2 | 0 | 2 | 9 | 7 | 16 |  |  |  |  |  |  |
| Districtof Colun | 15.3 | 244 | $39 \%$ | 3 | 1 | 4 | 2 | $1 \%$ | 39 | 48 |  | S1 |
| Florida－－．．．．． | U | 0 | 0 | 0 | 0 | 0 | 136 | 209 | 405 | 0 |  |  |
| Georgia | 149 | \％ 4 | 23 | 28 | 25 | 53 | 642 | 1，129 | 1，71］ | 0 |  | $0$ |
| Illinuis | 0 | 0 | 0 | 0 | 0 | 0 | 18 |  | 53 | 0 |  | $0$ |
| Indiana | 1. | 30 | 45 | 36 | 4 | 78 |  |  |  |  |  |  |
| Kentacky | 32 | $1 \%$ | 49 | 45 | 37 | 80 | 21 | 36 | ¢ 8 | 3 |  | 3 |
| Louisiana | 43 | 49 | 92 | 18 | 21 | 39 | 352 | 456 | 808 | 10 |  | 20 |
| Maryland | 70 | 125 | 195 | 0 | 0 | 0 | 132 | 903 | 335 |  |  |  |
| Mississipp | 74 | T | 148 | 10 | 2 | 12 | 199 | 279 | $4 \% 8$ |  |  |  |
| Missouri． | 10 | 3 | 13 | 82 | 164 | 246 | 17 | 31 |  |  |  |  |
| New Jersey | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |
| North Carolina | 94 | 8 | 102 | 113 | 79 | $19 ?$ | 530 | 481 | 1，011 | 10 |  | $16$ |
| Ohio－－－ | 51 | 21 | 55 | 16 | 33 | 49 |  |  |  |  |  |  |
| Penmsylvania | 148 | 0 | 148 | 0 | 0 | 0 | 40 | 63 | 103 | 5 |  | $1)$ |
| Sonth Carolina | 44 | 29 | 73 | 16 | 10 | 26 | 34 |  | 8 824 | 0 |  | $0$ |
| Tennessee． | 164 | 71 | 235 | 80 | 835 | 335 | 523 |  | 1，453 |  |  |  |
| Texas | 4 | 2 | 6 | 93 | 69 | 162 | 53 | 70 | 123 |  |  |  |
| Virginia． | 70 | 81 | 154 |  |  |  | 608 | 888 | 1，496 | 2 |  |  |
| West Virginia | 3 | 21 | 24 |  |  |  |  |  |  |  |  |  |
| Total | 1，186 | 911 | 2，097 | 563 | \％63 | 1，3\％6 | 4，283 | 6，060 | 10，343 | 81 |  | 139 |

Table 5．－Number of normal students and graduates in 1898－93．

| State． | Students in nor－ mal course． |  |  | Graduates of high－school course． |  |  | Graduates of normal course． |  |  | Giaduates of col－ legiate course． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { 我 } \\ \text { 荘 } \\ 0 \\ 0 \end{gathered}$ | $\begin{aligned} & \text { Fi } \\ & \text { ت゙ } \\ & \text { E } \end{aligned}$ | $\frac{0}{y}$ | $\begin{gathered} \dot{8} \\ \text { 采 } \\ \text { B } \end{gathered}$ | $\begin{aligned} & \text { ت゙ } \\ & \stackrel{\text { H }}{0} \\ & \text { E } \end{aligned}$ | $\frac{\dot{D}}{2}$ |  | coin | 袻 | 管 | \％ |
| Alabama | $39 \%$ | $2 \pi 1$ | 638 | 30 | 31 | 67 | $1 \%$ | 14 | 31 | 2 | 1 | 3 |
| Arkansas | 58 | 25 | 83 | 20 | 13 | 33 | \％ | 4 | 11 | 5 | 2 | 7 |
| Delaware | 1 | \％ | 3 |  |  |  |  |  |  |  |  |  |
| District of Columbia | 20 | 50 | 90 | 42 | $\pi 1$ | 113 | 11 | 10 | 24 | 3 | 2 | 5 |
| Florida ．－．－．－．－－－－－． | 18 | $\square 8$ | 45 | 7 | 5 | 12 | 6 | 4 | 10 | 0 | 0 | 0 |
| Georgia | 53 | 230 | 335 | 60 | 47 | 107 | 7 | 76 | 83 | 13 | 6 | 19 |
| Illinois | 0 | 0 | 0 | 6 | 8 | 8 | 0 | 0 | 0 | 0 | 0 | 0 |
| Indiana |  |  |  | 8 | 8 | 16 |  |  |  |  |  |  |
| Kentucky | 34 | 73 | 107 | 5. | 20 | 260 | 9 | 23 | 37 | 0 | 0 | 0 |
| Louisiana | 20 | 63 | 82 | 8 | $\because 0$ | 23 | ． 8 | 23 | 31 | 2 | 5 | 7 |
| Maryland | 10 | 34 | 44 | 19 | $8 \%$ | 106 | 9 | 7 | 16 |  |  |  |
| Mississippi | 33 | 58 | 90 | 8 | 23 | 30 | 33 | 50 | 83 | 32 | 14 | 46 |
| Missouri． | 4 | 9 | 13 | 12 | 18 | 30 | 7 | 9 | 16 |  |  |  |
| New Jersey | 0 | 0 | － | 0 | 0 | 0 | （） | 0 | 0 | 0 | 0 | 0 |
| North Carolina | 23.3 | 483 | \％ 13 | 67 | 87 | 94 | 67 | 49 | $10 \%$ | 27 | 2 | $\because 9$ |
| Ohio | O3 | 60 | 83 | 67 | 93 | 165 |  |  |  |  |  |  |
| Pennsylvania | 5 | 6 | 11 | 5 | 6 | 11 | 5 | 6 | 11 | 28 | 0 | 23 |
| South Carolina | 178 | 238 | 410 | 40 | 41 | 81 | 41 | 75 | 116 | 6 | 0 | 6 |
| Tennessee | 20 | 488 | $74 \%$ | 110 | $1 \% 1$ | ：31 | 30 | 58 | 83 | 18 | 5 | 23 |
| Texas | 47 | $6 \%$ | 114 | 23 | 32 | 55 | 19 | 35 | 54 | 8 | 2 | 10 |
| Virginia | 3：） | 191 | 15： | 37 | 9 | $10 \%$ | 39 | 88 | $12 i ̂$ | 4 | 0 | 4 |
| West Virginia | 9.$)$ | 141 | 210 | 2 | 9 | 11 |  |  |  |  |  |  |
| Total | 1，．563 | ， 498 | 4.061 | 63：\％ | 933 | 1，615 | 318 | 5\％3 | 845 | 148 | 39 | 187 |

Table 6．－Colored professional stukents and graduates in 1828－92．

| State． | Students in professional courses． |  |  | Professional students and graduates． |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Theol－ ogy． |  | Law． |  | Medi－ cine． |  | Den－ tistry． |  | Phar－ macy． |  | Nurse train－ ing． |  |
|  |  |  | $\begin{aligned} & \text { 霍 } \\ & \text { H } \end{aligned}$ |  |  | $\begin{aligned} & \text { 淢 } \\ & \text { B } \\ & \text { 荡 } \end{aligned}$ |  |  | 我 |  |  |  |  |  | 我 |
| Alabama | 115 | 53 | 173 | 115 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 8 |
| Arkansas | 67 | 0 | 6 | 67 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| District of Colum | $3{ }^{3}$ | 30 | 375 | 76 | 7 | 92 | 48 | 117 | 19 | 3. | 7 | －18 | 6 | 30 | 17 |
| Florida | $1:$ | 0 | 12 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Georgia． | 130 | 53 | 183 | 127 | 18 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 4 |
| Illinois－－ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Indiana． | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Kentucky | 23 | 0 | 23 | 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Louisiana | 41 | 0 | 44 | 41 | 4 |  |  |  |  |  |  |  |  |  |  |
| Maryland | 13 | 0 | 13 | 13 | 4 |  |  |  |  |  |  |  |  |  |  |
| Mississippi | 10 | 6 | 16 | 10 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 |  |
| Missouri－－．．． | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| North Carolina | 14 | 11 | 155 | 44 | 8 | 14 | 1 | ${ }^{8}$ | 4 | ．－． | 0 | 8 |  | 11 | 3 |
| Ohio ．－．．．－． | 㫛 | 0 | \％ 4 | 23 |  | 1 |  |  |  |  |  |  |  |  |  |
| Pennsylvania | 47 | 0 | 47 | 47 | 15 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| South Carolina | 0 | 2 | 92 | 0 | 0 | ${ }^{(1)}$ | 0 | 0 | 0 | 0 | 1 | 0 | \％ | 2 | 12 |
| Temnessee | 260 | 0 | 260 | 42 | $\stackrel{2}{2}$ | 12 | 4 | 171 | 39 | 19 | 1 | 16 | 7 | 0 | 0 |
| Texas | 11 | 0 | 11 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Virginia | －4 | 0 | 5 | 54 | 5 | 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 | 0 | 0 |
| Total | 1，291 | 180 | 1，4 ${ }^{1}$ | 710 | 78 | 122 | 53 | 336 | 62 | 51 | 8 | 42 | 13 | 180 | $4 \pm$ |

Table 7．－Industrial training of colored students in 1898－91．

| State． | Pupils receiv ing industrial training． |  |  | Students tramed in industrial hanches． |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\frac{\stackrel{0}{\mathrm{E}}}{\stackrel{y}{\mathrm{~L}}}$ |  | $\begin{gathered} \text { 部 } \\ \text { 感 } \end{gathered}$ |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { io } \\ & \text { 药 } \\ & \text { 8 } \\ & 8 \end{aligned}$ | $$ |
| Alabama | 1， 181 |  | $\begin{array}{r} 2,159 \\ 317 \\ 36 \\ 245 \\ 2.34 \\ 2,017 \end{array}$ | $\begin{gathered} 204 \\ 28 \\ 6 \\ 6 \\ 28 \\ 28 \\ 20 \end{gathered}$ | $\begin{array}{r} 24 \\ 39 \\ 19 \\ 61 \\ 55 \\ 157 \end{array}$ | 36 |  | 11 | 13 |  |  |  | 9 | 608 |  | 791 |
| Arkansas |  |  |  |  |  |  |  |  |  |  |  | 5 | 35 | $19 \%$ | 119 |  |
| District of Cold |  |  |  |  |  | － 0 | ， |  | 11 | 3 | 3 | 0 | 2，ii | 6.12 | 4. | －－－9 |
| Fiorida |  |  |  |  |  |  |  |  | 1 |  |  | 0 |  |  | 78 | \％9 |
| Georgia |  |  |  |  |  | 8 | 8 |  |  | 12 | 2 | 14 |  | 1，5\％］ | 189 | 211 |
| Illinois <br> Indian | 0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | － |
| Kentucky | 89 | 196 | 285 | 23 |  |  | 0 |  | 0 | 0 | 13 |  |  |  | 6 | 0 |
| Louisiana | 364 | 381 | 745 | 99 | 58 |  |  | 21 | 20 |  | 50 |  | 28 | 244 | 44 | 135 |
| Maryland | 41 | 172 | 213 | 2 | 5 |  |  |  | 0 | 4 | 0 | 4 | 10 | 162 | 81 | 16 |
| Mississipp | 422 | 319 | 741 | 343 | 93 |  |  |  |  | 5 |  |  |  | 281 | 131 | 23 |
| Missouri．－－ | 98 | 110 | 2018 |  | 4 |  |  |  |  | 0 | 10 |  | 18 | 110 |  |  |
| New Jersey | 30 |  | 109 | 1. | ． 30 |  |  | － | 0 | 48 | 0 |  |  | 33 | 20 | 26 |
| Ohio Narthe． | ${ }_{0} 0$ | 1,10 | 1， 0 | 12 | 2 | \％ | 10 | 0 | 0 | 48 | 0 | ＋ | 8 | 1，036 | 450 | 167 |
| Peunsylvania | 60 | 124 | 184 |  | 23 | 10 | 0 | （ | 0 | 0 | 0 | 17 | 11 | 61 | \％ | 0 |
| South Carolina | $60 \%$ | 892 | 1，＜19 | 93 | 810 | （is | $\because$ | 4. | ， | 40 | ？ | 14 | 59 | 861 | 170 | 60 |
| Tennessee | 106 | 519 | $6: 5$ | 36 | ：0 | － | － | I | ？ | 6） | O | 0 | $6{ }^{6}$ | 472 | 122 | 29 |
| Texas | 191 |  | 865 | 12 | 57 |  |  |  |  | 14 | 50 | 11 | \％ | 691 | 99 |  |
| Virginia | 581 | 1，193 | 1，234 | 234 | 48 | 2 | 23 | 11 | 5 | 45 | 12 | 16 | 45 | 951 | 381 | 8 |
| West | 0 | （） |  | 0 | （6） | 0 | 0 | 0 | 0 | 6 | 0 | （1） |  | 0 | 0 |  |
| Total | 5，121 | 9，029 | 11，183 | 1，356 | 1，473 | 10 | 48 | 104 | 56 | 3.35 | 216 | 169 | 698 | 7，747 | 2，218 | 1，8\％5 |

TAELE S．－Financial semmaty of the 16 午 colotod schoons．

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| Sutzuodax stooqos Jo ．taqums |  | 2 |
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| ふแџิ．todə． <br> spootus jo sモquin |  | $\hat{E}^{2}$ |
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| $\xrightarrow[\sim]{*}$ |  | C |

Table 9.-Schools for the education of the colored

race-teachers. students, and courses of study, 1898-99.


Table 9.-Schools for the education of the colored

race-terchers, students, and courses of study, 1998-99-Continued.


Table 9．－Schools for the education of the colored

Location． $\mid$ Name of school．

Boonville ．－．．．．．．－－
Jefferson City－．
Kansas City ．．．．．－
NEW JERSEY．
Bordentown．－ NORTH CAROLINA．
Beaufort
Charlotte $\qquad$
Dinglass High School． Lincoln Institute－－－－－．．．．．．
Lincoln High School
Geo，R．Smith College

Manual Training and In－ dustrial School．

Washburn Seminary
Biddle University－
Clinton Colored Graded School．
Concord
Scotia Seminary＿

$$
\bar{d}-\bar{N}
$$

Norma
School．
Fayetteville ．．．．．State Colored Normal School．
Franklinton．．．．
－－－－do
Goldsboro $\qquad$
Albion Academy，State Normal School．
areensbor
Franklinton Christian Col． lege．
State Colored Normal School．a

Do
High Point
Kings Mountain．
Lumberton ．．．．．．．
Pee Dee．．
A．and M．College for the Colored Race．
Bennett College a
High Point Normal and Industrial School．a
Lincoln Adademy＊
Whitin Normal Nchool＊－－－
Barrett Collegiate and In－
dustrial Institute．
State Colored Normal School．
St．Augustine＇s School．．．．．
Shaw University－．．．．．．
Colored Graded School ．．．
Livingstone College．．．．．．．－
State Colored Normal School．a
Gregory Normal School＊
Rankin－Richards Institute－
The Slater Industrial and
State Normal School．
Waters Nomal Institute．－
OHIO．
Wilberforce ．．．．．
Wilberforce University－．－
Xenia
PENNSYLYANTA．
Carlisle $\qquad$
Lincoln Univer－
sity．
Lincoln High School $\qquad$
Philadelphia． SOUTF CAROLINA
Aiken
Institute for Colored Youth

Beaufor $\qquad$
Camden
Charleston
Charleston．．．．．．．．－－
Columbia $\qquad$
＊Statistics of 1897－98．

| Religious denomi－ nation． | Teachers． |  |  |  |  | Pupils enrolled． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White |  | Col－ ored． |  |  | Total． |  | Ele－ <br> men－ tary grades． |  |
|  |  | $\begin{array}{\|c} \text { © } \\ \text { E } \\ \text { g } \\ \text { E } \end{array}$ |  |  |  | 宊 |  | 密 | 骨 |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|  |  |  |  |  |  |  |  |  |  |

Nonsect Nonsect．
Nonsect．
Nonsect． Nonsect．－
M．E．．．．．．

Nonsect．

Nonsect．
Presb ．．．．．
Presb
Nonsect．－
Nonsect．
Nonsect．
Christian

Nonsect

Nong
Nonsect
Nonsect．
P．E．
Bapt
Nonsect
A．M．E．
Z
Nonsect．
Cong ．－．．－
Nonsect．．
Dapt

A．M．E．

Nonsect．－
Presb－．－－
Friends ．－

| Nonsect． |
| :---: |
| Nonsect．－ |
| Presb |
| M．E． |
| Cong |
| Presb |
| Presb |
| A．M．E |
| Bapt ． |

race-teachers, students, and course of study, 1898-99—Continued.


Table 9.-Schools for the education of the colored

race-teachers, students, and courses of study. 1SOS-92-Continued.


Table 10.-Schools for the education of the colored race-

professional and industrial training-equipment and income, 1898-99.


Table 10.-Schools for the education of the colored race--professional

and industrial training－equipment and income，1898－99－Continued．

| Chief sources of support． |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | $2{ }^{2}$ | 23 | 2 | 25 | 26 | 27 | 38 | 29 |  |
| Amer．Bapt．Home Miss．Soc．， Jeruel Ass＇n． <br> Tuition and Amer．Disiss．Ass＇n <br> City | \＄1，043 |  | $\begin{array}{r} 9,500 \\ 5,600 \\ 3,000 \end{array}$ | 0 | 8475 | $\begin{array}{r}0 \\ \times \ldots \\ \hline \ldots .\end{array}$ | \＄2， 136 | ¢2，611 | 31 32 33 |
| Small endowment and miss． contributions． <br> Tuition and benevolence | 6,23 28,000 | $\begin{aligned} & 2,500 \\ & 10,500 \end{aligned}$ | $\begin{array}{r} \text { \% } 0,000 \\ \Omega y 1,000 \end{array}$ | 0 | 2， 2000 | $\$ 1,050$ 900 | 12,291 1,400 | 13,756 4.300 | 34 |
| A．M．E．Church and private |  | 1，506 | F5，000 |  | －900 | 90） | $\%, 100$ | 8，000 | 36 |
| W．A．H．M．S．，Slater fund．．．．．． | 1．730 | 3， 400 | 1\％5， 000 | 0 | 2，835 | 300 | $12.16 \%$ | 15，300 | 87 |
| aition |  |  |  |  |  |  |  |  |  |
| Northorn Presb．Church and trition． |  | 450 | 20，000 | 0 | 40 | 150 | 4，500， | 5，070 | 39 |
| Endowment and M．E．Ch． South． |  |  | 65，000 | 0 |  |  |  |  | 40 |
| Amer．Bapt．Home Miss．Soc－．－ |  |  | 4．500 |  | 585 | 0 | 2,054 | 2，639 | 11 |
| United States |  |  | 30，000 | 5， 000 | ） | $0 \cdot$ | 0 | 15． 20 | 42 |
| Western Union and South Western Union Ass’n． Tuition and benerolence | 508 |  | 1,000 12,900 | 300 | 0 709 | （ | 2，94\％ | 360 3.656 | 43 44 |
| Tuition and Amer．Miss，Ass＇n． | 160 | 3．c00 | 40， 000 |  |  | 500 | 3，300 | 5，800 | 44 |
| State Baptist Convention ．．．． |  |  | 15， 000 | 0 | 500 | － | 1，500 | 2，000 | 46 |
| Amer．Miss．Ass ${ }^{\text {n }}$ |  |  |  | 0 | 1，000 |  | 1，820 | 2，8\％0 | 47 |
| Freedmen＇s Aid and Southern Ed．Society． |  | 1，500 | 83，000 |  | 2，400 |  | 500 | 8， 000 | 48 |
|  | 2， 500 | 11， 000 | 100，000 |  |  | 21，000 | 500 | 21， 500 | 49 |
| Tuition and Amer．Miss．Ass＇n． |  | 325 | $8.8 \%$ |  | 662 |  |  | 662 | 50 |
| City and state |  | 423 | 5，000 |  |  |  |  |  | 5 |
| State |  | 1．650 | 39， 465 | 3，000 | 0 | 1，品3 | 3，480 | 7，785 | 54 |
| Tuition |  |  |  |  |  |  |  |  | 5 |
| Amer．Miss，Ass | 940 | 400 | 17， r $^{20}$ | 0 | 1，015 | $2 \pm$ | 11 | 1，3\％， | \％ |
| Amer．Christian Miss．Society－ |  | 23 |  |  | 2 | 244 | \％ 3 53 | 2，5\％ | \％ 8 |
| City and State ．－．．－．－．．．－．－．．．． |  | 80 | 30， 600 | 4，865 | $4{ }^{2}$ |  | 10 | 4，8\％0 | 39 |
| Freedmen＇s Aid and Southern Ed．Society． |  |  |  |  | 209 |  |  | 209 | co |
| Endowment，Freedmen＇s Aid Society M．E．Ch． |  | 2，500 | 40，000 |  | 4 | 2,400 | 400 | 3，275 | 61 |
| Endowmentand benefactions．－ | 26， 20 | 1，500 | 121.200 | 0 | 0 | 5.690 |  | 5，600 | 62 |
| Freedmen＇s Aid and Southern |  | 5，1：00 | 100， 000 |  | 1，150 | 350 | 6， 0,20 | 7，520 | 63 |
| State and United States ．－．．－． |  | 1，66\％ | 61，903 | 10，000 | 0 | 0 | 12，3\％ | 2R，37\％ | 6. |
| Thition and contributions ．－．．．． | 620． | 2，503 | 1（i）， 000 ． |  | 2，000 | 500. | 3，000 | 5，500． | 65 |

Table 10.-Schools for the education of the colored race--professional

and industrial training-equipment and income, 1898-93-Continued.


Table 10.-Schools for the education of the colored race-profcssional

and industrial training-equipment and income, 1898-92.-Continued.

| Chief sources of support. |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | 29 | 23 | 2.4 | 25 | $\pm 6$ | 27 | 19 | 29 |  |
| Tuit | \$75 | $\begin{aligned} & 4.50 \\ & 300 \end{aligned}$ | $\begin{gathered} \$ 3,500 \\ 1,200 \\ 5,010 \end{gathered}$ | ¢200 | $\begin{gathered} 8206 \\ 1,05 \\ 1,000 \end{gathered}$ |  | $\begin{array}{r} 85 \\ 850 \\ 250 \end{array}$ | $\begin{array}{r} \$ 126 \\ 2,20 \\ 1,750 \end{array}$ | 97 98 98 |
| State and Peabody Fund | 0 | 20 | 1,600 | 2,000 | 0 | 0 | 150 | 2, 150 | 100 |
| Amer. Bapt. Home Miss. Soc., contributions, tuition. |  | 2,000 | 90,000 | 1.00 | 3,675 40 | \% 25 | 11,914 | 15,865 | 102 103 |
| A. M. E. ${ }^{\text {Z }}$ and donatiozs | 4.500 | 4,000 | 1,500 | 1.45 | 1, 000 | 6,000 |  | 7,045 | 104 |
|  | $300$ |  | $1,0,000$ | 0 | 1,100 |  | 2,900 |  | 105 |
| Tuition and benevolent contributions. | 538 | 203 | $6,0,0$ |  | 12.8 | 200 | 522 3 | 850 $\sim$ | 106 |
| State .-.--------- .-...-. - |  | 1,504 | 30, 000 | 3,252 |  |  | 3,849 | \%,101 | 107 |
| Amer. Bapt. Home Miss. Society |  | 350 | 1. 100 | 188 |  |  | 1,191 | 1,35\% | 103 |
| State, tuition, and endowment. | 8,609 | 5, 260 | 123, 000 | 16. 868 | 2,304 | 1,636 | 6,1i2 | 2\%,010 | 109 |
| State and city----.-...---- | 2) 000 | 15. 010 | 23:004 | () | 1,250 | 00 | 10.09 | 11-250 | 111 |
| Endowment, contribution |  | 1,000 | 35), 000 | 108 | 6 | 58. | 5,600 | 6, 102 | 114 |
| State |  | 200 | $\begin{aligned} & 1,000 \\ & 5,0 \times 4) \end{aligned}$ | 1,800 |  |  | 100 | 1,900 | 115 |
| Tuition, Amer. Miss Ass | 0 | 800 | 20,000 | 0 | 2,20 | 0 | 2,500 | 4, | 118 |
| Tuition-....-.. |  |  | 8.000 |  | $2 \pi$ | 0 | 0 | 2.2 | 119 |
| Presb. Church <br> A. I. E. Church |  | ${ }_{20}^{2010}$ | 10,009 | - |  |  |  |  | 120 |
| Amer. Bapt. Home Mission |  | 2,300 | \% 14.000 |  | 1,192 |  | \%,059 | 8,251 | 120 |
| Soc., tuition. | 1,800 | 300 | $4,500$ | 0 | 135 | 0 | 1, 200 | 1,335 | 123 |
| Benerolence, Amer. Miss. Ass $n$ |  | 5,200 | 12,000 | 0 | 1,000 |  |  | 1,000 | 124 |
| City and Stat |  | 7 | 35,000 |  |  |  |  |  | 126 |
| Tuition..... |  | 80 | 1,500 |  | 124 |  |  | 624 | 127 |
| Donations and tuiti |  | 104 | 1,000 |  | 264 |  | 764 | 1,028 | 128 |
| $\begin{aligned} & \text { A. II. A. } \\ & \text { Stato } \end{aligned}$ | 2. | ${ }^{70}$ | 8, 0100 | 300 | 10 | 0 | 490 | 710 | 179 130 |
| United Presb. Church |  | 2,000 | 100,000 | 360 | 300 |  | 12,000 | 10,100 | 131 |
| Society of Friends .. |  |  |  |  |  |  |  |  | 132 |
| Tuition, Amer. Miss. Ass'n | 4,800 | 2,900 | 45, 000 | 0 | 4,500 |  | 4.800 | 9,300 | 133 |
| Meth. E. Ch., donations | \% 2,464 | 600 | 75,000 |  | 1,150 |  | 9, ©69 | 10,819 | 134 |


and industrial training－equipment and income，1898－90－＿Continued．

| Chief sources of support． | $\stackrel{\oplus}{\triangleright}$荅気通管荡 <br> 荌 <br>  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | 28 | 23 | 21 | 25 | 26 | 27 | 28 | 29 |  |
| State and county <br> Tuition，Freedmen＇s Aid and Southern Ed．Soc．，M．E．Ch． Amer．Miss．Ass＇n，tuition， State． | 9250 ..+ 0 | $\begin{array}{r} 6,000 \\ 6,632 \\ 50 \end{array}$ | $\begin{array}{r} 89,100 \\ 105,000 \\ 350,000 \\ 18,000 \end{array}$ | \＄485 | 31，320 4,292 | \＄150 | 87， 120 | 88,590 4,656 | 135 136 138 138 |
| Amer．Bapt．Home Miss．So－ ciety． |  | 4，000 | 200， 000 |  |  | 1，1\％0 | 2，200 | 3，370 | 133 |
| Amer．Miss．Ass＇n，tuition－．．． State |  | 2，000 | $\begin{gathered} 42,000 \\ 2,000 \\ 2 \end{gathered}$ | $1,200$ | $\begin{array}{r} 800 \\ 16 \end{array}$ | 0 | 2,200 | 3,100 1,216 | 140 141 |
| Donations ． |  | $\begin{gathered} 400 \\ 91 \end{gathered}$ | 40， 000 | （ 0 |  |  | 5，500 | 5，500 | 142 143 |
| Amer，Bapt．Home Mission Soc．，Slater fund． <br> Treedmen＇s Aid，Southern Ed． Soc．，M．E．Ch． | 122 | $\begin{aligned} & 2,100 \\ & 3,200 \end{aligned}$ | $\begin{array}{r} 100,000 \\ 30,000 \end{array}$ | 0 | $\begin{aligned} & 2,5,5,0 \\ & 9,000 \end{aligned}$ | 0 | 9,294 2,200 | 11,816 11,200 | 144 145 |
| Tuition，donation | 2，500 | 800 | 80，000 |  | 1，025 |  | 3，228 | 4，253 | $14{ }^{\circ}$ |
| Presb．Church | 600 | 300 | 23， 000 |  |  |  | 3，000 | 3，600 | 148 |
| United States | 136，416 | 9，500 | 712，006 | 0 | 0 | 32，9\％0 | 126，114 | 159， 084 | 150 |
| Contributions |  |  | 60,000 |  | 3， 500 |  | 8，500 | 12，000 | 151 |
| M．E．Church | 40 | 80 | c0， 000 | 0 | 500 | 0 | 1，701 | 2，210 | $15 \%$ |
| Benefactions | 5，240 | 300 | 16，000 |  |  |  | 5，500 | 5,500 | 153 |
| Uniter Presh．Church |  | 2， 000 | 69,000 |  | 1，\％95 |  | 6． 432 | 8，227 | 155 |
|  |  |  |  |  |  |  |  |  |  |
| City and State． State | 0 | 403 | 157,000 | 15，000 | 1，106 | 0 | 835 | 16，941 | 158 |
| Amer．Bapt．Home Mission Soc．，contributions． |  |  | 50， 000 |  | 600 |  | 4，672 | 5，272 | 159 |
| State，city，tuition <br> Amer．Bapt．Home Mission Soc | 1，108 | 334 5,009 | $\begin{aligned} & 26,300 \\ & 15,000 \end{aligned}$ | 8，550 | 80 271 |  | 3，392 | 8， 6,60 | 160 |
| Free Bapt．W．Miss．Soc．En－ dowment，State． <br> State |  | $\begin{array}{r} 5,000 \\ 600 \end{array}$ | $\begin{aligned} & 50,0<0 \\ & 54,200 \end{aligned}$ | $\begin{gathered} 1,000 \\ 19,000 \end{gathered}$ | 386 | 1，856 | $\begin{aligned} & 1,268 \\ & 5,000 \end{aligned}$ | $\begin{array}{r} 4,510 \\ 24,000 \end{array}$ | 162 163 |

## CHAPTER XLV.

## STATISTICS OF REFORM SCHOOLS.

Reports received from the individual reform schools for the year 1898-39 indicate general improvement and progress in this class of industrial training schools. Wherever tried the cottage system has been successful. Under this system it is possible to do more individual work and to separate the better class from the more vicious. It also approaches more nearly healthful home conditions than any other system.

The number of schools reporting was 82; instructors employed, $5 \% 8$; pupils attending school, 22,692, and 14,673 in industrial departments. The total number of inmates was 24,925 . The value of grounds and buildings was $\$ 18,873,587$. The expenditures on buildings and grounds amounted to $\$ 005,010$; for salaries and other expenses, $\$ 2,800,281$, making a total expenditure of $\$ 3,405,231$. The number of assistants, not including instructors in school departments, was 1,788. There were 16,699 white inmates and 2,784 colored inmates; 8,514 were of native parents and 4,122 of foreign-born parents. Those that could only read when admitted were 2,207 , and 1,595 could neither read nor write.
The number committed to the institutions during the year was 11,676 and the number discharged 11,990. When discharged from the schools many of the pupils possessed a trade and were provided for in good homes; all could read and write; the majority had received the equivalent of a common school education.

The North Atlantic Division reports 39 schools, 299 instructors, 11,550 pupils in school departments, and 9,282 in industrial departments. The number of inmates reported was 11,767 , of which number 9,282 were males and 2,485 females. The value of grounds and buildings was $\$ 9,92$, , $\% 33$. The expenditures on grounds and buildings amounted to $\$ 200,983$; for salaries and other expenses, $\$ 1,311,832$, malking a total expenditure of $\$ 1,512,815$.
The South Atlantic Division reports 11 schools, 5 r instructors, 1,898 pupils in school departments, and 525 in the industrial departments. Of the 1,909 inmates reported, 1,679 were males and 230 females. The total value of grounds and buildings was $\$ 1,195,09 \%$. The amount expended for buildings and improvements was $\$ 17,419$; for salaries and other expenses, $\$ 161,792$, making a total expenditure of $\$ 179,211$.

The South Central Division reports 5 schools, 29 instructors, 1, 449 pupils in school departments, and 441 in industrial departments; total number of inmates, 1,694 . Of this number, 1,110 are males and 584 females. The value of grounds and buildings was $\$ 42,200$. The total amount expended was $\$ 187,148$-for buildings and improvements, $\$ 27,241$, and for salaries and other expenses, $\$ 159,907$.
The North Central Division reports 28 schools, 184 instructors, and 7,164 pupils in school departments, and 6,205 in industrial departments. The total nuinber of inmates reported was 9,164 , of which number 6,729 were males and 2,435 females. The value of grounds and buildings was $\$ 8,738,019$. The amount expended was $\$ 1,380,117$-for buildings and improvements, $\$ 353,367$, and for salaries and other expenses, $\$ 1,026, \% 50$.
The Western Division reports 5 schools, 9 instructors, and 531 pupils in school departments, and 446 in industrial. The value of grounds and buildings was $\$ 545,738$. The amount expended was $\$ 146,000$-for buildings and improvements, $\$ 6,000$, and for salaries and other expenses, $\$ 140,000$.

Table 1.-Summary of statistics of reform schools, 1898-99.

| State or Territory. |  |  |  |  | Inmates. |  |  |  | Expenditures. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & \text { a゙ } \\ & \text { gig } \\ & \text { n } \end{aligned}$ |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|  |  |  |  |  |  |  |  |  |  |  |
| North Atlantic Division |  | :99 | 11,550 | 6,656 | 9, 882 | 2,485 | 11,767 | 9,922, 733 | 200, 983 | 1,311,832 |
| South Atlantic Division - | 11 | $57$ | 1,898 | 925 | 1,679 | 230 | 1,909 | 1, 195, 097 | 17,419 | 161, 792 |
| South Central Division.North Central Division | 5 | $\begin{aligned} & 29 \\ & 184 \end{aligned}$ | 1.549 | 441 6,205 | 1,110 6,729 | $\xrightarrow{2}, 485$ | 1, 9,164 | $\begin{array}{r}\text { 1 } \\ 6 \\ 6738,000 \\ \hline 738\end{array}$ | - 27.241 | 159,907 $1,026,750$ |
| North Central Division.- | 28 | 184 | ${ }^{\text {', }} 531$ | 6, 446 | 6, | - 20 | 9,164 391 | $6,738,019$ 545,738 | 353,267 6,000 | $1,026,750$ 140,000 |
|  |  |  |  |  |  |  |  |  |  | , 000 |
| New Ham | 1 | 3 | 127 |  | 105 | 22 | 127 | 100, 009 |  |  |
| Vermont. | 1 | 3 | 148 | 65 | 123 | 25 | 148 | 75, 000 | 2,134 | 17,634 |
| Massachuset | 10 | 38 | 848 | 657 | 707 | 162 | 869 | 529,710 | 30,258 | 145, 328 |
| Rhode Island | $\stackrel{2}{2}$ | ${ }_{1}^{6}$ | 406 | 110 | 351 | 5.5 | ${ }_{4}^{406}$ | 223, 700 | 157 | 5,551 |
| Connecticut | 2 | 15 | 687 | 583 | 433 | 254 | 687 | $6: 35,000$ | 5,801 | 37, 278 |
| New York. |  | 143 | 6,269 | 3, 048 | 5, 016 | 1,449 | 6,465 | 4, '744, 729 | 68,625 | 596,833 |
| New Jersey | 3 | 46 | 802 | 560 | 645 | 157 | 802 | 441,949 | 20, 13? | 121,921 |
| Pennsylvania | 4 | 35 | 2,054 | 1,560 | 1,766 | 288 | 2,054 | 3, 022,645 | 73,876 | 3\%9, 287 |
| South Atlantic Division: 3 12 127 86 114 24 138 158,000 |  |  |  |  |  |  |  |  |  |  |
| Miaryland --.-.-........- | 5 | 3.2 | 1,215 | 559 | 1,009 | 206 | 1,215 | 695,400 | 13,768 | 75, 428 |
| District of Columbi | 1 | 8 | 248 | 80 | 248 | 0 | 248 | 250, 000 |  | 41,825 |
| Virginia ---. | 1 |  | 108 200 |  | 108 200 | 0 | 108 | 25, 897 |  | 11,856 |
| West Virginia <br> North Carolina |  |  |  |  |  | 0 |  | 65, 800 | 3,540 | 20,640 |
| South Carolina |  |  |  |  |  |  |  |  |  |  |
| Georgia |  |  |  |  |  |  |  |  |  |  |
| South Central Division: |  |  |  |  |  |  |  |  |  |  |
| Kentucky ...---...-. | 2 | 13 | 604 | 441 | 320 | 374 | 694 | 400, 000 | 11,859 | 50, 806 |
| Tennessee | 1 | 12 | 745 |  | 535 | 210 | 745 |  | 11,428 | 67,278 |
| Alabama |  |  |  |  |  |  |  |  |  |  |
| Mississippi |  |  | 92 | 0 | 99 |  | 99 | 22, |  |  |
| Texas ... | 1 | 3 | 108 |  | 156 | 0 | 156 | 50,000 | 3,954 | 33,000 |
| Arkansas |  |  |  |  |  |  |  |  |  |  |
| Oklahoma -........ |  |  |  |  |  |  |  |  |  |  |
| North Central Division: |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Indiana | 2 | 3 | 1,693 | 693 | 1, 508 | 184 | 1,693 | 319,447 | 4,449 | 93,582 |
| Illinois | 5 | 26 | 1,257 | 1,903 | 1,763 | 28. | 1.985 | 1,565,000 | 202,060 | 233,360 |
| Michigan | 4 | 33 | 1,173 | 396 | 1, 153 | 676 | 1, $2 \cdot 9$ | 934, 963 | 4,000 | 153, 561 |
| Wisconsin | 2 | 16 | 552 | 243 | $3 \geqslant 0$ | 298 | 548 | 343, 671 |  |  |
| Minnesota | 2 | 14 | 433 | 441 | 405 | 38 | 443 | \%0i, 037 | 15, 557 | 109,378 |
| Iowa-.-- | $\stackrel{2}{2}$ | 16 | ${ }_{6}^{631}$ | ${ }_{6}^{631}$ | 442 | 189 | 631 | 274, 169 | 1,152 | 65,329 |
| Missouri | 3 | 15 | 236 | 510 | 739 | 195 | 934 | 600, 000 | 20,000 | 116, 335 |
| North Dako |  |  |  |  |  |  |  |  |  |  |
| South Dak | 1 | ${ }_{6}^{6}$ | 111 | 111 | 128 | 70 | 111 | 100,009 270,000 | $\stackrel{4,000}{2,500}$ | 16, 1,000 |
| Kansas | $\underset{3}{2}$ | 8 | 340 | 340 | 220 | 120 | 340 | 243, 000 | 32, 364 | 26, 795 |
|  |  |  |  |  |  |  |  |  |  |  |
| Wyoming |  |  |  |  |  |  |  |  |  |  |
| Colorado | 1 | 2 | 140 | 134 |  |  |  | 111, 00 |  |  |
| New Mexico |  |  |  |  |  |  |  |  |  |  |
| Arizona |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

TABLE 2.-Summary of statistics of reform schools, 1898-99.

| State or Territory. |  | Race. |  | Nativity. |  | Illiteracy. |  | During year. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { 䔍 } \\ & \stackrel{y}{E} \end{aligned}$ | $\begin{aligned} & \text { B } \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | \% | 8 | 9 | 10 |
| United States.- | 1. 788 | 16.699 | 2,784 | 8, 514 | 4,122 | 2,207 | 1,595 | 11,6\%6 | 11,990 |
| North Atlantic Division South Atlantic Division South Central Division. North Central Division Western Division | $\begin{gathered} 807 \\ 111 \\ 103 \\ 669 \\ 68 \end{gathered}$ | 7,734 $1, .285$ 1,140 6,048 492 | $\begin{gathered} 906 \\ 603 \\ 342 \\ 880 \\ 830 \\ 33 \end{gathered}$ | $\begin{aligned} & 2,412 \\ & 1,621 \\ & 476 \\ & 3,687 \\ & 318 \end{aligned}$ | $\begin{array}{r} 1,600 \\ 214 \\ 168 \\ 1,932 \\ 103 \\ 208 \end{array}$ | $\begin{aligned} & 329 \\ & 556 \\ & 350 \\ & 841 \\ & 138 \end{aligned}$ | $\begin{array}{r} 389 \\ 178 \\ 249 \\ 790 \\ 79 \end{array}$ | $\begin{array}{r} 4,893 \\ 894 \\ 890 \\ 4,776 \\ 2723 \end{array}$ | $\begin{array}{r} 5,156 \\ 883 \\ 972 \\ 4,725 \\ 454 \\ \hline 254 \end{array}$ |
| North Atlantic Division: <br> Maine <br> New Hampshire <br> Vermont. <br> Massachusetts <br> Rhode Island $\qquad$ <br> Connecticut <br> New York $\qquad$ <br> New Jersèy $\qquad$ <br> Pennsylvania | 7 9 13 101 36 59 335 63 181 | 210 126 140 833 374 200 3,473 691 1,687 | 3 1 8 38 39 54 54 292 117 367 | 66 49 140 283 149 196 329 91 1,118 | $\begin{array}{r} 7 \\ 78 \\ 8 \\ 899 \\ 266 \\ 261 \\ 169 \\ 32 \\ 540 \end{array}$ | $\begin{array}{r} 100 \\ +2 \\ 20 \\ 20 \\ 41 \\ 1 \\ 96 \\ 96 \end{array}$ | $\begin{array}{r} 20 \\ 29 \\ 39 \\ 12 \\ 27 \\ 5 \\ 524 \end{array}$ | $\begin{array}{r} 70 \\ \hdashline-98 \\ 608 \\ 318 \\ 192 \\ 2,374 \\ 230 \\ 1,019 \end{array}$ |  |
| South Atlantic Division: <br> Delaware <br> Maryland <br> District of Columbia <br> Virginia <br> West Virginia <br> North Carolina <br> South Carolina <br> Georgia <br> Florida | 18 52 40 14 17 | 64 64 844 98 108 171 | 73 871 150 0 29 | 40 1,050 218 107 200 | 34 149 30 1 | 32 427 428 89 15 | $\begin{array}{r} 15 \\ 79 \\ 64 \\ 8 \\ 8 \\ 18 \end{array}$ | $\begin{array}{r} 28 \\ 586 \\ 130 \\ 50 \\ 100 \end{array}$ | 24 610 106 84 89 |
| South Central Division: <br> Kentucky <br> Tennessee <br> Alabarna <br> Mississippi | ${ }_{37}^{53}$ | 364 | 118 | 344 | 144 | 306 | 142 | $\begin{aligned} & 359 \\ & 269 \end{aligned}$ | 288 |
| Louisiaña. Texas Arizansas | 14 | 24 70 | $\begin{aligned} & -75 \\ & 86 \end{aligned}$ | 132 | 24 | $\begin{aligned} & -27 \\ & 17 \end{aligned}$ | $\begin{gathered} -1 \overline{17} \\ 50 \end{gathered}$ | 181 81 | 389 76 |
| Oklahoma |  |  |  |  |  |  |  |  |  |
| North Central Division: |  |  |  |  |  |  |  |  |  |
| Ohio <br> Indiana | ${ }_{4}^{93}$ | 651 613 | 143 80 | $\begin{gathered} 260 \\ 584 \end{gathered}$ | $18 \pm$ | 67 | 80 139 | ${ }_{919}^{910}$ | 9 9\%6 |
| Inlinois | 55 | 1,632 | $2 \%$ | 1,09.5 | 665 | $2 \%$ | 201 | 1,220 | 1,033 |
| Michigan | 120 | 972 | 81 | ${ }^{7} 763$ | 293 | 21 | 52 | 1,780 | ${ }^{1} 88$ |
| Wisconsin | 77 | 525 | 13 | 144 | 401 |  |  | 201 | 302 |
| Minneso | 50 | 146 | 4 | 48 | 68 | . | ${ }^{6}$ | 139 | 144 |
| Iowa ---- | 36 | 554 | 77 | 479 | 146 | 450 | 230 | 213 | 203 |
| Missouri North Dakota | 102 | 412 | 103 | 82 | 4 | 20 | 10 | 725 | 655 |
| South Dakota. <br> Nebraska <br> Kances | $\begin{aligned} & 14 \\ & 41 \\ & 30 \end{aligned}$ | 104 178 178 | 7 17 7 | 68 45 119 | $\begin{aligned} & -18 \\ & \hline 43 \\ & \hline 10 \end{aligned}$ | 8 | 1 | 24 69 | 29 60 |
| Western Division: Montana |  |  |  |  |  | 19 | 1. |  |  |
| Wyoming - <br> Colorado-- <br> New Mexico | 16 | 118 | 16 | 87 | 47 | 0 | 1 | \%1 | 79 |
| Arizona.- <br> Utah <br> Nevai |  |  |  |  |  |  |  |  |  |
| Idaho |  |  |  |  |  |  |  |  |  |
| Washington <br> Oregon <br> California | $\begin{aligned} & 12 \\ & 13 \\ & 13 \\ & 27 \end{aligned}$ | $\begin{gathered} 145 \\ 99 \\ 130 \end{gathered}$ | 3 3 11 | $\begin{aligned} & 85 \\ & 80 \\ & 66 \end{aligned}$ | $\begin{aligned} & 63 \\ & 63 \\ & 23 \\ & 75 \end{aligned}$ | $\begin{array}{r} 28 \\ 100 \\ 10 \end{array}$ | 19 7 7 | 77 78 58 | 88 20 67 |

Table 3.-Statistics of industrial

City and County Industrial School.-
Pleston School of Industry. State Industrial School
Comnecticut State Reform School-.-Industrial School for Girls.
St. Joseph's Industrial School *--...-. Ferris Industrial School
Industrial School for Girls
Reform School of the District of Columbia.*
Richmond County Reformatory Institute.
Erring Women's Refuge of Reform-John Wor thy Manual Training School
Illinois Schnol of Agriculture and
Manual Training for Boys.
Illinois State Reformatory *.-........
Illinois Industrial School for Girls.
Indiana Industrial School for Girls.
Reform School for Boys
Industrial School for Boys.
Industrial School for Girls .
Kansas Industirial School for Girls
Reform School*
Industrial School of Reform*
Convent of the Cood Shepherd.....
Boys' House of Refuge -..-.-.--------
Maine Industrial School for Girls....-
State Reform School
House of Refuge
Female House of Refuge
St. Mary's Industrial School Ior Boys.
House of Reformation for Colored Boys.
Industrial Home for Colored Girls *.
House of Reformation
Middlesex County Truant School...
Hampshire and Franklin County Truant School.
State Industrial School for Girls.....
Essex County Truant School.
County Truant School.
Plummers Farm School of Roformation for Boys.
Hampden County Truant School
Norfolk, Bristol, and Plymouth Union School.
Lyman School for Boys
Industrial Home for Girls
House of the Good shepherd
State House of Correction and Reformator'y.
Industrial school for Boys
Minnesota State Training School
Minnesota State Reformatory
State Reform School for Boys

| Executive officer. | Number of assistants. |  |  |
| :---: | :---: | :---: | :---: |
|  |  | - | 鸰 |
|  |  |  |  |
| 3 | 4 | 5 | 6 |
| No report |  |  |  |
| David S. Kirshberg | 18 | 9 | 27 |
| Barmard L. Olds.-- | 13 | 3 | 16 |
| Charles M. Williams | 20 | 19 | 39 |
| IV. G. Fairbank ..... | 0 | 20 | 20 |
| Rev. I. J. Welbers -- | ? | 1 |  |
| Asmond S. Meserve- | 5 | 3 |  |
| Mrs. L. F. Brown ...- | 0 | 2 |  |
| G. A. Shallenberger- | 30 | 10 | 40 |
| No report |  |  |  |
| Helen M. Woods. |  |  |  |
| Robert M. Smith | 2 | 0 |  |
| Oscar L. Dudly | 8 | 35 |  |
| George Torrence.... |  |  |  |
| Miss Katherine S . Miller. | 0 |  |  |
| Miss Sara F. Keely-- |  | 13 |  |
| T. Ј. Charlton ------ | 21 |  | , |
| B. J. Miles . | 14 | 6 | 20 |
| A. H. Leonard. |  | 16 | 16 |
| Hester A. Hanback |  | 7 |  |
| J. W. Hart | 13 | 14 | 32 |
| P. Caldwell | 25 | 10 | 35 |
| Mother M. Baptis |  | 17 | 17 |
| Michall T. Mokler |  |  |  |
| Miss Helen M. Staples |  |  |  |
| Edwin P. Wentworth | 1 |  |  |
| Robert J. Kirkwood. | 21 | 5 | ) |
| Miss Mary D. Stuart. |  |  |  |
| Brother Dominic.-.- | 16 | 0 | - |
| Nathan Thompson .- | 21 | 3 |  |
| Mis. H. F. Whittemore. |  |  | 10 |
| John U. Anthony .-.- | 10 |  | 10 |
| Mi. A. Warre:2 | 4 | 5 | ) |
| W. A. Barrus | 1 | 1 |  |
| Mrs. I. T」. Brackett |  | 14 | , |
| Henry E. Swan | 3 | 4 |  |
| No report .-...... |  |  |  |
| Chas. A. Johnson | 3 | 3 |  |
| Erwin G. Ward | 1 | 3 |  |
| Aaron R. Morse | 2 | 5 | , |
| Theodore F. Chapin. | 19 | 23 | 42 |
| Mrs. Lucy M. Sickels |  | 17 | 17 |
| Mother St. Scholastica Stiene. |  | 31 | , |
| Otis Tuller ........... | 37 |  | 37 |
| J. E. St. John | 25 | 10 | 3 |
| J. W. Brown | 16 | 14 | 30 |
| Hon. W. H. Houlton - | 20 | 0 | 20 |
| Lyman D. Drake.... | 35 |  | 42 |

and reform schools for 1898-99.


TAbLE 3.-Statistics of industrial and


* In 189\%-98.
reform schools for 1898-99-Continued.



## CHAPTER XLVI.

SCHOOLS FOR THE DEFECTIVE CLASSES.

Schools for the blind.-It is gratifying to note in most of the institutions for the education of the blind in this country the effort to secure for the blind the means of a broader intellectual foundation, a greater development of the inner forces of thought, feeling, and action, a greater power of self-reliance and self-direction. As now conducted the kindergarten and elementary schools lay a firm foundation for their physical, mental, moral, social, andæsthetic development. This, followed by a high or preparatory school complete in its departments for physical and manual training as well as for literary, scientific, and musical strdies, will fully equip them to enter colleges and universities and conservatories of music. There, in company with the seeing pupils, the blind may pursue almost any branch of knowledge, thus eabling them to enter many spheres of usefulness, not confining them to the fiel of manual labor that is now practically closed to them on account of the extensive employment of machinery.

The total number of schools reported was 33; number of instructors, 393-male 137 , and $2 J 0$ female; in masic, $12 \pi$, and in the industrial deparments, 122. The total number of pupils raported was $9,65 \overline{3}-m a l e 1,898$, female $1, \% 67$; in the kindergarten, 41 ; in vocal music, 1,298 ; in instrumental music, 1,957. In the industrial department were reported 1,924 . The total number of volumes in the libraries was 93,262 . The value of scientific instruments was $\$ 100,610$ and the value of grounds and buildings $\$ 6,334,30 \%$. The total expenditure was $\$ 1,065,43 \%$.

Schools for the deaf. - There are represented in this report 104 schools for the deaf, with 1,158 instructors and 10,923 pupils. The $5 \%$ State public schools report 1,00 instructors-males 362 and females 645; in articulation, 381; aural development, 31 ; in industrial department, 280. The total number of pupils, 9,880, of which number 3,623 were tanght by the combined system, 8,301 by the purely oral method, and 3,169 by the manual method; 696 were faught in the kindergartens. The number of graduates was 240. The libraries of these institutions contained 95,229 volumes. The value of scientific apparatus was $\$ 14,420$; of grounds and buildings, $\$ 11,849,054$. The total expenditures amounted to $\$ 1,999,76 \%$.

The 18 private schools for the deaf report 22 instructors- 42 in articulation, 8 in aural development, and 24 in the industrial department. The number of pupis reported was 439 , of which number 256 were taught by the combined systern, 141 by the purely oral method, and 37 by the manual method; 47 were taught in the kindergartens. There were 32 graduates.
The public day schools for the deaf reported 99 instructors- $\% \boldsymbol{r}$ in articulation, 25 in aural development, and 32 in industrial departments. The number of prpils reported was 594, of which number 110 were taught by the combined system, 324 by the purely oral method, 9 by the manual method. The number taught in the kindergartens was 31. There were 13 gradrates.

The first oral school in America for the deaf was established in 186\%. It then met with rery litile favor. Since 1891 the system has grown with wonderful rapidity, and is now followed in all the leading schools of the country. Again the kindergarten supplies the means to the end in oral training. The early formation of the habit of looking to the lips rather than to the hands for information is the first step toward the acquisition of speech. Manual training in schools for the deaf occupies an important place. While it is not trade teaching, it prepares pupils for the selection of a trade; and "as a trained mind is the best preparation for the study of a profession, so are the trained hand and trained eye the best preparation for the successíul acquisition of a trade."

The South gives evidence of gratifying progress in deaf-mute education. The schools of Georgia and Texas have grown from log cabins to elegant buildings. The deaf school buildings of Georgia are valued at $\$ r 5,000$ and those of Texas at 5337,500 .

Schools for the feeble-minded. -The number of schools reported was 29, with 231 instructors in the school departments, 236 in industrial departments, and 675 assistants in caring for the inmates. The number of pupils reported was 9,542 , of which number 973 were instructed in the kindergarten and $1,5 \% 9$ in music. The 19 State public schools report 233 instructors in school departments, 206 in industrial departments, and 610 assistants caring for the inmates. The number of pupils reported was 9,158 . Of these 973 were in kindergartens and 1,559 in music. The value of grounds and buildings was $\$ 5,546,827$, and the expenditures were $\$ 1,4 \tau 2,1 \tau 0$.

Table 1.-Summary of statistics of schools for the bind, 1898-99.


Table 2．－Summary of statistics of schools for the blind，1898－39．

| States and Territories． | Pupils． |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { gi } \\ & \text { 鬲 } \end{aligned}$ |  | Nig |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | $\xi$ |
| United States．．． | 1，898 | 1，767 | 3，665 | 1，738 | 1，79\％ | 417 | 107 | 1，924 |
| North Atlantic Division． | 293 | 281 | 5\％9 | 211 | $26 \%$ | 117 | 38 | 44.9 |
| South Atlantic Division．．．． | 333 | 306 | 638 | 352 | 430 | 45 | 能 | 362 |
| South Central Division．－． | 418 | 470 | 888 | 675 | 397 | 125 | 20 | 592 |
| North Central Division | 765 | 638 | 1，403 | 405 | 636 | 130 | 27 | 519 |
| Western Division ．．．．．－ | 85 | 72 | 154 | \％ | 67 |  |  | 42 |
| North Atlantic Division： Manle |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Vermont－－－－－ |  |  |  |  |  |  |  |  |
| Massachusetts | 123 | 115 | 238 | 61 | 117 | 7 | 12 | 204 |
| Rhode Island． |  |  |  |  |  |  |  |  |
| New York．．． | 8. | 69 | 151 | 7 | 50 | $25^{-}$ | 6 | 88 |
| New Jersey． |  |  |  |  |  |  |  |  |
| Pennsylvania－－．．．－－ | 93 | 97 | 190 | 143 | 100 | 13 | 20 | 157 |
| South Atlantic Division： |  |  |  |  |  |  |  |  |
| Maryland | \％ 8 | 54 | 135 | 88 | 89 | 18 | 3 | 95 |
| District of Columbia |  |  |  |  |  |  |  |  |
| Virginia－－－－－－ | 34 | 25 | 59 | 52 | 39 |  | 3 | 57 |
| West Virginia－ | 114 | 118 | －43 | 15 150 | $\begin{array}{r}36 \\ 165 \\ \hline\end{array}$ | 27 | 1 | 95 |
| South Carolina． | 2 | 23 | 50 | 47 | 44 |  | 1 | 50 |
| Georgia ． | 53 | 55 | 108 |  | 5 |  | 9 | 45 |
| Florida． | 7 | 4 | 11 |  | 5 |  |  |  |
| South Central Division：$\quad 630$ |  |  |  |  |  |  |  |  |
| Kentucky－－－．－－－－－－ | 63 | 73 | 139 | 136 | 68 | 23 | 8 | 116 |
| Alabanat | 46 | 46 | $\begin{array}{r}109 \\ 92 \\ \hline\end{array}$ | 129 | 92 |  |  |  |
| Mississippi | 品 | 12 | 34 | 13 | 19 | 11 |  | 44 |
| Lonisiaña | 24 | 23 | 47 | 47 | 28 | 15 |  |  |
| Texas．．． | 93 | 1：20 | 219 | 9 | 11.4 | 33 | 6 | 59 |
| Arkansas | 100 | 108 | 203 | $15 \%$ | 60 | 39 | 4 | $1: 5$ |
| Oklahoma． |  |  |  |  |  |  |  |  |
| Indian Territory | 8 | 9 | 17 | 16 | 16 | 6 |  |  |
| North Central Division：－－－－－－－－－$\quad$－ |  |  |  |  |  |  |  |  |
| Ohio ．－．－． | $19 \pm$ | 138 | 338 | 139 | 151 | 37 | 9 |  |
| Indiana． | 103 | ${ }_{96} 66$ |  | 57 | 113 | 46 | 5 | 118 |
| Michigan | $6: 3$ | 5 | 114 | 88 | ${ }_{7}$ |  | 4 |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Iowa．．．． | 93 | $8 \pm$ | 180 | 53 | 90 |  |  | 110 |
| Missomi <br> North Dakota． | 52 | 52 | 101 | 70 | 72 | 17 |  | 14 |
| North Dakota Sonth Dakota |  |  |  |  |  |  |  |  |
| Nebraska－－． | 36 | 39 | $7{ }^{-7}$ | 68 | 68 | 9 |  | 50 |
| Kansas－－－－－－－ | 45 | 53 | 93 |  |  | 11 |  |  |
|  |  |  |  |  |  |  |  |  |
| W yoming |  |  |  |  |  |  |  |  |
| Colorado | 21 | 21 | 45 |  |  |  |  |  |
| New Mexico． |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Itaho．．．． |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

Table 3.-Summary of statistics of schools for the blind, 1S9S-99.

Table 4.-Statistics of State institutions for the ertucation of the blind, 189S-99.



Thbee 5.-Summary of statistics of State institutions for the deaf, 1898-39.

|  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| State or Territory. |  |  |

Table 6.-Summary of statistics of State institutions for the deaf, 1898-99.


TABLE 7.-Summary of statistics of State institutions for the deaf, 1899-39.

| State or Territory. | $\begin{aligned} & \text { Volumes } \\ & \text { in } \\ & \text { library. } \end{aligned}$ | Value of scientific apparatus. | Value of grounds and buildings. | Expenđitures. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Grounds and build̄ings. | $\begin{gathered} \text { For } \\ \text { support. } \end{gathered}$ |
| 1 | 2 | 3 | 4 | 5 | 6 |
| United States | 95, 299 | \$14,420 | \$11, 849, 054 | \$158,952 | \$1,840, 815 |
| North Atlantic Division | 38, 923 | 8,350 | 4,076, 264 | 61,394 | 764, 813 |
| South Atlantic Division | 13, 008 | 2,620 | 1,608,000 | 26, 000 | 188,877 |
| South Central Division. | 6,650 | 1,350 | 1,330,500 | 26, 350 | 205, 658 |
| North Central Division | 32,909 | 1,250 | 3, 795, 390 | 37,976 | 573, 659 |
| Western Division . | 3,739 | 850 | 1,038, 900 | 7,232 | 107,808 |
| North Atlantic Division: |  |  |  |  |  |
| Maine | 600 |  | 30,060 |  | 15,000 |
| New Hampshire |  |  |  |  |  |
| Vermont.-.Massachusett | 2,400 |  | 170,000 | 500 | 47,254 |
| Rhode Island | 142 |  | 90, 000 |  | 19,000 |
| Connecticut. | 2,300 |  | 20S, 000 | 295 | 5,088 |
| New York. | 21,857 | 8,250 | 1,954, 669 | 51,376 | 453,188 |
| New Jersey | 10, 120 | 100 | 1,453,595 | 9,293 | 225,283 |
| South Atlantic Division: |  |  |  |  |  |
| Delaware |  |  |  |  |  |
| District of Columbia | 3,008 4,400 | 780 1,000 | 290,009 | 3,000 | 34, 027 |
| Virginia - | ¢ 609 | $1{ }^{1} 40$ | 150,000 |  | 25, 000 |
| West Virginia | 500 |  | 75, 000 |  | 34,850 |
| North Carolina | 2,300 | 200 | 235, 000 | 23,000 | 15,000 |
| South Caroli | 900 |  | 58,000 |  |  |
| Georgia. | 1,200 | 600 | 75,000 |  |  |
| Fouth Central Division: | 100 |  | 20., 000 |  | 10,000 |
| South Central Division: Kentucky .---.-. | 2,000 | 500 | 143, 000 | 3,750 | 65, 006 |
| Tennessee | ${ }^{900}$ |  | 150,000 | 1,600 | 33, 500 |
| Alabama. |  |  | 100,000 |  | 31, 407 |
| Mississippi | 1,000 |  | 75,000 |  | 18,530 |
| Louisiana <br> Texas .... | 500 1,050 | 50 | 350,000 337,500 | 12,000 | 17,215 |
| Arkansas | 1,200 | 800 | 175,000 | 9,000 | 40,000 |
| Oklahoma --.... |  |  |  |  |  |
| Indian Territory. |  |  |  |  |  |
| North Central Division: |  |  |  |  |  |
| Ohio -..- | 1,000 |  |  |  |  |
| Indiana | 3,209 12.000 |  | 530,460 500,000 |  | 61,698 109,217 |
| Illinois Michion | 12,000 3,665 | 600 | 500,000 435,305 | 5,463 6,390 | 109,217 59,884 |
| Wisconsin | 2, 400 | 100 | 120,000 |  | 43,286 |
| Minnesota | 1,850 |  | 271, $6 \%$ | 6,000 | 45,000 |
| Iowa .. | 2,800 |  | 400, 000 | 4,500 | 43,000 |
| Missouri | 2, 000 | 200 | 360, 000 | 12,000 | 103, 383 |
| North Dakota | 400 |  | 23, 000 |  |  |
| South Dakota | 185 |  | $\begin{array}{r}60,000 \\ \hline\end{array}$ | 1,000 | 10, 5 , 710 |
| Kansas..- | 2,000 | 350 | 205,000 |  | 42, 481 |
| Western Division: Montana |  |  |  |  |  |
| Montana.- | 100 | 150 | 50, 000 | 1,217 | 10,286 |
| Colorado. | 581 | 200 | 120,000 |  | 21000 |
| New Mexico |  |  | 5,500 |  |  |
| Arizona. | 358 |  | 188, 400 |  |  |
| Nevada. |  |  | 108, |  |  |
| Idaho |  |  |  |  |  |
| Washington | 200 |  | 100,000 259,000 |  | 11,850 |
| California | 2,509 | 500 | 550, 000 | 6,015 | 61,672 |

Table 8．－Summary of staitistics of pablic and private day schools for the deaf， 1898－99．

PUBLIC DAY SCHOOLS．

| States． | Instructors． |  |  |  |  |  |  | Pupils． |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{aligned} & \text { 品 } \\ & \stackrel{\text { din }}{0} \end{aligned}$ |  | $\begin{gathered} \text { تin } \\ \substack{0 \\ \hline \\ \hline} \end{gathered}$ |  |  |  | $\begin{aligned} & \dot{9} \text { 㤩 } \\ & \text { 荗 } \end{aligned}$ |  | $\begin{aligned} & \text { İ̉ } \\ & \text { HiO } \end{aligned}$ |  |  |  |  |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | I\％ | 18 | 14 | 15 | 16 | 17 |
| Total | 29 | 6 | 73 | 79 | 57 | 25 | 32 | 331 | 263 | 594 | 110 | 324 | 9 | 31 | 13 | \＄43， 155 |
| California | 1 | 0 | 2 | 2 |  |  |  | 9 | 5 | 14 |  | 14 |  | 4 |  |  |
| Illinois－ | 12 | 2 | 18 | 20 | 17 | 14 | 16 | 106 | 68 | 174 | 49 | 109 |  |  |  |  |
| Indiana． | 1 | 1 | 0 | 1 | 1 |  |  | 7 | 8 | 15 | 15 |  |  |  |  |  |
| Massachus | 1 | 1 | 16 | 17 | 12 | －－－ | 5 | 63 | 65 | 128 |  |  |  |  | 9 | 22，299 |
| Michigan | 1 | 0 | $\stackrel{2}{3}$ | 2 |  |  | ．．． | 6 | ${ }^{6}$ | 12 |  | 12 |  |  |  | 1，200 |
| Missouri | 1 | 1 | ${ }^{3}$ | 4 | 1 |  |  | 25 | 15 | 40 | 40 |  |  |  | 1 |  |
| Ohio－－．．－－ | 4 | 1 | ${ }_{20}^{12}$ | 121 | 110 | ${ }_{5}^{6}$ | 5 6 | 57 58 | 46 50 | 103 108 | 6 | 81 108 | 9 |  | 3 | － $\begin{array}{r}4,018 \\ 15\end{array}$ |

PRIVATE DAY SCHOOLS．

| Total | 18 | 20 | 52 | 72 | 42 | 8 | 21 | 230 | 221 | 439 | 276 | 141 | $3 \%$ | 47 | 32 | 73，500 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| California | 3 | 1 | 4 | ${ }^{5}$ | 1 |  | 2 | 14 | 19 | 33 | 21 | 4 | 5 |  |  |  |
| Illinois | 3 | 0 | 13 | 13 | 10 | 4 | 3 | 49 | 53 | 103 | 73 | 24 |  | $\because 4$ |  |  |
|  | 1 | 1 | 0 | 1 | 3 |  | 6 | ${ }_{9} 7$ | $\stackrel{2}{8}$ | 5 | 23 |  | \％ |  |  |  |
| Maryland | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ | 2 | $\stackrel{3}{2}$ | 4 | ， | － | 0 | 2 | $\begin{aligned} & 18 \\ & 10 \end{aligned}$ | 3 |  | 32 | ， |  | 3 | 51，500 |
| Massachusetts | 1 |  | 4 |  | 2 |  |  | 12 | 5 | 17 |  | 17 |  | 17 | 5 |  |
| Michigan | 1 | 3 | 1 |  | 2 | 2 |  | 20 | 23 | 43 | 43 |  |  |  | 5 | 22， 1100 |
| Missouri | $\underset{1}{2}$ |  | 7 | 7 | 4 |  | 3 | 15 | 37 | 5： | 46 | 6 |  |  |  |  |
| Nebraska | 1 |  | 3 | 5 | 3 | 2 | 5 | 5 | 10 |  |  | 1 |  | 6 |  |  |
| New York | 1 | 3 | 6 | ， | 9 |  |  | 12 | 19 | 31 |  | 31 |  |  |  |  |
| Ohio | 1 |  | 3 | 3 | 1 |  |  | 8 | 4 | 12 | 6 | 5 |  |  |  |  |
| Oklahoma | 1 | 1 | 0 | 1 |  | －－－ |  | 0 | 5 | 5 |  |  | 5 |  |  |  |
| Wisconsin | 1 | 4 | 4 | 8 | 3 | －－ | 5 | 43 | 19 | 62 | 41 | 81 |  |  | 19 |  |

Table 9．－Statistics of State institutions for the edtucation of the deaf，189S－99．

|  | Post－office． | Name． | Executive officer． | Instructors． |  |  |  |  |  | Pupils． |  |  |  |  |  |  |  | $\begin{aligned} & \circ \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  | $\begin{aligned} & \text { Value of grounds and build- } \\ & \text { ings. } \end{aligned}$ | Expendi－ tures． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 守 |  | $\begin{array}{\|c} \stackrel{\rightharpoonup}{\mathrm{g}} \\ 0 \\ \mathrm{E} \end{array}$ |  |  |  | $\frac{8}{x}$ |  | त्यु $\stackrel{\rightharpoonup}{0}$ － |  |  |  |  |  |  |  |  |  |  |  |
|  | 1 | 思 | 3 | 4 | 5 | 6 | 7 | 8 | 3 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 思 | 23 |
| 1 | Talledega，Ala ．－ | Alabama Institute for the | Joseph H．John－ |  |  | 15 |  |  |  |  | 57 | 182 |  |  |  |  |  |  |  |  | \＄100，000 |  | 331，40 |
| 2 | Little Rock，Ark | Arkansas Deaf－Mute Insti－ tute | Frank B．Yates． | 10 |  | 21 | 3 |  |  | 141 | 116 | 254 |  | 56 | ：01 | 33 |  | 200 |  | 800 | 1\％5，000 | 89，000 | 40，000 |
| 3 | Berkeley，Cal ．．．． | California Institution for the Education of the Deaf and the Blind． | Warring Wilkin－ soll． | 10 |  | 17 | 2 |  |  |  | 71 | 161 | 161 |  |  |  | 11 | 2，500 | \＄288 | 500 | 550,600 | 6，015 | 61，6\％2 |
| 4 | Colorado Sp＇gs， Colo． | Colorado School for the Deaf and Biind． | W．K．Argo ．．．．－ |  |  |  | 4 |  | 5 |  |  |  |  |  | $4:$ |  | ： | 581 |  | 00 | 1：0，000 |  | 24,000 |
| 5 | Hartford，Conn－－ | American School at Hart－ ford for the Deaf． | Tob Williams ． |  |  | 18 |  |  | 6 |  | \％ 2 | $1 \%$ | 114 | 12 | 44 |  |  | 2.000 | $: 00$ |  | 200，000 |  | $2 \mathrm{~N}, 8$ |
| 6 | Mystic，Conn ．．．－ | Mystic Oral School for the Deaf． | Ella Scott． | \％ |  | \％ | 6 | 6 | \％ | 11 | 2 | 33 |  | 33 |  |  |  | 300 |  |  | 8，000 | 5 | 5，08 |
| 7 | Washington，D． C． | The Columbia Institution for the Deaf． | Edward M．Gal－ laudet，presi－ dent． |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4，400 |  | 1，000 | \％00，000 | 3， 000 | 70，000 |
|  |  | Gallaudet College | Edward M．Gal－ laudet． | 14 |  | 21 | 10 |  |  | 63 | 39 | 102 | 102 |  |  |  | 13 |  |  |  |  |  |  |
|  |  | Kendall School．－ | James Denison ．－ | 5 |  | 10 |  |  |  |  | 21 | 53 | 5 |  |  |  |  |  |  |  |  |  |  |
| 8 | St．Augustine， Fla． | State Institution for the Blind，Deaf，and Dumb． | Frederick Pasco |  |  | ） | 1 |  | 2 |  |  | $\left[\begin{array}{r} 61 \\ 691 \end{array}\right]$ |  | 4 |  | 11 |  | 100 | 140 |  | 25，000 |  | 10，000 |
| ${ }_{10}^{9}$ | Cave Spring，Ga－ Jacksonville，Ill | Georgia school for the Deaf Tllinois Institntion for the | W．O．Connor <br> Dr．T C Gordon | 19 |  | ？ | 3 |  | $\stackrel{4}{8}$ |  |  | 134 |  |  |  |  |  |  |  | 600 | $\begin{gathered} 75,000 \\ 5000 \end{gathered}$ |  |  |
| 10 | Jacksonville，Ill | Illinois institution for the Education of the Deaf and Dumb． | Dr．J．C．Gordon－ | 19 |  | 5 |  |  | s |  | 201 | 233 |  |  |  | 50 |  | 12，000 | 涨 1 |  | 500， 000 | 5，463 | 109， $21 \sim$ |
| 11 | Indianapolis，Inả | Indiana Institution for the Education of the Deaf．＊ | Richard O．John－ son． | 15 |  | 33 | 10 |  |  |  |  |  |  | S\％ |  |  | 9 | 3，209 |  |  | 530，460 | $\therefore, 6$ | 61，69 |
| 12 | Council Bluffs， Iowa． | Iowa School for the Deaf ．－ | Hemry W．Roth－ ert． | s | 10 | 18 | 4 |  |  |  | 118 |  |  | \％$\%$ | 235 |  | 13 | 2,800 |  |  | 400， 000 | 4，i00 | 43，000 |


| 13 | Olat | Kansas Institution for the Education of the Deaf and Dumb. | H. C. Hammond |  | 16 |  |  |  |  |  |  |  |  |  |  | \| 220| | 20 | 13 | 2,000 | 169 | 350 | 225, 000 |  | 481 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14 | D | Kentucky Institation for the Education of Deaf Mutes. |  |  |  |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  | . 00 | 143,000 | 3,750 | 0 |
| 15 | Baton Rouge, La | Louisiana State Institution for the Deaf and Dumb. | Dir. John Jamstremski. |  |  |  |  |  | 4 |  |  |  |  | 71 | 32 |  |  |  | 500 | 180 |  | 350,000 |  |  |
| 16 | Portiand | Maine School for the Deaf.. | Elizabeth R. Taylor. |  |  |  | 8 |  | 5 |  |  |  |  |  |  |  | 10 |  | 600 | 300 |  | 30,000 |  | 15, 000 |
| 17 | Balt | Maryland School for Colored Blind and Deaf. | Frederick D. Morrison. |  |  |  |  |  |  |  |  |  |  | 40 |  |  | 10 |  |  | 20 |  | 35,000 |  | 99 |
| 18 | Frederick, Md | Maryland School for the | Chas. W |  |  |  |  |  |  |  |  |  |  | 27 |  |  | 13 |  | 3,008 | 5 | r80 | 2J5, 000 |  | 3,308 |
| 19 | Northampton, Mass. | Clark | Caroline A. Yale. | 1 |  |  | 22 |  |  |  |  |  | 151 |  | 151 |  |  |  | 0 | 283 |  | 159, 000 |  | 47,254 |
| 20 | Beverly, Mass . . | New England Industrial | N |  |  |  |  |  | 1 |  |  |  | 26 | 26 |  |  |  |  |  |  |  | 15,000 | 50 |  |
| 21 | Flint, Mich | Michigan School for the | Francis D.Clarke | 12 |  |  | 13 |  | 7 | 0 | 19 |  | 423 | 423 |  | 300 |  |  | 3,665 | 17 | 600 | 435, 305 | 6,3:0 | 29, 884 |
| 22 | Faxibaut | Minnesota School for the Deaf. | James N. Tate. . |  |  |  |  |  | 5 | 140 | 10 |  | 24.2 | 183 |  |  | 32 |  | 1,850 | 20.2 |  | 271 | 6,000 | 45,000 |
| 23 | Jackson | Institution for the Education of the Deaf and Duml, | J |  |  |  |  |  | 5 |  |  |  | 94 | 74 |  |  |  |  | 000 |  |  | 7,000 |  | 3 |
| $2 \pm$ | Fulton, Mo | Missouri School for the | Noble B. McK | 14 |  |  | 5 |  | 7 |  | 1 |  | 407 |  |  |  |  |  | \% 2,000 |  | 200 | 360,000 | 12, 000 | 103,383 |
| 2 | Boulder, Mo | Montana Deaf and Dumb Asylum. | E. S. Tillinghast |  |  |  |  |  | 1 |  |  |  |  |  |  |  |  |  |  | 32. | 15 | 50,0 | 1,217 | 10,286 |
| 26 | Omaha, | Nebraska Institute for the Deaf and Dumb. | H |  |  |  |  |  |  |  |  |  | $17 \%$ | 17 |  |  | 24 |  |  | 157 |  | 120,000 |  | , \%10 |
| 27 | Trenton, N. J | Nerv Jersey School for Deaf Mutes. | Weston Jenki |  |  |  |  |  | 5 | 74 |  |  | 145 |  |  |  |  | 13 | 500 | 306 |  | 150,000 |  |  |
| 28 | Santa Fe, N. Mex | New Mexico Asylum for the Education of the Deal and Dumb. | Lars M. Larson |  |  |  |  |  |  |  |  |  | 12 |  |  |  |  |  |  |  |  |  | 5,500 |  |
| 29 | Albany, N. Y | Albany Home School for the Oiral Instruction of the Dear. | Mary |  |  |  |  |  | 1 | 14 |  |  | 2 |  |  |  | 14 |  |  | 20 |  | 10,000 |  | 5, |
| 30 | Buffalo, N. Y | Le Conteulx St. Mary's Institution for the Improved Instruction of Deaf Mutes. | Sister Mary Anne Burke. | 2 |  |  |  |  | ${ }^{6}$ | 94 | 8 |  | 180 | 170 |  |  | 6 | 19 | 78 | 2) |  | 230, 000 | $2 \mathrm{~m}, 865$ | 31,618 |
| 31 | Fordham, N. ${ }^{\text {a }}$-. | St. Joseph's Institute for the improved Instruction of Deaf Mutes. | Miss Anna $R$. Peacock. |  |  |  | $30$ |  | 10 | 211 | 19 |  | 40.3 |  |  |  |  |  | 1,900 | 295 |  | 500,000 |  | 11T,614 |
| 32 | Malone, N. Y....- | Northern New York Institution for Deaf Mutes. | Edward C.Rider |  |  |  |  |  |  | 50 |  |  |  |  |  | 91 |  |  |  | 305 |  | 8\% ${ }^{\sim}, 836$ |  | 25, u3: |
| 33 | New York (Lexington avenue), N. Y. | Institution for the Improved Instruction of Deaf Mutes. | H.F. Mitchell |  |  |  | 20 |  |  | 106 |  |  | 202 |  | 202 |  | 11 |  | 900 | 314 | 500 | 213, 716 | 6, 5.2 | 56,394 |

Table 9.-Statistics of State institutions for the education of the deaf, 1S9S-99--Continued.


| 45 | Mount Airy, <br> Philadelphia, Pa. | Pennsylvania Institution for the Deaf and Dumb. | A.L. E. Crouter .- | 17 |  |  | $50$ |  |  |  |  |  |  |  |  | 40 | 6,500 |  |  | 11,000,000 | 5,000 | 141,921 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | Scranton, Pa....- | Pennsylvania Oral School for the Deaf | Mary B.C.Brown | 2 |  |  |  |  | 31 | 47 | 81 |  | 81 |  |  |  | 170 | 237 |  | 155,500 |  | 20,085 |
| 46 | Providence, R.I. | Rhode Island Institute for the Deaf. | LamraDeL.Richards. | 2 |  |  |  |  | 34 | 28 | 62 |  | 62 |  | 10 |  | 142 |  |  | 90,000 |  | 19,000 |
| 48 | Cedarspring,S.C. | South Carolina Institution for the Education of the Deaf and Blind. | N.F.Walker....- | 4 |  | 11 |  |  | 58 | 53 | 111 |  | 38 |  |  |  | 909 | 150 |  | 58,000 |  |  |
| 49 | Sioux Falls, S. Dak. | South Dakota School for Deaf Mutes. | James Simpson.- |  |  |  |  |  |  |  | 49 | 49 |  |  |  |  | 189 |  |  | 60,000 | 1,000 | 10, 000 |
| 50 | Knoxville, Tenn | Tennessee Deaf and Dumb School. | Thomas L. Moses |  | 9 | 15 | $2 \quad 1$ |  |  | 91 | 220 | 80 | 31 | 116 |  |  | 900 | 163 |  | 150,000 | 1,600 | 33, 500 |
| 1 | Austin, Tex | Deaf, Dumb, and Blind Institute for Colored Children.* | S.J.Jenkins | 1 | $3$ | 4 |  |  | 21 | 14. | 35 |  |  |  |  | 1 | 150 |  | 50 | 37,500 | 12,000 | 17,215 |
| \% | --.-do-d... | Deaf and Dumb Asylum.... | B.F. McNulty --. | 14 | 14 | 88 | 8 |  | 164 | 120 | 285 | 281 |  | 174 |  | 4 |  | 187 |  |  |  |  |
| 53 | Ogden, Utalı | Utah State School for the Deaf and Dumb. | Frank W. Metcalf. |  | 5 | 7 | 5 |  |  |  |  |  | 20 |  |  |  | 358 |  |  | $188,400$ |  |  |
|  | Staunton, Va | Virginia School for the Deaf and the Blind. | Wm. A. Bowles .- | 9 |  |  |  |  |  | 64 | 14.2 | 125 | 17 |  |  |  | 600 |  | 40 | 150,000 |  | 25,000 |
| 5) | Vancouver, Wash. | Waslington School for Defective Youth. | James Watson... | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 100, 000 |  |  |
| 56 | Romney, W. Va.- | West Virginia Schools for Deaf and Blind. | James T.Rucker- |  |  |  |  |  |  | 69 | 139 |  |  |  |  |  | 500 | 89 |  | 75,000 |  | 34, 850 |
| 51 | Delavan, Wis ... | Wisconsin School for the Deaf. | John W. Swiler-- | 12 |  |  |  |  | $12 \pm$ | 108 |  |  | 120 | 11. |  | 16 | $\therefore 200$ | 220 | ) 100 | 120,000 |  | 43,286 |

Table 10.-Siatistics of public day schools for the deaf, 1S9S-99.


Table 11.-Statistics of private schools for the deaf, 1S3E-99.


Table 12．－Summary of statistics of public and private schools for the feeble－ minded，1898－99．

PUBLIC INSTITUTIONS．

| States． |  | Instructors． |  |  |  |  | Pupils． |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 完 |  | 录 |  |  |  |  |  |  | 烒 |  |  |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| Total | 19 | 57 | 176 | 233 | 206 | 610 | 4，750 | 4，408 | 9，158 | 973 | 1，559 | \＄5，546， 827 | \＄1，472， 170 |
| Massachusett | 1 | 5 | 9 | 14 | 6 | 94 | 398 | 208 | 678 | 210 | 82 | 363， 600 | 94，326 |
| New York | 3 | 1 | 16 | 17 | 22 | 77 | 352 | 814 | 1，166 | 124 | 179 | 602，653 | 157，383 |
| New Jersey | 2 | 5 | 11 | 16 | 14 | 44 | 176 | 188 | 364 | 43 | 259 | 250，000 | 66， 254 |
| Pennsylvania | 1 | 1 | 19 | 20 | 70 | 41 | 579 | 382 | 961 | 70 | 120 | 575， 000 | 182， 191 |
| Kentucky－－ | 1 | 7 | 5 | 12 | 7 | 11 | 78 | 68 | 146 |  | 94 | 120， 000 | 55，063 |
| Ohio． | 1 | 2 | 26 | 28 | 16 | 49 | 683 | 439 | 1，122 |  |  | 783， 297 | 154， 153 |
| Indiana | 1 | 14 | 13 | 27 | 18 | 30 | 327 | 279 | 606 | 32 | 285 | 400， 000 | 86， 200 |
| Illinois | 1 | 3 | 13 | 16 | 5 | 41 | 450 | 400 | 850 | 150 | 35 | 500， 090 | 111，500 |
| Michigan | 1 | － | 9 | 9 | 4 | 17 | 101 | 176 | 277 |  | 10 | 129， 600 | 65， 908 |
| Minnesota | 1 | 2 | 13 | 15 | 4. | 41 | 367 | 330 | 697 | 45 | 94 | 449， 895 | 122，480 |
| Iowa | 1 | 7 | 18 | 25 | 11 | 41 | 518 | 386 | 904 | 66 | 123 | 315， 915 | 122，040 |
| Nebraska | 1 | 2 | 6 | 8 | 3 | 10 | 108 | 116 | 224 | 20 | 74 | 200，000 | 74， 000 |
| Kansas． | 1 | 1 | 2 | 3 |  | 40 | 91 | 49 | 140 | 26 |  | 100，000 | 50，226 |
| Washington | 1 |  | 2 | 2 | 1 | 3 | 29 | 23 | 52 | 42 | 29 | 25， 000 |  |
| California． | 1 | 2 | 7 | 9 | 20 | 20 | 302 | 274 | 576 | 108 | 50 | 590， 000 | 80， 000 |
| Wisconsin | 1 | 5 | 7 | 12 | 5 | 51 | 191 | 204 | 395 | 37 | 125 | 231，867 | 50， 446 |

PRIVATE INSTITUTIONS．

Table 13．－Statistics of State institutions for the feeble－minded，189S－99．

|  | Post－ofince． | Name． | Executive officer． | Instructors． |  |  |  |  | Pupils． |  |  |  |  |  |  |  | Expenditures． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | $\begin{aligned} & \text { 发 } \\ & \text { Gig } \end{aligned}$ |  | $\begin{array}{\|l\|} \hline \text { Hin } \\ \text { H } \\ \text { H } \end{array}$ |  |  |  | $\begin{gathered} \text { 感 } \\ \text { E } \\ \text { E. } \end{gathered}$ |  |  |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 19 | 13 | 14 | 15 | 16 | 17 | 18 |
| 1 | Eldridge，Cal | California Home for the Care and Training of Feeble－Mind－ | A．E．Osborne | \％ | $\gamma$ | ！ | 20 | $: 30$ | 302 | $2 \pi 4$ | 576 | 108 | 50 |  |  | 8500，000 |  | \＄80．000 |
| 2 | Lincoln， Il | Illinois Asylum for Feeble－Mind－ | Dr．W．L．Athon | 3 | 13 | 16 | 5 | 41 | 450 | 400 | 850 | 150 | 35 | 500 | \＄500 | 500，000 | 33.500 | 108，000 |
| 3 | Fort Wayne，lud | ed Children <br> Indiana School for Feeble－Mind－ | Alexander Johnson． | 14 | 13 | $\therefore{ }^{\prime \prime}$ | 18 | 30 | $32 \%$ | $2 \% 9$ | 606 | 3： | 285 | 400 | 1，000 | 400，000 | 8， 700 | 77，500 |
| 4 | Glenwood，Iowa | Iowa Institution for Feoble－ | F．M．Powell | 7 | 18 | 河 | 11 | 41 | 518 | 386 | 904 | 66 | 123 | 1，066 | 1，060 | 315， 915 |  | 129，040 |
| 5 | Winfield，Kans | Minded Children． <br> Kansas State Asylum for Idiotic | Dr．C．S．Newland．－－ | 1 | $:$ | 3 | － | 40 | 01 | 49 | 140 | 26 |  | 40 |  | 100， 600 | 37，501 | 12， 200 |
| 6 | Frankfort，Ky． | Kentucky Institution for Care | J．L．Long | 7 | 5 | 12 | 7 | 11 | \％ 8 | 68 | 146 |  | 94 |  |  | 1：00，000 | 28,800 | 28,243 |
| 7 | Waverly，Mass | of Feeble－Mmded Children． | Walter E．Fernald ．－ | 5 | 9 | 11 | 6 | 94 | 398 | 280 | 678 | 210 | 8.3 | 920 | 800 | 363， 600 | 11，548 | 8：2，7\％8 |
| 8 | Lapeer，Mich | the Feeble－Minded． | W．A．Polglase，M．D－ |  | 9 | 9 | 4 | 17 | 101 | 176 | 277 |  | 10 |  | 300 | 129，600 | 16，161 | 49， $74 \%$ |
| 9 | Faribault，Minn | Minded and Epileptic． Minnesota School for Feoble－ | Artlur C．Rogers， | 2 | 13 | 15 | 4 | 41 | 304 | 339 | 697 | 45 | 94 | 254 | 3，081 | 449， 895 | 17，500 | 104，980 |
| 10 | Beatrice，Nebr－ | Minded． | Menj．D．L．Long，M．D． | 2 | 6 | 8 | 3 | 10 | 108 | 116 | 294 | 20 | ${ }^{2} 4$ |  |  | \％ 300,000 | 2b， 000 | 48，000 |
| 11 | Vineland，N．J． | Minded Youth． <br> New Jersey State Institution for Feeble－Minded Women． | Mary J. Dunlap, |  |  |  | 6 | 8 |  | $10 \%$ | 107 |  | 85 | 600 | 1，000 | 50，000 | 2，000 | 3，000 |
| 1：2 | ．－do | for Feeble－Winded Women． <br> New Jersey Training School for Feoble－Minded Children． | M．D． <br> S．Olin Garrison1．．．． | 5 | 11 | 16 | 8 | 36 | 176 | 81 | $25 \%$ | 43 | 174 | 600 | 1，200 | 200，000 | 7，998 | 53， 250 |
| 13 | Newark，N．Y ${ }^{\text {New Yorich }}$ | Feoble－Minded Children． <br> New York State Custodial Asy－ <br> lum for ${ }^{2}$ eeble－Minded Women | C．W．Wivinspear |  | 1 | 1 | 3 | 28 |  | 448 | 449 | 40 | 26 | 195 | 443 | 179，07\％ | 12，734 | 49，488 |
| 14 | New Yorir，N．Y－．．．－ | lum for ${ }^{2}$ eeble－Minded Women． School for Feeble－Minded | M．C．Dumphy |  | 3 | 3 | 3 | 11 | 58 | $7:$ | 130 | 40 | 110 |  |  |  |  |  |
| 15 | Syracuse，N．Y． | Syracuse State Institution for | James U. Carson, | 1 | $1 \stackrel{3}{2}$ | 13 | 10 | 38 | 294 | 993 | $58 \%$ | 44 | 43 |  |  | 423，588 | 3．452 | 91，715 |
| 16 | Columbus，Ohio | Ohio Institution for the Educa－ | G．A．Doren，M．D．．． | ： | 20 | 28 | 16 | 49 | 683 | 489 | 1，120 |  | 320 | 2，608 |  | 783，297 | 11．\％48 | 142，405 |


| 17 | Elwyn, Pa........... | Pennsylvania Training School for Feeble-Minded Children. | $\begin{aligned} & \text { Martin W. Barr, } \end{aligned}$ | 1 | 19 | 20 | 70 | 41 | 579 | 382 | 961 | 70 | 120 | [1,200 | 600 | 575, 000 | 27,502 | 154,689 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18 | Vancouver, Wash... | Washington School for Defect- | James Watson |  | 2 | 2 | 1 | 3 | 29 | 23 | 52 | 43 | 29 |  | 200 | 2\%,000 |  |  |
| 19 | Chippewa Falls, Wis | Wisconsin Home for FeeßleMinded. | Alfred W. Wilmarth | 5 | 7 | $1: 2$ | 5 | 51 | 191 | 204 | 395 | 37 | 125 | 121 | 250 | -231,86\% |  | 50,446 |

TABLE 14.-Statistics of private schools for the feeble-mindea, 1898-99.


## CHAPTER XLVII.

STATISTICS OF PUBLIC KINDERGARTENS.

There are now 213 cities in the United States of over 4,000 population in which public kindergartens are maintained in connection with the city systems of public schools. The table on the next page summarizes the statistics of the public kindergartens of these 213 cities for the scholastic year 1898-99. There was an increase of 24 in the number of cities supporting public kindergartens over the preceding year. The actual number of kindergartens reported was 1,542, an increase of $17 \%$. The number of teachers employed was 2,829 , an increase of $29 \%$. The number of pupils in the kindergartens was 109,894 , an increase of 14,027 over the year $1897-98$. 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 training schools. The result was printed in Chapter LIII of the Education Report for 189\%-98, pages 2537 to 2579. The office, by much correspondence, procured the names of 2,998 private kindergartens known to have been in operation in 189\%-93. After repeated requests for information, 1.519 private kindergartens reported statistics to this office. Detailed information from the 1,479 other private kindergartens reported as still in existence could not be obtained. The 1,519 kindergartens reporting had 3,232 teachers and 47,853 pupils. Allowing proportionate numbers of teachers and pupils, it may be estimated that the 1,479 kindergartens not giving statistics had 3,173 teachers and 45,884 pupils. Taking this as a liberal estimate, the 2,998 private kindergartens had 6,405 teachers and $93,78 \%$ 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.

Assuming that the private kindergartens in 1898-99 maintained the average enrollment of the preceding year, the number of children receiving instruction in kindergartens was not less than 203,631 . If the private kindergartens have kept pace with the grow th of public kindergartens, 10,000 to 15,000 may lee added to the grand total.
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 keginning with 1873:

| Year. | Kindergartens. | Teachers. | Pupils. | Year. | Kindergartens. | Teachers. | Pupils. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18\%3 | 4.2 | 73 | 1,252 | 1882. | 348 | 814 | 16, 916 |
| 1874 | 55 | 125 | 1,636 | 1884 | 354 | 831 | 17,002 |
| 1875 | 95 | 216 | 2,809 | 1885 | ${ }_{417}$ | 905 | 18, 832 |
| 1877 | 129 | 336 | 3,931 | 1887. | 544 | 1,250 | 25, 925 |
| $18 \%$ | 159 | 376 | 4,797 | 1888 | 521 | 1,202 | 31, 226 |
| 1879 | 195 | 452 | 7,554 | 1892 | 1,311 | 2,535 | 65,296 |
| 1880 | $\stackrel{23}{29}$ | 524 | 8,871 | 1898 | 2,884 | 5,764 | 143, 720 |
| 1881 | 273 | 676 | 14, 107 |  |  |  |  |

Table 1.-Statistics of public kindergartens reporting for 1895-99, and private kindergartens reporting and not reporting for 1897-98.


Table 2.-Public kindergartens in cities of over 4,000 inhabitants.


Table 2.-Public kindergartens in cities of over 4,000 inhabitants-Continued.


Table 2.-Public Findergartens in cities of over 4,000 inhabitants-Continued.


Table 2.-Public kindergartens in cities of over 4,000 inhabitants-Continued.

|  | State and city. | Kindergartens. | Instructors. | Pupils. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Male. | Female. | Total. |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 1~\% | Pentsylvania. |  |  |  |  | 300 |
| $1 \% 8$ | Beaver Falls ............ | 1 | 1 | 10 | 10 | 20 |
| 119 | Chambersburg.... | 1 | 2 | 15 | 20 | 35 |
| 180 | Dunmore. | 1 | 1 | 20 | 27 | 47 |
| 181 | Philadelphia | 142 | 201 | 3,566 | 3,742 | \%,308 |
| 182 | Pittsburg' .... | 20 | 41 |  |  |  |
| 183 | Cranston. | 4 |  | 55 | 65 | 120 |
| 184 | Newport. | 4 | 4 | 134 | 150 | 284 |
| 185 | Pawtucket. | 4 | 8 | 1\%\% | 187 | 364 |
| 186 | Providence-- | 16 | $3 \stackrel{2}{2}$ | 638 | 626 | 1,201 |
| 187 | Woonsocket | 1 | 2 | 31 | 29 | 60 |
| 188 | El Paso. | 1 | 3 | 82 | \%2 | 134 |
| 189 | Logan | 1 | 2 | 35 | 38 | 73 |
| 190 | St. Albans, | 2 | 3 | 53 | 59 | 112 |
| 191 | Seattle | 1 | 2 | 38 | 45 | 83 |
| 192 | Spokane. |  | 8 | 203 | 200 | 403 |
|  | Wisconsin. |  |  |  |  |  |
| 193 | Appleton...- |  | 8 | 149 | 181 | 330 |
| 194 | Baraboo ..... | 4 | ${ }_{2}^{4}$ | 150 | 156 | 306 |
| 195 | Beaver Dam. | 2 | $\stackrel{2}{9}$ | 41 | 40 143 | 81 |
| $19 \%$ | Berlin .-- | $\stackrel{3}{2}$ | 3 | 54 | 170 | 114 |
| 198 | Fond du Lac. | 5 | 10 | 125 | 175 | 300 |
| 199 | Kaukauna. | 1 | $\stackrel{2}{4}$ | $3{ }^{3}$ | \%5 | $5 \%$ |
| 200 | Madison ... | 2 | 4 | 67 | 65 | 13: |
| 201 | Manitowoc. | $\stackrel{2}{2}$ | 2 |  |  |  |
| 202 | Marinette | 5 | 5 | 246 | 239 | 485 |
| 203 | Menasha. | 3 | 4 | 113 | 115 | 228 |
| 204 | Menomonie | 3 | 10 | ${ }^{134}$ | ${ }^{143}$ | ${ }_{6} 27$ |
| 205 | Milwaukee. | 43 | 85 | 3,081 | 3,030 | 6,111 |
| 206 | Monroe. | 3 | 5 | 100 | 114 | 214 |
| $20 \%$ 208 | Neenah.. | 1 9 | 11 | 40 490 | 588 | 98 1,012 |
| 209 | Racine.- | 8 | 11 | 300 | 321 | 621 |
| 210 | Sheboygan | 6 | 20 | 442 | 426 | 868 |
| 211 | Sterens Point | 4 | 6 | 104 | 108 | 21. |
| ${ }_{213}^{213}$ | Superior. | 9 | 22 | ${ }_{218}$ | 499 240 | 92 |
| 213 | Wausau .. | 5 | 5 | 212 | 240 | 40. |

## CIIAPTER XLVIII.

# CONTRIBUTIONS TO THE HISTORY OF NORMAL SCHOOLS IN THE UNITED STATES. 

By M. A. Nerrell, formerly Secretary of the Maryland State Board of Education.

## I.

## THE STATX NORMAL SCHOOLS OE NEW ENGLAND.

## 1. MASGACHUSETNS.

It is said that the first normal school of which we have any authentic account was established in Rheims, France, in 1681 by the celebrated Abbé de La Salle. But the normal idea goes much farther back. "Vixere fortes ante Agamemnona." Luther was filled with it. The mediæval universities had for their prime object the production of doctors-teachers. And what were the "schools of the prophets" but teachers' seminaries of a special kind?

It is very probable that the normal school established by the Abbé de La Salle bore more resemblance to the Hebrew "schools of the prophets" than to the State normal schools of New England; but let him have due credit for his work. The schools of the Christian Brothers, of which he was the founder, are the most progressive of any under the auspices of the Roman Catholic Church. The exhibit which they made at the New Orleans Centennial Exposition was highly creditable, and excited both surprise and admiration.

But though France may have been first in point of time, Germany "bettered the instruction." In 1697 August Hermann Francke organized a teachers' class in connection with his school at Halle. Among the students who flocked to his school to learn his improved methods of teaching was Johann Julius Hecker, who founded a teachers' seminary in 1735 at Stettin, in Pomerania, and another at Berlin in 1748. The graduates of the school at Berlin were considered so far superior to untrained teachers that it is said that Frederick the Great gave orders that no others should be employed to teach in schools on the crown lands of his kingdom. The school established at Berlin was afterwards removed to Potsdam, and both it and the school at Stettin became State institutions, the first State normal schools ever established. ${ }^{1}$

To James G. Carter, of Lancaster, belongs the credit of haring first arrested the attention of the thinking men of Massachusetts to the necessity of immediate and thorough improvement in the system of free or public schools. He has been called the father of normal schools in America, but recognizing the subsequent claims of "Father Peirce," we should rather call Mr. Carter the "grandfather." Hie "Letters to the Hon. William Prescott on the free schools of New England" in 1824, and his "Essays on popular education," on "Education as a science," and an "Institution for the instruction of teachers in 1825," were pioneer efforts in the great work, and
unlike most pioneer work, were as raluable and useful for construction as for destruction. In 1827 he opened an institution with special reference to the education of teachers on the plans which he had expounded, and memorialized the legislature for aid. The memorial sets forth, "That he is about to open a seminary in a central part of the State for the general instruction of. children and youth of both sexes, and also for the particular instruction of those who may resort to him for that purpose in the science of education, or in the best means of developing the physical, moral, and intellectual powers of the young by judicious and wholesome exercise of those powers, and at a subsequent period of conveying to their minds the greatest amount of useful knowledge." The normal school was evidently in his head not in a protoplastic state, to be evolved and differentiated subsequently, but full grown, like Minerva in the brain of Jupiter, fully armed and equipped. Unfortunately, Vulcan was not on hand with his ax to effect a speedy delivery.
Mr. Carter asked the legislature, as the chosen guardian of the schools, to extend to private enterprise a moderate amount of public patronage, so as to diminish the necessary expenses to individuals, and to open its doors to all who would aspire to the responsible employment of teachers of youth. By this union of private and public means he believed that "a seminary for the education of teachers might be at once commenced upon a scale more commensurate with its importance to the community, more adequate to the public demands for better instruction, more in keeping with the fundamental principles of the free schools, and more consonant with the whole spirit of our free institutions."

The committee to whom the memorial was referred made a favorable report. They say that Mr. Carter's plan "is entirely practical in its character, simple in its details, and peculiarly calculated to develop the powers of the mind, and that the studies it requires are brought wholly and appropriately within the pale of downright utility." The committee further say that while they "incline to the opinion that this institution should be detached entirely from all other pursuits and be devoted wholly and distinctly to the simple object in view, they would not be considered as deciding definitely that it could not be safely connected with some of the literary establishments of the State." It is worthy of note that the sentiment of Massachusetts, so far as that sentiment has found record, was not in favor of the experiment tried afterwards in New York of grafting a normal scion on an academic stock, nor of the Pennsylvania system of pooling the issues between the State and a private corporation. The committee preferred an institution "detached entirely from all other pursuits" with the "simple object in view"-the preparation of teachers.

The committee are very frank in expressing their views as to the necessity of such preparation. They say "it needs neither argument nor an exhibition of facts to demonstrate to the legislature that the free schools of the Commonwealth are not such as they ought to be-that they fail, most essentially, of accomplishing the high objects for which they were established. Upon this subject public opinion is fully settled. Nor is it difficult to arrive at the true cause. Can it in the large majority of cases be traced to any other cause than the incompetency of teachers?" The logic is simple and irrefutable. Our schools are not what they ought to be. The cause of failure is the incompetence of the teachers. To have competent teachers we must instruct them in the business of their profession. Therefore, etc., Q. E. D. But neither the logic nor the eloquence of the committee prevailed with the legislature. The recommendation of the committee was lost by a majority of $1 .{ }^{1}$

The story of the origin of normal schools in the United States has been told so often and so well that it is introduced here merely for the sake of completeness, and must be disposed of in the briefest possible manner. It was not due to any noticeable uprising of popular opinion; it had not been heralded by any voice crying from

[^60]the wilderness; it would have come, sooner or later, in any event; but the precise date of the advent seems to us mortals almost like an accident.

In August, 1834, the Rev. Charles Brooks, of Medford, Mass., on his way from London to the United States, made the acquaintance of Dr. St. Julius, of Hamburg, who had been sent by the King of Prussia to learn the condition of schools, hospitals, prisons, and other public institutions in the United States. The six weeks companionship of these two men (record-breaking steamers had not then been invented) resulted finally in planting the seed which afterwards grew up as the normal school system of the United States. Mr. Brooks says: "I fell in love with the Prussian system, and it seemed to possess me like a missionary angel. I gave myself to it, and in the Gulf stream I resolved to do something about State normal schools. This was its birth in me, and I baptized it 'my sea-born child.' After this I looked upon each child as a being who could complain of me before God if I refused to provide for him a better education after what I had learned. The whole Prussian system,'" he says, "is built on these eight words, 'As the teacher is, so is the school,' and, therefore, we must have seminaries for the preparation of teachers."

In 1835 Mr. Brooks called a convention of the citizens of Plymouth, to whom he opened the whole matter as clearly and as strongly as he could, showing that the great work must begin by founding a State normal school in Plymouth County. The audience was warmed up, and Ichabod Morton, dean of the first parish, rose and said: "Mr. President, I am glad to see this day. The work is well begun; the facts now presented to us so plainly prove conclusively the inestimable value of teachers' seminaries. Mr. Brooks says he wants the first one established in the old colony, and so do I, sir, and I will give one thousand dollars toward its establishment." Thus the Prussian stranger began its journey from Plymouth Rock.

Many conventions were held, many speeches were made, many resolutions adopted, in 1838, but the points emphasized in nearly every convention were:

First. The deplorably low condition of the public schools.
Second. The necessity for immediate and radical reform.
Third. A declaration that the inauguration of normal schools after the Prussian model would reform and vitalize the whole system of elementary education in the State.

At one of these conventions (Hanover, September 3, 1838) Daniel Webster and John Quincy Adams were present, and though both had attended under the condition that they were not to be called on to speak, yet neither of them was able to refrain from giving expression to the feelings and sentiments which had been developed by contact with the enthusiastic leaders of the movement.

Mr. Webster said he was anxious to concur with others in aid of the project. The ultimate aim was to elevate and improve the primary schools. If the town schools were no better than they were when he attended them, he was sure they were insufficient to the wants of the present day. This plan of a normal school is designed to elevate the common schools and thus to carry out the noble ideas of our Pilgrim fathers. But there is a larger view yet. Every man and every woman, every brother and every sister is a teacher. Parents are eminently teachers. Now, if normal schools are to teach teachers, they make parents and all who in any way influence childhood competent to their high office. In families there will be better teaching, and the effect will be felt throughout society.

Mr. Adams said:
The original settlers of New England were the first people on the face of the globe who undertook to say that all children should be educated. On this our democracy has been founded. Our town schools and town meetings have been our stronghold in this point, and our efforts now are to second the efforts of our pious ancestors. Some kingdoms of Europe have been justly praised for their patronage of elementary instruction, but they were only following our early example. Our old system has made us an enlightened people, and I feared that the normal school system was to
subrert the old system, take the power from the towns and put it into the State and overturn the old democratic principle of sustaining the schools by a tax on property; but I am happy to find that such is not its aim or wish; but on the contrary it is accordant to all the old maxims, and would elevate the town schools to the new wants of a growing community. We see monarchs expending vast sums to establish normal schools through their realms, and sparing no pains to convey knowledge and efficiency to all the children of their poorest subjects. Shall we be outdone by kings? Shall monarchs steal a march on republics in the patronage of that education on which a republic is based? On this great and glorious cause let us spend freely, yes, more freely than on any other.

Mr. Brooks and his immediate and active coadjutors, Edmund Dwight, Ichabod Morton, George B. Emerson, Dr. Channing, James G. Carter, Horace Mann, and other less conspicuous but not less honored men, had joined in their minds the idea of a State board of education and a State normal school as essential elements of the proposed reform of the system of her public schools. It was plain to them then, as it is plain to us now, that a State normal school without the support and direction of the State itself would be but as a ship set adrift on the ocean without sails and without a pilot. Each seemed to them to be the necessary complement to the other, and much of the objection raised afterwards against the State board of education was really directed against the State normal school.

## First State Board of Edecation. .

The board of education was established by a vote of the legislature, and was organized on the 29th of June, 1837, with Horace Mann as secretary. The promoters of the enterprise hoped to have Mr. Carter as the executive officer, but they were, fortunately as we now think, overruled. No better man than Horace Mann could have been selected. It was understood from the beginning that the first business of the board was to organize a State normal school. Without Mr. Brooks the child would not have been born at that time; without Horace Mann it might not have survived the perils of infancy.

The new board of education recommended, as was expected, the enactment of a law for the establishment of State normal schools. It is doubtful whether their recommendation would have been adopted had not a "deus ex machina" descended for the occasion. Mr. Edmund Dwight proposed to the legislature that he would be responsible for $\$ 10,000$ to aid in the establishment of teachers' seminaries, provided the legislature would give the same amount for the same cause. On the 19th of April (a marked day in the history of the United States) the legislature passed resolutions accepting the gift, and authorizing the governor to draw a warrant on the treasurer for $\$ 10,000$ for the purpose specified in the resolutions. Thus were the State normal schools of Massachusetts launched upon an ocean of uncertainty, but with a fair prospect of reaching the desired harbor. ${ }^{1}$

The board decided to establish three normal schools-one for the northeastern, one for the southeastern, and one for the western part of the State, to be continued three years as an experiment; and as the money at their disposal was not sufficient to erect buildings, they proposed to establish the schools at suitable places as soon as the requisite assistance was given. Many towns in different parts of the State submitted proposals; and at a meeting of the board December 28,1838 , it was voted "to locate a normal school for the qualification of female teachers at Lexington, and one at Barre for both sexes."
This is the first official use of the word "normal;" and it is to be noticed that it needed an explanatory phrase, "for the qualification of female teachers." The word in the sense in which it was used was not English, and was not understood except by educational experts. The English "Training school for teachers," or the

[^61]German "Teachers' seminaries" would have been intelligible and suggestive; but the French "Normal" conveyed no precise information to any but well-educated people. There is not a principal of a normal school who was living twenty-five years ago who has not been addressed, as the writer has been, as principal of the "norman" school, or (Dii avertite omen!) principal of the "Mormon" school. But words are things. They are more. They are living things. They take root. They bear fruit. And this word "normal" has borne much bad fruit. There are scores of socalled "normal" schools in the country which have nothing "normal" about them except in their advertisements and catalogues. But the word became popular, and unscrupulous dealers in education used it as an umprotected trade-mark to make their wares more salable.

## Lexingmon-Framingham Smool.

The Rev. Cyrus Peirce was engaged to teach the school at Lexington. Had he proved a failure, success would have been postponed for a quarter of a century. But he had said, "I would rather die than fail," and though he came very near dying, there was no symptom of failure. He succeeded even beyond the expectation of Horace Mann, a man of great expectations. "He not only knew how to teach with precision, but he evoked from his pupils such a force of conscience as insured thorough study and assimilation of whatever was taught." There is no doubt that the rapidly increasing popularity of normal teaching was largely due to the conscientiousness, the sagacity, and the professional skill of "Father Peirce."
The opening day came, July 3, 1839, and with it a heavy rain. Assembled in the reception room of the normal building were the august visitors of the school, with the newly elected principal, and before them sat three timid girls-only three-to be examined and enrolled as the first pupils of the first State normal school in America. The first quarter closed with 12 students. In the fall a model school was conducted with 33 pupils. "The normal students are," says Mr. Peirce, "in the very undesirable condition of being familiar with the books without knowing anything they contain." The studies for the first term were the common branches, algebra, natural philosophy, physiology, mental philosophy, bookkeeping, moral philosophy, and geometry. In an address delivered about this time by his excellency Edward Everett, chairman of the board of education, his excellency laid down rery clearly the lines on which normal instruction is built and the objects it should seek to accomplish.
(1) Instruction, especially in the common branches.
(2) The art of teaching.
(3) The science of school government, and theory applied to practice in the model school.
Truly we have not advanced far since those days. Movements there have been, but motion is not always progress.
Mr. Peirce worked for three years in Lexington, performing an almost incredible amount of labor. There was no appropriation for assistance of any kind, and he took it upon himself to supervise or actually perform the menial services of the school. He seldom allowed himself more than four hours sleep out of the twenty-four. He attended to the fires, he rang the school bell, he heard almost every recitation in the normal room, and visited the model room at recess. With the assistance of his wife he examined the written exercises, the compositions, the school journals, answered the demands of his large correspondence, and arranged all the details of every day's school duties with a persistence and conscientionsness unsurpassed, if ever equaled, elsewhere. "Had it not been for Cyrus Peirce," says Dr. Henry Barnard, "I consider the cause of normal schools would have failed or have been postroned to an indefinite period." ${ }^{1}$

[^62]
## COUNTER REYOLUTION.

The course of aggressive reforms, like the course of true love, never runs smooth. The normal school had demonstrated its power; therefore the normal school must be crushed. In March, 1840, the committee of education was directed by an order of the house of representatives to "consider the expediency of abolishing the board of education and the normal schools, and to report by bill or otherwise." The board of education and the normal schools were regarded as Siamese twins-the death of one would be the destruction of the other. The normal schools were not popular at first. Brooks and Carter and Mann believed in them, but there were many who regarded them as newfangled heresies. The committee on education belonged to the latter class. The teacher, like the poet, they said, as Gail Hamilton said forty years ago, "nascitur, non fit;" the faculty of acquiring necessarily implies the faculty of of imparting; all that is needed is knowledge. That will bring with it skill. The arguments of the committee are worth reproducing, inasmuch as they contain the germ of all that has been said in opposition to normal schools for the last half century.
(1) They are imitated from France and Prussia, where "the smallest bridge can not be built or any village road repaired until a central board has been consulted." "The French and Prussian systems appear to be much more admirable as a means of political influence and of strengthening the hands of the government than as a means for the diffusion of knowledge."
(2) Academies and high schools are fully adequate to furnish a competent supply of teachers. "Comparing the normal schools already established with the academies and high schools of the Commonwealth, they do not appear to present any peculiar or distinguishing advantages."
(3) There is no need of professional instruction. "It is insisted by the board of education that the art of teaching is a peculiar art, which is particularly and exclusively taught at normal schools, but it appears to the committee that every person who has himself undergone a process of instruction must acquire by that very process the art of instructing others." [Nomine mutato. Every person who has himself undergone the process of being shaved by a barber, must acquire by that very process the art of shaving others.]
(4) "It is obviously impossible, and it is perhaps not desirable, that the business of keeping these [district] schools should become a distinct and separate profession, which the establishment of normal schools seems to anticipate."
(5) "We have no adequate security that the teachers thus taught at the public expense will remain in the Commonwealth, and it seems hardly just that Massachusetts should be called upon to educate at her own cost teachers for the rest of the Union."
(6) These normal schools "do not appear to have any stronger claims on the public treasury than many of our academies and high schools."
(7) "The idea of the State controlling education, whether by establishing a central board or by organizing normal schools, seems a great departure from the uniform spirit of our institutions-a dangerous precedent and an interierence with a matter more properly belonging to those hands to which our ancestors wisely intrusted it. It is greatly to be feared that any attempt to form all our schools and all our teachers upon one model would destroy all competition, all emulation, and even the spirit of improvement itself."

The committee, in accordance with their report, submitted a bill abolishing the board of education and the State normal schools. But Horace Mann and his enthusiastic supporters were too strong for the conservative committee, and the bill was lost by a rote of 245 to 182." The "counter revolution" failed.
Just forty-seven years later a gentleman of Alabama published a pamphlet
${ }^{1}$ Commonwealth of Massachusetts. House Document No. 49, session of 1810.
entitled "The normal school question investigated," which had the same object as the report of the committee and met with the same fate. It begins, "Ought the normal schools of Alabama to be abolished? I think they ought, and in the following pages shall give some of the reasons why I think so." But the reasons are so much shrouded in rhetoric that it is hard to find them. A few specimens will suffice:
There is nothing taught in the normals which is not taught in the other schools of the State. Why, then, should they be supported by the State? * * * Those seeking an education very naturally accept the free tuition tendered them, and, besides, they very readily see that, with much lower attainments and much less merit, they can secure the more desirable situations for having attended the normal, so that the very natural tendency is to lower rather than exalt the standard. Besides, the State may have the satisfaction of seeing her true and tried teachers crushed financially and driven from the field. * * * The appropriations to the normal schools have all the offensiveness of the worst kind of class legislation, and as such are fine fuel for communistic fires. * * * I am aware that many are looking to our normal schools to furnish us teachers. Such hopes are delusive. They will never be realized. * * * Normal students, when you get them through school, will not accept work in our common country schools. * * * Is it a part of the legitimate duties of our lawmakers to establish and endow institutions to manufacture teachers? Would it not be better to have teachers educate themselves like [sic] men do for the other professions? ****I can scarcely realize how men can be sincere when they talk about the abolition of these [normal] schools affecting disastrously the educational cause of the State. No fears need be entertained. The tide is rising. These normals are only a little driftwood on the surface, showing that the swell is coming. Their abolition would possibly affect disastrously a few towns and a few teachers, but it will in no wise retard the steady growth of a healthy educational interest in the State. This interest was here before the normals came, and when they are gone it will continue to grow. ${ }^{1}$

The rhetoric of the pamphleteer had no more effect on the legislature of Alabama in 1887 than had the logic of the committee on education on the Massachusetts legislature in 1840.

The normal schools of Massachusetts in their youth were not popular institutions. Carter and Brooks and Horace Mann believed in them from the first. Daniel Webster and Jolm Quincy Adams and men of their stamp, capable of broad views of the present and prescient of the future, gave in their adhesion, but conservatism, localism, and vested interests were against them. A formidable assault through the newspapers, principaily religious newspapers, led by a minister of the Gospel, caused some fear and trembling for a moment, but served in the end to slow the strength of the fortress. Thirty-one Boston schoolmasters raised the old cry, "Great is Diana of the Ephesians!" A Boston school committee objected to the employment of a school superintendent who should spend part of his time in the training of teachers because "such training would lead to repeated experiments with new methods." But in spite of opposition, and partly because of opposition, the normal schools went on "conquering and to conquer."

Three years of unremitting and excessive labor in Lexington proved too much for Mr. Peirce's health-a man of less power of endurance would have broken down sooner-and in 1842 he resigned, and after two years' rest returned to his old charge. The school had now outgrown its accommodations, and a suitable building was offered at West Newton. The price was $\$ 1,500$, which was given to Horace Mann by Josiah Quincy, jr. Before this Mr. Mann had sold his own library to fit up the normal boarding house at Lexington. In 1849 Mr . Peirce's health again failed, and he was compelled again to resign.

The school soon outgrew its accommodations at West Newton, as it had done those at Lexington, and in 1852 an appropriation of $\$ 6,000$ was made by the legislature to defray the expense of providing a more commodious building and a better site for the school with the necessary appurtenances and apparatus. The choice of site fell
upon Framingham, a spot "beautiful for situation," but so far from the nearest railway station that the school fell oft in numbers for some years.

On Christmas day, 1887, the boarding house of the school, Crocker Hall, which had been built in the year previous, was partially destroyed by fire, and the legislature at their first session thereafter appropriated $\$ 105,000$ for the repair of the hall and the erection of a new academic building. It this appropriation is compared with the amount roted to remore the school from West Newton to Framingham, an idea may be formed of the rise in value of normal schools in thirty-five years.

> Principals of the Lexington-THest Neuton-Framingham School.

Cyrus Peirce.
1839 to 1842
Samuel J. May......................................................................... . . 1842 to 1844
Cyrus Peirce.......................................................................... 1844 to 1849
Eben S. Stearns.-......................................................................... 1849 to 1855
George N. Bigelow ....................................................................... 1855 to 1866
Annie E. Johnson...................................................................... 1866 to 1875
Ellen Hyde............................................................................. 1875

## The Barie-Weatfield School.

Two months and one day after the opening of the normal school at Lexington the school at Barre (established by rote of the board of education at the same time) was opened for the reception of students under the principalship of Samuel P. Newman, a graduate of Bowdoin College. The opening was signalized by an address from the governor of Massachusetts, Edward Everett, one of the most perspicuous and most polished of his speeches, perspicuous and polished as they all are. He sets forth with great plaimess and with sufficient amplification the aims and purposes of normal schools:
(1) A careful review of the branches of knowledge required to be taught in our common schools, it being of course the first requisite of a teacher that he should first know well that which he is to aid others in learning. Such an acquaintance with these branches of knowledge is much less common than may generally be supposed. The remark may sound paradoxical, but I believe it will bear examination when I say that a teacher thoroughly versed in those branches only which are taught in our common schools is as difficult to find as a first-rate lawyer, divine, or physician, statesman, man of business, or farmer. * * *
(2) The art of teaching. To know the matter to be taught, and to know it thoroughly, are of themselves, though essential, not all that is required. There is a peculiar art of teaching. The details of this branch are inexhaustible, but it is hoped that the most important principles may be brought within such a compass as to afford material benefit to those who pass even the shortest time at these institutions.
(3) The third branch of instruction to be imparted in such an institution concerns the important subject of the government of the school, which might perhaps more justly have been named the first. The best method of governing a school-that is, of exercising such a moral influence in it as is most favorable to the improvement of the pupils-will form a very important part of the course of instruction designed to qualify teachers for their calling. * * * How much is implied in the words, "to govern a school!" For sereral hours in the day the teacher is expected to exercise the authority of a parent over fifty or sixty, perhaps over ninety or a hundred children. Without the aid of that instinct of natural affection which fortifies parental authority he is expected, with a parent's power, to control alike the docile and the obstinate, the sullen and the gay. And he is to do this not by violence and storm, but by wisely threading the maze of that living labyrinth, the affections of the youthful heart. * * * The instruction of the normal school will therefore dwell on the government of youth as of paramount importance, as that part of the teacher's duty which demands the rarest union of qualities, which most tries the temper, and, when faithfully and judiciously performed, is most important in its results. Give me the child whose heart has embraced without violence the gentle

[^63]love of obedience, in whom the sprightliness of youth has not encroached on deference for authority, and I would rather have him for my son, though at the age of twelve he should have his alphabet to learn, than be compelled to struggle with the caprice of a self-willed, obstinate youth whose bosom has become a viper's nest of the unamiable passions, although in early attainments he may be the wonder of the day.
(4) In the last place it is to be observed that in aid of all the instruction and exercises within the limits of the normal school, properly so called, there is to be established a common or district school as a school of practice, in which, under the direction of the principal of the normal school, the young teacher may have the benefit of actual exercise in the business of instruction.
The temptation to quote from the magnificent peroration to this magnificent address is too strong to be resisted. Like other classic gems it has found its way into our schoolbooks, and though much worn it will never become trite:

Permit me, fellow-citizens and friends, in bringing this address to a close, to congratulate you on the establishment, in the bosom of this community, of an institution destined, we trust, to be an instrument of much good. We place it under the protection of an intelligent public. Its organization is simple; its action will be wholly free from parade or display; its fruits, we trust, will be seen in raising the standard of common-school education. This object, we confess, we regard as one of paramount importance-second to no other not immediately connected with the spiritual concerns of man. If there be any persons to whom the words "common schools" and "common-school education" convey an idea of disparagement and insignificance, such persons are ignorant, not merely of the true character of our political system, but of the nature of man. I certainly intend nothing derogatory to our higher seminaries of education in town or country. * * * But whether we consider the numbers who enjoy their benefit, the relative importance to the State of an entire well-educated population and of the services of those who receive the advantages of an education at the higher seminaries, taken in connection with the fact that a liberal education may be had elsewhere, but that a common-school education must be had at home or not at all, no rational man, as it seems to me, can fail to perceive the superior importance of the common schools They give the keys of knowledge to the mass of the people. * * * Our common schools are important in the same way as the common air, the common sunshine, the common rain-invaluable for their commonness. They are the corner stone of that municipal organization which is the characteristic feature of our social system; they are the fountain of that widespread intelligence which, like a moral life, pervades the country; they are the nursery of that inquiring spirit to which we are indebted for the preservation of the blessings of an inquiring Protestant spiritual faith. Established as they were by special legislation in the infancy of the colony, while they are kept up and supported with a liberality corresponding with the growth of the country no serious evil can befall us. Whatsoever other calamities, external or internal, may overtake us, while the schools are supported they will furnish a peremnial principle of restoration. With her 3,000 district schools, supported at the public expense, nothing but the irreversible decree of Omnipotence can bring the beaming forehead of Massachusetts to the dust. Ticissitudes may blight the foliage, but there will be vigor in the trunk and life at the root. Talent will constantly spring up on her barren hillsides and in her secluded vales and find an avenue through her schools to the broad theater of life, where great affairs are conducted by able men. Other States may exceed her in fertility of soil, but the skillful labor of her free citizens will clothe her plains with plenty. Other States may greatly outnumber her, but her ingenuity will people her shady glens and babbling waterfalls with half-reasoning engines which will accomplish the work of toiling myriads. Other States will far surpass her in geographical domain, but the government of cultivated mind is as boundless as the universe. Wheresoever on the surface of the globe and in the long line of coming ages there is a reasonable being, there is a legitimate subject of mental infiuence. From the humblest village school there may go forth a teacher, who, like Newton, shall bind his temples with the stars of Orion's belt-with Herschel, light up his cell with the beams of before undiscovered planets-with Franklin, grasp the lightning. Columbus, fortified with a few sound geographical principles, was, on the deck of his crazy caravel, more truly the monarch of Castile and Arragon than Ferdinand and Isabella, enthroned beneath the golden vaults of the conquered Alhambra. And Robinson, with the simple training of a rural pastor in England, when he knelt on the shore of Delft-Haven and sent his little flock upon their gospel errantry beyond the world of waters, exercised an influence over the destinies of the civilized world which will last till the end of time. ${ }^{1}$

The school was kept at Barre for only three years. The whole number of students was 165; young women, 90 ; young men, 75 . On the death of its principal it was suspended for two years, and was then removed to Westfield and placed under the care of the Rev. Dr. Emerson Davis as temporary principal. It occupied for one term the old academy building while rooms were being prepared for its accommodation in the town hall, where it remained for two years, until a building of its own was completed and dedicated to its service September 3, 1846. ${ }^{1}$ At this dedication the Rev. Dr. Heman Humphrey made the principal address. He said he would touch upon four topics:
(1) Upon the urgent demand for better-qualified teachers in our common schools.
(2) Upon the reasons why those who are to be teachers should be educated with special reference to the profession.
(3) Upon what is embraced in a good professional teacher's education.
(4) Upon the adaptation of the normal system to give such education. ${ }^{2}$

At the centennial celebration it was stated that the whole number of students registered since the opening at Barre was 3,619 , and the number of graduates since 1855 (before which there was no formal graduation) 1,222.
There are two courses of study in the modern school, a two years' and a four years' course. It will be interesting to compare these courses of study with the modest demands of Edward Everett and Dr. Humphrey fifty years before, and with the first printed course of studies under Principal Rowe in 1847.

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\text { Course of studies at the Westifield Normal School, } 1847 .
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Reading of Scripture daily.
Orthography:-Fowle's Common School Speller, McElligott's Analyzer, and Worcester's Dictionary; also daily exercises in etymology as connected with spelling.

Enunciation and reading.-Tower's Gradual Reader, Russell and Goldsbury's American School Reader, and Leavitt's Fourth Book.

Writing.-Exercises given by the principal.
Physiology.-Cutter's and Jarvis's.
Drauting.-Schmidt's.
Grammar.-Wells's and Greene's; also Greene's Chart.
Alyebra.-Day's and Thompson's algebras; also Tower's Mental Algebra.
Geometry.-Playfair's Euclid.
Philosophy.-Olmstead's.
Phonogriphy.-Andrew's and Boyle's works.
The globes.-Problems.
Theory and practice of leaching.-Page's, Abbott's, and Palmer's treatises.
Vocal music.-Three times a week.
English composition.-Once a week.
Topics of the two years' course.
FIRST TERM.
Arithmetic.-Notation, addition, subtraction, multiplication, and division of integral numbers; common fractional numbers; decimals; compound denominate numbers; metric system taught by apparatus; practical work.

Geometry.-First three books of Wentworth's Geometry, or their equivalent. Pupils do not use text-books. They are required to work out and teach most of the definitions, theorems, and constructions of the course.
Zoology.-General characteristics of animals; chief groups of animals, with methods of determining relative rank; special study of mammals, birds, etc. The school has an excellent "working cabinet" which is in daily use in classes.

Tocal music.-Rhythmics, melodics, dynamics, sight singing, methods.
Composition.-Capitals, punctuation, letter writing, business forms, language lessons.
United States history.-Periods of discoveries; explorations; settlements and

[^64]colonies, with the included wars; revolution; constitution; civil war and evente following; collateral reading.

Drauing.-Study and analysis of solids; clay modeling; plane figures; straight and curved lines; free-hand drawing on blackboard and paper from object, dictation, and memory; elementary designs; color.

## SECOND TERMI

Arithmetic.-Percentage, and its application in commission, taxes, interest, banking, etc.; extraction of roots, with applications; mensuration; examples and problems in all subjects taught, to apply knowledge. Pupils are encouraged to seek information at the post-office, at lawyers' offices, banks, stores, and the teacher's desk, and thus to become familiar with the practical applications of arithmetic in the affairs of everyday life.
Grammar--Outline of subject; parts of expressions taught and named; words studied with reference to classification, properties, and construction; parsing and analysis of sentences.

Geography.-Scientific study of the form, size, and motions of the earth; configuration and relief of the land masses; atmospheric and oceanic morements; climate; plant and animal life, and especially man, including distribution of races, and ail conditions affecting this distribution; religion, govemment, and whatever affects the civilization of the races.
Algebre.-Usual topics preceding quadratics.
Botany.-Study of specimens in class room and in field, for knowledge of structure, habits, etc.; bases of classification; analysis of points with artificial keys.

Drawing.-Work of first term continued; geometrical drawing; working drawings; surface developments (objects constructed); free-hand perspective; botanical analysis; historical ornament; design. Drawing is required for only one year, but many continue the study for an additional term or two. For those who do this the subjects are: Model and cast drawing in outline, shading in crayon and charcoal (stump), applied design, details of human figure from the fiat and casts.

Composition.-Paragraphing; compositions on subjects assigned; criticism in class and by class; spelling.

THIRD TERM.
Physiology.-General outline of subject; anatomy, physiology, and hygiene of digestive organs, including classification of food stufis and methods of preparing food; anatomy, physiology, and hygiene of circulatory and respiratory organs; animal heatits nature, source, distribution, regulation, etc.; clothing-use, qualities desirable in, qualities of common materials, how to dress hygienically, etc. Anatomy is taught from anatomical preparations of organs of the human body; and physiology, as far as possible, by observing organs of other animals in action.

Physics.-Physical properties of matter; definition and enumeration of forces; effects of gravitation, including pressures of liquids and gases, with consequences and applications; electricity, special attention being given to elementary phenomena and to practical applications; machines or means of applying force. In this subject everything is taught experimentally, pupils being required, as far as possible, to perform all important experiments for themsel res.

Geography (six weeks).-Philosophic study of topics taken up in second term.
Phetoric.-Study of figurative language and qualities of style, with practical applications, followed by several weeks of composition writing and criticism; study of the mind and its qualities, including wit, humor, etc.; the sensibilities, especially taste.

English literature.-History of language; study of the life and style of the following authors, and of selections from their works: Wickliffe, Chaucer, Crammer, Spencer, Bacon, Shakespeare, Milton, Johnson, Whittier, Hawthorne, Lowell, Longfellow; reading (in addition) of Idyls of the King, Ivanhoe, Henry VIII, Merchant of Venice, Julius Cæsar, one book of Paradise Lost, Macaulay's Essay on Johnson, Snowbound, Among the Hills, Vision of Sir Launfal, Commemoration Ode, The Old Manse, Evangeline, Courtship of Miles Standish. There are some rariations from term to term.

Mineralogy.-Study of all common minerals, rocks, and ores for qualities and uses.

## FOURTH TERM.

[^65]Chemisiry.-Chemical physics and inorganic chemistry, with laboratory practice by each pupil.

Theory and art of icaching.-Psychology in its relation to principles and methods of teaching; school organization and government; school laws of Masachusetts; severa: weeks of purely professional work in common English branches; civil polity.

Geology. - Study of agencies now at work modirying the structure of the earth; historical geology; special study of local features.

Drauing.-Backboard practice in elementary work for primary school, illustrating reading, language, geography, botany, zoolggy. etc. Color (theory and practice).

## Topics of the four years' course.

Same as those for the two years' course, with the following additions:
Geometry.-Plane geometry completed. The method is the same as for the tiro years course.

Algebra.-Pupils hare constant drill in the application of the principles, and are taught how to teach the following topics to classes in the upper grades of school: Involution, evolution, radicals and radical equations, imaginary quantities, quadratics, simple indeterminate equations, inequalities, ratio, proportion, progressive series, binominal theorem, logarithms and logarithmic tables.

English literaiture. - Pupils will select one of the following courses:
Course I. - Chaucer: Prologue to the Canterbury Tales, The Knight's Tale. Shakespecipe: Hamlet or Macbeth, As You Like It, Lear, Midsummer Night's Dream, twelve sonnets. Milton: L'Allegro, Il Penseroso, Comus, Lycidas, Paradise Lost (Books I and II), Samson Agonistes.

Course II. - Shakespeare: Hamlet, As You Like It, twelve sonnets, Life. Mition: I'Allegro, Il Penseroso, Paradise Lost (Book I), six sonnets, Life. Scoit: Waverley, Mammion. Eliot: Romola. Tennyson: Idyls of the King, songs in The Princese. Thackeray: Henry Esmond.

Course III (Nineteenth Century).-Scoti: Heart of Midlothian. Thackeray: Henry Esmond. Wordsuorth: Intimations of Immortality. Temmson: Idyls of the King. Eliot: Romola. Byron: Prisoner of Chillon. Buluer: Last Days of Pompeii. Corlyle: Essay on Burns. Mrs. Broming: sonnets, short poens. Froude: extracts from Fistory of England. Macuilay: selected essays.

Draning.-Models in outline; models in crayon or charcoal (stump) ; casts in charcoal; botanical analysis and applied design; foliage from nature; historical omament; color; perspective (parallel and angular); machine drawing; building construction.

Plysies.-Sound, heat, light, electricity, and magnetism, with practical applications.
Chemisim.-Qualitative analysis of liquids and solids; chemical theories; preparation of chemicals and apparatus.

Botany.-Structure, composition, growth, functions, and classification of plants; preparation of specimens, etc.

Iatin.-Elementary work; translation of Cæsar, Cicero, and Virgil; sight translation; colloquia; scanning and prosody; study of customs, men, times, and style; writing Latin (the more important rules of construction being developed inductively); methods. Pupils are required to teach in the elementary work.

Fench.-First year: Suuyeur's Petites Causeries and Contes Merveilleux, with conversation and dictation exercises; Lambert and Sardou's Manual; Smith's French Principia; Roulier's First Book of French Composition.

Second year: Bernard's L'art d'interesser en Classe; Rougemont's La France; Sand's Petite Fadette; Michelet's Jeame d'Arc; Souvestre's Confessions d'un Ouvrier; Tableux de la Révolution Française; Roulier's First Book of French Composition; Lambert and Sardou's Manual; Chardenal's French Exercises; Bluet's Class Book of French Composition.

German.-First year: Whitney's German by Practice; Worman's Elementary German Grammar; Schiller's Wilhelm Tell.

Second year: Conversations based on Andersen's Bilderbuch ohne Bilder; Otto's German Grammar; Goethe's Hermann und Dorothea; Goethe's Ausgewählte Prosa (Hart's edition).

General History.-Ancient Greece and Rome, with reference to modern institutions. Institutions and modes of life of the middle ages, with reference to the evolution of our political and other institutions. Modern history, including the development of the nationalities of western Europe and constitutional liberty.

The writer had the pleasure of visiting the Westfield school in 1865 , when under the principalship of John W. Dickinson, now secretary of the board of education of Massachusetts. The impression made at that visit will never be obliterated. Though fresh from the study of other normal schools of high reputation-New Jer-
sey, Albany, Oswego, and others-he thought, and still thinks, that the Westfield school was sui generis. One spirit seemed to pervade every room, every class, every student, every teacher-the spirit of John TV. Dickinson, the genius loci. An immense and complicated machine animated by one spirit, every part working harmoniously with every other part for the accomplishment of one propose. In every department of study you found strictness of definition, precision of statement, rigidity of reasoning, variety of illustration, abundance of practical application. Every question, every answer, every recitation, every exercise breathed pedagogy of the severest type. One might, had be been inclined to find fault, have asked for a little more liberty, a little more self-assertiveness on the part of the students, a litthe more impulsiveness, a little freer play of individual thought, but the keenest critic must have acknowledged that the school was an organization "nobly planed" and skillfully directed by an expert whose convictions were like the laws of the Medes and Persians and who had the full courage of his convictions.

In 1872 the legislature appropriated $\$ 72,000$ for a boarding hall ample enough for the accommodation of all the students, and lately an appropriation of $\$ 150,000$ was made to erect a new school building on new grounds.

## Miodel School at Westrimld.

The board of education contemplated the addition of a model school, or school of practice, to each of the normal schools under their jurisdiction. It was expected that the town school would furnish this necessary supplement, and such a school was maintained in connection with the normal school at Westfeld from 1844 till 1855. But "the relations of this school to the town and to the normal school were never entirely satisfactory, and they were dissolved in 1855, leaving the normal school to obtain its experience by practice on its own members. After this change the Westfield school turned its exclusive attention to the study of the philosophy of teaching, to gaining a technical knowledge of the branches of learning taught in the schools, to preparing such courses of study as are the right occasions for the acquisition of useful knowledge and right mental development, and to training the pupils to teach by requiring them to recite all review lessons in the form of teaching exercises. This method of work produced good practical results, and yet it did not furnish an opportunity for an experience in teaching and controlling a school of real children. To supply the want as far as possible, a school of observation was organized in 1866, and so related to the normal school that its principal could, by permission from the town school committee, nominate the teachers, suggest a course of studies and exercises, and the method of teaching that should be practiced. The normal pupils were granted the privilege of observing the operations of this school and of teaching some of its classes." ${ }^{1}$

Principals of the Westfield school.
Samuel P. Newman ..... 1839-1842
Emerson Davis ..... 1844-1846
David S. Rowe ..... 1846-1854
William H. Wells ..... 1851-1856
John W. Dickinson ..... 1856-1877
Joseph G. Scott ..... 1877-1887
James G. Greenough ..... 1887

## Bridgewater Norbial School.

It has already been stated that the State board of education decided, in April, 1838, to open three normal schools, each to be continued three years as an experiment. Urged by the eloquence and zeal of the Rev. Charles Brooks, the people of Plymouth

County were the first to apply to the board to have one of these three schools located within their borders. The board resolved formally to grant the request "as soon as suitable buildings, fixtures, and furniture, and the means of carrying on the school, exclusive of the compensation of teachers, should be placed at the disposal of the board." At a county convention which met at Hanover in September, 1838, a resolution was passed to raise $\$ 10,000$ for this purpose. It was found easier to pass the resolution than to raise the money. In fact, it never was raised, although six towns were desirous of the honor of having the normal school within their limits. Finally the board was asked to name the terms on which they would locate the school at Bridgewater.

The board roted "that the school be established at Bridgewater for the term of three years, on condition that the people of the town put the townhouse in such a state of repair as may be necessary for the accommodation of the school, and that they place at the disposal of the visitors of the school the sum of $\$ 500$, to be expended in procuring a library and apparatus; and that they give reasonable assurance that the scholars shall be accommodated with board within a suitable distance at an expense not exceeding $\$ 2$ a week."

The conditions were accepted, and the school was opened in the old town hall in September, 1840 , with a class of 21 young women and 7 young men, under the charge of Capt. Nicholas Tillinghast. The hall was a frame building, 40 by 50 feet. For the accommodation of the school the main room was divided lengthwise by a board partition, so constructed that the lower half could be raised so as to throw the two rooms into one for general exercises. The seating corresponded to the building-a pine board attached to the desk behind.

At the end of the three years for which the town hall was engaged, it became necessary to obtain a permanent and more capacious building. A memorial was presented to the legislature of 1845 , signed by Charles Sumner and other prominent citizens of Massachusetts, asking for an appropriation of $\$ 5,000$ for normal school buildings, on condition that a like sum should be contributed by private individuals for the same purpose. The people of Plymouth promised to give the required contribution, and were very anxious to have the school removed to that town, but the board of education decided the question in favor of Bridgewater. Plans and specifications were prepared and proposals called for, but no contract could be made because the board had not sufficient funds at their disposal. After considerable delay, Horace Mann came forward and gave his personal obligation to make up the deficiency, which turned out to be about $\$ 700$, which he paid; but the money was afterwards returned to him from the State treasury. The house was only a plain wooden structure, 64 by 42 feet, and two stories high; but it was considered one of the most attractive schoolhouses in the State. At the dedication in August, 1846, Mr. Mann made one of his characteristic speeches. Referring to the opposition which the normal schools had met with, he said:
I honor the great body of common school teachers in Massachusetts for the magnanimity they have displayed on this subject. I know that many of them have said, almost in so many words, and what is nobler, they have acted as they have said: "We are conscious of our deficiencies; we are grateful for any means that will supply them; nay, we are ready to retire from our places when better teachers can be found to fill them. We derive, it is true, our daily bread from school keeping, but it is better that our bodies should be pinched with hunger than that the souls of children should starve for want of mental nourishment, and we should be unworthy of the husks which the swine do eat if we could prefer our own emolument or comfort to the intellectual or mental culture of the rising generation. We give you our hand and our heart for the glorious work of improving the schools of Massachusetts, while we scorn the baseness of the men who would appeal to our love of gain, or of ease, to seduce us from the path of duty." This statement does no more than justice to the noble conduct of the great body of teachers in Massachusetts. To be sure there always have been some who have opposed the normal schools, and who will probably continue to oppose them as long as they live, lest they, themselves, should
be superseded by a class of competent teachers. These are they who would arrest education where it is, because they can not keep up with it or overtake it in its onward progress. But the wheels of education are rolling on, and they who will not go with them must go under them.

A boarding hall for the students was built in 1869 in accordance with a resolution of the legislature which authorized the commissioners of the Massachusetts school fund to lend the board of education $\$ 15,000$ for that purpose, and requiring the board to collect from the occupants of the boarding hall "a sum sufficient to cover the interest at 6 per cent per annum on the cost of said buildings and furniture, and a reasonable insurance of the same." The next legislature increased the loan to $\$ 25,000$. The interest was punctually paid, but in 1871 the legislature released the board from the obligation to pay interest and insurance, and so the loan became a gift.

The hall was hardly built when it needied to be enlarged, and the school building also required enlargement. Both enlargements were carried through, and in 1889 a new building was imperatively required. It was erected at the cost of $\$ 150,000$, and is one of the handsomest and best equipped of all the normal school buildings in the country. In addition to the usual assembly room, study rooms, recitation rooms, and libraries, it has 7 laboratories-2 physical laboratories, 2 chemical, 1 mineralogical and geological, 1 biological, and 1 industrial. The last is furnished with carpenters' benches and sets of tools, a circular saw and jig-saw attachment, and is especially useful to students who wish to make sets of apparatus for their own schools without great expense. In the early days it was not easy for graduates of this school to find places as teachers; now the demand for graduates exceeds the supply.
The school is organized, like the other State normal schools of Massachusetts, under the direction of the board of education, with three courses of study-a two years' course, an intermediate course, and a four years' course. The two years' course includes arithmetic, bookkeeping, elementary geometry, algebra, elementary physics, chemistry, mineralogy, botany, zoology, geology, physiology, geography, astronomy, reading, orthography, etymology, grammar, rhetoric, literature, composition, penmanship, drawing, vocal music, gymnastics, military drill, history and civil polity of Massachusetts and of the United States, and school laws of Massachusetts, psychology, science and art of education, school organization, school government, and history of education. It goes without saying that on some of these slices of bread the butter must be spread exceedingly thin.

Thefour years' course has, in addition to the above, algebra, geometry, trigonometry, surveying, physics, chemistry, botany, zoology, general history, English literature, drawing, Latin and French; Greek and German at the option of the principal and visitors.

The intermediate course adds to the studies of the two years' course such advanced studies as the regular order of exercises may permit.

The catalogue of 1890 gives the names of 130 students in the two years' course, 64 in the four years' course, and 5 in the intermediate.
The early plans of the board of education looked to the maintenance of a model school, or school of practice, as an essential element of each of the State normal schools. The proper adjustment of the theoretical to the practical part of the work has been one of the greatest difficulties met with in most of the normal schools of the country, city training schools, perhaps, excepted. The Bridgewater school has had the benefit of much and varied experience on this point. For the first six years the model school - was kept in a small schoolhouse, erected for the purpose by the center school district of the town, and was taught sometimes by a salaried principal and sometimes by the students of the normal school under the stupervision of the principal of that school. We are told that "practice teaching in the model school was not very attractive to the normal pupils. Those who had taught before coming to the normal school felt
that they were not specially benefited by this practice; and those who had never taught before did not become sufficiently interested to appreciate work" [how could they in the two weeks allotted to them?] "and some parents preicrred that their children should not be experimented with." The school was closed in 1850; but the new building (1881) has model school rooms for 120 scholars. ${ }^{1}$

Principals.
Nicholas Tillinghast ..... 1840-1853
Ma:shall Conant ..... 1853-1860
Albert G. Boyden ..... 1860
Silem.

In 1852 the board of education, at the same meeting at which the proposals from Framingham were accepted, resolved to recommend to the legislature the establishment of a normal school in Essex County. The legislature approved the recommendation and made an appropriation to carry it into effect. Proposals were received from Salem, North Andover, Groveland, and Chelsea, and after a careful examination of the claims of the several localities the board decided on Salem, and experience has proved the wisdom of the selection. A suitable site was furnished by the city; a brick building was erected two stories high and 67 feet square, and was dedicated with appropriate exercises in September, 1854, Governor Washburn presiding. The school opened with 65 pupils (the largest opening number up to this date), under the superintendence of Mr. Richard Edwards, a graduate of the Bridgewater Normal School, afterwards principal of the normal school at St. Louis, and later State superintendent of public instruction in Illinois. He was succeeded in 1857 by Prof. Alpheus Crosby, who resigned in 1865, and was followed by Daniel B. Hagar, the present principal. ${ }^{2}$

As a necessary consequence of the labors of three men so distinguished as educators, the school overflowed its banks, and the legislature was called on for an appropriation of $\$ 25,000$ to enlarge the building, which was promptly and cheerfully granted.

The building as enlarged contains a reception room, 7 recitation rooms, and 3 dressing rooms; an assembly room seated for 210 pupils, rooms for the principal and the assistant teachers, 3 laboratories and lecture rooms, a cabinet, a drawing-room, a library, and a room for text-books. The tower contains a valuable telescope, which was paid for by the voluntary contributions of several graduating classes. The school is intended for the preparation and training of young women exclusively. The course of instruction is the same as in other normal schools of the State.

According to the Report of the Massachusetts State Board of Education for 1889, 88 per cent of the graduates of this school have taught in the State: " 50 in normal schools, 2 as principals; 144 in high schools, 11 as principals; 46 in academies and seminaries; 9 in colleges, 2 as professors; 7 in universities; 10 in deaf-mute schools; 8 in the Clarke Institution at Northampton; 5 in kindergarten schools; 4 in training schools; 2 in State industrial schools; 1 in the school for the blind."

## Worcester.

The normal school at Worcester is thirty-five years younger than the pioneer school at Lexington. The experience of these years was in great part utilized by the new school. There was no need of experimenting. There was no fear of lacking

[^66]support. There was no dread of public opinion. ${ }^{1}$ The way had been prepared. The paths had been made straight and the rough places smooth. But the school was not content to follow in the wake of its predecessors. From the first it manifested an individuality of its own; and this has been strengthened by the double good fortune of permanence of location and permanence of its working staff. It has had but one principal in its seventeen years of life, and the changes in the subordinate members of the faculty have not been so numerous as to mar the continuity of the work. From the first no instructors were employed but persons having distinguished professional qualifications, incluaing mature age, wide attaimments, and successful experience.

The whole number of students admitted up to Jannary, 1890 (the late of the last available report), was 855 , of whom 400 completed the course and graduated with credit. Ninety-five per cent of these graduates engaged in teaching aimost as soon as they were free to do so.
The Wrorcestex school is a school of methods, par excellence; not of pedagogic methods merely, but business methods as well. The following selection of blanks will illustrate this in part. (The numbering is the editor's.)

When a student has signed the declaration to teach in the public schools of Massachusetta, as is required in all the normal schools of the State, the following blank is sent to the parent or guardian for signature before the student is formally admitted:

Certificate of parent or guardian.
I hereby authorize and approve the declaration signed by Miss __ as a condition of admission to the State Normal School at Worcester, Mass.

Dated at 18...
[Signature.]
Parent. Guardian.
[Note.-All blanks are of the feminine gender, so to speak; although young men are legally admissible.] •

In order to assist students from a distance in procuring suitable boarding accommodations, the following circular is sent to persons likely to have rooms to spare and to be willing to receive normal students:

State Normal School at Worcester.
Please fill in the particulars as indicated below and return this paper to us. We have only a limited number of boarding pupils, and therefore can not always seat even to satisfactory places.

Name, $\qquad$
Address, -
Accommodations,
Number of rooms,
Number to occupy each,
Size of rooms,
Number of windows in each,
How warmed, $\qquad$
Is light furnished?
Is washing done?
Do you take any other boarders?
Terms,
References,
Remarks,

[^67]The student, having been duly enrolled and established in a comfortable temporary (or permanent) home, is required to fill up the following blank every week:

S'udent's weekly report.
Report of -_ For the week ending -_ - 18-.
[Approximate estimates only are required.]

| Time spent. | Monday. |  | Tuesday. |  | Wednesday. |  | Thursday. |  | Friday. |  | Saturday. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H. | M. | H. | M. | H. | M. | H. | M. | H. | M. | H. | M. |
| At school .................. |  |  |  |  |  |  |  |  |  |  |  |  |
| In study . . . . . . . . . . . . . . . |  |  |  |  |  |  |  |  |  |  |  |  |
| At work................... |  |  |  |  |  |  |  |  |  |  |  |  |
| In recreation............... |  |  |  |  |  |  |  |  |  |  |  |  |
| At table.................... |  |  |  |  |  |  |  |  |  |  |  |  |
| In slcep..................... |  |  |  |  |  |  |  |  |  |  |  |  |
| Accounted for $\qquad$ <br> Not accounted for $\qquad$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total. | 21 | 00 | 24 | 00 | 24 | 00 | 24 | 00 | 24 | 00 | 24 | 00 |

Questions for students.

1. What has been your latest bedtime during the week?
2. How many meals have you missed?
3. How many evening hours have you spent away from your room?
4. How many hours of outdoor exercise have you had?

Remarks:
[Signature] $\qquad$
Street and number.
(Indorsement:) I have read this report, and believe it to be substantially correct. [Signature]

Leare of absence being sometimes necessary, the following card is given to the student when the leave is granted:

This is to certify that Miss $\qquad$ a member of the State Normal School at Worcester, Mass., has permission to be absent $\qquad$ , until—— Principal. -——, 18-.
Before the expiration of the leave the student receives a postal card as follows:
State Normal School, Worcester, Mass., ———, 18-.
Your leare of absence expires on ————, 18-. Please write me whether you expect to come back to school at that time, or whether you desire to prolong your absence. If the latter, please give your reasons and inclose your certificate to me in order that the extension of time may be noted on it.

Very sincerely, yours,
Principal.
If the extension is granted, a card to that effect is sent to the student.

Occasionally a student is obliged for good reason to leave the school before the expiration of the term. In this case the student receives the following:

Certificate of dismission.
This certifies that Miss - is honorably dismissed from the State Normal School at Worcester, Mass.

- Principul.
———, 18-.
As supplementary to the systematic study of psychology, the pupils of this school have been engaged for several years in the study of children, objectively, upon a plan which may be outlined as follows:

The principal requests the students to observe the conduct of children under all circumstances-at home, at school, in the street, at work, at play, in conversation with one another and with adults-and record what they see and hear as soon as circumstances will permit. When the nature of the work is explained to the school great emphasis is placed upon the necessity of having the records genuine beyond all possibility of question; of having them consist of a simple, concise statement of what the child does or says without comment by the writer; of making both the observation and the record without the knowledge of the child; and of noting the usual, rather than the unusual, conduct of the individuals observed.

For convenience in classification blanks of five colors are provided for the records; white paper is used for such observations as students make themselves, red for wellattested ones reported by others, yellow for reminiscences of their own childhood, green for mention of whatever they read on the subject, and chocolate for observations that extend continuously orer a specified period of time. Each blank has the following heading:

STATE NORAAL SCROOL AT WORCESTER.
Sinuly of children.

1. Date, -.
2. Observer's name, ——; age, ——; post-office address, ——.
3. Name (or initials) of person (child) observed, __; sex, __; nationality, -; age (years and months),
4. Length of time between making the observation and recording it, -. Pecord,

If the record is from hearsay the names of both recorder and observer must be given.

Pupils write their records at their convenience (immediately after making the observation is the best time), and put the papers in a designated place. A teacher reads them from time to time and classifies them under the heads of knowledge, reflection, imagination, conscience, feeling, play, etc. ${ }^{1}$

For "exceptional" cases another blank is used with the same items as No. 7, but with the following additional particulars:
(8)

1. Form (body, limbs, size, apparent strength, symmetry, etc.), -_.
2. Head and face (size; shape, symmetry, features, complexion, etc.),
3. Movement and posiures (head and neck, forehead, eyes, mouth, arms and hands, spine, legs and feet)
4. Healih (nutrition, color, activity in play, sleep, etc.) --
5. Intelligence (attention, memory, imitation, speech, etc.)
6. Disposition (moral, emotional) ——.
7. Additional (parents, brothers and sisters, accidents, incidents, etc.) - .

The public schools of Worcester are the practice or training schools of the normal echool. The harmonious relations existing between the two authorities-and not
often found elsewhere except in city training schools--have led to the establishment of a system of apprenticeships "under the joint supervision of the city superintendent of schools and the faculty of the normal school." Each student after a year and a half spent in the normal school is allowed-not compelled-to go to one of the public schools of the city to observe, to teach, and, occasionally, to take part in the government. The apprenticeship lasting for six months, every student has an opportunity to serve in at least three grades of schools. Each apprentice keeps a diary of the occupation and experience of every day's service, and this record is inspected by the faculty of the normal school. On the completion of the apprenticeship the teacher of the city school in which the service was rendered fills up the following blank:
Report of the apprentice work of -___.

```
    Grade -_ street school.
    Time, from - to -
    Scale 10 -use no fractions.
    Number of absences, -_.
    Number of tardinesses, -_.
    Power of control, -
    Power of interesting,
```

$\qquad$

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    Skill in questioning, -_.
    Skill in explaining and illustrating,
    Enthusiasm, -
    Bearing, -.
    What traits of excellence (if any) have been shown in teaching or management?
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    What weakness or deficiency?
    Remarks.
        [Signature.]
    When the apprentice graduates the following certificate is given in addition to the usual diploma:

Cerlificale of apprenticcship.
MASSACHUSETTS STATE NORMAL SCHOOL AT WORCESTER.
—_ _ , of ——_ a regular graduate of this school (class of —_, 18-), besides doing the work of the two-years' course, has served for half a year as apprentice (or assistant) in the public schools of the city of Worcester.

> Principal.

Worcester, Mass., --_ 18 -
The watchful eye of the school is on the students even after they have left their alma mater. If any should forget this, they will be reminded by the following circular:

## State Normal School.

Worcester, Mass., ————, 18-.
$\mathrm{T}_{0}$ ___ Class.
Please answer the following questions and return to me.
The report to be made up from these answers will be sertously impaired in vaiue if you fail to respond promptly.

Very truly, yours,
———, Principal.

1. (a) Where, (b) how many times, (c) how many weeks, and ( $d$ ) in how many different schools have you taught since you graduated? -.
2. (a) How large is your present school, and (b) is it exceptionally difficult to manage?
3. (a) What wages per week do you receive, and (b) of how many weeks does your school year consist?
4. What evidence have you that your teaching has been successful?

Note.-Reelection, promotion, and increase of salary are the best (though not the only) evidences of success.
5. To what, chiefly, do you attribute your success?
6. Is your health, so far as you are arrare, unimpaired?
7. What are your expectations with reference to continuing teaching?
8. Give the name and post-office address of a school officer to whom you are or have been directly responsible.
9. Give (a) your present and (b) your permanent post-ofice address.

As the graduate derives great advantages from the instruction and disciphine of the normal school, it is thought but right in retum that the giaduate teacher should contribute something to the experience and further developnent of the normal school. Accordingly a letter making inquiry into the practical effect of normal training on young teachers, so far as they are able to realize it, is sent to graduates of trio years standing.

> STATE NORMAL SCHOOL, WORCESTER, MASS.

To -_ Class.
It is thought that the experience of our earlier graduates must enable them to form valuable opinions as to the comparative usefulness in practical teaching of the rarious points in study and training to which they gave special attention here. Such opinions frankly expressed would furnish important hints for the future management of the school.

The following questions are therefore sent to those who have taught two years or more since graduation. Full and frank answers are earnestly desired, and will be of real service to the school.

1. Have you had much occasion to use the knowledge of hygiene that you acquired here; and if so, in what ways chienf?
2. (a) Do von use and value what youl.
(b) In "Methods?"
3. State pretty fully how you regard your "apprenticeship."
4. (a) How much occasion have you had for your acquirements in music?
(b) In drawing?
5. (a) In what respects do you feel best satisfied with your course here?
(b) In what respects least satisfied?
6. (a) What one or two acquirements or habits gained chiefly here do you find most useful in schoolteaching?
(b) What one or two least useful?
7. What exercise or study, considering the time it required, do you regard as the most valuable to you?
8. What influence, if any, do you attribute to the school in the formation or development of your character?
STATE NORMAL GCHOOL AT WORCESTER.
Weekly programme, spring term, 1891.
[Explanations: The Roman figure before a class shows the number of the class. The fourth class is divided into two sections, known as a and b divisions. G means graduates' class.]
FIRST STUDY I'ERIOD.

|  | Tuesday. | Wednesday. | Thursday. | Friclay. | Saturday: |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9.30 to 10.30. | I. Arithmetic. <br> II. Music. <br> III. Grammar. <br> (a) Reading. <br> (b) Geology. | I. Music. <br> II. History of̂ education. <br> III. Arithmetic. <br> (a) Grammar. <br> (b) Geography. <br> Apprentice. | I. Hygiene. <br> II. Psychology. <br> III. English. <br> (a) Gcology. <br> (b) \{Grammar. | I. Geography. <br> II. P'hysiology. <br> III. Drawing. <br> (a) English. <br> (b) Reading. | I. Civil government. <br> II. Arithmetic. <br> Natural seience. <br> III. Principles. <br> (a) Geometry. <br> (b) English. |
| 10.05 to 10.35. | I. Civil government. <br> II. Principles. <br> III. Drawing. <br> (a) Geology. <br> (b) Botany. | I. Teaching. <br> II. History. <br> III. Grammar. <br> (a) Geology. <br> (b) Geometry. <br> Apprentice. | I. History of education. <br> II. English. <br> III. English. <br> (a) Gcometry. <br> (b) Geology. | I. Psychology. <br> II. Drawing. <br> III. Arithmetic. <br> (a) Geography. <br> (b) Grammar. | I. Psychology. <br> II. Arithmetic. <br> \Nataral science. <br> III. Reading. <br> (a) Drawing. <br> (b) Geography. |
| 10.40 to 11.10 . | I. Psyehology. <br> II. $\left\{\begin{array}{l}\text { Arithmetic. } \\ \text { Natural science. }\end{array}\right.$ <br> III. Principles. <br> (a) Geography. <br> (b) $\left\{\begin{array}{l}\text { Botany. } \\ \text { Gramimar. }\end{array}\right.$ | I. Psychology. <br> 1I. Music. <br> III. Principles. <br> (a) Geography. <br> (b) Geology. <br> Apprentice. | I. Geography. <br> II. Rhetoric. <br> III. Principles. <br> (a) Geometry. <br> (b) English. | I. Grammar. <br> II. Drawing. <br> III. Principles. <br> (a) Geology. <br> (b) Geography. | 1. Teaching. <br> II. I'sy'chology. <br> III. Drawing. <br> (a) Geography. <br> (b) Geology. |

[^68]

## Normal Art School of Massicieusetts.

Drawing has for many centuries been recognized as one of the branches of a finished education in two opposite directions: Technological, as a necessary auxiliary in architecture, engineering, and kindred pursuits; and fashionable, from works of tapestry down to the copying of prints. The fashionableschool catalogues of the beginining of the century generally wound up with "drawing and the use of the giobes" at so much extra. Even to-day there are thousands of teachers who make a living by asvisting their pupils in making pictures to be framed for parlor adornment on which not one stroke of the pupil's own hand can be recognized.

The introduction of drawing as a necessary elementary study is but of recent date.
In 1749 Benjamin Franklin published his "Proposed hints for an academy," in which we find the following:
Stulies to be selected and adopted.-As to their studies, it would be weil if they could be taught every thing that is riseful and everything that is ornamental. But art is long and their time is short. It is therefore proposed that they learn those things that are likely to be most useful and most ornamental.

Iriting, drauing, and arthmetic.-All should be taught to write a fair hand and swift, as that is useful to all. And with it may be learned something of drawing by imitation of prints, and some of the first principles of perspective.

This is perhaps the first recognition in the United States of drawing as entitied to the same rank as writing and arithmetic, among the "useful" branches of learning.
In 1821 William Bentley Fowle took charge of a Lancasterian or monitorial school in Buston, in which he made drawing a general exercise. Mr. Fowle was ahead of his time, like many other reformers, and after two years' service, his employers discovered that they had no further need of him; but the people had, and a company of private citizens built a schoolhouse and invited him to take charge of it. The school, called the Female Monitorial School, was a notable success.
In 1827 Mr. Fowle published an elementary work on drawing, translated in part from the French of M. Francoeur, with additions and alterations to adapt it to the use of schools in the United States. In his preface he says:
Notwithstanding the great utility of this branch of education, it is a lanentable fact that it is seldom or never tanght in the public schools, although a very large proportion of our children have no other education than these schools afford. Even in the private schools where drawing is taught, it is too generally the case that no regard is paid to the geometrical principles on which the art depends. Not one in fifty of those who have gone through a course of instruction can do more than copy such drawings as are set before them. They never originate any design, and rarely attempt to draw from nature.
If Master Fowle had lived forty years longer, he might have made the same renarks with equal truth and equal pertinency.

Among the pioneers of the movement which culminated in the genem introduction of drawing as a common-school study must be reckoned the Hon. Henry Barnard, editor of the American Journal of Education, and subsequently the first U. S. Commissioner of Education.

In 1838 Dr. Barnard delivered several lectures on drawing as the foundation of all industrial education, and urged that drawing should be taught in the common school pari passu with reading and writing. It was generally believed at that time that the ability to draw was a gift bestowed only on a few, and that, consequently, it would be a waste of time and energy to make it a common schoolstudy-in fact, throwing pearls before swine. Dr. Barnard's views on this subject are brielly presented in the following extract from Professor Stone's Report on the Practice of Music and Drawing in the Common Schools of Prussia, made to the legislature of Ohio in 1838, and printed.

The universal success also and beneficial results with which the arts of drawing and designing, vocal and instrumental music, have been introduced into schools was
another fact peculiarly interesting to me. I akked all the teachers with whom I conversed whether they did not sometimes find children actually incapable of learning to draw and to sing. I have had but one reply, and that was that they found the same diversity of natural talent in regard to these as in regard to reading, writing, and other branches of education; but that they had never scen a child who was capable of learning to read and write who could not be tanglat to sing well and draw neatly; and that, too, without taking any time which would at all interfere with, indeed which would not actually promote, his progress in other studies. ${ }^{1}$
dramivg in prussian schools, 1840.
How slow is the process of observing, appreciating and imitating the best methods of instruction may be seen by comparing the system used in the Realsechule of Berlin in 1840, with the systems, or want of system, in vogue in the United States thirty years later. Again we are indebted to that invaluable thesaurus, the American Journal of Education (August, 1810):

The drawing department of this school [the Royal Realschule of Berlin] is superintended by a teacker who has introduced a new method of instruction particularly adapted to the purpose for which drawing is to be applied in common life and in the arts; a method which is found to enable a much larger proportion of the pupils to make adequate progress than the ordinary one of copying from drawings. In this method the pupil begins by drawing from simple geometrical forms, those selected being obtained from models in wood or plaster, of a square pillar ( $7 \frac{1}{2}$ inches high and $1 \frac{1}{2}$ inches in its square section), a niche, and a low cylinder (the form of a millstone). The square pillar separates in joints, affording a cube and parallelopipeds of different heights. The hemisphere which caps the niche may be removed, leaving the concave surface of its cylindrical part. The exercises of the pupils run thus: First, to place upon a board, of upon his paper or slate, a point vertically above another point, or so that the lines joining the two shall be parallel to the right or left hand edge of the board, paper, or slate; second, to join them; third, to place a point horizontally from the second, and at a distance equal to that between the first and second points; fourth, to place one vertically over the third, and at a distance equal to that below the first, and to join the third and fourth. The third and forrth being then joined, a square is formed. After practice in this, the simple elevation of the cube is dravn; next, a perspective, by the use of a small frame and silk threads, such as is common in teaching the elements of this subject, and by means of which the pupil acquires a knowledge of the practice. * * * This method of teaching has been introduced quite generally in Prussia, and with the best results as to the formation of accuracy of eye and of hand.

## REPORT OF COMTITMEE ON DRAWTNG.

Compare with this the report of the "special committee on drawing," Boston, 1870. A few short extracts will suffice:

When this committee was appointed, the programme of studies in the schools of the first twelve wards of this city included drawing. The Boston programme was well, so far as it went; but it was not followed. In many of our schools no time was given for even the very mechanical exercise the rules prescribed. There was a general feeling among the teachers that drawing was simply an accomplishment for those whose leisure might be amused by its exercise, and that a large majority of the children in their charge would be better off without it; and with this impression joined to the knowledge that there were no examinations or requirements in this

[^69]department for promotion to higher schools, it is not strange that the time, already insufficient, was found too short for drawing. In some schools the routine of taking out the books, allowing the children to play with pencil and paper for half an hour, and then putting away the result, often without examination, was virtuously performed. In a few schools instruction, and good instruction, was given by the master and his assistants. But this was very exceptional. * * * There was nowhere any system from the primary to the high schools. ${ }^{1}$

But though no great progress had been made in the teaching of drawing in the thirty years referred to, the subject was kept before the people, and the way was prepared for action when opportunity should offer.

## REMBRANDT PEALE IN PHILADELPHIA.

In 1840 Rembrandt Peale, the painter, being convinced that drawing could and should be taught in public schools of every grade, offered his services, at a merely nominal salary, to the Philadelphia High School as professor of graphics. His purpose was to verify his theory by actual experiment. The experiment was entirely successful. He then offered to introduce his system into the lower schools if the directors would allow him. This proposal stirred up much opposition. To teach children, children of the poor, to draw was an unheard of and dangerous innovation. Drawing was an accomplishment, not a necessity; a luxury to be enjoyed by those only who were willing and able to pay for it. In the common schools it would be a waste of time. So argued the "conservatives." The "progressists" had a majority of votes, but the minority were so persistent and so virulent in their opposition that the scheme was dropped, and Peale resigned his position in the high school shortly afterwards. "Could Mr. Peale's ideas have been realized," wrote Prof. John S Hart to Hon. John Eaton, United States Commissioner of Education, "in a great mechanical and manufacturing city like Philadelphia, I have no doubt it would have added millions annually to the productiveness of its artisans. Thirty years ago I expressed. the belief, and I am willing still to abide by the record, that such a system as Mr. Peale's, fully and fairly carried out, would have been worth to the city pecuniarily more than the entire cost of her system of public schools."

## WILLIAM MINIFIE 1N BALTISORE.

In 1848 and 1849 there was in the Boys' High School of Baitimore a teacher of drawing, Mr. William Minifie, who taught the subject as a science and not as picture making. Based on geometry, his progressive studies proceeded systematically, and the progress made by his pupils was most striking. After teaching in the high school for one or two years this teacher was dismissed, because, forsooth, some member of the committee, who was utterly ignorant of any form of art, had some favorite, equally guiltless of any ability to teach industrial drawing, whom he wished employed; rational drawing was relegated to the limbo of forgotten things, picture making was encouraged, and the school children of Baltimore for the next twenty years were deprived of the very opportunity England had taken such pains to furnish, and which, twenty years later, Massachussetts made such commendable efforts to procure. ${ }^{2}$

Post hoc et propter hoc. In his elaborate report on the school drawing exhibits in the Centennial Exhibition at Philadelphia, Mr. Charles B. Stetson writes:

The specimens of drawings done by the boys in Baltimore City College [formerly high school] which are here exhibited consist almost wholly of reproductions from flat copies in light and shade. There are landscapes, trees, rocks, dilapidated houses, fences, bridges, carts, etc. The boys who are compelled to do such work are truly to be pitied. There is nothing to indicate the course of instruction, if really there is anything of the sort.

[^70]The following history of the Normal Art School is taken from the fifty-third report of the Massachusetts board of education, with some abridgment and many omissions:
A petition was presented to the legislature of 1869, asking that the board of education be requested to report a definite plan for providing instruction in drawing in all towns of the Commonwealth having more than 5,000 inhabitants. * * * In response, the legislature passed a resolve, which was approved June 12, 1869, instructing the board of education to consider the expediency of making provision for giving free instruction to men, women, and children in mechanical drawing in all towns having 5,000 inhabitants or more and to report a definite plan therefor to the next legislature.
The board, through a committee of three of its members, recommended the passage of a law "which shall require elementary and free-hand drawing to be taught in all the public schools of every grade, and which shall further require all cities and towns of _inhabitants to make provisions for giving annually free instruction in industrial or mechanical drawing to men, women, and children in such manner as the board shall prescribe." * * *
By an act of the legislature approved May 16, 1870, drawing was included among the branches of learning required to be taught in the public schools. Provision was likewise made for giving free instruction in industrial or mechanical drawing to persons over 15 years of age, all to be under the direction of the school committee. The above act was to take efiect upon its passage. To ingrait upon the educational system of the State this branch of instruction created a demand for special training in the art of drawing; but from what source were the instructors to come? Clearly an institution for training the teachers must be established, or no satisfactory results would follow.
In the autumn of 1871 the board employed Mr. Walter Smith, recently from the Art School, Leeds, England, to be State director of art education. * * * Convinced of the necessity of providing some means for the training of teachers in the new branch of study, Mr. Smith advised the establishment of a school for that purpose. The board, acting upon Mr. Smith's recommendations, at once appealed to the legislature for the means to establish a normal art school. The first appeal was not successful. The means were finally provided, and on November 11, 1873, the school was located in rooms in the third story of a private dwelling then in possession of the State, in Pemberton square, Boston. * * *

These were wholly inadequate to the demands, being originally prepared for 36 students, while the school at first numbered 107 and in a short time contained twice that number. The legislature of 1875 authorized the sergeant-at-arms to assign to the school other rooms in another dwelling in Pemberton square. From this location in the fall of 1875 it was removed to rooms, 10 in number, in School street block, opposite the city hall. Here it remained for a term of five years, when it was again removed to better-fitted and more ample rooms in the Deacon House on Washington street. Its last remove was in 1878, to a building constructed for its special use on the comer of Dartmouth and Exeter streets. The Normal Art School building was constructed at an expense of about $\$ 85,000$. It is favorably located. Though unadorned, it is artistic in design and finish. It is abundantly provided with the necessary appliances for art teaching, and is in every respect a model of convenience for the purposes it was built to serve. * * *

The number of students kept pace with the constantly increasing means of accommodation, and was always in advance of these until the art building was erected. The present number is 220 . The number that have received certificates and diplomas is 498; the number that have graduated from the full course is $71 . * * *$

RESULTS OF THE ESTABLISHMENT OF THE SCHOOL.
The law of 1870, which required drawing to be taught in schools of all grades throughout the Commonwealth, went into operation in the absence of every direct means for its enforcement. There were but few teachers of drawing in the State; there was no published scheme for instruction in drawing which was adapted to the several grades of schools; there was no popular public sentiment among the people which demanded its introduction into the list of branches required to be taught.

The Normal Art School has, during the seventeen years of its existence, prepared teachers of practical skill in the art of drawing, for the evening schools now kept in all the cities and large towns of the State. It provided a large number of art directors and teachers of drawing for public and private schools, for the normal and technical schools, and for the collegiate institutions, and they are filling important positions in all parts of the country. * * *

Perhaps the most important result produced by the school is seen in its influence on the general culture of the pupils in all schools where drawing is taught. It trains them to observe with accuracy and intelligence. Its exercises cultivate the imagination and the judgment; they increase the power of invention, and produce an evident effect in purifying the heart and refining the taste.

When the Normal Art School began its work the highest idea of drawing in most schools which gave the subject any attention was picture making, with little else besides copying from books. At present the scheme for teaching this branch begins with molding the elementary forms in clay and extends through all grades of exercises to the highest forms of the art. The present scheme is the elaborated product of much careful study and varied experience by numerous patient observers and workers; and, while it incorporates much that is of foreign birth, it aroids the mistakes of other countries and furnishes a system of instruction well adapted to our own. * * *

The indirect result is what was anticipated by some of its early advocates and what was ineritable: it is creating a taste among the people for art in desigus foreign to our hitherto unfamiliar eyes, and at the same time is training designers and artists for manufacturing establishments which brita few years since were wholly dependent upon aliens, or upon the product of their taste and skill brought from other markets.

## PROF. WALTER SMITH.

The spread of elementary drawing throughout the public schools, not only of Massachusetts, but of the United States, is largely due to the experience, skill, and untiring energy of the first principal of the Boston Normal Art School and State art director, Prof. Walter Smith. The principles he advocated and the methods he pursued, exhibited in his Boston work and diffused and popularized by his lectures at teachers' institutes at home and addresses at educational conferences throughout the country, were as good seed sown on good ground and brought forth fruit, "some thirty, some sixty, and some an hundred fold." Disciples followed in crowds and in their turn became apostles of the new art education. A man of such energy, of an aggressive spirit, of great self-confidence, of such firm belief in his own doctrines, his own plans, his own methods, could not fail to stir up opposition. The assailants in normal-school contests have two methods of attack. They may attack the system itself or they may attack the head of the system. When the attack is made on both sides at once, it needs no prophet to foretell the result; the man is" sure to fall, as in Walter Smith's case-a very small, almost insignificant, minority in the legislature, aided by the governor (Benjamin F. Butler), making an attack on the system, while a powerful combination outside the legislature made war upon the man. The board of visitors formed a sort of aulic council around the art school, and their orders, though given with the best intentions, proved very embarrassing to the coumander in chief.

No doubt mistakes were made on both sides; but when two undertake to ride a horse one must ride behind, and the obstinate Englishman refused the back seat. Taking all the circumstances into account, an unconciliating chairman, an unconciliatory principal, a number of very sensitive teachers, a publishing house acting on strictly business principles, it is rather to be wondered at that the fiat had not gone forth sooner, "Delenda est Carthago." And so Walter Smith returned to his native land, not without due recognition of his splendid talents on both sides of the Atlantic.

In their first report after the retirement of Professor Smith the committee on drawing say:

That we are able to carry on drawing so successfully as we do under existing circumstances is due to the past, which gave us a sound system of instruction, trained many teachers in the practice of free-hand and model drawing, taught the principles of design, substituted true for false models as objects of study, and both perfected and equipped the free evening drawing schools, which deservedly rank among the most useful institutions of the city.

Referring to the appointment of Mr. Walter Smith in 1883 as head master of the art department of the Technical College at Bradford, England, the Right Hon. A.J.

Mundella in a public address "congratulated the Technical College on having Mr. Walter'Smith as an art master." "There were few art masters," he said, "who had the experience and who possess so completely the successful art of teaching as Mir. Walter Smith and who knew how to apply art to industry." ${ }^{1}$

COURRSE OF STUDIES.
The school offers two courses of study-a four-years' course, which gives training in the scientific and artistic branches and in their application to industries, and a twoyears' course, which trains for the work of teaching and supervising drawing in the public schools. There are four classes-A, B, C, and D. On the completion of the work of Classes A and © students receive a diploma certifying that they are qualified to teach mechanical and architectural drewing. On the completion of the work of Classes $\mathrm{A}, \mathrm{B}$, and D they reccive a diploma certifying to their qualifications to teach industrial art.

Applicants for admission to Class A must pass examinations in the following subjects:

1. Model drawing (outline).
2. Model drawing (shaded).
3. Historic onnament (outline from cast).

Upon entering Class A choice is given to each pupil of beginning (a) a course of study that will fit him especially for teaching and supervising drawing in the public schools, or (b) one that will prepare him to teach the broad subject of industrial art. Those desiring to enter on the former conse ( $a$ ) are required to pass an entrance examination (in addition to the subjects mentioned above) on the following subjects: (1) English grammar and composition; (2) history of the United States; (3) geography; ( 4 ) plane geometry; (5) elementary botany; (6) elementary physiology. ${ }^{\text {a }}$

## CONNECTICUT.

## Early Legislation.

The law establishing the first State normal school of Connecticut was passed in 1849. It states explicitly that the object of this school "shall be not to educate teachers in the studies now required by law, but to receive such as are found competent in these studies and train them in the best methods of teaching and conducting common schools." It provides that the number of pupils shall not exceed 220, that applicants shall sign a written declaration that their object in seeking admission to the school is to qualify themselves for the employment of common-school teachers, and that it is their intention to engage in that employment in the State; and that to all pupils legally admitted "the tuition and all the privileges of the school shall be gratuitous." For the support of this school there was appropriated "the bonus derived from the 'State bank,' and the interest which may accrue thereon, from which the sum of twenty-five hundred dollars annually, for the term of four years, shall be paid to said trustees with said interest, no part of which sum shall be expended in any building or fixture for said school." At the same session the principal of the normal school was made ex officio superintendent of common schools. Slight changes tvere introduced into the original law in 1866, 1872, 1883, and in 1889. The most important changes were (1) the maintenance of two normal schools, one of them.east of the Connecticut River; (2) the appropriation of $\$ 40,000$ a year for their support; (3) the regulation of the number of students to be admitted is left to the State board of education; (4) authority is given to the State board of education to establish and maintain model schools under permanent teachers, approved by the board, in which pupils of the normal schools shall have an opportunity to practice modes of instruction and discipline.

## Nefv Britain.

The school was opencd at New Britain in 1850 with encouraging prospects. During the first year the number of pupils enrolled was 154; it rose, in 1855, to 359, and

[^71]then graduaily decreased till, in 1864-65, it fell to 138. For the next four years the school was suspended (1865 to 1869), from causes which the editor has not been able to ascertain definitely, and at which he prefers not to guess, though he visited the school in its dying moments. But in 1869 it was reopened with 132 students, and the numbers continued to increase till 1874, when it was again closed for a year. In 1875 it was again resumed and the progress, judging from numbers, from that to the date of the last catalogue was steady and nearly miform. This catalogue contains the names of 401 students.

The building now occupied by this school was erected in 1882, and by successive alterations and additions has become almost a model. Besides the usual assembly room, schoolrooms, recitation rooms, lecture rooms, library, etc., it has two laboratories, a cabinet, a manual training room, a cooking room, a lunch room, a room for drawing and modeling, a gymnasium, and two kindergarten rooms.

The grouping of studies under several teachers is in some instances "very peculiar." For example, Miss A has drawing and literature; Miss B, arithmetic and geography; Miss C, drawing and language; Miss D, singing and arithmetic; Miss E, kindergarten and sloid; Miss F, mathematics and English. The purpose is probably to prevent a teacher from running in one rut by giving her two ruts to run in. The gentlemen teachers, it should be noticed, are provided with but a single wheel, with one exception, and he has a bicycle, "principles of teaching" and "writing." It must be acknowledged that certain unquestionable advantages may be obtained from this system of "union of opposites," especially when, as appears to be the case in the present instance, it is the result of design and not of accident or necessity.

A characteristic feature of the Connecticut normal school is seen in the

## Training Departuent and Model Schools.

The State board of education has under its supervision and full control three model schools-one at New Britain, with 404 pupils and 11 permanent teachers; one at Bristol, with 252 pupils, and one at South Manchester, with 635 pupils.

The professional training course at New Britain will be understood from the following outline:

The first year gives a review of common-school subjects, with the special object of making the students familiar with the best methods of teaching children.

The second year is devoted to observations, methods of teaching, trial lessons, assisting in model schools, psychology and general principles, and independent teaching under supervision.

Observation. - At the beginning of the second year those students who have reached the required standard of scholarship in all subjects, and who are thought to be sufficiently mature, begin to work in the model schools. They visit the classes daily and describe the lessons they observe.

Methods.-The teachers of the model schools sum up for the training class the essentials of each subject to be taught to children and teach children when members of the class are present.

Trial lessons are required as fast as individuals show a good understanding of the work they observe. Students do not usually give lessons in the presence of all their classmates. Criticism of the teaching is not a public exercise, and each student receives personal suggestions and advice.

Assisting.-After observing in the model schools, students are assigned to the modelschool teachers as assistants. They are taught to place work on the blackboard, keep the register, make a programme, and hear classes in all subjects taught in the room.

Psychology and general principles.-From this time on commonly accepted principles are discussed and some instruction is given in physiological psychology.

Independent teuching.-After the completion of the preliminary training described, every student must teach and govern successfully for three months one of the departments in charge of the State board of education, located outside of New Britain, but under the supervision of skilled teachers and closely connected with the parent school.

The members of the senior classes in the normal school observe frequently in the
kindergarten. The kindergartner gives to this class a careful statement of the principles and theory involved and instructs them in the occupations relating to primary work. The first five months are spent in observation and in study of the following special subjects: Biology, botany, physics, chemistry, physiology, free-land drawing, modeling, coloring, inventional geometry, manual work, gymnastics, singing, literature, and penmanship.
A special diploma is awarded to graduates of the kindergarten training class. ${ }^{1}$
A normal school which is organized with special reference to the requirements of any particular locality can not safely be used as a model for another where the environments are different; yet one who should wish to organize or to reorganize a normal school in any part of this country would do well to study carefully the plans and methods of the school at New Britain. They are fully up to the times, provided always that the actual worting corresponds exactly to the printed statement.

## Willimantic.

This school was established by an act of the legislature passed in 1889. The sum of $\$ 75,000$ was appropriated for the construction of a brilding, but without waiting for its completion the school was opened in September, 1889, in rented rooms. It is the counterpart, in miniature at present, of the school at New Britain. It is under the same superintendence and control and aims at developing the same principles by the same methods.

## -RHODE ISHAND.

What Horace Mann had been in the educational history of Massachusetts, Henry Barnard was in that of Rhode Island. He was the first State school commissioner, and spent some of the best years of his life in efforts to establish a system of State normal schools in Rhode Island. He visited every portion of the State, delivered lectures, organized teachers' institutes, and began what he called an "Itinerating normal school agency." During his term of office more than 1,100 public meetings were held to discuss subjects connected with the public schools, and at all these meetings one of the most prominent topics was the necessity of a thoroughly organized State normal school.
After one year's incessant and well-directed labor he was sanguine enough to believe that the time had come for carrying his projects respecting the State normal school into execution. His plan was to have two normal schools-one in Providence and the other scmewhere in the country. The school in Providence was to supply the missing link between the municipal schools and Brown University. The country school was to be a "training school" with an industrial annex in which pupils might pay part of their expenses by manual labor.
The scheme was too complicated-one might almost say too good-to command popular favor. But the legislature seemed willing to try it, at least in part. In 1845 a bill was passed authorizing the establishment of "one thoroughly organized normal school in the State," but no appropriation was made for carrying the law-if it can be called a law-into effect. The people were simply authorized to spend their own money and declined to spend it.
Now, Brown University came to the rescue. The university created a new chair, a professorship of didactics, and Samuel S. Greene, then superintendent of schools in Providence, was appointed to the position, which he was allowed to hold in connection with the superintendency. In the winter of 1851-52 the first normal classes were taught in the hall of the Providence high school. Next fall the school was opened, in rooms rented for the purpose, with 85 students and 3 assistant teachers. The following term was made noteworthy by a course of lectures on physical geography delivered by the celebrated Professor Guyot.

[^72]Donations and tuition fees, however, were totally inadequate to the support of such an institution. Even the $\$ 1,000$ appropriated by the general assembly in 1854 proved to be but a drop in the bucket, and on the urgent recommendation of Mr. Elisha R. Potter, the school commissioner, who succeeded Dr. Barnard, the general assembly, May, 1854, passed an act establishing a "State normal school" and appropriating $\$ 3,000$ for its support. The school was opened on the 29 th of May with 27 students, under Dana P. Colburn principal; before the end of the session the registered students numbered 88. Within two years a library of 1,200 volumes was accumulated and a beginning made in the collection of apparatus. The "collection" was slim enough-" two movable blackboards, one 6 -inch and two 12 -inch globes, a valuable collection of outline maps and charts, and a set of anatomical plates." The value lay in the fact that it was a " beginning" and in the right direction.
The genial spring was not followed by the usual bountiful harvest. Unseasonable winds began to biow, and kept on blowing. It was said by some that the towns should give more pecuniary aid, and that the State treasury should be relieved in part of the expense of maintaining the school. All parts of the State were not equally benefited, and yet all parts were equally taxed. The old and not yet exploded fallacy that education is a local more than a general benefit was urged for all and more than it was worth. It has fortified itself and been dislodged in many strongholdsthe family, the district, the township, the State. When it is once expelled from the citadel the country will be safe. The citizens of Bristol were willing to receive the ark of the covenant, and thither it was carried; but the blessing did not follow it. About the beginning of the civil war the numbers in attendance fell off to $19-5$ young men and 14 young women.
At the close of the spring term in 1865 school adjourned for a vacation of five weeks. It was hoped that the general assembly would send it back to Providence, but the hope was not realized. The operations of the school were suspended until after the meeting of the legislature in May, and in July it was suspended indefinitely. But "blessings brighten as they take their flight." The institution was "not dead, but sleeping," awaiting the voice of the master. School committees were urgent in their demand for its reestablishment. One committee declares that "the need is becoming every year more urgent." Another, that "the best interests of public education can not be promoted without the establishment of a State normal school." Another, that "the importance of establishing a State normal school as a means for the advancement of our common schools needs no argument." Another says, "We hope that a normal school will be established in this State, and that no persons will be employed to teach in our public schools except graduates of that or similar institutions. Much of the time of the children is now thrown away at the commencement of each term by employing teachers, who, while their intellectual culture is all that could be desired, know but little, if anything, of the art of teaching."

Then the master appeared.
Mr. Thomas W. Bickneil received the appointment [of State school commissioner] in May, 1869, and he at once set himself to work to bring about the desired result. He left no stone unturned during the years 1869 and 1870 to inspire and combine the public sentiment in favor of the enterprise. It is true that the ground had already been prepared and the seed had been sown by the labors of his predecessors, and he was able to reap the harvest which had in part been brought on to its growth and maturity by them. But at this particular moment it seemed to need precisely the qualities which Mr. Bicknell possessed and the efforts which he put forth to bring the former labors to their consummation. * * * By public educational lectures in every town in the State; by teachers' institutes, and papers and discussions thereon; by the newspaper press, which opened its columns freely to the commissioner; by the Rhode Island institute of instruction; by the distribution of educational tracts, and by personal interviews with the members of the general assembly, the labors of the commissioner began to bear fruit. ${ }^{1}$

[^73]In 1871 a bill was introduced for the establishment of a State normal school, and was passed by a very large majority after a very brief discussion. The people were prepared for it. The board of education and the commissioner were made trustees, and they wisely selected Proridence as the location of the school. The school was opened in September, 1871, in a rented building; but in 1877 the legislature made an appropriation of $\$ 40,000$ for the purchase of a building for the permanent home of the school. The city of Providence being about to erect an new high school building, the old high school estate was purchased for $\$ 30,000$ and fitted up comfortably for the use of the normal school with the remainder of the appropriation. The school took possession of its new home in December, 1878. From the "Cataloguc and circular" of 1890 we learn that the number of students for the scholastic year, including graduates who completed their course in January, was 200. The full course (scven half years) includes 100 lessons in composition and grammar, 300 in arithmetic, 100 in chemistry, 150 in drawing, 100 in the English language, 100 in geography, 100 in physiology and laygiene, 50 in bookkeeping (single entry), 100 in general history, 100 in geometry, 100 in reading, 200 in Latin, 100 in rhetoric, 100 in algebra, 100 in botany, 100 in physics, 100 in English literature, 50 in physical geography, 50 in geology, 50 in psychology, 50 in logic, 50 in ethics, 50 in zoology, 50 in pedagogy, 50 in primary methods, 50 in methods in geography, 50 in methods in grammar, 50 in mineralogy.

## Principals.

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Daniel Goodwin . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1859-1860

T. J. Morgan . . . . . ............................................................................ . . . 1884

## NEW INAMPSHMRE.

The history of the normal school campaign in New Hampshire is curious, interesting, and instructive-an early and promising attack, a victory, long in doubt; ignorance and prejudice behind the intrenchments; indifference, perhaps treachery within the lines; a deficient commissariat, skirmishes without results, compromises without advantage, indomitable pluck on one side, invincible obstinacy on the other-triumph at last. "The darkest hour of all the night" proved to be "the hour before the morning." All the battles with ignorance, prejudice, misrepresentations, jealousies, parsimony, which had been fought and won in thirty other States, had to be fought again. And not in vain.

> "For freedom's battle once begun, Bequeathed by bleeding sire to son, Though bafled oft is ever won."

Now peace, with wings outspread, hovers over the beautiful normal buildings at Plymonth; and for a peace offering thousands of dollars can be had almost without asking where hundreds were once sulkily refused.

The story of the State Normal School of New Hampshire can best be given in the words of the present principal of the school, Dr. Charles C. Rounds, in an address which he delivered on the dedication of the new building. The present editor regrets that waut of space compels him to omit many paragraphs from this interesting paper. After a brief sketch of the development of normal schools in the State of Massachusetts, Dr. Rounds says:

In 1823 there was established at Franklin, N. H., by the munificence of Mr. Joseph Noyes, a school called the Instructors' School. Its principal for many years was Capt. Benjamin M. Tyler, a graduate of Captain Partridge's Military Echool at Norwich, Vt. In regard to normal methods of teaching Captain Tyler was far in advance of his time, and in spring and fall terms for years he formed and taught a teachers' class in the principles of the various branches of study and in methods of
teaching and school management. It has been claimed that more than sixty years ago there could be found at Franklin a superior normal school.
At a public dinner in Boston a few years since I heard Hon. J. W. Bradbury, of Maine, a colleague of Webster and Calhoun in the United States Senate, tell the story of the next normal school in New Hampshire. In 1829, having finished his course of legal study, he had three months to wait before admission to the bar. He had noted, as many were noting at that time, the miserable condition of the common schools and the mental poverty of the teachers therein. Instead of taking a vacation he came across the line from his home, in Parsonsfield, Me., to Effingham, and organized for a three-months' term a school for the preparation of teachers.
The next attempt in our State to give teachers special preparation for their work was made here in Plymouth by Samuel Read Hall, who had been connected with the school in Concord, Vt., in 1823, and with Phillips Academy in 1829. In 1837, while teaching in Phillips Academy, he was asked to become preceptor of Holmes Academy in Plymouth. He accepted, on condition that it should be called a teachers' seminary and should have a department specially for the training of teachers. These conditions were accepted, and for two years (1837-1839) the teachers' seminary at Plymouth continued, and then was closed in consequence of the failure of an expected endowment.
I hold in my hand the first catalogue of this teachers' seminary. The course of study and the classification of the school show the honesty of the man and the character of this, as a normal school, much truer to the name than many pretentious institutions which followed long after its time. Although it had a classical department, the teachers' department evidently lay nearest the heart of Mr. Hall.
Though this school antedated by two years the establishment of the normal school at Lexington, Mass., after its closing for many years no other similar attempt was made. Normal schools were established in other States in numbers increasing by a constantly accelerating ratio, but here the reliance seems to have been upon academies, and these doubtless did what they could. But under such auspices popular education could not advance, and after trying all other agencies the conviction became stronger and stronger that again a special effort must be made. In 1870 the act was passed for the establishment of a normal school. * * *
There is not time now to give the history of the efforts which culminated in the passage of the normal-school law, nor of the contests which resulted in locating the school in the buildings of the Holmes Academy, at Plymouth. It was finally here established, and for several years sustained by the tuitions paid by pupils, and by the generosity of the town, of private individuals, and of the Boston, Concord and Montreal Railroad. Here I quote from the principal's report to the trustees in 1887: "Thirty-two years after the first normal school in Massachusetts had been established, with two years in its course of study, and years after Maine, Connecticut, and Rhode Island had established normal schools on the same basis, the State Normal School of New Hampshire was established, with the legal provision that said normal school shall be established and maintained without expense to the State, except the necessary expenses of the trustees, which shall not exceed the sum of $\$ 300$; that the school should be in session at least twenty weeks each year, and that pupils could graduate from one of the courses at the end of one school year. Large numbers actually went out from the school with diplomas at the end of a course of only twenty weeks. Yet the schooi, sustained by tuitions and voluntary contributions, opened with a good faculty and 70 students, and in its second year enrolled 184 different pupils. To an urgent request of the trustees for $\$ 12,000$ for building and $\$ 3,000$ for a library, the State responded with a total appropriation of $\$ 5,000$. In the first four years of the school the State gave nothing for current expenses. For the lack of funds the faculty had to be cut down, and at the close of the third year the school suffered the loss of its first principal by death from overwork. During a part of the fourth year the faculty consisted of only two teachers, each teaching from seven to eight hours a day, and one of these broke down before the close of the year. In 1875 the State made its first appropriation for current expenses, and the school was declared a free school, but tuitions were still exacted from those who did not complete the course of the first or the second year until 1886. For four years, without endowment, the school had been sustained by tuitions and contributions. It is safe to say that a State normal school established under such auspices and sustained on such a basis was never before known.
"The report of 1876 speaks of constant improvement in the school, of jealousies which had sprung up against the school as an intruder into the educational field, and of the great harm which had been done to the cause by the graduation of large numbers from the short course of twenty weeks-a course of study only one-quarter the length of the shortest courses of other New England normal schools. Of the 175 graduating up to this time 158 had graduated from the twenty-weeks' course. In

1878 the jealonsies and opposition referred to in earlier reports resulted in reducing the annual appropriation for the school to $\$ 3,000$. The numbers in the school had been greatly reduced; the outlook was most discouraging. Yet, instead of trying to increase the numbers by merely popularizing the school, it was made more severely professional than ever before. "The one-year course was abolished. As might have been expected the numbers did not rapidly increase, but the character of the school as a school for professional training was established beyond all possibility of cavil. The policy continued by cutting down even the modest appropriations asked, or of refusing them altogether, and the complaint continues from year to year of insufficient accommodations and means of instruction. * * *"
In 1885 an appropriation of $\$ 2,000$ was asked for, but was refused. This was apparently a turning' point in the history of the school. Hostilities which hindered its work ceased. Friends in increasing numbers came to its aid. The press gave it a more and more generous support. In 1887 it received from the legislature an appropriation of $\$ 12,000$ for building, and the amnal appropriation for support was raised from $\$ 5,000$ to $\$ 7,000$. $* *$ The legislature of 1889 gave an additional appropriation of $\$ 60,000$, and you here to-day behold the fair results, a lasting monument to the many friends who worked so faithfully to secure this appropriation, as well as to the memory of the devoted teachers of the earlier days, who, amid discouragements, kept alive in New Hampshire the idea oỉ the normal school and carried it through its phases of development. We have this beautiful schoolhouse, which, for solidity of construction, for convenience, for its provisions for comfort and health, and adaptation to the work for which it is designed, may well challenge comparison with any other. We have a boarding hall so planned and furnished as to ofier to our pupils a comfortable, healthful, and elegant nome. * * * The normal school begins its twenty-first year under these favorable auspices. Like a travelei who, after long wandering through morass and fog, comes out into the sunshine on solid ground, so we at last find firm support for our feet and see the sunshine on our path. ${ }^{1}$

The course of study does not differ greatly from that of other first-class normal schools limited to a two-years' course, as will be seen by the following programme:

Course of instrucion.
[Figures denote number of lessons per week (music and writing, each two lessons counted as one).]

|  | First year. |  | Sccond year. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | First term. | Sceond term. | First term. | Sccond term. |
| Languagc. | Reading, 3; grammar, 3; composition, 3. | English literature,2. | English language, <br> 3; essays, 1 . | Essays, 1. |
| Mathematics.... | Arithmetic, 3: elements of gcometry, 2. | Geometry, $3 . . . .$. | Algebra, 4 | Bookkecping and reviews, 4. |
| Natural science. | Physiography, $3 \ldots$ | Geography, 4: botany, 4: physics, 3. | Chemistry, 3; plyssiology, 3 . | Physical geography, 4. |
| History | American history, 4. | General history, 4. | Civil goverument and school law, 2 . | History of education, 4. |
| Professional .... | School cconomy, 2; drawing, 2; music, 1; writing, 1 . | Psychology, 4; drawing, 2 ; music, 1. | Methods and training, 6; drawing, 2; music, 1 . | Pedagogy,4;methodsand training, 8; drawing, 1. |

## VERMONT.

State Normai School at Castleton.
The institution now known as the State Normal School at Castleton, Vt., celebrated its centennial in 1887 , having changed its name several times during the century. It was established by act of the legislature in 1787 as a county grammar school in and for Rutland County, to be held "at the house commonly known by the name of the new schoolhouse, near Dr. William Woolcott's in Castleton, provided that the county of Rutland shall not be at any cost or charge in completing or repairing the same." Another act of the legislature provided "that it shall be known by the name and

[^74]style of the Corporation of Rutland Grammar School." In 1805 it was enacted "by the general assembly of the State of Vermont that the name and style of the Rutland County Grammar School be, and the same is hereby, altered to the name and style of the Yermont Classical High School." This act was repealed in 1830. In 1866 an act was passed authorizing the establishment of one normal school in each of the three Congressional districts of the State with two courses of study; graduates of the short course to receive certificates for five years, the others for fifteen.

In 1867 the legislature granted an annual appropriation of $\$ 500$ to each of these normal schools for the purpose of assisting indigent young men and women "inhabitants of this State who may desire to more perfectly qualify themselves for the office of teaching by attending the normal schools within this State." Persons so aided were required to teach at least two years subsequent to their graduation.

This sum was increased in 1870 to $\$ 1,000$, and in 1882 an additional $\$ 500$ a year was appropriated to each of these three schools. In 1888 the legislature extended their charters until the year 1900.

The first session of the normal school at Castleton was opened on the 2d of January, 1868.

In 1878 the legislature, fearing that the normal schools might attempt to fiy too high, passed the following enactments to clip their wings:

No. 113. SEc. 2. No more than two courses of study shall be allowed in the normal schools of this State. No studies or subjects not included in the course of study established for them shall be taught in the normal schools of the State, nor in any school or department established and controlled by the trustees or by the teachers of any normal school in the State.

SEc. 3. The two courses of study for the normal schools may include such branches of learning as have been set, or shall be set, in them, by the trustees of any normal school acting in concurrence with the State superintendent of education; but no foreign language, ancient or modern, shall be a suiject of instruction in any normal school.

Yet the course of study in the Vermont normal schools is by no means narrow, judging from the list of text-books used.

First course: Hill's Geometry for Beginners, The Franklin Algebra, Greenleaf's Complete Arithmetic, Prang's Drawing Books, Maury's Physical Geography, Walker's Physiology, Wood's Object Lessons in Botany, Eggleston's History of the United States, Macy's Our Government, True's Our Republic, Conant's Vermont, Whitney's Essentials of English Grammar, Conant's Drill Book in English, Scott's Lady of the Lake, American Poems, American Prose, Principles of Education Practically Applied, Gill's Systems of Education, Putnam's Psychology, Payne's Lectures on the Science and Art of Teaching, De Garmo's Essentials of Method.

Second course: Wentworth's Algebra and Geometry, Sharpless and Phillips's Natural Philosophy, Young's Astronomy, Kellogg's Rhetoric, Swinton's Outlines of the World's History, Arnold's English Literature, Lockwood's Lessons in English, Painter's History of Education, Thomson's Seasons, Bacon's Essays, Janet's Elements of Morals.

The number of students in attendance during the school year ending July, 1890, was 230 . The number of graduates since 1868: First course, 350; second course, 85. ${ }^{1}$

Principals.


State Normal School at Rindolpif.

The Randolph Academy, or Orange County grammar school, was established in 1806 in a building now occupied as a dwellinghouse. Its last principal was Edward Conant, "the father of the Termont normal schools," by whose aid chiefly the academy was changed in 1866 to a training school for teachers-one of the three for which the legislature made an appropriation in 1867, as has been already mentioned.

Normal schools naturally divide themselves into three groups: Those whose work is chiefly academic, and whose aim is to secure scholarship in the subjects tanght; those of the character of city training schools, which strive to give their students a large amount of practical teaching after certain prescribed methods; and those which seek to give their graduates a scientific basis of practical pedagogy. The Irandolph school claims to belong to the last class.

From February, 1867, to June, 1890, the whole number of students admitter was 1,877 . Of these 819 graduated in the first course, and 122 in the second course. ${ }^{1}$

Principals.
Edward Conant ............................................................................. . . . . 1867 -1874
Abel E. Leavenworth. ..................................................................... . . . . . 1874-1879
Andrew E. Edson . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $1879-1884$
Edward Conant ............................................................................ 1884

## State Normhl School at Johnson.

This school was started as an academy about the year 1828 with 16 scholars, in a room which had formerly been a shoe shop. In 1836 the school was incorporated by act of legislature as the Lamville County grammar school, and public lands were granted toward its support. In 1866 the school surrendered its original charter and was recognized as a Siate normal school. The old academy building was at this time rebuilt, greatly enlarged, and fitted up nearly as it stands now. The last principal of the academy, S. H. Pearl, was the first principal of the normal school. In 188 the village primary school was placed under the care of the principal of the normal school as a model and training school, in which normal students should have the opportunity of doing practical work under the direction of experienced teachers. ${ }^{2}$
The number of students June, 1890, was 136.
Principals.
S. II. Pearl ..... 1867-1871
C. D. Mead ..... 1871-1872
Harlan S. Perrigo ..... 1872-1875
William C. Crippen ..... 1875-1881
Edward Conant ..... 1881-1884
A. H. Campbell ..... 1884

## MANNE.

## First Normal School at Farmington.

The teachers of Franklin County, Me., at their annual convention in 1857 passed a resolution "That the interests of our common schools and the teachers having them in charge not only require the fostering care of the State, but most imperatively demand the immediate establishment of that long-neglected source of improvement, a State normal school." This was no uncertain sound, although it was but the echo of the

[^75]demand made ten years before by William G. Crosby, the secretary of the first board of education of Maine. For thirteen years longer the voice was heard as of one crying in the wilderness, till at last, in 1860, the legislature was stirred up to activity. The first experiment was an endearor to establish normal departments in 18 academies of the State. Of course, the attempt was a failure. The law was repealed in 1862, and an act for the establishment of normal schools was passed in 1863. A rommission of three persons, appointed by the governor and council, was to locate two normal schools, one in the eastern and one in the western part of the State: "Provided, that the citizens of such places will furnish, without expense to the State, suitable buildings for the instruction of 200 pupils for the term of at least five years; and provided, that such locations be not within the limits of any incorporated city." To sustain these schools for five years, four half townships of the public lands were appropriated, to be sold in whole or in part, as should be deemed best by the governor and council. The commission decided to locate one of these schools at Hampden, the other at Farmington, but two years afterwards Castine was selected in place of Hampden. The trustees of Farmington Academy offered a cash donation of $\$ 4,000$, together with the acalemy building, which they proposed to enlarge so as to accommodate 200 students. The school began in August, 1864, in a temporary hall, for the new building was not as yet completed. Thirty-one students were present at the opening, and during the year 130 students were entered, a number larger than in any subsequent year. ${ }^{1}$

Principals.
Ambrose Parsons Kelsey . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1864-1865
Creorge M. Gage ........................................................................... . . . . . 1865-1868
Charles C. Rounds ........................................................................ . . $1868-1883$
George C. Parington........................................................................... 1883

## Scheol at Castine.

From the circular of the State Normal School at Castine, Me., for 1890, we learn that the object and work of the normal school are plainly stated in the act establishing these schools in that State:

They shall be thoroughly devoted to the training of teachers for their professional labors. The course of study shall include the common English branches, in thorough reviews, and such higher branches as are especially adapted to prepare teachers to conduct the mental, moral, and physical education of their pupils. The art of school management, including the best methods of instruction and government, shall have a prominent place in the daily exercises of said schools. While teaching the fundamental truths of Christianity and the great principles of morality recognized by statute, they shall be free from all denominational teachings and open to persons of different religious connections on terms of perfect equality.

This school has been in operation twenty-three years and has had over 2,000 different pupils connected with it since its organization.
A model primary school is in operation in one of the rooms of the normal building, which has been fitted with primary furniture for that purpose. This school is under the control of the principal of the normal school and is taught by a teacher specially selected for that work. It has four grades, and is free to all children of these grades, as far as its capacity extends. The pupil-teachers are here furnished with a model which will help them to form an ideal of what a primary school ought to be. This enables them to have a standard of excellence in mind when they go out to teach, which it will be safe for them to strive to attain.
The following is the outline of work actually done in the model school in the different grades:

[^76]Model School At Castine.
First Year.-Reading.-Word, sentence, and phonic methods from charts. The lesson is first taught from the blackboard in script. Spelling.-By sound and letter. Number.-The Grabe method, modified, as far as 10. Counting and writing numbers. Fraction $\frac{1}{2}$. Simple practical examples. Geography.-Position. Divisions of land and water, with molding board. Language. - Story-telling by the children; use of words in sentences, and careful correction of bad forms of speech. Drawiny.Lines and angles, and smple figures. Writing.-On blackboard and slates. Object lessons.-Form, culor, human body, animals, plants, etc.

Second Year.-Reading.-First and Second Readers. Sight reading. Spelling.From reading lessons. Number.-Modified Grube system to 20. Continue counting and writing numbers and practical examples. Exercises with fractions $\frac{1}{2}, \frac{1}{3}, \frac{1}{4}$. Geography.-Map of schoolroom. Oral lessons on continents, with maps and molding board. Language. - Continue work of first year. Writing simple sentences. Use of capitals and periods. Drowing.-Simple geometrical figures and original designs. Writing. - With ink in tracing books. Object lessons.-Continue work of first year.
Third Year.-Reading.-Third Readers. Sight reading. Spelling.-From spelling book. Number.-Multiplication and division tables. Continue practical examples. Work in fundamental rules. Fractions $\frac{1}{5}, \frac{1}{6}, \frac{1}{7}, \frac{1}{8}, \frac{1}{9}, \frac{1}{10}$. Geography.-"Our World No. 1." Lanquage.-"Elementary Lessons in English." Drauing.-Continue second year's work. Writing.-With ink in copy books. Object lessons.-Continue second year's work.

Fourth Year.-Reading.-Fourth Readers. Spelling.-From spelling book. Number.-Continue work of third year. Work in common fractions, United States money, decimal fractions, and factoring. Geography.-Elementary text-book. Language.-"Elementary Lessons in English." Drawing.-Original designs and simple object drawing. Writing.-With ink in copy books. Object lessons.-Continue work of third year. The object lessons are graded so that attention is called to name, parts, form, size; then to qualities and uses; then to relations, so that though the object may be the same in different grades, the lessons taught become more and more difficult.

Normal school-Course of study.
FIRST YEAR.

| F Class. | E Class. | D Class. |
| :---: | :---: | :---: |
| Arithmetic, from percentage. Grammar. Geography. Sehool economy. Reading. Writing, one-half term. Elementary music, one-half term. | Arithmetic, methods. Grammar. <br> Geography. <br> Algebra. <br> Physiology. | Algebra. Geometry. Physics. Physical gecgraphy. Drawing. |

SECOND YEAR.

| C Class. | B Class. | A Class. |
| :---: | :---: | :---: |
| Geometry. | Psychology. | Didaeties and history of edu- |
| General history. | Chemistry. | cation. |
| Physics. | United States history. | Practice teaching. |
| Rhetoric. | Civil government. | English literature. |
| Botany. | Moral philosophy. | Astronomy. |
| Bookkeeping, one-half term. | Praetiee teaching. | Geology, one-half term. |

Principals. ${ }^{1}$

[^77]
## NORILAL SCHOOLS IN NEW YORK, PENNSYLVANIA, NEW JERSEY, AND MARYLAND.

NEW EORE.

Early History.
In 1825 De Witt Clinton, governor of New York, in his annual message, speaking of the common school system, says: "In furtherance of this invaluable system I recommend to your consideration the education of competent teachers." This recommendation is repeated in his message of 1826: "I therefore recommend a seminary for the education of teachers in the useful branches of knowledge." The phrase "the education of teachers in the useful branches of knowledge" indicates that the governor had but a rague notion of the proper function of a "teachers' seminary;" and it is not to be wondered at that for many years after his death the people of New York struggled long and fruitlessly to make normal instruction an annex of the academy system. In his last message, 1828, the governor lamented that no law had been passed to elevate the talents and qualifications of teachers.

In 1830 a committee of the citizens of Rochester petitioned the legisfature to establish a State seminary for the education of teachers.

In 1833 Governor Marcy said in his message to the legislature: "One of the most obvious improvements in relation to common schools would be a plan for supplying them with competent teachers." There is no good reason to suppose that the "competency" thus desired extended further than a knowledge of the subjects taught in the common schools.

In 1835 John A. Dix, chairman of a committee of the board of regente, recommended the establishment of teachers' classes in the academies.

In 1839 Governor W. H. Seward recommended that "Normal-school instruction be ingrafted on our public school system." In the same year John C. Spencer, secretary of state and ex officio State superintendent of schools, secured the passage of a law creating a board of visitors of schools. The chairman of the board was the Rev. Dr. (arterwards Bishop) Alonzo Potter, and with him was associated Francis Dwight, who afterwards became superintendent of schools for the city and county of Albany and secretary of the executive committee of the board of regents.

In 1842 a convention of county superintendents was held in Utica, at which the Rev. Dr. Alonzo Potter, Horace Miann, and George B. Emerson advocated the establishment of a normal school; to which project the superintendents promised their support. In 1843 a similar conrention was held, and again the county superintendents reported in favor of a normal school. In the same year Calvin H. Hulberd, as chairman of the assembly committee on colleges, academies, and common schools, made an eloquent and elaborate report, accompanied by a bill to establish a normal school for the period of five years. The bill was passed May 7, 1844. The law provided that the sum of $\$ 10,000$ shall be "annually paid to the superintendent of common schools, from the revenue of the literature fund, for the maintenance and support of $* *$ a normal school for the instruction and practice of teachers of common schools in the science of education and in the art of teaching, to be located in the county of Albany." The "normal-school idea" had grown since the time of De Witt Clinton, whe 'so ably advocated the establishment of a seminary "for the educat.on of teachers in the useful branches of knowledge." The law also placed the school "under the supervision, management, and government of the superintendent of common schools and the regents of the university," but practically the school was governed by an executive committee of five persons appointed by the
regents, of whom the law required that the State superintendent of common schools should be one.

The school was first located in the depot building of the Ifudson and Mohawk Railroad Company, the rent of which, $\$ 500$ a year, was paid by the city of Abany; afterwards, 1849 , in a house built by the State, at the cost of $\$ 25,000$, on a lot presented by the city in the rear of the old State Hall. The lot was not a yory desirable one, and the building corresponded to the lot, though at the time it was regarded as "large and commodious."

The first principal was the now long lamented David P. Page, of whom nothing further need here be said, for he "being dead yet speaketh." ${ }^{1}$ One of the first "regulations" prescribed by the executive committee, doubtless at the instance of Mr. Page, deserves more than a passing notice: "The internal regulations of the school shall be left to take their form and character from the circumstances as they arise, and as the teachers may hereafter suggest."

## Normal Departhents in Academies.

For several years before and after the organization of the Albany school there had been maintained in several academies in the State of New York a department for the instruction of common-school teachers. These departments were of two classes: One was established by the regents of the university by virtwe of chapter 140 of the Laws of 1834 , for the support of which the regents appropriated annuaily to each academy $\$ 400$-a sum supposed to be equal to the expense of maintaining the department; the other class consisted of those academies to which a share of the revenue of the literature fund, equal to $\$ 700$ a year, was distributed for their ordinary support, and which were required by the regents, pursuant to chapter 237 of the Laws of 1838, to establish and maintain departments for the instruction of common-school teachers. There were in $18 \pm 0$ eight academies in the first class and seven in the second. The number of students entered in these departments was, in 1835, 138; and in the following years successively, 218, 284, 374, 498; and in 1840, 668. The State superintendent, John C. Spencer, in his report for 1840 says he is "convinced that there has been a decided improyement in these departments. The standard of instruction in their vicinity has been raised. The desire for competent instructors has increased; their wages hare advanced; the demand for them has augmented, and a general influence in favor of primary education of the most salutary character has been diffused." He thought these departments should be sustained and encouraged, and the means of establishing a larger number in other academies should be provided. Where there were no academies he would have normal schools established-the neighborhoods furnishing the grounds and buildings and the State paying the teachers.

These normal departments do not seem to have been either popular or efficient, notwithstanding the indorsement of Mr. Spencer. An academy in King's County reports: "No students are at present (1840) connected with this [the normal]

[^78]department, nor have any applied for admission since its organization." A seminary in Dutchess County reports that "but few students, compared with the usual number in the school, have applied for admission to the teachers' department." The Troy Female Seminary reports: "No students have been instructed in this institution for the express purpose of teaching in common schools." The Albany Female Academy reports that "no separate department has been established exclusively for the education of common-school teachers." The Ithaca Acarlemy established a department for the education of teachers, but no students presented themselves for instruction in that department.

On the other hand, the St. Lawrence Academy reports: "The establishment of this department has exerted a powerful and salutary influence on the character and supply of teachers of district schools." And in the Genesee Wesleyan Seminary there were 184 students in the teachers' department.

Prof. Alonzo Potter, having visited officially a number of these academies, made an elaborate and instructive report on their condition, in which, after giving them due credit as aids in the education of teachers, he says: "The principal evil connected with our present means of training teachers is that they contribute to supply instructors for select rather than common schools; and that, for want of special exercises, they perform even that work imperfectly." Yet the academic idea is not yet extinct in New York, and in many so-called "State normal schools," both there and elsewhere, "the trail of the serpent" may be distinctly traced.

From the annual school report of Superintendent Young we learn that in the year 1842 there were 681 students under instruction in teachers' departments in the academies of New York. He says: "These departments have doubtless given increased character and efficiency to the business of instruction, but it must be admitted that most of them have practically failed in the accomplishment of the great object for which they were instituted-the special qualification of teachers for the common schools." The great cause of this failure seemed to him to be that " the bounty of the State is diffused over too great a surface, the small sum of $\$ 4,800$ being divided equally among sixteen separate institutions." Accordingly he adrocates the establishment of a State normal school at Albany. "Normal schools," he says, "will not be an innovation. They have, on a limited scale, been in operation for some years in the city of New York, and a similar institution was recently organized at Kingsboro in Fulton County."

## Pioneer School at Kingiboro.

It is refreshing to compare the simple exercises of this pioneer school with the three and four story programmes of some normal schools of the present day.

The school opens at 9 o'clock a. m. by reading the Scriptures and prayer. A general exercise follows on arithmetic, consisting of lectures and demonstrations from the blackboard by the principal and students in turn. Lectures are given on notation, numeration, addition, subtraction, multiplication, division, the denominate numbers, reduction, and fractions; and a course of lectures has been given by the principal on ratio and proportion, with a practical application to the rule of three, direct, inverse, and compound. In addition to this exercise in arithmetic, the whole school is divided into four classes, each class spending one-half hour per day in the solution of problems on the blackboard and in reading, the teacher telling them how to solve them and the reason of the operation. Particular attention is given to the principles of arithmetic and their practical application to the business of life. There are two classes in algebra and two in natural philosophy. Algebra has had a tendency to withdraw the attention of the students from the elementary branches, consequently less attention will be giyen to this branch during the remainder of the term. The whole school is exercised in linear drawing, including most of the figures in geometry. Considerable attention has been given to penmanship, but not as much as its importance deserves. An accomplished writing master has been engaged to teach this art, which will claim special attention during the term. The students are required to recite regular lessons in geography, taking their regular turn in hearing the recitations. Then follows a general exercise of the whole school called classifying, or, in
other words, repeating in concert the names of the different States and kingdoms of the world, with their capitals, the oceans, bays, seas, gulfs, lakes, rivers, etc. This exercise is very interesting and profitable, as students will gain a knowledge of the names and situations of places much sooner in this way than any other with which I am acquainted. This exercise is followed by a lecture on the globe. In English grammar the females constitute one class, the males another, and about three-quarters of an hour every day has been occupied by each class in parsing, correcting false syntax, etc. Then follows a general exercise of the whole school, consisting of lectures by the students alternately, parsing difficult sentences, correcting grammatical errors which occur in daily conversation, and with discussions on disputed points in grammar. One composition a week is required of every student, which is corrected by the principal in the presence of the writer.

The whole school exercise daily upon the sounds of the letters and the principles of orthography. Great attention is given to elocution and reading. In addition to a daily exerciee in concert by the whole school, including the elementary sounds of the English language, difficult specimens of articulation, and the best and most difficult pieces in our language, five students declaim every day. The exercises are intended to cultivate and improve the voice, train the organs of speech, and improve the articulation, pronunciation, and taste of the pupil. Attention is given to the grammatical and rhetorical pauses, emphasis, quantity and quality of voice, and everything neces-sary to enable the pupil to read with beauty, force, and variety. ${ }^{1}$

The reader will bear in mind that this schedule is fifty years old.
The establishment of the State Normal School at Albany was not followed immediately by the organization of similar schools in other sections of the State. A long time sometimes intervenes between the planting of a tree and the ripening of the fruit. The lack of enthusiasm in the cause of normal schools may be traced partly to the early death of the first principal, partly to a general suspicion that the Albany school was not doing strictly normal work, and partly to a preference for the local academies that were supposed to be quite capable of preparing teachers for their calling. It is certain that much of the opposition which normal schools afterwards encountered in the State was due to the zeal of the friends of the academies. At this very time (1891) an experiment is under way which may have the effect of giv-ing the training of teachers for district schools to the academies on the ground that normal graduates are not willing to do "common school" work for common school compensation. If it succeeds, the New York system will be logically perfect: Training classes, normal schools, and the normal college, corresponding to the elementary school, the high school, and the college in the scheme of public instruction.

Nineteen years after the opening of the Aibany school a normal school was established at Oswego, under E. A. Sheldon, principal; and four years thereafter (1867). it was accepted by the State as a State normal school. The present writer visited this school in 1865, and made a report to the State superintendent of Maryland, from. which the following extracts are made:

The training school at Oswego was organized mainly for the purpose of furnishing the city schools with teachers competent to carry out the objective or Pestallozzian system of teaching. The public schools of Oswego are divided into four grades: The primary, the junior, the senior, and the high school. Each school is divided intor three classes, and the course of each class lasts for one year. Pupils are admitted at five years of age, and if they pass regularly and without interruption through the: whole course, they are graduated at the age of 17 . New classes are formed only once a year. Scholars presenting themselves after the new classes have been formed are admitted, provided their attainments correspond with the standard of any particular class. If they are found defective in certain studies they are sent to what is called the "Ungraded school," an ingenious contrivance to prevent the uniformity of the classes from being broken by an influx of unprepared scholars. For the first four years of the child's school life he is taught without books-reading-books of course excepted. The elements of language, number, place, color, and form; lessons in "objects," drawing, singing, as well as arithmetic and geography are taught by the living voice of the teacher, aided by maps, charts, pictures, real "objects" when they can be introduced, and an unremitting use of the blackboard. * * * Of the
"objective system" of teaching pursued in these schools, I can not speak too highly. I have examined and studied it very closely and I do not hesitate to say that it is not only a good system, but the only good system that I have seen for the rational education of young children. *** The training school is intended to prepare teachers for conducting the exercises of the "Oswego system," and is admirably fitted to accomplish this result. It is divided into two sections whose time is divided equally between learning and teaching. One section "recites" in the morning and teaches in the afternoon, the other recites in the afternoon and teaches in the morning. The students are not permitted to give any lesson to the section until they have reheared the same lesson themselves, and have written out a careful analysis of it. ${ }^{1}$

For a more detailed and very excellent account of the Oswego school, the reader is referred to Circular No. 1, 1891, of the United States Bureau of Education, by Prof. J. P. Gordy. The tree planted at Albany in 1844 now began to yield an annual harrest.

The normal school at Brockport was established in 1867; Fredonia, in 1868; Cortland and Potsdam, in 1869; Bulfalo and Geneseo, in 1871; and, after a rest of fifteen years, Newpaltz, in 1886; Oneonta, in 1889, and Plattsburg, in 1890. Though each of these schools has some distinguishing peculiarities, it would be tedious and unprofitable to discuss them separately, especially as at present (1891) they are all working under the following uniform curriculum, prescribed and enforced by the State superintendent of public instruction:

COURSE OF STUDY.
The following is the course of study now in force in the different normal schools: The elementary English course will be discontinued after the school year 1891-92, and the requirements for graduation will then be at least the work now laid out in the "Advanced English course," which will then be designated as the "English course."

## ELEMENTARY ENGLISH COURSE.

FIRST YEAR.
First term.-Arithmetic, composition and grammar, botany and familiar science, linear drawing, reading, vocal music, physical culture.
Second term.-Algebra, composition and rhetoric, physiology and zoology, physical geography and map drawing, reading, rocal music, physical culture, a course of reading in history of the United States.
On completing the work of this year, pupils may be admitted to the professional work, as indicated in the second year of this course, if, in the judgment of the faculty, they are sufficiently mature, and have sufficient mental discipline to enable them to do it successfully; otherwise, they will be required to go on with the subject work in one of the adranced courses until the faculty may deem them prepared to take up the study of philosophy of education and methods.

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SECOND :EAR.
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First term.-Philosophy and history of education, school economy, civil government and school law, methods of teaching the elementary English branches, methods of giving object leasons, including lessons on objects, form, drawing, size, color, place, weight, sound, animals, plants, human body, moral instruction, general science, and common manufactures, declamations, essays, and select readings.
Second term-Teaching in school of practice, a course of reading connected with professional work, essays, declamations, and select readings.

ADVANCED ENGLISH COURSE.
Students, to be admitted to this course, must pass a satisfactory examination in all studies in the first year in the elementary English course.

First term.-Algebra, geometry, English literature, physics, declamations, essays, and select readings.

Second term．－Rhetoric，general history，triconometry，perspective drawing，chom－ istry，geometry，declamations，essays，and select readings．

First term．－Philosophy and history of education，school economy，civil govern－ ment and school law，methods of teaching the elementary English branches，meth－ ods of giving object lessons，including lessons on objects，form，drawing，size，color， place，weight，sound，animals，plants，human body，moral instruction，general science，and common manufactures，orations or essays，and select readings．

Second term．－Mineralogy and geology，astronomy（half term），orations or essays and sclect readings，teaching in school of practice，a cousse of reading connected with professional work．

CLASSICAI COURSE．
Students，to be admitted to this course，must pass a a atisfactory examination in all the studies of the first year of the elementary English course．

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FIRST YEAR.
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First term．－Algebra，geometry，Latin，English literature，declamations，essays， and select readings．

Second term．－Latin，general history，rhetoric，geometry，trigonometry，declama－ tions，essays，and select readings．

SECOND YEAR．
First term．－Latin，Greek or French or German，physics，astronomy（hali term）， orations or essays，and select readings．
Second term．－Latin，Greek or French or German，chemistry，mineralogy and geology，orations or essays，and select readings．

THIRD YEAP．
First term．－Latin，Greek or French or German，philosophy and history of educa－ tion，civil government and school law，school economy，orations or essays，methods of teaching the elementary branches，methods of giving object lessons，including lessons on objects，form，drawing，size，color，place，weight，sound，animals，plants， human body，moral instruction，general science，and common manufactures．

Second term．－Latin，Greek or French or German，teaching in school of practice， orations or essays，a course of reading connected with professional work．
scientieic course．
This course includes all the subjects of the advanced English course，together with a two years＇course in two of the following languages：Latin，French，German，Greek．

It must not be inferred that all the State normal schools of New York are purely and simply＂training schools for teachers．＂Nothing is easier than to write a uniform programme；nothing more difficult than to carry the ideal into practice． And it is well that it is so；a school without individuality is simply a wheel in a machine．Differences of situation，of local surroundings，of inherited tradifions，of present aspirations，will differentiate the schools，whatever may be the outwaid bond of uniformity．It would not be surprising if，even at present，comparing the＂train－ ing school＂theory with the acadomic practice，it should be hard to determine which is the main building and which the annex．

## Potsdam．

Music seems to be a specialty in the Potsdam Normal School．The Outline of Work in Music in the State Normal and Training School，Potsdam，N．Y．，is an 8 vo ． pamphlet of 34 pages，the substance of which may be gathered from a circular of the school bearing date January 1，1890，and containing the new uniform curriculum：

## OUTLINE OF COURSE 1N YOCAL CULTURE AND SNNGING．

First rear．－Voice placing，breathing studies，special attention to distinct articula－ tion，purity of tone and clear intonation；English songs and ballads．

Second year．－Study of vowels and consonants，development of voice in clear and
somber timbres, mechanical exercises for execation, chromatic scale, preparatory studies for trill, English and Italian songs and arias.

Third yere.-Studies in execution continued, trill and other embellishments, study of selections from operas and oratorios, study for intelligent interpretation of the best songs.

Fourth yerer.-Studies in execution continued; study of classical songs, selections from opera and oratorio; French, German, and Italian songs; special attention paid to delivery, facial expression, and stage presence.
A diploma will be given to those completing the course satisfactorily.
piano forte.
First grade. - Emery's Foundation Studies, or Part First of New England Conservatory Method
Second grade.-Twelve LittleStudies, Kohler, op. 157. Kohler, op. 50. Loeschhorn, op.52. Duvernoy, op. 120. Loeschhorn, op. 66. Majorand MinorScales and Arpeggios from "Complete set of scales," by A. D. Turner. Easy and progressive pieces. Clementi's Sonatinas. Daily practice of technique.

Thirl grade.-Bertini, op. 29. Berens, op. 61. Heller, op. 46. Turner's Melodious Studies, op. 30. Study of Octaves. Krause, op. 5. Kohler, op. 128. Bach's "Little preludes and two part inventions" (ed. by F. Kullak). Pieces for left hand alone, Irummel, op. 43. Pieces by Mozart, Haydn, Mendelssohn, and modern composers. Daily practice of technique.

Fourth grade.-Turner's Elements of Modern Octave Playing. Cramer's Studies (Bulow edition). Bach's Three Part Inventions. Damper Pedal Studies, op. 15, by A. D. Turner. Clementi's Gradus ad Parnassum (ed. by Tausig). Studies for leit hand, by Rheinberger, and A. D. Turner's op. 29. Selections from Mendelssohn, Beethoven, Schumann, Chopin, and other composers. Daily practice of technique.
Fifth grade.-Moscheles, op. 70 . Bach's Inventions. Bertini, op. 66 . Mayer, op. 119. Selections from Schumann, Chopin, Mendelssohn, Beethoven, Liszt. Mozart's Concertos. Picces committed to memory. Daily practice of technique. Study of harmony.
Chopin, op. 10. Selections from Bach's "English Suites" and "Well Tempered Clavichord." Kuilak's Octare Studies. Selections from Chopin, Schumann, and liszt. Concertos and concert pieces by the classic composers. Two piano pieces. Daily practice of technique. Study of harmony.
Of the 19 teachers in the "Faculty," 5 and an assistant are devoted exclusively to music.
The Potsdam school has also issued, among other pedagogic circulars, an "Outline of the work in primary methods," 39 pages 8 vo., in the main an admirable compend and guide for the use of young and untrained teachers, but without originality. The "Object lessons" are no improvement on the pioneer efforts of Miss Elizabeth Mayo, nearly half a century ago, as will be seen from the following extracts from the "Outline:"

QUALITIES FOR LESSONS IN PART Il AND PART III.
Light. Because shavings, festiners, wool, curled hair, dry leaves, etc., are easy to lift or carry, they are said to be light.
Heavy. Because iron, lead, stone, marble, silver, gold, ete., are not easy to lift or carry, they are said to be heavy.
Artificial. Because flowers, fruit, etc., are made by man to look like those made by God, they are said to be artificial.
Useful. Because wood, iron, etc., are of use to man, they are said to be useful.
Adhesive. Because gum, sealing wax (when heated), etc., stick or adhere, they are said to be adhesive.
Soluble. Because sugar, salt, etc., will dissolve in water, they are said to be soluble. Caution.-If substances not soluble in water, but soluble in spirits, are mentioned, be sure to name the solvent.
Insoluble.
Compressible. Because bread, sponge, etc., can be made smaller by squeezing or pressing, they are said to be compressible.
Incompressible.
Preservative. Because sugar, salt, saltpeter, etc., will keep or preserve meat, fruit, etc., they are said to be preservative.

Aromatic. Because cinnamon, sassafras, etc., have a fragrant odor and pleasant, spicy taste, they are said to be aromatic.
Pungent. Because pepper, mustard, etc., have a sharp, hot, biting taste, they are said to be pungent.
Fusible. Because wax, lead, etc., will melt, they are said to be fusible.
Pulverable.
Ductile.
Pliable.
Reflective.
Pormeable.
Impermeable.
Medicinal.
Manufactured.
Lessons on manufacture appeal strongly to conception. They lead children to be observing.
Britle. Because crayon, glass, china, etc., break easily with a snap, they are said to be brittle.
Tough.
Porous. Because bread, sponge, cork, bone, etc., are full of little holes or pores, they are said to be porous.
Fibrous. Because rope, corn stalks, etc., are made of little threads or fibers, they are said to be fibrous.
Liquid. Because water, milk, ete., can be poured out in drops, they are said to he liquid.
Solid. Because sand, com, stone, etc., can not be poured out in drops, they are said to be solid.
Crumbling. Because bread, cake, etc., break easily into little pieces (crumbs), they are said to be crumbling.
Odorous. Because camphor, periumery, etc., have an odor, they are said to be odorous.
Inodorous.
Fragrant. Because (some) flowers, oranges, etc., have a pleasant odor, they are said to be fragrant.
Acid. Because lemon, vinegar, cream oi tartar, etc., have a sour taste, they are said to be acid.
Flexible. Because whalebone, etc., bend easily without breaking, they are said to be flexible.
Elastic. Because whalebone, rubber, etc., will bend when pressed, and then go back (return) to form (or shape), they are said to be elastic.
Opaque. Because milk, stone, wood, etc., can not be seen through, they are said to be opaque.
Transparent. Because glass, water, air, etc., can be plainly scen through, they are said to be transparent.
Semitransparent. Because mica, thin paper, oiled paper, etc., can be dimly seen through, they are said to be semitransparent.
Sapid. Because bread, milk, etc., have a taste, they are said to be sapid.
Insipid. Because water, etc., have little or no taste, they are said to be insipid.
Palatable. Because bread, milk, etc., have a pleasant taste, they are said to ve palatable.
Wholesome.
Nourishing.
Saline. Because salt, etc., have a salt taste, they are said to be saline.
Combustible. Because cloth, sponge, wood, etc., will burn, they are said to be combustible.
Inflammable. Because wood, etc., burn with a flame, they are said to be inflammable.
Durable. Because hard wood, iron, etc., will last a long time, they are said to be durable.
Hard. Because wood, iron, etc., do not give or yield easily to the touch, they are said to be hard.
Soft. Because wool, sponge, etc., give or yield easily to the touch, they are said to be soft.
Buoyant. Because wood, cork, etc., float upon water, they are said to be buoyant.
Absorbent. Because bread, sponge, etc., soak up or absorb water, milk, etc., they are said to be absorbent.
Sparkling. Because salt, loaf stigar, etc., shine or sparkle in little points, they are said to be spartling.

Granular. Because salt, sugar, etc., are made up of little grains, they are said to be granular.
Vegetabie. Because trees, grass, etc., grow from the ground, they are caid to be vegetable.
Animal. Because leather, etc., are obtained from animals, they are said to be animal substances.
Mineral. Because iron, lead, etc., are dug from mines in the ground, they are said to be minerals.
Natural. Because God made trees, grass, etc., they are said to be natural.
The "Outline of Wok in Grammar," published by the same school, is a very interesting pamphlet of 64 pages. It contains a syllabus of the work in grammar for several terms, the last term being in the first year of the normal course. From this "Seventh Term in Grammar" a single page is selected to show the analytical spirit that pervades the whole course.

## I. Connectives: co-ordinate.

1. Parts of Speech-conjunctions.
2. Kinds:
a. Copulative conjunctions are-
(1) Principal-"and."
(2) Associate copulative connectives, used for emphasis or some additional idea-so, also, likewise, moreover, too, besides, nou.
(3) Correlative co-ordinate connectives, not only awaken an expectation of something additional, but make the second part em-phatic-both, and, as well as, first, secondly, etc.
b. Adversative connectives.
(1) Principal adversative, "but."
(2) Associate adversative used for emphasis or some additional ideayet, still, nevertheless, notwithstanding, however.
(3) Correlative Adversatives-not only-but; but also; but likeuise.
c. Alternative co-ordinate connectives.
(1) Principal-"or" which offers, "nor"' which denies a choice.
(2) Associate alternatives for emphasis-else, otheruise.
(3) Correlatives-either-or, neither-nor.
d. Illatives imply consequence or inference.
(1) Principal connective usually understood, "and."
(2) Associate connectives indicating inference-hence, thence, therefore, wherefore, consequently, accordingly, as, etc.
3. Connectives: subordinate.
4. Definition.
5. Classification.
[1] Connecting substantive clauses.
a. Connecting statements [conjunctions]-that, that not, but, but not.
b. Containing questions [interrogative adjectives, adverbs and pro-nouns]-which, what, who, where, whither, whence, when, how long, how often, why, how.
[2] Connecting adjective clauses [relative pronouns, relative adveros]who, which, what, that; whoever, whosoever; whicherer, whichsoever; when, where, why.
[3] Connecting adverbial clauses [conjunctions, conjunctive adverbs].
a. Local, or connectives of place-where, whither, whence, etc.
b. Temporal, or connectives expressing time-when, while, as, before, after, till, until, since, whenever, soon as, etc.
c. Causal:
(1) Causal-because, for, as, since, etc.
(2) Conditional-if, unless, except, provided that.
(3) Final-that, that not, lest, so that, such that.
(4) Concessive-though, although, notwithstrnding, however, whatever, with their correlatives, yet, still, nevertheless.
d. Manner or degree: (1) Correspondence-just as, same as, such as; (2) Comparison-
6. Equality-us-as.
7. Inequality-than, more than, less than.
8. Proportionate equality--the-the, the-so much the.

## The Nef Advacee.

The honest intention and earnest desire of the State school authorities of New York to make their normal schools distinctly professional, and to exclude from them the two classes of students that have heretofore interfered with the declared purposes of these schools-those who desired boarding-school veneering, and those who needed preparatory education which they could have obtained at home-are made manifest by the following extracts from the circular of the State superintendent (November 1, 1890) already quoted from.
No students can be admitted who have not already acquired a substantial elementary education. This can be gained in all the ordinary schools, and the professional training schools can not properly be taxed with work which the common schools can perform as well. * * * There is room and welcome in the normai schools for the graduates of the elementary and secondary schools, and even for those who have made substantial advancement in the elementary course without technical graduation, provided they give promise of becoming successful teachers, and possess the desire to become such; but there is no room for students who have laid no real found ation for professional training, and who have no well-determined purpose about the matter, and no fair conception of the responsibilities and obligations of a teacher's occupation. [Italics are the editor's.] * * * No student is desired at a normal school who does not read readily and intelligibly, spell correctly, and write legibly and neatly. Regardless of diplomas, certificates, and examinations, principals will refuse admittance to all students who do not possess these acquisitions in a highly creditable degree.

If these conditions are complied with in good faith, New York may well boast of having the best arranged and most perfectly equipped system of normal schools in this country.
The preparation actually required and exacted from candidates for admission to the New York normal schools will be best understood from the following sets of examination papers:

ENTRANCE EXAMINATION QUESTIONS.
[Prepared by a committee of normal principais and published by the State department of public instruction.]

## Entrance examination, February, 1900.

Write the subject of the examination, your name, and the date at the head of your papers.
The work should be written out in full in the answers.
Correct answers will receive ten credits each, and a proportionately less number will be allowed as the answer approximates correctness or shows lnowledge of principles.
In order to secure admission candidates must gain an average of seventy credits in the three branches and not fall below sixty credits in any one of them.

Use care in spelling, writing, and general neatness of appearance.
ARITKMETIC.

1. What is a proof for division? Define a composite number. Define the prime factors of a number. After several numbers have been resolved into their prime factors, how is the G. C. D. of those numbers found? How their L. C. N.?
2. Reduce $17 \frac{1}{4}$ to twelfths and write the analysis.
3. If it takes one man $7 \frac{1}{4}$ days to do a piece of work, how long will it take three men to do $2 \frac{2}{3}$ times as much?
4. Multiply nine thousandths by eight hundred and divide the product by thirtysix milionths.
5. You sell to-day to James Carson for cash 2 bol. flour, at $\$ 6.25$ per bbl. ; 264 13. corn meal, at $\$ 1.10$ per cwt., and $1,850 \mathrm{lb}$. coal, at $\$ 5$ per ton. Make out bill in proper form.
6. Having lost $12 \frac{1}{2}$ per cent of his canital, a man had $\$ 10,850$ left. How much did he lose?
7. Write an ordinary bank note, dated to-day, for $\$ 200$ at 60 days, and find its proceeds if discounted at a bank.
8. At $\$ 5.75$ per bbl., what costs 3 bbl., 17 gal., 2 qt . of vinegar?
9. What is the exact contents, in cubic yards, of a cellar wall 2 feet thick and 9 feet high, whose outside measurement is 36 feet by 24 feet?
10. Ilow many rods on the side of a square field containing 100 acres?

GEOGRAPIIY.

1. What determines the position of the tropics and polar circles?
2. Define latitude, longitude, isothermal lines, river system, and promontory.
3. Name three canals of New York State and state what waters they connect.
4. Mention three counties of New York State on islands.
5. Locate the following cities and give a fact about each: Chicago, Boston, Riga, Bombay, Glasgow.
6. In what zone is Asia situated?
7. Name and locate two lakes of Africa.
8. On what waters would you sail from Edinburgh to St. Petersburg?
9. Describe the largest river in South America.
10. Mention two conditions which determine the ciimate of a place.

GRAMMAR.
(1.) "You all did see that, on the Lupercal I thrice presented him a kingly crown, Which he did thrice refuse." (2.) "The mellow year is hasting to its close; The little birds have sung their last." (3.) "So sweet a kiss the golden sun gives not To those fresh morning drops upon the rose."

1. Diagram or analyze sentence (1) by any method you may have learned.
2. Parse the verb of the principal clause in (1).
3. Decline and parse all the pronouns in (1).
4. Parse all the verbs in (2).
5. Select the nouns in (3), tell their cases and give reasons.
6. Select and classify the adjectives in (3).
7. Write a sentence containing a verb in the active voice, and recast the sentence so that the verb shall be in the passive voice.
8. Write a sentence containing a predicate adjective.
9. Correct the following sentences:
(a) The number of students are very great.
(b) Everyone has their enemies.
(c) This is the friend which I love.
(d) George sent you and I some candy.
(e) Either Mary or John have gone.
10. Write a composition containing not less than fifty words, setting forth your idea of the usefulness of studying grammar.

Entrance examination, September, 1900.
ARITHMETIC.

1. What is the name of (a) the tenth period in whole numbers; (b) the sixth period in decinals; (c) the eighth place in decimals.
2. Write twenty whole numbers of six significant figures each, and add them.
3. Mllustrate your method of verifying your work when you have multiplied two large numbers together.
4. Find (a) G. C. D. of 1372 and 432 by two methods; (b) L. C. M. of same two numbers.
5. Divide $\left(2 \frac{1}{7} \times \frac{3}{16}\right)$ by $\left(2 \frac{1}{4}-1 \frac{5}{7}\right)$ and reduce the number to a decimal.
6. How many yards of carpet $\frac{3}{4}$ of a yard wide is required to cover a floor 17 feet long and 16 feet 6 inches wide?
7. In what time will $\$ 680$, at 4 per cent simple interest, amount to $\$ 727.60$ ?
8. A collector who charges 8 per cent commission on what he collects pays me $\$ 534.75$ on a bill for $\$ 775$, how much of the bill remains uncollected?
9. A cellar is to be dug 30 feet long and 20 feet wide. At what depth will 100 cubic yards of earth have been removed?
10. How many feet, board measure, in a plank 16 feet 4 inches long, 1 foot 7 inches wide, and $4 \frac{1}{2}$ inches thick?

GEOGRAPHY.

1. Name the counties bordering on (a) the Hudson River; (b) Lake Ontario.
2. In what county is (a) Rochester; (b) Syracuse; (c) Binghamton; (d) Middletown; (e) Jamestown; (f) Utica; (g) Poughkeepsie.
3. List of the cities named in question 2 in order of greatest population.
4. Name (a) the four longest railroads in this State; (b) their termini; (c) the cities through which they pass, respectively.
5. By what number, approximately, would you multiply the population of New York State to produce the population of the United States?
6. How many (a) States in the United States; (b) Territories.
7. Name (a) the Territories; (b) the States that have been admitted since the last Presidential election.
8. Name three railroad lines to the Pacific coast.
9. Name the largest State in area in the United States and compare it in size with (a) France; (b) the United Kingdom of Great Britain and Ireland; (c) Germany; (d) Russia.
10. Draw a rough outline map of the Western Hemisphere and locate the large (a) political divisions; (b) rivers; (c) mountains; (d) bays; (e) gulis; (f) capes.
grammar.
11. Give a synopsis of the rerb "to see" in the third person singular of all the modes and tenses in the active voice.
12. Classify adjectives and give illustrations.
13. Compare much, ill, able, faithful.
14. Give the rule for the formation of the possessire case.
15. Write the possessive case plural of sheep, man, lady, enemy, son-in-law.
16. Name the grammatical forms of the parts of speech and the parts of speech to which they severally apply.
17. Copy the following and underscore the logical subjects once and the grammatical subjects twice: (a) "A thing of beauty is a joy forever;" (b) Chaucer, the father of English poetry, wrote the Canterbury Tales;" (c) "The morn, in russet mantle clad, walks o'er the dew of yon high eastern hill."
18. Diagram or analyze the following by any method: "Franklin, who afterwaids became a distinguished statesman and philosopher, learned his trade in the printing office of his brother, who published a paper in Boston.
19. In the first five questions make a list of (a) the nouns and their cases; (b) the verbs and their principal parts; (c) the prepositions and their terins of relation.
20. Write a description of some village or city-seventy-five words. Give special attention to punctuation and capitalization.
In this "new departure," or to speak more accurately, in this return to first principles, the Albany school is expected to take the lead. The executive committee, to whom the reorganization of the school was committed, found that the instruction heretofore given had been chiefly academic; that teachers had been chosen for their scholarship rather than for pronounced professional ability; that the work done in the early years was largely the same as was done in the academies and high schools; that while increased attention was being given to pedagogy, yet the conditions of admission were so low that students of very meager attainments in scholarship were permitted to enter, and consequently a large part of the time of the teachers was spent in teaching subjects usually taught in academies and high schools; that the expectation that graduates of the normal school would become teachers of district schools had not been realized, because such graduates could command a larger salary than districts were able to pay; that consequently the district schools must secure their teachers from the union schools, academies, and high schools; and that it would be wise and economical to offer in the Albany school a course of study which should prepare its graduates to become "teachers and trainers of those persons in the mion schoos, academies, and high schools who are to become the instructors of the young in small or sparsely settled communities."

## English course.

Candidates for admission are required to be at least 17 years of age and to pass a satisfactory examination in the following subjects for admission to the English course:

| Arithmetic. | Rhetoric. | Geography. | Physics. |
| :--- | :--- | :--- | :--- |
| Algebra through | English literature. | American history. | Chemistry. |
| quadratics. | Bookkeeping. | Gelieral history. | Astronomy. |
| Geometry. | Civil government. | Botany. | Geology. |

Plane trigonometry. Elements of linear
Gramman Rysiology.
Grammar. drawing. Zoclogy.

No "degree" is to be conferred on graduates of this course, but they will receive a diphoma which authorizes them to teach in the public schools of the State.

Classical course.
Candidates for admission must be at least 17 years of age, but no one will be graduated who is not at least 20 years of age. The entrance examination embraces all the subjects required for entrance to the English course and in addition-
Cæsar, three books. Cicero, six orations.
Virgil's $F$ Eneid, six books.
Xenophon's Anabasis, three books.
Homer's Iliad, three books.
Latin prose composition.
Greek prose composition.
Instead of the requirements in Greek, candidates may offer a two-years' course in French or German or a less amount of both.

## COURSE OF STUDY.

First term.-Philosophy of education, school economy, drawing; methods of tearhing the following subjects; Number, arithmetic, botany, place, geography, physiology, color, language, grammar, zoology, object lessons, reading, penmanship, composition; a course of reading connected with professional work.
Second term.-Methods of teaching the following subjects; Algebra, geometry, physics, chemistry, Latin, rhetoric, mineralogy, geology, astronomy, preparation of specimens and apparatus.

Thirll term.-Methods of teaching the following subjects: Latin, Greek or French or German, history, solid geometry, mensuration, physical geography, civil government, trigonometry, sanitary science, bookkeeping, school architecture, preparation of specimens and apparatus.
Fourth term.-History of education, school law, kindergarten methods; methods of teaching the following subjects: Music, drawing, physical culture, elocution, teaching in model school; a course of reading connected with professional work; discussion of educational themes.
Graduates of this course receive the degree of "Bachelor of Pedagogy." Future announcements will prescribe the conditions on which the degrees of "Master of Pedagogy" and "Doctor of Pedagogy" will be conferred.

TEACHERS' TRAINING CLASSES.
The number of teachers employed in the public schools of New York is, according to the last report of the State superintendent (1891), 31,703. Reckoning the average professional life of a teacher at five years, the State requires at least 6,000 new teachers every year. The normal schools send out fewer than 1,000 graduates every year. Lstimating the number of graduates and undergraduates of the normal schools who go into the schools as teachers at 1,500 , there is still a large deficit of trained or partly trained teachers. How is this deficiency to be supplied? The answer has been already given-by establishing training classes in connection with the academies and union echools. The legislature in 1890 passed an "Act in regard to professional instruction of common-school teachers in academies and union schools," and appropriating $\$ 60,000$ annually "for the instruction of competent persons in academies and whion schools in the science and practice of common-school teaching, under a course to be prescribed by the superintendent of public instruction," who is to designate the academies and union schools in which such instruction shall be given and also to prescribe for them a uniform curriculum. The purpose and scope of these training classes-they would have been called normal schools a few years before-will be best understood by reading the "curriculum:"

COUPSE OF STUDI.
The following course of study is prescribed upon the advice of a committee of principals representing the union schools and academies of the State. This course was devised to meet the requirements of the uniform system for teachers' certificates and to satisfy the couditions for admission to advanced classes in the normal schools of the State:

First iem.

FIRSM RECITATYON゙ーARITHMETIC.
[Onc recitation daily throughout the term.]
Review of the following topics with special reference to teaching:

1. Definition of terms.
2. Notation and numeration.

Numbers in the decimal scale; numbers in varying seales; fractions; expressions of per cent.
3. The four fundamental processes applied to numbers in the decimal scale; numbers in varying scales; fractions.
4. Reductions.

Decimals; fractions; numbers in varying scales.
5. Properties of numbers.

Classification; factors; divisors; multiples.
6. Ratio and proportion.
7. Involution and square root.
8. Practical measurements.
9. Applications of percentage-in which time is not an element.
10. Interest and discount.

Partial payments by United States rule; true discount; bank discount; commercial discount.

SECOND RECITATION-GEOGRAPHY.
[One recitation daily for eight weeks.]
Review of the following topics with special reference to teaching:

1. Definition of terms.
2. Shape, size, and motions of the earth; day and night; the seasons.
3. State of New York.

Boundaries and extent; mountains; rivers and lakes; counties; cities and important villages; agricultural and mineral productions; commerce; railroads and navigable waters; climate; industries or occupations; places noted for natural scenery; places of historic interest.
4. The United States.

Boundaries and extent; States and Territories; mountain and river systems; agricaltural and mineral productions; important cities; population; commerce and transcontinental lines of travel; industries or occupation.
5. Other countries of the world, especially Furope.
6. The great mountain systems and ranges oi the world.
7. The principal rivers of the world.
8. Latitude and longitude; local and standard time.
9. Physical phenomena.

Climate; tides; ocean currents and trade winds.

## 10. Races oí men.

Location; characteristics; occupations.
The remainder of the term is to be devoted to the study of methods of teaching. The relative time given to each of the following subjects is left to the discretion of the instructor:

METHODS IN PRIMARY NUMEEER.
[Sce Observation and practice work.]
METHODS IN GEOGPAPHY.
[See Observation and practice work.]
Second term.
FIRST PECYTATION-LANGUAGE AND GRAMMAR.
[One recitation daily through the term.]
Review of the following topics with special reference to teaching:

1. Definition of terms.
2. Parts of speech.

Classes; modifications; inflections; syntax.
3. Analysis of sentences.

Principal clauses; subordinate clauses; analysis of clauses; modifiers-words, phrases, clauses; classification of modifiers as to office.
4. Construction-involving a knowledge of the foregoing topics.
5. Composition.

Divisions-subject, hearls, thoughts. About familiar subjects-objects, animals, metals, plants, incidents.
Letter writing, bills, orders, receipts, acknowledgments, introductions.
SECON゙I RECITATION゙—PHYSIOLOGY.
[Four weeks.]
Review with special reference to teaching. (See syllabus.)
SCHOOL MANAGENENT AND SCHOOL LATV,
[Fone weeks. See syllabus.]
The remainder of the term is to be devoted to methods of teaching. The relative time given to each of the following subjects is left to the discretion of the instructor:

METHODS OF TEACHNG PEADING.

> [See Observation and practice work.]
> methods of teacinng language.
> [Sce Observation and practice work.]

1. Form-shdy and drauing, one recitation every week through ach term. The particular day of the week is left to the convenience of the instructor. Where desirable this topic may be presented each day consecutively until completed.
2. The examinction of the training classes under the uniform system will be held the third Saturday of January and the second Saturday of June.
3. The laws of mental development and principles of teaching are to be considered especially in the study of methods of teaching; but as these laws and principles are fundamental to the professional study of the teacher, they can be illustrated and developed in comection with any of the above subjects of study.

## OESERYATION AND PRACTICE WORK.

1. The course of study derotes ten weeks each term to the special study of methods of teaching; during the first term, ten weeks to number and geography; during the second term, ten weeks to reading and language. Part of the time given to these topics must be spent in observation and practice work under the direction of the instructor of the class acting as critic. One consideration specially noted in granting applications is the opportunities afforded for observation and practice work, and it is insisted that these opportunities be improved.
2. Observation. In addition to receiving methods of teaching on the authority of the instructor, it is very important that the members should be trained to critically observe and intelligently interpret the principles of teaching by being brought in contact with the pupils in the actual work of imparting instruction. To afford this training, it is expected that the critic teacher, at least twice a week, will give an opportunity to witness practical work, either by taking the class to other departments of the school to observe the work of experienced teachers, or by bringing pupils from other departments to receive a model lesson from the critic teacher.
3. For practice work it is recommended that each member be given actual work in teaching, both by taking charge of a class in other departments of the school as often as is consistent with the work of the school, and by having papils brought beiore the training class to receive a lesson from a member designated for that purpose.
4. At a subsequent recitation let this observation and practice work be reviewed by the critic teacher, the underlying principles clearly brought out, and the proper methods forcibly presented. In the presentation of the methods the outlines as given in the syllabus may prove suggestive to the critic teacher. The time devoted to the observation work and the criticisms on the work will be accounted part of the regular daily periods of class instruction.
5. Very much depends upon the instructor of these classes whether the instruction and practice drill are of proper grade and character. The number of graduates sent out each year from our normal schools is ample to furnish competent and thoroughly trained teachers to take charge of the classes. Duty to the common schools demands thoroughly trained teachers for this work.
6. If the inspector in his visitations shall find any person in charge of the instruction who is not qualified by professional study or experience to properly present the work,
he is authorized to report the fact to the superintendent, who will annul the appointment to instruct such a class.

> SYLLABUS.

The following outlines are presented to aid in the study of methods of teaching, as prescribed during the last ten weeks of each term. Inasmuch as the training classes are not all of the same grade of scholarship, these outlines are not given with the expectation that they are to be followed strictly to the letter, but rather as suggestions to teachers who have no better plan of work.

FORM STUDY AND DRAWING.
The syllabus for work in form study and drawing will be the course prepared by the late Dr. French and issued by the Department of Public Instruction.

THE MENTAL POWERS AND THE LAWS On MENTAL DEVELOPMENA.
I. The mind:
(1) The teacher must have practical knowledge of the mind.
(2) The laws of its growth.
(3) Means of its culture.
(4) The right methods of using the means of culture.
(5) What the mind is, and does.
II. Attention:
(1) How to secure.
(2) How to retain.
(3) Conditions of.
III. How knowledge is gained:

Perception-
(1) Idcas of pressure and resistance. The sense of muscular resistance.
(2) Ideas in regard to the surface of objects. Touch and its organs.
(3) Ideas of flavor. Taste.
(4) Ideas of odor. Smell.
(5) Ideas of sound. Hearing.
(6) Ideas of light and color. Sight.
(7) Secondary (or acquired) perceptions.
(8) Law:-Ideas belonging to one sense can not be conveyed through another sense. Application of this law in teaching.
(9) Sense training.
(a) Neglect of
(b) Importance of.
(c) Bost means of.

Two-fold character:-Reproduction and recognition, spontaneous and voluntary.
Kinds. $\left\{\begin{array}{l}\text { Arbitrary-Rote learning. } \\ \text { Suggestive-Learning by heart. } \\ \text { Associative. }\end{array}\right.$
Growth of memory-"Plastic Period."
How best cultivated.
Educational value.
On what depends.
Kinds. $\left\{\begin{array}{l}\text { Reproductive. } \\ \text { Constructive. }\end{array}\right.$
V. Imagination.

Necessity of training.
Its utility in education and in life.
Means of cultivation.
Relation to general school work.
Relation to preceding powers.
Results to be aimed at by teacher.
VI. Reason.
VII. Principles of Kinds. $\begin{cases}\text { Inductive. } & \text { Deductive. } \\ \text { Analytical. } & \text { Synthetical. } \\ \text { Demonstrative } & \text { Dogmatic. }\end{cases}$ Demonstrative. Dogmatic.
Means of cultivation.
Means of cultivation.

## Senses trained by object-teaching.

Ideas before words; thoughts before sentences; knowledge before definitions; facts before inferences; processes before rules. mental culture.

Power to do comes by doing. Power to think comes by thinking.
Right habits result from acts frequently and rightly periormed.
I. Preliminary selections:
(1) Distinguish between number-teaching and the formal teaching of arithmetic.
(2) Arithmetic is a science and an art.
(3) A brief presentation of the mental faculties that are brought into action and developed by its study and practice and a brief stady of each faculty.
(4) The mental principles upon which recognized or accepted pedagogical rules are based, and their application in teaching arithmetic.
II. Primary work:
(1) Method-concrete.
(2) Furniture.
(a) Frames.
(b) Pictures.
(c) Counters-beans, corn, pebbles, etc.
(3) Write numbers.
(a) Distinguish between the object and the number. Object wordfigure.
(t) The idea of number.
(a) Its expression.
(b) The relation of numbers.
(c) Kinds of numbers.
(5) Develop the idea of the order and relation of the figures in the numbers. (Ideas of the meaning of each step dwelt on until comprehended. Explanations and practice in the use of numbers.)
Grube's method.
(6) (c) Limitations of first year's work; outline of second; development of each number; combining and separating.
(b) Develop idea of the terms, and define.
(c) Develop idea of operations, and give rule.
(d) Develop idea of proofs, and state methods.
(e) Make tables.
( $f$ ) Give examples.
(7) Teaching of the fundamental rules.
(a) Methods of teaching reading and writing numbers.
(b) Systems of practice in addition to gain rapidity and exactness.
III. Factoring:
(1) Development of: divisors, multiples, terms, principles.
(2) Operations and applications illustrated by examples and problems.
IV. Fractions. Development of:
(1) The idea of a fraction.
(2) The terms, forms, values, classes, uses, changes in forms.
(3) Operations, principles, reduction.
Y. Decimal fractions:
(1) Treated the same as common fractions.
(2) The distinctions between decimal and common fractions and simple whole numbers made clear.
VI. Denominate numbers:
(1) Development of tables, scales, their meaning, use, and how derived.
(2) Kinds of units as to form, name, and application.
(3) Reductions, principles, and operations developed from work.
VII. Percentage:
(1) Derivation, meaning and application of the term.
(2) Development of terms, definitions and principles.
(3) Elements of: base, rate, percentage, difference, and amount.
(4) Development of formulas and rules.
(5) Oral and written solutions of examples and problems.

METHODS IN GEOGRAPHY.
I. Local primary:
(1) The handis and pointing.
(2) Direction and facing.
(3) Location and direction.
(4) Points of the compass.
(5) Lines and their names.
(6) Lines for the points of the compass.
(7) Draw ground plan of a schoolroom.
(8) Plan of lot and house.
(9) How to begin map study.
II. Adranced primary:
(1) Study of district, with roads, bridges, buikings, railroads, and water courses.
(2) Study of township, with villages, hamlets, streams, and bodies of water.
(3) Study of township, with the surrounding towns.
(4) Draw outline map of countr, with township lines.
(5) How to go from county to the earth as a whole.
III. General study of countries:
(1) Position.
(2) Boundaries-outline map.
(3) Relief.
(1) Drainage.
(5) Soil.
(6) Climate.
(7) Vegetation-Flora.
(8) Animals-Fauna.
(9) Occupation of the inhabitants.
(10) Talks on definitions; when to learn them and how to use them.
(11) Suggestions in regard to arousing interest in the study.
IV. Work on State of New York:
(1) Outline map on blackboard.
(2) Boundaries. $\left\{\begin{array}{l}\text { Land. } \\ \text { Water }\end{array}\right.$
(3) Mountains-class to learn location of three or four ranges; describe in class; locate on the blackboard map.
(4) Valleys-class to give location; describe.
(5) Lakes-class to give location; describe.
(6) Rivers, five largest-class to learn source, direction of flow and into what each empties; important cities on each.
(7) Islands-class to give location; describe.
(8) Cities-class to learn location, and important and interesting facts about buildings; processes of manufacturing articles. The work to be reproduced in composition form for next recitation.
(9) Railroads and canals-require termini, direction; principal cities along the line; principal industries of each.
(10) Conversational lessons-on occupation, productions, education, government, and public buildings.
(11) Dictation on map.

PHYSIOLOGY AND HYGIENE.
I. Utility of the study:
(1) Practical.
(a) Knoriledge of hygiene will affect personal habits and practices to some extent.
(b) An intelligent concention of the body as a piece of delicate mechanism tends to prevent its owner from trifing with it-one does not tinker with a fine watch, or entrust it to a blacksmith to be mended. Quacks and nostrums do not find favor with one that understands the body.
(c) Though a knowledge of hygienic laws does not always ensure their practice, yet that knowledge on the part of future parents and teachers, if woll grounded in the upprehension of the perfection (ond complexity of the human machine, must tend to better hygienic management of children at home and at school.
(2) Educational.
(a) Affords opportunity for the study of things, as opposed to the study of words and abstractions-things in which pupils may be casily interested, and of which their parents will be glad to have them learn-thus training their powers of observation and comparison.
(b) Serves as a center about which the teacher may group the beginnings, and the most important elementary facts of biology, chemistry, and physics.
(c) Gives abundant exercise in tracing out adaptations of means to ends.
(d) Develops the idea of analogy as distinguished from similarity.
I. Utility of the study-Continued.
(e) As the nomenclature of anatomy and physiology is tolerably precise, recitations in these subjects give opportunity in older classes for the cultivation of accurate diction. In younger classes the propensity of bright children to delight in their ability to use new words, especially "hard names," finds natural and healthy indulgence if the teacher makes sure that they first have the ideas, and then discreetly encourages them to acquire the names; avoiding any forcing.
II. Suggestions to teachers:
(1) Teach objectively and by observation as much as possible.
(2) Exhibit, when possible, the part or object described, taken from the lower animals.
(3) For objective teaching of physiology great assistance is rendered by the possession of a manikin, models, charts, microscope, and prepared specimens.
(4) Encourage the pupils to invent simple experiments and to observe analogies from nature to illustrate the lesson.
(5) Aim to present the laws of life in a practical way, so that they will become a guide to living.
(6) Teach physiology by a daily practice of hygienic laws. To allow pupils to sit in draughts, to pay no attention to rentilation and arrangement of light, to be careless in regard to diet, dress, and hours of sleep, teaches to little purpose.
(7) Show clearly, without overstatement, the pernicious effect of alcohol and narcotics upon life and health, organ and function.
IlI. Method of work. Primary:
(1) The study of physiology should be confined to parts that can be seen or felt. Names should be taught, and children should be exercised in "touching." They should be led to discover the functions and adaptations of these parts, and to compare them with corresponding parts of lower animals.
(2) All pictures or descriptions that would excite unpleasant thoughts or morbid fancies are out of place with young children.
(3) Terms to be taught:

| Head: | forearm, | root, | Neck: |
| :--- | :--- | :--- | :--- |
| trunk, | radius, | gum, | throat, |
| limbs, | ulna, | enamel, | windpipe, |
| right, | wrist, | incisors, | larynx. |
| left. | palm, | eyeteeth, | Breast: |
| Legs: | knuckles, | molars, | breast bone, |
| ankle, | thumb, | tongue, | ribs, |
| knee, | forefinger, | saliva. | arm-pits. |
| hip, | midde finger, | Eye: | Back: |
| thigh, | ring finger, | pupil, | chcst, |
| kneepan, | litte finger, | iris, | abriomen, |
| calf, | finger tip. | eyeball, | loins, |
| shin. | Skull: | socket, | spine. |
| Foot: | crown, | (orbit), | Skin: |
| toe, | hair, | eyelids, | cuticle, |
| nail, | face, | eyelashes, | true skin, |
| ball, | cheek bone, | eyebrows, | pores. |
| sole, | forehead, | tears. | Sweat: |
| instep, | temples, | Nose: | blood, |
| heel. | cheek, | nostrils, | arteries, |
| Shoulder: | chin, | bridge, | veins. |
| shoulder blade, | mouth, | septuin. | Muscles: |
| collar bone, | lips, | Ear: | sinews, |
| arm, | teeth, | lobe, | (tendons), |
| elbow, | crown, | canal. | joints. |

In review teach names of corresponding parts of lower animals; e.g., stifle, hock, pastern, hoof, etc.
(4) Lessons on the care of the eyes, ears, teeth, skin, hair, hands, and feet, should be given in connection with the study of those organs, and there should be talks about habits of eating, drinkiig, breathing, bathing, sitting, and sleeping.
III. Method of work-Primary-Continued.
(5) Unfortunately, object lessons on the effects of alcohol are too sadly frequent in the vicinity of most of our schools. The attention of the children may be called to the melancholy and too plainly visibleeffects of intemperance upon the body, and they may be led to pity the simer and detest the sin. But the utmost care must be used not to hurt the feelings of children that suffer from the drink habit in others.
IV. Method of work. Intermediate:

In graded schools the same general method of oral work may be continued through the intermediate years. The organs and processes of digestion, circulation, respiration, and excretion should be taught. Pupils should become familiar with the location and appearance of the organs by the use of pictures and charts or blackboard drawings, by touching those parts of their bodies beneath which these organs are situated, and particularly by examining the organs themselves as found in other animals. Functions should be explained in a general way, and the hygiene of the organs carefully taight. The effect of stimulants and narcotics should be emphasized, with care to a void extravagant statements which the observation and experience of the children would contradict.
V. How to use a text-book:
(1) Introduce each main topic and, as far as possible, each subdivision by the exhibition and examination of a real thing-bone, muscle, nerve, brain, skin, heart, artery, lung, stomach, liver, kidney, etc.
(2) Recitation should be both topical and by question and answer; one method for advance, another for review.
(3) Make much use of the pictures and diagrams. Have them recited by blackboard memory sketches.
(4) Illustrate such terms as oxygen, hydrogen, carbon, nitrogen, pressureof the air, carbonic acid, osmose, etc., by simple chemical and physical experiments before these terms occur in the book.
VI. How to use specimens:

When fresh joints, etc., are used for illustration, take the utmost pains to secure neatness. Use dinner plates, plenty of tissue paper or white cloth, pins and needles. Cover every part except what is to be shown. Keep all covered till the proper time comes. Have water and clean towelshandy. The exhibition of the muscles and nerves, and even of the organs of respiration, circulation, and digestion of a small, cleanly animal ( f.g., a red squirrel), if well managed, arouses intense interest and is very instructive.
VII. How to make models and illustrative apparatus.
VIII. Reference books:

Colton's Practical Zoology (gives rery full directions for the study of organs of animals) ; Blaisdell's Our Bodies and How We Live (contains numerous simple and practicable experiments); Martin's Human Body-Briefer Course (makes prominent the doctrines of energy, and gives good directions for demonstrations); Buckalew and Lewis's Practical Work in theSchooiroom (primary lessons); Woodhull's Manuai of Homemade Apparatus; Woodhull's simple Experiments for the Schoolroom; Lind's Lasy Experiments in Chemistry and Natural Philosophy.

SCHOOL MANAGEMENTT.
I. Organization of school:
(1) Temporary -
(a) Necessity of knowing what to do the first day
(b) Order of the work.
(c) How to keep all busy.
(d) Manner of forming classes.
(e) How to change from your temporary to a permanent organization_
(2) Permanent-
(a) Suggestions about forming programme.
(b) Number of classes.
(c) Order of classes.
(d) Time given for study-for recitation.
(e) Model programme for the work of an ungraded school, made ont hy members of the class.

1I. Sessions:
(1) Length.
(2) How divided.
(3) Recess.
(土) How long to keep young pupils in school.
III. Study:
(1) Objects of study:
(2) Conditions requisite-
(a) In pupils themselves.
(b) In their surroundings.
(3) Power of concentration.
(4) Incentives-
(a) Proper.
(b) Doubtful.
IV. Recitations:
(1) Objects.
(2) Methods oi conducting-
(a) Advantages of each
(b) Kind of work for which each is adapted.
(c) Use a variety of methods.
(3) Teacher's preparation-
(a) What it should include.
(b) Need of preparation.
(c) When teacher should use a book in the class.

V . Questioning:
(1) Character of questions-
(a) Capacity of pupil.
(b) A mental force.
(c) Logical order.

- (d) The first question most important.
(e) Teacher should study the answer before asking.
(2) Object of questions: To direct, to incite, to lead, to arouse, to test.
(3) Principles of questioning.
(4) Manner of giving out questions.
(5) Order of questions.
(6) Position of pupil in answering.
(7) Questions to be avoided.
(8) Answers to questions: To the point, clear, direct, concise, definite, complete.
VI. Examinations:
(1) Object.
(2) Frequency.
(3) Methods.
VII. School ethics:
(1) Duty of teacher.
(2) Duty of pupils.
(3) Duties of school officers.
(4) Duties of superintendent.

TIIF. School government:
(i) Object.
(2) School control.
(3) Elements of governing power.
(4) Cause of disorder.
(5) Means of avoiding disorder.
(6) Rules and regulations.
(7) School punishment.
(8) How to detect offenders.
(9) Self-reporting system.
I. Combining spelling with reading.
II. Oral:
(1) Definition.
(2) Advantages.
(3) Disadvantages.
(4) Method of presentation.
III. Written:
(1) Definition.
(2) Advantages.
(3) Disadvantages.
(4) Method of presentation.
IV. Syllabication.
Y. Word analysis:
(1) Classes of letters-
(a) Yowels.
(b) Consonants.
(2) Classes of words-
(a) Primitive.
(b) Derivative.
(c) Simple.
(d) Compound.
VI. Practice phonic analysis and sounds of the letters for clearness of articulation.
VII. Use of diacritical marks.
I. Kinds of license:
(1) Normal-school diploma.
(2) State certificate.
(3) College-graduate's certificate.
(4) Limited license.
(5) Certificate of board of education.
(6) Certificate of school commissioner issued under the uniform-examination system.
II. License annulled:
(1) Evidence against moral character.
(2) Deficiency in learning or ability.
(3) Appeals to State superintendent.
III. The teacher's contract:
(1) Prerequisites.
(2) Relation to trustee.
(3) With whom made.
(4) The duration.
(5) The duties-
(a) To keep a successful school.
(b) T́ Keep school open every school day.
(c) To instruct all pupils.
(d) To keep the school register.
(6) Breaking of contract.
IV. The teacher's authority:
(1) Absence and tardiness.
(2) Control of the child's studies.
(3) The Bible and religious exercises.
(4) Suspension and expulsion.
(5) The parent.
(6) Corporal punishment.
Y. School officers:
(1) Duties.
(2) Term of office.
(3) Salary.
(4) How elected.
(5) How removed.

YI. School meetings:
(1) When held.
(2) How called.
(3) Qualifications of roters.

## READING.

I. Thought:
(1) Definition.
(2) Ways of getting it.
(3) Ways of expressing it.
II. (1) Definition of reading.
(2) Preparation made for reading before school life begins.
(3) Use of the principle of association in teaching reading.
(4) Comparison of methods.
III. The alphabet method:

Objections-
(1) Term is given before idea.
(2) Works from the unknown to the known.
(3) Does not begin objectively.
(4) Makes slow stumbling readers.
(5) Does not secure good expression.
(6) A very slow method.
IV. The phonic method:

Can not have a perfect phonic method-
(1) The same letters represent different sounds.
(2) Different letters the same sound.
(3) Some letteris have no sound.
V. The word method:
(1) Adrantages-
(a) Teaches ideas before terms.
(b) Commences objectively.
(c) Begins at the child's standpoint.
(d) Makes sight readers.
(e) Children read with intelligence and expression.
VI. The sentence method:
(1) Advantages-
(a) Does not violate any principle of teaching.
(b) Begins at the child's standpoint.
(c) Can be made interesting.
(2) Objections-
(a) Can not be followed strictly.
(b) Gives no key by which pupils can help themselves.
VII. Snggestions in the different methods:
(1) In the alphabet method perception and memory are chiefiy cultivated in detecting resemblance and difference.
(2) In the phonic method care should be taken in producing the exact sound.
(3) In the word method the order of development is-
(a) The idea suggested by the object.
(b) The spoken word expressing that idea.
(c) The written word expressing the idea.
(d) The thought expressed by a collection of words.
VIII. Steps in the work of each lesson:
(1) A conversational lesson about some familiar object.
(2) Show the object or a picture of it, or make a drawing of the object.
(3) Have the pupils give the name of the object-the spoken name.
(4) Write the name on the board.
(5) Drill on the word, having pupils pronounce it.
(6) Require pupils to write the words on their slates.
(7) Combine words into sentences.
X. How to conduct first work:
(1) Vocabulary to be used.
(2) Practices to be observed.
(3) Practices to be avoided.
(4) How combine spelling and reading.
(5) When use books.
(6) How use them.

X . Means of maintaining interest:
(1) Sight reading.
(2) Supplementary reading.
XI. Errors to be avoided:
(1) Too great rapidity in adyancing pupils.
(2) Mispronunciation of words.
(3) Mechanical reading.
(4) Too much criticism.
XI. Errors to be avoided-Continued,
(5) Too much drill on nonessentials.
(6) Neglect to pursue the natural order of mental growth.
(7) Attempt at eiocutionary effect.
XII. Points that may need special attention:
(1) Attend to pupils' positions.
(2) Attend to pupils' breathing.
(3) Attend to the thought.
(4) Attend to the expression of the thought.

METHODS IN LANGUAGE.
I. Suggestions to teachers:
(1) Strive to make the child do. He learns to use by using.
(2) Be careful about the use of language before children.
(3) Make every lesson a language lesson.
(4) Train the faculties in the natural order.
(5) Aim to awaken thought, to cultivate the use of correct language, to arouse criticism.
(6) Study the art of questioning. It is the teacher's passport to success.
(7) Use the following methods: Objective, inductive, analytic, synthetic, oral, ard written.
(8) Have every thought expressed in a correct sentence.
II. Oral lessons:
(1) Objects: Quality, parts, material, use.
(2) Conversations and descriptions of actions, of animals, of plants.
(3) Complete sentences in answer to all questions.
(4) Supplying omitted words in elliptical sentences.
(5) Formation of new sentences from known words.
(6) Describing what is seen in pictures.
(7) Reproduction of facts from reading and object lessons, of short stories.
(8) Memory lessons, short quotations.
III. Written exercises:
(1) Copying sentences from reading lessons; supplying omitted words in elliptical sentences; construction of new sentences from known words; short sentences reviewing facts learned in language and object lessons.
(2) Dictation: Sentences from reading lessons.
(3) Results to be reached: Spelling, penmanship, capitalization, punctuation.
(4) Original work: Short sentences, descriptive of pictures, objects, animals, plants, etc.
(5) Reproduction from facts in lessons in reading and geography.
IV. Different kinds of sentences:
(1) Development of idea.
(2) Construction.
(3) Definition.
(4) Drill.
V. Development of parts of speech:
(1) Name words (or nouns).
(2) Action words (verbs).
(3) Quality words (adjectives).
(4) How, when, where words (adverbs).
(5) Personal pronouns, prepositions, conjunctions, interjections.

The committee appointed by the conference of secondary principals recommend as especially adapted for the use of instructors and pupils, the following books:
On physchology, Sully and IIill; on pedagogy, White and Johomot; on history of education. Painter and Hailman; on school management, Wichersham and Batdivin; on memory, Kay.

## PENNSYLYANIA.

## Early II istory.

The normal fire, which was lighted at Lexington in 1839 and which smoldered in New York for some years after the death of Professor Page, did not reach Pennsylvania as a practical force until 1854. During the summer of that year a number of the citizens of Millersville and its vicinity, desiring a more liberal education for their children than was furnished by the common schools of the neighborthood, erected a building for the purpose of accommodating a school, which they proposed to call
"The Millersville Academy." This building was offered to the late Prof. James P. Wickersham, then county superintendent, for the purpose of holding a teachers' institute for three months. The attendance at the institute was so large and the general results so catisfactory that the trustees resolved to enlarge their building and establish a regular normal school.
The legishature had passed a law in 1857 granting certain privileges to such private institutions as would comply with the requisitions of the law and engage in the work of training teachers. Among these requisitions were the following: That each normal school established under the law should possess ground to the extent of 10 acres; a hall, capable of seating 1,000 persons, and boarding accommodations for at least 300 students. The trustees and stockholders of the Millersville Academy at a public meeting voted "that it is expedient to so enlarge the grounds attached to the school and to make such additions to the building connected therewith as to bring the achool within the requirements of the act of assembly of May, 1857," already referred to. The institution was continued as a permanent county normal school until it obtained official recognition as a State normal school in December, 1859.

But the "normal idea" had taken root in Pennsyivania long before the fruit appeared. In a letter to the chairman of the joint committee on education (session of 1833), the Rev. George Junkin, president of Lafayette College, at Easton, writes as follows, in answer to a query of the committee:

Are your teachers formed or prepared in the common schools or have you model schools for them? In prosecuting this inquiry it may be best to state distinctly the thing desired, or, in other words, define a good teacher; and I suppose three qualifications to be indispensable: (1) The art of governing a sehool. (2) The art of communicating knowledge. (3) The knowledge to be communicated. These are set down in what I take to be the order of their importance, but they are all equally indispensable. * * * The capacity of a teacher to train other minds will very much depend on the systematic accuracy to which his own mind has been subjected in its training. The art of communicating must be deeply affected by the practice of acquiring and the habits formed by that practice. These remarks all go to evince the necessity of a model school, in which shall be taught the science-that is, the knowledge of letters and other things to be taught to the children in our common schools, and the arts of communicating and governing. It does appear to me impossible to obtain the right kind of teachers, and in adequate numbers, without it. This point settled, our next business is to settle a plan of attaining this object, and here I know of but three projects: (1) A manual labor academy near Harrisburg, under the immediate direction of the State authorities, in which 100 of the future teachers are to be pupils. [Here follow five weighty objections to this plan.] (2) The establishment of model schools, without manual labor, where the future teacher shall be taught on the best plans. We have settled the question of model schools; they are necessary, and chiefly with reference to practical training in the difficult matters of government and discipline. Without an actual school of children, you have no model at all, be the building and fixtures and apparatus and teacher ever so periect. There lies, then, in the very nature of the case, this necessity, to wit: You must have a school to teach the science, and another school to teach, by the living thing itself, the arts of government and practical details. Now these are furnished, and the only remaining or third project or plan, which is that of establishing, in the existing colleges of our State, model schools, a teachers' course. This project has in its faror the plea of perfect simplicity, and may be explained in a few words:
(1) Let each college fix upon a liberal course of studies for school-teachers, and constitute a new degree in graduation.
(2) Let a common school, to be kept full of children from the neighborhood, in every respect such as is desirable to see in every district of the State, be established contiguous to the college buildings, which school shall be a model in its buildings, fixtures, desks, books, apparatus, rules and regulations, and mode of management.
(3) Let the candidate for the collegiate honor of a school teacher's diploma be in every respect on the same footing in college with other students-study in the same class his own particular branches, submit to the same system of discipline, and let him in addition to these spend a part of every day in the common school as a spectator, and occasionally as an assistant.
(4) When he shall have completed his course, which will take two years, let him pass a final examination and, if approved, receive the honorable testimony of the board of trustees.
(5) Let every teacher thus qualified, who shall teach within the State, recuive, besides the provision made for his support by the people, a yearly allowance from the school fund for every year he shall teach in one place.

The Doctor proceeds to give in six paragraphs what he conceives to be the adrantages of this "project." No clearer statement has since been made of the way in which a miversity chair of pedagogy may be employed for the preparation of teachers of common schools. Beyond this the pioneers of normal training had not at that time ventured.

Pennsylvania claims "to have been the first of our American States to inaugurate the work of preparing teachers." If by "preparing teachers" is meant the furnishing of teachers with sufficient knowledge of the subjects taught in common schools, the claim is somewhat rague, as every good school or college does the same. If it means that Pennsylvania was the first to establish an institution whose principal object was to give instruction in the science and art of teaching and the mode of organizing and governing schools, the claims of Massachusetts must be considered. "The Unirersity of Pennsylvania, begun as an academy in 1749, was designed partially as a school for teachers. Dr. Franklin, the chief among its founders, in addressing the common council of the city for aid in its behalf, states that as the cointry is suffering greatly for want of competent schoolinasters, the proposed academy will be able to furnigh a supply of such as are ' of good morals and known character' and can 'teach children reading, writing, arithmetic, and the grammar of their mother tongue.'" 1 The good Doctor had evidently no conception of a normal school as we now understand the term. The Westem Boarding School, established by the Society of Friends in 1799, made a report in 1824, announcing that "severai of both sexes have so profited by the course of studies and the mode of instruction thus derired as to be qualified for teachers of schools in many parts of the country." The Moravian School, established in 1807 at Nazareth Hall, had "a special department for the preparation of teachers, in which young men received such instruction as qualified them either to teach in schools established at home, or to open and conduct schools in the missionary field." Dr. Benjamin Rush, in an address to the legislature in 1786, favored "the establishment of a system of free schools, of one university at Philadelphia, and of three colleges, one at Carlisle, one at Lancaster, and one at Pittsburg," and adderl, "the university will in time furnish masters for the colleges, and the colleges will furnish masters for the free schools." In all this there seems to be an intention to make scholars who might or might not afterwards become teachers, but there is no intimation that more than scholarship was needed. In 1838 the trustees of Lafayette College erected a building for a model school, placed a distinguished Scotch educator at the head of it, and established a teachers' course. But the people were not as yet educated up to this point and the project failed. The city of Philadelphia has the credit of establishing the first city training school in this country. The Philadelphia Model School, as it was called, was inangurater in 1818 expressly as a teachers' school, for the purpose of qualifying teachers "for the sectional schools and for schools in other parts of the State." The name "Model" Was imported from England, where it was used to designate a school in which young persons could observe and practice the art of teaching. The Philadelphia Model School was a necessary adjunct of the Lancasterian system, which prevailed in that city until 1836, and in a modified form until 1848.

## Colleges as Preparatory Schools.

The plan of utilizing the colleges of the State as preparatory schools for teachersthey can not be called "training schools"--was followed for more than a quarter of a century, and with the same results as in New York.

In 1831, Washington College received from the State an appropriation of $\$ 500$ a year for five years on condition "that the trustees shall cause that there be instructed ammually, gratis, 20 students in the elementary branches of education, in a manner best calculated to qualify them to teach common English schools."

In 1832, Jefferson College was given $\$ 2,000$ a year for four years on condition that " 6 sturlents in indigent circumstances should be educated gratuitously for four years," and thereafter 24 students should be prepared for teachers of common schools.

In the same year Reading Academy receired $\$ 3,000$, with the stipulation that 4 poor students be educated for five years, free of expense of tuition, for teachers of common English schools.

In 1834, Pennsylvania College was given $\$ 3,000$ a year for six years on condition that 15 young men students should be prepared for teachers.

In 1837, Marshall College received a grant of $\$ 2,000$ a year for two years on condition that 20 students be prepared for teachers of the English language.

In the same year Allegheny College received a grant of $\$ 2,000$ a year for four years, for which were to be instructed annually 12 students, free of expense, for teachers in the English language.
"But the experiment of educating teachers in the colleges failed," says Dr. Wickersham, "because there was not then much demand for teachers thus prepared, and for the stronger reason that the general work of a college and the special work of a teachers' school can never be made to harmonize." State Superintendent Burrows, in his report for 1838 , says, "The colleges have already been tried as a means of supplying teachers, and with little success. * $* *$ Hope from this quarter is dead."1 The present writer may add as his own experience that a semicollegiate education is the worst possible introduction to the teaching now required in the common country schools. Few teachers and few schools survive the experiment.

## Professional Normal Schools Recommended.

In 1838 Superintendent Burrows abandoned the plan of educating teachers in departments connected with colleges and academies and advocated the establishment of separate free institutions for the instruction of teachers, in which they should receive " a full and careful course of theoretic and practical instruction in the art of teaching." Superintendent Haines in 1849 advocated the establishment of a normal school in each county and a central institution of the same character, but of higher grade, for the whole State. Superintendent Curtin in 1857 recommended in substance the provisions of the act which was passed by the legislature in that year for the establishment of normal schools. In drafting this bill and carrying it through the legislature, Dr. Wickersham, then principal of the normal school at Millersville, was the leading and guiding spirit. His good judgment, energy, zeal, and practical success as a teacher, as county superintendent and State superintendent, caused the example which he set in the second district to be followed rapidly by several of the other normal districts, and ultimately by all but one.

## Law for Establishment of State Normal Schools.

For normal purposes the State was divided into thirteen districts, in each of which one normal school might be established under the law of 1857 , before referred to, and additional enactments passed in 1859, 1872, 1875, and 1879. The pecuniary and other affairs of each State normal school are managed by a board of 18 trustees, 12 elected by the contributors or stockholders and 6 appointed by the State superintendent of public instruction. All changes in by-laws and rules for regulating proceedings of these boards must be approved by the State superintendent before going into effect. The State appropriations made directly to normal schools are distributed through a

[^79]commission, consisting of the governor, the superintendent of public instruction, and the attorney-general, in such a manner as to do exact and equal justice to the several schools. ${ }^{1}$ Each school is required to have at least six professors of liberal education and known ability in their respective departments: One of orthography, reading, and elocution; one of writing, drawing, and bookkeeping; one of arithmetic and the higher branches of mathematics; one of geography and history; one of grammar and English literature, and one of theory and practice of teaching, together with such professors, assistants, and tutors as the condition of the school may require. Every school is required to have attached to it one or more schools for practice, or model schools, with not less than 100 pupils, in which the students of the normal schools may have an opportunity to acquire a practical knowledge of the art of teaching. The qualifications for admission and the course of study are by law uniform in all the schools and are determined by a couvention of the principals, subject to approval by the State superintendent.
The following notices are taken with much abridgment from the reports of principals of State normal schools to the State superintendent of public instruchion and will be found in full in the last (1891) annual report of the superintendent, pages 183198. The items in the footnotes are excerpted from the latest accessible catalogues of the several schools:

First District, West Citester (G. M. Philips, principal). -There has been no interruption in the prosperity of our school during the past year. Every year sees a substantial but healthy growth in our numbers, and, as usual, we report that the attendance during the past year has been the largest in the school's history. $* * *$ The work in the gymnasium has been carried on with marked success. The physical measurements of our students at the end of the year, when compared with the measurements of the same students at the beginning of the year, showed marked improvement in almost every case. * * * Our post-graduate course has proved to be a marked success. It will be of great value in furnishing higher schools with competent, well-qualified teachers. * * * Many new books have been placed upon the shelves of the library, the number of volumes now reaching about six thousand. * * * The year just ended completes the twentieth year of this school's history, and the tenth of my principalship. ${ }^{2}$
Second District, Millersville (E. Oram Lyte, principal).-The prosperity of this school is still increasing, the attendance last year being the largest in its history. The total number of students for the summer session was 772 ( 386 of each sex), and 1,225 for the year. The graduating class numbered 72 , all of whom obtained good positions as teachers, except a few who have returned to complete the scientinc course. * * * One of the most important improvements made during the past year was the completion of the large gymnasium. The style of architecture of the building is Romanesque. The lower floor contains three rooms, entirely separated from each other. One of these contains the bowling and pitching alleys, and the others are each provided with lockers and bathing accommodations. On the main floor are the reception room, examination room, and the large room for exercising purposes, with elevated walking track, etc. The gymnasium is completely furnished with the latest and most approved apparatus. Two teachers are constantly engaged in the department of physical culture [one lady and one gentleman]. * * \% Believing that a good model school is absolutely necessary for the proper training of

[^80]teachers, no expense has been spared to increase the efficiency of our practical school. It now contains nine grades, begimning with the kin lergarten and ending with the adranced grammar grade. ${ }^{1}$

Timm Dismeict, Kutztown (Nathan C. Schaeffer, principal). -The new wing was reaty fur occupation at the opening of the spring term. The class rooms in it, equipped with all the latest improrements, added greatly to the efficiency of our work. We were thereby enabled to reduce the size of our classes. When students recite in sections numbering from 20 to 30 they can complete a course of several years in a session or two less than it takes if they recite in classes numbering from 50 to 7. Mental growth is greatly stimulated by daily individual contact with live teachers. Probably the greatest need of our Pennsylvania normal schools is a faculty pail by the State. This would lead to free tuition, smaller classes, a standard of scholarship for admission, and would put an end to the strained reiations that sometinues result from undue competition. ${ }^{2}$

Fifmir Dhsmer, Mansfield (D. C. Thomas, principal).-Six hundred and twentymine sidents were envolled during the past year. Of these, 93 graduated in the elementary churse, 2 in the scientitic, and 12 in masic. The accommodations in our ladies' building were not sufficient for the constantly increasing attendance of that sex. An addition to the present building is in process of construction. When done, it will be a magnificent structure. The work wili cost at least $\$ 100,000$.

Sixti District, Bloomsburg (J. P. Welsh, principal). -The year just closed has added another year of success to the history of this institution. The attendance has been greater than ever before; the senior class was the largest ever graduated here, and was composed of young men and women of exceptional promise as teachers. One hundred and five certificates of admission to the next senior class were issued to juniors at the cloze of the year, while 37 applicants for this certificate were rejected by the faculty. * * $\%$ In September last the manual-training department was organized, and was placed under the management of a teacher who received special training for the work. Under his direction this department has been a marked success. Stadents, grading from the model school to the senior class, receired instruction in the nature and uses of tools and materials. A series of graded lessons has been arranged for this parpose, which terminate in the senior year with wood carying and the construction of useful articles, such as philosophical and mathematical apparatus needed in schools. $\% ~ \% ~ \% ~ T h e ~ c l a s s e s ~ o f ~ 1891 ~ a n d ~ 1892 ~ h a v e ~ p r e s e n t e d ~$ to the school a set of gymmastic apparatus, consisting of chest weights, intercostal machines, parallel bars, vaulting bars, wrist machines, fiving rings, quarter circles, giant strides, boxing gloves, striking bags, ete. * * * "I believe that the professional character of the normal schools would be elevated if, in every instance, all applicants for the normal certificate were examined in actual teaching. ${ }^{3}$

[^81]Seventh District, Smippensburg (G. M. D. Eekles, principal).-The year juat closed has been one of unusual prosperity for the Cumberland Talley State Nornal School. There bas been a considerable increase in the patronage of the school, and we believe a marked improrement in the character of the work done. We graduated fourscore young men and women from our school this year, by far the largest class in its history. This increase in mombers has not been secured by any sacrifice of the standard of qualifications fixed by the school. In our junior class the grade of qualifications has been raised, and we expect to continue the raising of our standard with this class from year to year, as the raising of the standard of the juniors is necessarily followed by a corresponding raising of the standard of the seniors. Nearly all the dormitories have been painted and ornamented with neat de-igns. The desigus for the room decorations were all made by students and by those connected with the school. ${ }^{1}$
Eigith District, Lochfaten (James Eldon, principal).-The Central State Normal School is now fully established in its new home. During the year which ended July 2, 1891, every room in the building was occupied, two in a room, and many boarders had to be accommodated with lodgings in adjacent buildings. At the last commencement 44 graduated in the elementary course, and 30 juniors' were admitted to the senior class. Several of the graduates before the tern closed were elected to responsible positions as principals of schools."
Ninth District, Indiana (Z. X. Snyder, principal).-Growth characterizes the living. From this standpoint the Indiana normal is a living institution. During the year it has grown in every direction-scholastically, professionally, in efficiency, in teaching power, and in numbers. The annual attendance was 790. * * * The erection of a greenhouse has aided very materially in the beautifying of the grounds. * * * One hundred guns were received from the State for the purpose of military drill. * * * In our industrial department three types of work are done: Kindergarten, sloid, and manual training. * * * A number of good microscopes were purchased for the science department. * * * The model school has passed from a mere practice school to a model school in the true sense. It is a school where experts teach, enabling the juniors and seniors to observe. * * * The trustees contemplate the erection of a gymnasium. It will be commenced in the spring. * * * The classes of 1889 and 1890 erected a beautiful fountain on the campus. ${ }^{3}$

Tenth District, California (Theo. B. Noss, principal).-Our attendance of students was larger than ever before, reaching a total of 711 , of whom 502 are in the
kinds of wrood, the nature of each tool, and the principle on which it works; ther then mate a craw ing, afterwards an object to correspond, and finally give an whal or written description of the object * * L Lessonsare given in shorthand and typewriting. * * * An athletic association, composed of students, has charge of all outdoor sports, such as baseball, temis, football, and the like. The ladies are drilled in wand and dumb-bell exercises, and have organized several walking clubs. (Circular of the State Nomal School of Bloomsburg, Pa., 1891.)
${ }^{1}$ The last catalogue (1890-91) clams for the shippensburg sehool the following among other advantages:

1. We employ none but high-grade teachers. * * * All our teachers are specialists in their departments.
2. Our school is thoroughly and properly disciplined. * * * We hold ourselves responsible for the moral as well as the inteilectual development of our students.
3. We lay great stress on the professional training of our students. * * * The practice teaching in the model school is under skillful supervision and competent dircetion.
4. Our school is organized in the interest of the students. Our system of classifieation cnables us to advance students as rapidly as their progress will permit. No person is held in check to accommodate the interests of dull and inattentive scholars.
5. Our graduates are distiaguished by their originality, being something more than bind imitators.
6. Our school is not crowled beyond its capacity.
7. Our graduates are doing noble work in their chosen profession. We have no difficulty in seenring good positions for them.
8. We do not claim to have the best school in the country, but we do claim that there is none better.

2 This school was founded in 1871, but was not open for the admission of students until the fall of 1877. In December, 1888 , the fine building oecupied by the school from its organization was totally destroyed by fre, but the work of instruction was carried on without interruption in a large hotel building, fitted up for the purpose. In May, 1890 , the new building was occupied, 200 stndents being present. To the erection of this building the state contributed $\$ 105,000$. It is of brick, with brownstone trimmings, and has three distinct parts. It is lighted at night by 450 electric lamps.

The training school is composed of children from 5 to 6 years of age. These are divided into classes so as to represent every grade of teaching required in the public sehools of the State, from the kindergarten to the high school. The time given to the practice of icaching is not less than forty-five minutes each day for twenty-onc consecutive weeks. All students reccive class instruction in yocal music. Lessons are also given, at an extra charge, on the piano, organ, violin, cornet, and other instruments. There are two literary societies. each having its own hall, library, and reading room. The ari department offersinstruction in oil painting, china painting, portrait painting, and sketching.

Principals.-Albert N. Raub, 1877-1884; George P. Beard, 188d-1887; James Eldon, 1887. (Catalogue of 1891-92.)
${ }^{3}$ The catalogue of 1890-91 showed seven departments: (1) Kindergarten department, (2) primary department, (3) grammar department, (4) high school department, (5) principals and superintendent's department, (6) ungraded department, (7) manual-training department.
normal dcpartment and 209 in the model school. A new building is now in course of erection. It will be used for the model school, for the sloid shop, and for the naturd science departinent. The large attic story of this building, which is 86 by 56 feet in size, will be nitted up as a gymmasium. Our graduating class this year consisted of 18 gentlemen and 17 ladies; most of these have already secured desirable positions as teachers for the coming year. ${ }^{1}$

Eleyenth District, Slippery Rock (Albert E. Maltby, principal).-The normal school at Siippery Rock has just closed a very successful school year. The increased atiendance under adverse circumstances is certainly very encouraging, and the future seems bright with indications of continued growth and prosperity. Our last graduating class numbers $12 . * * *$ Oyer 500 pupils were in attendance during the year, and the class-room accommodations were taxed to their utmost extent.
The plans for a new building have been drawn, and work will begin immediately. The structure will be in brick, handsomely ornamented with stone, and will contain class rooms, society halls, reading rooms, music rooms, parlors, library, gymnasium, offices, and principai's residence. The total cost is estimated at $\$ 50,000$. * * * Every effort is being made to bring out the beautiful in our campus and school grounds. An addition of some 5 acres, and the planting of many valuable trees have done much toward improvement in appearance. The ball field is unsurpassed by that of any other school. ${ }^{2}$

Thelfti District, Edinboro (Martin E. Benedict, principal).-The past school year closed the $3 d$ of July. There were 89 graduates. One hundred received junior certificates. * * * The average age of the class was 22 years and 8 months. Over 60 had taught in the public schools. Nearly all have entered the schoolroom as teachers, and they received from $\$ 40$ to $\$ 100$ a month. * $* *$ In the model school, 60 students can practice a day, one class each. * * * The library occupies a room 50 by 65 feet, and is open daily from 8 o'clocka. m. until $4.15 \mathrm{p} . \mathrm{m}$. The books are in open cases and all students are free to take books from the cases. The librarian is in constant attendance. * * In recitation the students stand at the blackboard with chalk and pointer, or directly before the class, and in their own language give the substance of the lesson. ${ }^{3}$
Thirteenth District, Clarion (A. J. Davis, principal).-This school completed the fourth year of its history without any remarkable changes or innovations. The stringency of the times affected the population of the district with peculiar force, and

1 Number of students- 113 normal, 229 model. On the 11 th of April, 1890 , the school celebrated the twenty-fifth anniversary of its opening under the charter name of South Western Normal College. It is the outgrowth of an academy first opened in 1852. From the time the success of the experiment at Millersville, in 1855, became known, the undertaking of a similar enterprise at Caliíornia was freely discussed and was fimally achieved (1874). (Catalogue of the State Normal School at Caliornia, 1891.)

2 During the autumn of 1887 the question of organizing a school in the town was agitated. The project found many friends and soon assumed definite form. A meeting was called at which it was determined to erect a building and open an academy. The community was canvassed for money to erect a building and support a school until it should become self-sustaining. While this work was in progress the discovery was made that there was no normal school in the district. A second meeting was called, at which it was resolved to erect the necessary buildings and apply for recognition as the State Normal School of the Elcventh district. In the spring of 1888 an organization was effected, a charter obtained, and the erection of the buildings was begun. In the spring of 1889 the buildings were completed and inspected by the committee appointed by the state; who unanimously recommended the "recognition" of the school as the State Normal School of the Eleventh district. The number of students on the catalogue of 1890-91 was 340 in the normal department and 160 in the model school.
${ }^{3}$ Mectns employed to train teachers.-These are study, recitation, reading, observation, practice, and instruction. The value of study varies, coteris paribus: (1) As the time spent in the strdy; (2) as the square of the engergy; (3) as the square of the interest; (4) as the cube of the methods; (5) as the fourth power of the quality; (6) as the spirit of willing obedience.

Students in the normal school recite as teachers. They receive no help. Each member of the class while others are reciting is both pupil and critic. The normal school teachers aim to act as model teachers, and thus student teachers, even unconsciously at rccitation, become acquainted with methods of teaching.
The library is rich in works upon teaching, and students are taught to seleet, read, and digest the thoughts of educational writers.
The library occupies a room in the new building 50 by 65 feet. It is opened daily from 8 a. m. until $4.15 \mathrm{p} . \mathrm{m}$. The students learn to know books and to enjoy reading them. They are taught to read with profit, and are referred to the manual of reading among the refercnce books. The books are classified as follows: (1) Works of reference; (2) works upon teaching; (3) periodical literature.

Two literary societies, the Potter and the Everett, hold regular sessions Saturday afternoons. Each occupies a pleasant and well-furnished hall 25 by 40 fect. All students are free to join or not, as each prefers.

A musical department has been organized whose aim is to prepare teachers for leading the music in public schools, and for skill in teaching music. Especial attention is given to the cultivation of a musical touch anc a correct interpretation of the standard works. The department offers two courses, (1) a course for the thorough training of teachers; (2) a course for persons wishing to become skilled singers.

The number of normal pupils is 670 , of whom 345 are reported as "unclassified." The model school numbers 208 .
the attendance of students during each term was less than in the corresponding terms of the preceding year, the first instance of retrogression since the organization of the school. * * * The number of books in the library is about 3,000 . * * * The senior class manufactured a fine lot of apparatus, under the direction of the profersor of physics and the instructor in woodworking. ${ }^{1}$

The course of study in the State normal schools of Pennsylyania is intended to be uniform and is prescribed by a convention of principals, aded by the State superintendent; but as the order in which the legal studies are to be pursued is not prescribed, and the number and kind of additional studies are not limited, each school maintains a distinct personality, notwithstanding the basis of uniformity. The legal course and one of the catalogue courses (Bloomsburg) are given below:

The courses of instruction prepared for the state normal schools of Pennsylyania, and approved by the State authorities, are as follows:

ELEMENTARY COURSE.
JUNIOR YEAR.
Pedagogics.-Elements of school management and methods.
Language.-Orthography and reading; English grammar, including composition; Latin, sufficient for the introduction of Cæsar.

Mahemutics.-Arithmetic, except mensuration; elementary algebra.
Natural science.-Physiology and hygiene.
Historical sciences-Geography, physical, mathematical, and political; history of the United States; civil government.

The arts.-Penmanship, sufficient to be able to explain some approved system, writing to be submitted to board of examiners; bookkeeping, single entry, seven weeks; drawing, a daily exercise for at least twenty-eight weeks, work to be submitted to board of examiners; vocal music, elementary principles, and attendance upon daily exercises for at least one-third of the year.

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SENIOR ゾEAR.
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Pedagogies.-Psychology, embracing the intellect, sensibilities, and will; methods; history of education; model school work, at least twenty-one weeks of actual teaching daily during one period of not less than forty-five minutes; a thesis on a professional subject, and two meetings each week for the discussion of the practice of teaching.

Language.-The outlines of Thetoric, together with at least a fourteen weeks' course in English literature, including the thorough study of one selection from each of four English classics; Latin, Cæsar, through the Helvetian war.

Mathematics.-Arithmetic, mensuration; plane geometry.
Naturcl sciences.-Elementary natural philosophy; botany.
Historical sciences.-Reading of general history in connection with the history of education.

The arts.-Elocutionary exercises in connection with the study of English literature.

SCIENTIFIC COURSE.
Pedagogics.-Moral philosophy; logic; philosophy of education; course of professional reading, with abstracts, notes, criticisms, to be submitted to board of examiners.

Language-Latin, six books of Virgil, four orations of Cicero, the Germania of Taciuns, or a full equivalent; an equivalent of Greek, French, or German will be accepted for spherical trigonometry, analytical geometry, calculus, mathematical natual philosphy, and mathematical astronomy; literature.

Mathematics.-Higher algebra; solid geometry; plane and spherical trigonometry and surveying, with use of instruments; analytical geometry; differential and integral calculus.

[^82]Netural sciences.-Natural philosophy, as much as in Snell's Olmsted; astronomy, descriptive and mathematical; chenistry; geology or mineralogy; zoology.
History.-General history.
COURSE OF INSTRUCTION ARRANGED FOR THE STATE NORMAL SCHOOL AT BLOOMSBURG.

ELEMENTAlE COURSE.

JUNIOR YEAR.
First term.-Arithmetic, beginuing with stocks, as in Brooks's; English grammar, beginning with "Complex sentences" in Reed \& Kellogg; reading and spelling, Latin, geography, practical teaching, draving, vocal music.

Second term.-Arithmetic, algebra, beginning with "fractions" in Wentworth; English grammar, Latin, history of the United States, beginning with administrations; practical teaching, drawing, bookkeeping.

Third term.-Algebra, English composition, reading and spelling, Latin, civil government, $\frac{1}{2}$; geography, mathematical and physical, $\frac{1}{2}$; physiology, practical teaching.

SENIOR YEAR.
First term.-Geometry and mensuration, rhetoric, reading of general history, natural philosophy, school economy, teaching, mental philosophy.
Second term.-Geometry and mensuration, English literature, elocution, Cesar, botany, $\frac{1}{2}$; natural philosophy, $\frac{1}{2}$; methods of instruction, teaching, mental philos ophy, history of education.

Third term.-Geometry and mensuration, Cæsar, botany, methods of instruction, teaching, history of education.

## SCIENTIFIC COUPSE

When students have completed the studies of the elementary course or the equivalents they can enter this course and graduate in two years. The studies are as follows:

JUYYOR YEAR.
Philosophy of education, higher algebra, solid geometry, plane and spherical trigonometry, surveying, analytical geometry, chemistry, geology, mineralogy, general history, Latin, professional reading.

SENIOR YEAR.
Differential and integral calculus, natural philosophy, mathematical and descriptive astronomy, logic, zoology, moral philosophy, Latin, English literature, professional reading, general review.
All students in this course hare the privilege of taking an equiralent of Greek, French, or German for the portions of higher mathematics, specified under substitutions.

ACADEMIC DEPARTMENT.

## 1. Preparatory collegiate.

FIRST YEAR.
Latin, arithmetic, English grammar, history.
SECOND YEAR.
Latin (Virgil), Greek (Anabasis and Ihad), Latin and Greek composition, geometry, history, Franklin's autobiography, Milton.

## 2. Generat academic.

JUNIOR YEAR.
First term.-Orthography and reading, English grammar, history of England, arithmetic, physiology, geography, penmanship and drawing, vocal music.

Secomd term.-Orthography and reading, English grammar, arithmetic, algebra, United States history, Latin, penmanship and drawing.

Third term.-English grammar, civil government, Trench on Words, algebra, botany, Latin, drawing.

SEN゙IOR YEAR.
First term. - Mental philosoply, natural philosophy, geometry, rhetoric and Fnglish classics, bookkeeping, drawing.

Second term.-Geometry, Latin, English classies, elocution, drawing.
Whith term.-Latin, reviews, drawing, geometry.

## 3. Senior academic yeur.

First term.-Trigonometry and surveying, chemistry, elements of criticism, lrench, German, or Latin.

Steond term.-Geology, political economy, general history, French, German, or Latin.

Third term.-Eridences of Christianity, astronomy, general history, Freneh, German, or Latin.

The Pennsylvania normal schools are not free schools. The local boarding-school element from which most if not all of them were "evolved" rendered itimprudent to make trition free; but by an act of the legislature the following appropriations are made by the State of Pennsylvania to normal students and graduates:

1. Each student over 17 years of age who shall sign a declaration of intention to teach in the common schools of this State shall receive the sum of 50 cents per week.
2. Each student over 17 years of age who was disabled in the military or naval service of the United States, or of Pennsylvania, or whose father lost his life in said service, and who shall sign an agreement as above, shall receive the sum of $\$ 1$ per week.
3. Each student, who, upon graduation shall sign an agreement to teach in the common schools of the State two full years shall receive the sum of $\$ 50$.
4. Any student to receive these benefits must attend the school at least one term of hyelve consecutive weeks, and receive instruction in the theory and practice of teaching.

The amount expended under this act in the school year ending June 1, 1891, was $\$ 47,875.25$.

Comparative table of statistics of the State normal schools of Pennsylvania for the schoot year ending June, 1890.

| Schools. | $\begin{aligned} & \text { 1891. } \\ & \text { Years in } \\ & \text { exist- } \\ & \text { ence. } \end{aligned}$ | 1890. <br> Population of district. | Appropriation granted. | 1890. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Total enrollment. | $\left\lvert\, \begin{gathered} \text { Students } \\ \text { in } \\ \text { normal } \\ \text { school. } \end{gathered}\right.$ | Pupils in model school. |
| Millersvilie | 32 | 296,715 | \$102, 500 | 730 | 568 |  |
| Edinboro | 30 | 291, 296 | 117, 500 | 9 |  | 249 |
| Manstield | 29 | 249, 279 | 127,500 | 613 | 51.3 | 103 |
| Bloomsburg | 2 | - | 16, ${ }^{\text {a }}$ | 619 | 510 | 139 |
| West Chester. | 20 | 357, 965 | 107,500 | 717 | $65^{4}$ | 61 |
| Shippensburg | 18 | 287,578 | 144.500 | 303 | 234 | 67 |
| California. | 17 | 283,878 | 117,500 | 612 | 413 | 229 |
| Indiana. | 16 | 201.741 | 135, 500 | 756 | 581 | 17. |
| Lockhaven. | 14 | 198,824 | 187,500 | 325 | 22.5 | 100 |
| Claxion. | ${ }_{2}^{4}$ | 173,687 | 67, 500 | 905 | 422 | 463 |
| Slippery Rock | 2 | 657,425 | 27,500 | 438 | 298 | 110 |
| Tourth district |  | 526,668 |  |  |  |  |
| Philadelphia? |  | 1,046, 264 |  |  |  |  |

${ }^{2}$ Not included in State school system.

## NEW FERSEY.

Early History.
In 1825 Philip Lindsay, D. D., acting president of the College of New Jersey, advocated the establishment of teachers' seminaries, for these among other reasons:

That at present the great mass of our teachers are mere adventurers; either young men who are looking forward to some less laborious and more respectable vocation, and who, of course, have no ambition to excel in the business of teaching and no motive to exertion but immediate and temporary relief from pecuniary embarrassment, or men who despair of doing better or who have failed in other pursuits, or who are wandering from place to place, teaching a year here and a year there, and gathering up what they can from the ignorance and credulity of their employers.

Three years later Prof. John Maclean, afterwards president of the University of New Jersey, recommended, in a lecture on the school system of the State, "the establishment of an institution to educate young men for the business of teaching." ${ }^{1}$

Nineteen years after this (1847) a convention of the friends of education in Burlington County, N. J., was held at Mount Holly. A committee on business was appointed, who reported a series of resolutions in favor of the establishment of a State normal school. The resolutions were fully discussed, but in order to afford time for further deliberation the convention adjourned to meet in the same place on the $2 d$ of December. At this adjourned mecting letters of approval and congratulation were read from the following eminent public men: William H. Seward, of New York; ${ }^{2}$ Rev. TVilliam H. Campbell, secretary of the executive committee of the State normal school at Aibany; ${ }^{3}$ Bishop Potter, of Pennsylvania; ${ }^{4}$ Joseph R. Chandler, editor of the United States Gazette; ${ }^{5}$ Horace Mann, of Massachusetts; ${ }^{6}$ Edward Everett; ${ }^{7}$ John G. Pal-

[^83]${ }^{2}$ The advantages resulting from the professional education of teachers in what are called normal schools are universally conceded among the friends of education in this State. If I had ever doubted on this subject, all my doubts would have been removed by the experiment of the institution in this city (Albaisy), which has been eminently successful. The ultimate operation of normal schools will be to elevate the standard of public education and, of ccurse, the dignity of those to whom its labors are confided. (Report on normal schools to the convention of the friends of education, Burlington, N. J., 1847.)
${ }^{3}$ I had doubts when our normal school was first started as to the necessity of such an institution among us; but my opinion is entirely changed. * * * I have become convinced of the great value of the normal school. My conviction is the result of actual observation, and from this I feel justified in saying that a normal school is indispensable in carrying out any State educational system. * * * I hope soon to hear that New Jersey has instituted a State normal school. (Ib.)
${ }^{4}$ I rejoice to hear that the State of New Jersey is moving in respect to the education and training of teachers for common schools. It is beyond doubt the most essential step in the great work of improving and, as it were, of regenerating our system of common-school instruction. * * * The establishment of the statenormal school was therefore looked forward to as the essential complement to all other plans. (Ib.)
5 While all other professions and pursuits have their appropriate schools and other means of preparation for the duties of their calling, why should the teacher alone be neglected? Why should he be allowed to try experiments upon our children until he has learned how to teach, wasting the precions time of our youth by the timidity naturally resulting from his want of practice, or destroying their tempers by the restlessness of one who has never learned to have command over himself? : * * I really believe that the important scheme of public schools can not be carried out as it should be without trained teachers. (Ib.)
${ }^{6}$ I regard normal schools as the one indispencable thing for carrying forward a system of common sehools. * * * How it can happen that a man shall need to serve an apprenticeship to make a boot, but can instruct and train a child by instinct is more than I can comprehend. (Ib.)
${ }^{7}$ It affords me much pleasure to hear that you are taking measures for the establishment of a normal school in New Jersey. * * * It seems quite evident that the art of teaching-an art so difficult and so important-should require some special training for its attainment. If it did not, it would differ from all other intellectual arts. * * * The fact is that hardly any teacher is, as such, selfformed. He employs, as an instructor, the methods which were in use at the school where he received, his own education some ycars-perhaps a gecd many ycars-kefore. His teacker, in like manner probably followed traditionary methods. Such a course can result in nothing but the perpetuation of errors, and must end in degeneracy. (Ib.)
frey, editor of the North American Review; ${ }^{1}$ Jolnn A. Dix, of New York, formerly superintendent of common schools; ${ }^{2}$ Darid P. Page, ${ }^{3}$ principal of the New York normal school at Albany.

The business committee reported a forcible and logical argument in favor of establishing a State normal school, and answering the most plausible objections.
(1) As to the expense.
(2) As to the difficulty of securing the services of the graduates of the normal school to the business of instruction in the State.
(3) As to the allegations that there is no necessity for normal schools, inasmuch as the business of instruction, like other social and private wants, is regulated by the commercial law of supply and demand.
(4) As to the assertion that it is not so much teachers that we need, nor schools for the education of teachers, as it is a higher compencation for their services.
(5) As to the apprehension that a due measure of religions instruction and influence can not be reconciled with the exclusion of sectarianism.
(6) That normal schools are an importation from Prussia, a monarchy, a despotism, well enough adapted to such a Government, but unsuited to the genius ands temper of ours.

Time having thoroughly refuted the objections, the cogent and eloquent answers: given in the report may be omitted here; but one is tempted to imagine that Bryant wrote "Error crushed to earth will rise again" when one recalls the fact that thirtyseven years after this report was written the sixth objection was strongly but ineffectually urged in the legislature of a neighboring State by the son of a German Jew.

The report was accepted and the accompanying resolutions adopted seriatim without a single dissenting voice; yet it was not till the year 1855 that an act was passed by the legislature of New Jersey containing the following sections:
There shall be a normal school or seminary for the training and education of teachers in the art of instructing and governing the common schools of this State, the object of which school or seminary shall be the training and education of its pupils in such branches of knowledge and such methods of teaching and governing as will quaiify them for teachers of our common schools.
The board of trustees are authorized to maintain a model school under permanent teachers in which the pupils of the normal school shall have opportunity to observe and practice the modes of instruction and discipline inculcated in the normal school, and in which pupils may be prepared for the normal school.
The act appropriated $\$ 10,000$ annually to the support of the school, but no provision was made for a site or buildings. It was left to the people to supply by voluntary action the means for which no provision had been made by the legislature. This appeal to the people met with a warm and generous response. New Brunswick, Beverly, Orange, Trenton, and other places made liberal offers. After careful deliberation the trustees selected Trenton, where, by the liberality of the citizens, a large

[^84]and commodious building was erected after a plan prepared by the trustees. Sundry citizens of New Jersey sent a petition to the legislature in 1861 praying for the repeal of the act establishing the State Normal School, and asking for the appointment of a joint committee to investigate certain matters therein referred to. The committee on education reported that they did not "perceive either the necessity or the expediency of a committee of investigation, because all the facts called for were fully set forth in public documents to which all have ready access.'" The petitioners submitted that "at times like the present no unnecessary burden should be laid upon the people." The committee replied that "the great lesson taught at times like these [the begimning of the war] is that we should relax no effort, omit no expenditure, and cripple no resource necessary to the instruction and enlightenment of the masses of the people. The whole fabric of our Government reposes upon the foundation of virtue and intelligence universally diffused among the people; but such a foundation is possible only through good common schools everywhere established, liberally supported, and efficiently conducted by able and skillful teachers. To make good scliools, we must first make good teachers. This is precisely the object and aim of the normal school, and the committee believes that a thorough investigation of the facts will establish beyond controversy that these aims and objects are being realized in a most satisfactory degree."

The committee concluded with a unanimous expression of their conviction that the prayer of the petitioners ought not to be granted.

There was until lately in some parts of the State a feeling adverse to the continuance of the normal cechool. The opposition was partly caused by entire misapprehension of the character and aims of the institution, and partly by an exaggerated estimate of the annual cost of supporting it. Not a solitary well-founded objection was raised, but the attacks being repeated anmually were detrimental to the best interests of the institution and to the cause of popular education in the State.

## Opening of the School at Trenton.

The State Normal School of New Jersey was opened in the fall of 1855 in a temporary building, rented for the purpose. New buildings were erected from time to time as they were needed. The last building was completed in 1890. It is so located as to connect the old buildings and thus enable the students to pass to all parts of the entire institution without going out of doors. It contains a chemical laboratory, a physical laboratory, a manual training shop, a library, a gymnasium, and an auditorium which seats about 600 persons.

On the opening day, in October, 1855, there were 15 pupils in attendance. At the close of the hali year, 43. The attendance varied considerably from year to year. After rising to 140 in 1863, it fell to 53 in 1866. Of late it has been steadily on the increase; the last catalogue contains the names of 326 students enrolled in the normal school; 541 in the model school, and 127 in the Farnum Preparatory School. The number of students graduated from the normal during the year was 89-7 men and 82 women. Twenty-four of the graduates were from the advanced course; the remainder from the elementary course. All of them, except 4, were teaching " when last heard from," at salaries ranging from $\$ 35$ to $\$ 80$ a month.

The Farnum Preparatory School is located in the city of Beverly on the Delaware River, about 15 miles from Philadelphia. It was built by Paul Farnum in the year of 1855, and by an act of the legislature in 1857 it was made a part of the State school system, and placed under the control of the trustees of the State Normal School. An endowment of $\$ 20,000$ was bequeathed to the school by Mr. Farnum. The objects of the school are twofold: First, to act in conjunction with the normal school in the work of preparing teachers for the public schools of the State; secondly, to furnish to the citizens of Beverly and the ricinity a well-organized and well-conducted school, and the best advantages for the proper education of their children. Pupils,
intending to teach are admitted into the four highest classes free of tuition charges. These pupils receive daily lessons in teaching, and are required to assist the instructors in the work of the school. After pasaing through the preparatory department, they are admitted to the professional course of the normal school without examination. The income of the school is derived from three somrces-the State appropriation of $\$ 1,200$ amually, the interest on the endowment of $\$ 20,000$, and the proceeds of tuition fees, which average about $\$ 20$ a year per capita.

Principals of the Vere Jersey Sate Nomal School.
William F. Phelps. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 18555-1864
John S. Hart. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $186 t-1870$
Lewis MI. Johnson . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1870-1876
Washington Hasbrouck................................................................. . . . . . . . 1876 -1859
James M. Green. ................................................................................. . . . 1889

COUHEE OF STLDY AT TRENTON SCHOOL.
The course of study for the normal extends through three years of two terms each. The work of the first year is formative in character, designed for such students as have been over it, but not in the thorough and disciplinary manner necessary to those who are to be teachers. While the work of this year can not be said to be strictly professional, it is made necessary by the conditions of our State, and, being taught by the regular normal teachers, it becomes in a peculiar way preparatory to the strictly professional work of the years to follow.

The work of the second and third years is strictly professional. While arithmetic, grammar, geography, United Siates history, etc., are again taken up in these years, they are considered fundamentally in the light of method or how to teach.

The professional subjects-psychology, theory and practice, the history and philosophy of education-are pursued, accompanied by practice teaching, extending over two years.

The practice teaching is so arranged that experience in teaching is given to each student in each of the common branches. This experience consists in observing the regular teacher, preparing, plans for teaching, subject to the approval of the critic teacher, and actually teaching, both in the presence and absence of the regular teacher.
The following are the studies of the respective years. In each branch there are five forty-minute recitations per week, or the equivalent:
B.-Geography, physical and political; grammar, with composition; practical arithmetic; United States history, with Constitution; pemmanship and bookkeeping; industrial drawing and vocal music, each the equivalent of one term; elocution, with orthography and declamation.
A.-Psychology, theory and practice, one term; methods in the elementary branches; practice, one term; zoology and physiology, one term; botany, one term; algebra, drawing, rhetoric, one term.

Senior--Elementary physics; elementary chemistry, with mineralogy; geometry, first five books; Shakespeare, one term; outline history, one term; history and philosophy of education; practice teaching, two periods a day; manual training; physical training, throughout the course. ${ }^{1}$

## MARILAND.

The history of the State Normal School of Maryland is the history of the public schools of Maryland. Up to the year 1865 there was no general system of pubic schools, except in the city of Baltimore. There were schools in every county, some good, some bad, most of them indifferent; but there was no coordination, no supervision, and very little vitality. In 1864, when the star of the Confederacy was about to set, a constitutional convention was called, in which a large majority of the members were supporters of the Union. The two most important objects of this convention were the extinction of slavery and the establishment of a State system of education. Both were accomplished. The new constitution contained the following sections:

Section 1. The governor shall, within thirty days after the ratification by the people of this constitution, appoint, subject to confirmation of the senate at its first session thereafter, a State superintendent of public instruction. * * * He shall report to the general assembly within thirty days after the commencement of its first session under this constitution a uniform system of free public schools. * * *
SEc. 3. * * * In case of failure on the part of the general assembly to provide [a public school system as required by the constitution], the system reported to it by the State superintendent of public instruction shall become the system of free public schools of the State: Provided, That the report of the State superintendent shall be in conformity with the provisions of this constitution, and such system shall be subject to such alterations, conformable to this article, as the general assembly shall from time to time enact.

The chairman of the committee of education in the constitutional convention was Joseph M. Cushing, esq., of Baltimore. He foresaw the possibility that the legislature might not carry into effect promptly the constitutional requirements respecting education, and therefore persuaded the convention to order that the State superintendent (who had not yet been appointed) should prepare a bill and submit it to the next legislature, with the provision that if the legislature failed to enact a law as required by the constitution the bill should become law. It was already well understood that Dr. Van Bokkelen would be appointed State superintendent. To these two gentlemen belongs the chief credit for the establishment of the public school system of Maryland. They deserve to rank with the educational pioneers of Massachusetts, New York, and Pennsylvania.

The bill submitted to the general assembly by Dr. Van Bokkelen was "harmonious in its parts and comprehensive in its aims-a plan not of common schools, but of thorough and extended public education." It embraced eight titles: (1) supervision; (2) that which is to be supervised; (3) modes of securing competent teachers; (4) sources of income; (5) university of Maryland; (6) benevolent, remedial, and reformatory institutions; (7) aids and encouragements to universal education; (8) miscellaneous.

In the law finally enacted upon the basis furnished by the State superintendent the subjects embraced in the fifth, sixth, and seventh sections were omitted, and in the others his suggestions were followed without material variation.

In his first report, explaining the principles on which the bill was founded, Dr. Van Bokkelen says: ${ }^{1}$

The enactments of the bill submitted are predicated upon principles which have been often discussed and now are accepted as the foundation of all sound legislation on the subjects with which they are connected.

First. Education ought to be universal.
Second. Education ought to be free.
Third. The property of the whole State is responsible for such education of every child in the State as will prepare him to perform the duties of a man and a citizen, in obedience to the laws of God and the laws of the Commonwealth. * * * Education must be free, free as the light and the air. The public schoolhouse must be open to every child, as open as the public highway which leads to its door. And this, not because it is the charitable duty of the State to offer education to all, but because it would be a high crime against humanity to withhold it. The free schools of the State are in no sense charity schools. Through them the State does not give one jot or tittle that each child has not a right to claim. It is the duty of the State, as the agent of the people, as the legal trustee of the whole property which she protects and enables to be used, to take care that the young are not defrauded of their rights. * * * Hence, as a natural sequence, the law which provides at public cost universal and free education should oblige parents to send their children to school and should inflict severe penalties on manufacturers who task young children in their mills, wearing out their bodies and starving their minds. **** To correct, perchance atone, for the errors of the past, it is proposed to establish at once a thorough system, perhaps a model system. Maryland has no time for gradual development.

[^85]By one volition she can attain that which has cost her sister States years of experiment to secure. She has taken her place among the Commonwealths that proclaim universal freedom; why not rank also with those that provide universal education? Not the education which halts before the door of the primary school, but marches on, takes the poorest youth whom God has endowed with intellect, nurtures that intellect, gives it the benefit of the best culture and exhibits the pure benevolence of republicanism, which, by bestowing equal privileges upon all, gradually raises the humble to an equality with those who enjoy all the benefits of wealth and social position. Wisdom counsels us not to wait for years to accomplish that which by one earnest, vigorous, unselfish efiort can be done in months. The work is before us. No partial system of gradual development, waiting for the decay of old prejudices or the abandonment of local preferences, can do this. If done at all, it will be by a system, perfect in its adaptations, comprehensive in its aims, and immediate in its operations. It will cost money; so do all great public works; but it will be the best and most productive investment the State has ever made-the purse appropriated to the development of brain.
The bill of Dr. Van Bokkelen was not accepted in its entirety, but it became the basis of a system which, with many alterations in nonessentials, has lasted to the present day, has served as a model to other States, and was pronounced by the late governor of the State in his farewell message to be "nearly perfect."

The law as finally enacted provided for a State board of education, a State superintendent, county superintendents, district schools, graded schools, high schools, State uniformity of school books, a normal school and a model teachers' association, teachers' institutes, and an income from State taxation capable of supporting the schools six months in the year, with unlimited power of local taxation.

The first section of the chapter on the normal school reads thus: "There shall be located in the city of Baltimore, until the board of education shall otherwise direct, a State normal school for the instruction and practice of teachers of public schools in the science of education and the art of teaching and the mode of governing schools. The sessions of the State normal school shall be held in such suitable building as may be provided by the mayor and city council of Baltimore, or, they declining to do so, in such building as the State superintendent may select."
The mayor and city council of Baltimore "deciined to do so." With a boys' high school and two girls' high schools, which they considered quite equal if not superior to a normal school, they did not feel under any obligation to enter into partnership with the school authorities of the State. Besides, at this time the relations of the State superintendent and the city superintendent were somewhat strained. Therefore search had to be made for a "suitable building." None could be found; but after patient waiting a large hall was procured, by no means suitable in any respect, but the best that could be obtained. The school was opened on the 1.5th of January, 1856, with 11 students. At the close of the session in June there were 48 names on the roll. The next year there were 129 students, divided into four classes, each of which occupied one of the four corners of the hall. Notwithstanding this disadvantage the numbers continued to increase steadily for six years, when a large and commodious building was rented at $\$ 3,000$ a year, which gave accommodation to both the normal and the model school for three years. It soon became evident that even this large building would in a short time be too small. Accordingly it was necessary to apply to the legislature for a new building specially arranged for school purposes. Application after application failed to produce any result, but finally, by dint of constant hammering, an appropriation of $\$ 100,000$ was granted to purchase a site and erect a building. The school took possession of the new building in 1876. It is a very beautiful structure and contains a liall capable of seating nearly 800 persons, ten class rooms, a library, a reception room, an office, a laboratory (physical and chemical), an apparatus room, a calisthenium, and a residence for the principal. But even this house is now insufficient for the demands of the school. It needs a larger library and reading room, a gymnasium, a lecture room, a drawing room, a manual training workshop, a larger chemical laboratory, a sewing room, a
kitchen for lessons in cookery, and additional cloak and toilet rooms. Numbers are no test of the professional value of a school, although they may afford a fair estimate of its popularity. One may travesty the words of Pope-

But most by numbers, judge the peet's song-
and apply them to schools, normal and abnormal. A school that gives what its clientele demands, and at a satisfactory cost, is sure to grow in numbers, at least if it has been properly located. The Maryland school has never courted numbers. From 18- to 1890 one principal object was to retard its numerical growth. The organic law restricted the number of professional students pledged to teach in the public schools of Maryland to 200, with the permission to receive as many pay students as amounted to half the number of those enrolled and pledged to teach in the public schools. But as the free appointments were divided among the several counties in proportion to the number of representatives each county had in the general assembly, there arose a dificulty in the distribution. At first this arrangement allowed two students for each member of the legislature, but as the population increased the number of representatives increased, and the per capita became one and a fraction. Now there is no known method of teaching a fraction of a student or even of obtaining a fractional student to be taught, and so the multiplier 2 was necessarily continued, and under the present law must continue for many years.

As has already been stated, the law allows the admission, on the payment of fees, of one student, free of obligations to teach in the public schools, for every two who have signed the declaration of their intention thus to teach. The purpose was to preserve the professional character of the school as a training school for teachers. Accordingly no special instruction is given to unprofessional students; they simply have the privilege of joining such regular classes as they may be inclined and quatified to enter. There is but one curriculum for all. In striking contrast with the number of "courses" advertised in many normal-school catalogues-elementary, adranced, scientific, classical, commercial, collegiate, etc.-the primary object of the school is simply the training of young persons as teachers of the common district schools in esse and in posse. The effect of constant adherence to this principle has been that about 95 per cent of the graduates and 50 per cent of the undergraduates and a majority of the unpledged students who completed the course have become teachers of the public schools-a small proportion of them in city schools, but by far the largest number in rural districts.
A model school was provided for in the organic law: "The State board of education shall make provision for model and experimental primary and grammar schools, under qualified teachers, in which students of the normal school shall have an opportunity to practice the modes of instruction and discipline inculcated in the normal school." The model school is still an experiment, not an achievement. It was commenced in the first year as a school of observation and practice, the practice largely predominating. It was necessarily a pay school. Had it been a free school it would have come into undesirable competition with the public schools of the city. As a pay school, some parents complained, without just reason, that their children were made subjects of experiment. The fact is that the children were better taught than they had been before or have been since. But rox populi prevailed because the fees were a welcome addition to the restricted income derived from the State. The school then became a school of observation with a seasoning of practice. At present it affords a minimum both of observation and practice, owing to peculiar circumstances, which throw no light on the general question of the place of the model school in an institution for the training of teachers. The subject presents no difficulties in a city training school nor in small towns where there is a unity of purpose betreen the local school authorities and the superintendent of the normal school. But a State normal school, located in a large city, organized for the special
purpose of preparing teachers for the district country schools, will have a hard road to travel to establish a school of observation and practice which shall meet hoth the theoretical and practical requirements of the case.
The scholastic attainments required by law for admission into the normal school are a knowledge of the branches "hereinbefore required from teachers." In other words, an applicant for admission must be alre:idy legally qualified to teach school. The theory is correct, but in practice not one in ten would apply for admission. The aim of nine-tenths is to be legally qualified, not better qualificd. A strict adherence to the law would have had the effect to prepare a rery few teachers for higher-or, rather, for more remunerative-positions than country schools, and thus the main intent of the law would have been frustrated. The appointment of free students was rested in the boards of county school commissioners, and they, taking a practical and not a legal view of the case, sent up large numbers of students who needed academic rather than professional instruction, and the normal-school authorities had no right, and indeed no desire, to refuse them admission.
This large infusion of academic instruction was not without its adrantages. The young graduate, when thrown upon his own resources as a teacher of a country school, found more help and inspiration in the recollection of the practices and methods of his normal teachers than in the psychological principles and pedagogical precepts with which his notebook was filled.

COURSE OA instruction. ${ }^{1}$
The course of instruction extends through three years. Graduates of high schools and certificated teachers may enter the second year's class without examination, and the third year's class on passing an examination on the studies of the second year.

First year, first term.-Review of arithmetic, mental and written; geometry, first book; object lessons; history and geography; English composition, letter writing; pedagogy, lectures on methods in elementary schools; Latin grammar (optional).
First year, second term. - Algebra, through simple equations; English grammar, parsing and analysis; English composition; physiology; Latin reader (optional); lectures on teaching, organization and government of clementary schools.
Second year, first term.-Geometry (plane), continued; geography and map drawing; algebra, completed; botany and natural history; pedagogy, lectures on principles; Latin (optional), Virgil.
Second year, second term.-Arithmetic, completed; parsing and analysis; elocution; English literature; pedagogy, lectures on principles and methods; chemistry, laboratory work; cooking.

Third year, first term.-Physics; physical geography; botany (field work); English literature; geometry, completed; Latin (optional), Cicero.

Third year, second term.-General review of elementary studies, with reference to practical teaching; trigonometry and practical surveying (for men); bookkeeping by double entry; teaching exercises; pedagogy, history of education; psychology, logic.
Singing, drawing, and calisthenics are taught in every term except the last; also sewing (to women) and military tactics and the use of woodworking tools (to men).
Students will be examined on entrance in order to ascertain the proper class to which they should be assigned. Admission to the lowest class will require that the candidate should be able to read fluently, spell correctly, write legibly and rapidly, and perform accurately easy computations in whole numbers and in yulgar and decimal fractions. Young persons who have not received a good primary education should not expect to obtain it at this school, under the clain that they are training for teachers; but all due allowance will be made for earnest and diligent students who will exert themselves to obtain a good standing during the first term of probation. No student will be allowed to enter an advanced class until all the work required in the lower classes has been performed satisfactorily.
Students difier very greatly, both in natural ability and acquired preparation. It is not expected that all shall make equal adrancement in equal times. To fail to pass an examination is of itself no disgrace. The disgrace lies in the want of due diligence; or, still more, in the desire to seem to be that which one is not.

## Number of students in normal school proner June 1, 1891.

Ladies. ..... 307
Gentlemen ..... 24
Number of graduates:
From the organization to June, 1890 ..... 768
Who taught in public schools, about ..... 691
Who were teaching in 1891 or when last heard from ..... 547
Ladies, married ..... 119
Deceased (from 1866 to 1891) ..... 40
Principels.
Libertus Van Bokkelen, D. D. (ex officio) ..... 1865-1867
M. A. Newell, Ph. D ..... 1867-1890
E. B. Prettyman ..... 1890

## III.

## NORMAL SCHOOLS IN THE SOUTH ATLANTIC STATES.

## VIRGINIA.

## State Fenale Normal School, Farmville.

On the 31st of March, 1879, the senate of Virginia passed the following resolution:
Whereas the State of Virginia, during almost the entire period of her history, has liberally provided for the higher education of her sons, and is now supporting three superior institutions for such purpose; and

Whereas the Commonwealth has never, at any period of her history, made any provision whatever for the education of her daughters; Therefore, be it

Resolved, That the superintendent of public instruction be, and he is hereby, requested to gather and in his next annual report furnish to this body such information and views in regard to higher female education as might be useful in considering the propriety and practicability of making by this State some provision in this direction; and that he inquire and report the cost of education in such female seminaries of other States as are assisted or supported at public expense with any matter of interest concerning the same. ${ }^{1}$

The resolution says not a word about normal schools-wisely, perhaps; higher education was more popular with Virginia legislators than normal education. But the State superintendent in his response to the order of the legislature included normal schools among the agencies of higher education, while he pressed upon the community "the unjust discrimination that had been made in favor of the sons and against the daughters of Virginia." Five years elapsed-years of financial embarrassment and years of needed enlightenment of the public mind under the tuition of that eminent public educator, Dr. W. H. Ruffner, State superintendent-and when the legislature of Virginia took up the question of the higher education of women in 1884 it was prepared to give a favorable answer.

The normal schools of the South, with the exception of South Carolina, were post bellum and, to a great extent, propter bellum. Being the necessary complement of a system of free schools, without such a system normal schools had no raison d'être. It is a curious coincidence that every argument that has been brought against the establishment of normal schools had previously been urged against the maintenance of free public schools. We may expect to find the development of a State system of public schools to be accompanied or followed by the establishment of normal

[^86]schools. The efficiency of cither may always be measured by the progress of the other.

The State Female Normal School of Virginia is the successor and, to a certain extent, the outgrowth of the Farmville Female College, an institution which had been in successful operation for many years previous to the transformation. The legislature enacted in 188土 that there should be established a normal school expressly for the training and education of white female teachers for public schools. Each city of 5,000 inhabitants and each county of the 100 counties in the State was to be entitled to send one pupil free of cost for tuition; also one free pupil for each additional representative in the house of delegates above one. The law appropriated $\$ 5,000$ for preliminary expenses and $\$ 10,000$ a year for current expenditure, the amount to be paid out of the public free-school fund. This last clause produced some embarrassment and delay. The second auditor refused to honor the draft of the school board for $\$ 10,000$ because the attorney-general had given his opinion that it was not legally cliargeable to the public-school fund, but to the general treasury, and the auditor declined to pay the amount out of any other fund than the one specified in the act. So the question was carried to the court of appeals, which decided that the amount could not be paid out of either. But the legislature at its first session thereafter cut the Gordian knot and the money was paid.

The first principal of the school was Dr. William H. Ruffiner, who had been for twelve years previously State superintendent of public instruction. In an address delivered by him in 1885, before the county superintendents of Virginia, he explained the modes of teaching employed by the instructors:

In normal schools generally the oral method of instruction is employed more fully than is usually practicable in other schools. On most subjects there is no textbook used in the way text-books are commonly employed-that is, there is no uniform set of books in which lessons are assigned to be conned and recited. Books are used only for reference, and any book containing the facts or expositions wanted may be resorted to. In teaching the elementary principles of any study, no use whatever is made of a book.
The principle sought is developed as far as possible by a system of questions addressed orally to the students in class, which will often bring together truths already known in such a way as to reveal their fundamental relations and suggest the desired principle. Examples and perhaps concrete illustrations may also be employed as guides. The teacher must, of course, make affirmative statements, but these are made only when the principle or the fact can not be reached through the previously existing knowledge or the understanding of the student. When, by the combined efforts of teacher and students, the desired statement is put in due form, it is written on the blackboard and copied into the note books and subsequeutly recited upon. After a time topics are assigned, which the students are required to prepare themselves to expound, and they are expected to resort not to particularly specified books, but to any books they can find which will afford them the help they need. A reference room, furnished with suitable books, is provided for this purpose.

A still more specialized feature in the course is the teaching exercise, given daily by the students as a part of each lesson. The students repeat the teacher's work according to their several ability. Usually the student is uotified in advance that she will be called upon to teach a given topic at the proper time, and she is expected to develop the subject by a carefully prepared system of questions and statements, exactly as if she were instructing a class in her own school. At the end of each exercise the members of the class are allowed to make criticisms, and the teacher also corrects any error as to matter or manner.

Dr. Ruffner's successor, Prof. John A. Cunningham, found that these teaching exercises occupied too large a part of the time of the class, and were in his opinion a serious obstacle to progress in the study of subject-matter. As the majority of students were pursuing many of their studies for the first time, it was thought impossible for them to assume the point of view of the teacher in a subject of which they had obtained an incomplete riew. Besides, the necessity for such exercises had been lessened by increased amount of work in the practice school. Accordingly the
course of study was divided so as to give two years for academic training and one of strictly profersional work. The courses of study, as now (1891) planned, are-
First year, two terms.-Language, including syntax, composition, and thorough sentence analysis; algebra and geometry; physiology, one term; physical geography, one term; general history, drawing, vocal music, elocution, Latin (elective).
Second year, tuo terms.-History of the English language, rhetoric, and literature; geometry, one term; a teachers' review of arithmetic, one term; chemistry, one term; civics, one term; drawing, vocal music, Latin (elective).

Third year, professional course-Psychology; history and science of education; school management; methods in arithmetic, grammar, geography, and reading; school laws of Virginia; observation and practice in the model school.

Graduates from known high schools are admitted to the professional course and after one year's successful study under the direction of the faculty are given a diploma.

The annual appropriation from the State is $\$ 10,000$.
The number of students for the year ending 1890 was 143 , of whom 14 were in the professional course and 8 in special courses. ${ }^{1}$

## WEST VIRGINLA.

## Marshall College, Huntington.

The State normal school of West Virginia was established by act of the legislature February, 1867, which provided "That there be established a State normal school, to be called the 'West Virginia State Normal School,' for the instruction and practice of teachers of common schools in the science of education and the art of teaching." Marshall College, near "the young and growing city of Huntington, having already acquired considerable reputation as an educational institution, was made the State normal school, and the property of the college was transferred to the State. Subsequently five branches of the State normal school were established by law, making six normal schools in the State. ${ }^{2}$ The supreme direction is in the board of regents, composed of the superintendent of free schools, ex officio, and one member appointed by the governor from each of the four Congressional districts of the State. The board of regents has provided for two distinct courses of study in the State normal school and its branches-a normal training course and an academic course. The former occupies three years; the latter two years. The junior year in the normal department embraces orthography, reading, writing, arithmetic, geography, English grammar and language lessons, United States history, elementary algebra, civil government, physiology, drawing, exercises in composition and declamation. The middle year embraces orthography, reading, prose composition, sentence analysis, physical geography, algebra to quadratics, elements of general history, theory and practice of teaching, elements of pedagogy, the school law of the State, exercises in composition and declamation, ancient or modern languages (optional). The senior year includes spelling by dictation and written exercises, English literature and rhetoric, algebra (completed), elementary geometry and trigonometry, elements of natural philosophy, natural history, botany, bookkeeping by single entry, psychology, history of education, frequent exercises in hearing classes recite, the organization and classification of schools.

The practical working of the regents' scheme will be better understood from the following programme, taken from the Catalogue of the State Normal School at Fairmont for the year 1890:

[^87]Programme for daily work:
TALL TERM.
[ 8.45 to 9.10 a. m., opening exereises, including orthography.]

|  | $9.10-9.50$. | $9.50-10.30$. | 10.40-11.20. | 11.20-12. |
| :---: | :---: | :---: | :---: | :---: |
| Junior class... <br> Middle class . <br> Senior class... | Civil government . . <br> Elementary algebra. <br> Higher algebra | Mental arithmetic.. <br> Mental to fractions. <br> Natural philosophy. | Higher arithmetic to per cent. <br> Higher arithmetie to exchange. Psychology. | Elementarylan guage. <br> Higher language berinn. <br> English grammar. |
|  | 1.20-2 p. m. | 2-2.40. | 2.10-3.20. | 3.20-1. |
| Junior class... <br> Middle eiass . . <br> Senior class... | Penmanship......... <br> Elementary physiology. <br> Rhetoric. | United States history. <br> Physical geography. <br> Geometry. | Reading .............. <br> Elocution. $\qquad$ <br> English literature | Intermediate geog raphy. Bookkeeping. General history. |

WINTER TERM.

|  | 9.10-9.50. | $9.50-10.30$. | 10.40-11.20. | 11.20-12. |
| :---: | :---: | :---: | :---: | :---: |
| Junior class... <br> Middle class . . <br> Senior class... | Civil government .. <br> Elementary algebra. <br> Higher algebra..... | Mental arithmetie. <br> .... . do $\qquad$ <br> Natural philosophy. | Higher arithmetic to exchange. <br> Figher arithmetic to series. <br> Psychology.......... | Elcmentary lan guage. <br> Higher lessons in English. English grammar. |
|  | 1.20-2 p. m. | 2-2.40. | 2.40-3.20. | 3.20-4. |
| Junior class ... <br> Midale class. <br> Senior class... | Penmanship........ <br> Higher pliysiology.. <br> Rhetoric. | United States history. <br> Physical geography. <br> Geometry............ | Reading <br> Elocution <br> English literature. . | ```Intermediate geog raphy. Bookkeeping. General history.``` |

SPRING TERM.

|  | 9.10-9.50. | $9.50-10.30$. | 10.40-11.20. | 11.20-12. |
| :---: | :---: | :---: | :---: | :---: |
| Junior class ... <br> Middle class . <br> Senior elass... | Elementary algebra begun. <br> Higher algebra to powers. <br> Theory and practice school law. | Mental arithmetic.. <br> .....do $\qquad$ <br> Natural philosophy. | Higher arithmetic to series. <br> Higher arithmetic. . <br> Psychology | Elementarylanglage. Higher English. Grammar. |
|  | 1.20-2 p.m. | 2-2.40. | 2.40-3.20. | 3.20-1. |
| Junior elass... <br> Middle elass . <br> Senior class ... | Penmanship <br> Higher physiology.. <br> Rhetoric. | United States history. <br> Geometry begun ... <br> Mensuration and trigonometry. | Elementary English literature. <br> Higher English literature. <br> English literature.. | Intermediate gengraphy. Bookkeeping. General history. |

The academic course is understood to be equivalent to a preparatory college course, and is accepted as such by the State university.

Tuition is free to all regular normal students. The number of free appointments is regulated by the board of regents and distributed among the several counties of the State according to population. Each normal school is entitled to seventy free scholars, selected by the county superintendents and approred by the State superin-
tendent. "IIale pupils must not be less than 14 and females not less than 13 years of age."

> State Normal School, Fairmont.

The State normal school at Fairmont was opened in 1868. A bill proposing the establishment of such a school at this place was introduced into the legislature in the cession of 1865-66, but failed to pass. Not discouraged by the failure, the citizens formed a joint stock company under the title of "The Regency of the West Virginia Normal School," secured a charter, purchased a lot, and commenced building, but before the house was completed the normal school passed under the control of the State. In 1872 a new and much larger building was erected, 80 by 40 feet and three stories high. The cost was about $\$ 20,000$, of which one-half came from the State treasury and the other from the citizens of Fairmont and Marion County.

The course of study at Fairmont, though conforming to the requirements of the regents' course, is elastic and very accommodating:

Can pupils be accommodated in any course they may desire to pursue? Most certainly they can; and if classes are not formed ready for them to enter, such classes will be organized for their advantage. The plan of the school is to meet the demand of its patrons. * * *

To what extent can pupils pursue branches of learning? To this inquiry our reply is: To the same extent they can in any other institution. In this school there are both normal and collegiate departments. * * *

Is it better to remain out of school and teach a year, or to teach a term of four or three months each year and try at the same time to keep up with the classes in the normal school? We have no hesitation in saying it is best in every respect for the student, whether lady or gentleman, to teach but three or four months in the year and to hold his position in the classes of the normal school at the same time. This a young man of energy and good health and application can do by an extra effort. * * * The only plan to secure success on the part of young persons in gaining an education by their own efforts is to join the normal school at once, become identified with its work, and then avail themselves of the provisions of its regulations, which allow students to teach four months during the year. ${ }^{1}$

## Shepherd College, Shepherdstown.

During the spring of 1871 Mr. Shepherd Brooks was asked to give the buildings erected by his grandfather, and which had been used as a court-house for some years, for the purpose of opening therein a classical and scientific school, and the request was readily granted. A board of trustees was incorporated, a charter obtained, and the school opened in September. In the following February the legislature authorized the organization of a branch State normal school at Shepherd College; but owing to legislative changes the school did not get fully into operation until September, 1873.

In addition to the normal and academic departments common to all the normal schools of West Virginia, Shepherd College has, according to the catalogue, a collegiate department, and an "ornamental department," which includes a course in vocal and instrumental music, a course in French, a course in botany, a course in drawing, and a course in art embroidery. The music course requires four years for its completion and the French course three years. The last catalogue has the names of twenty-three students in the "ornamental department."

Shepherdstown is a very interesting place. It is the oldest town in West Virginia. The college bears the name of one of the original settlers, Thomas Shepherd, who led a colony of emigrants from Pennsylvania in 1734. The battlefield of Antietam is but 3 miles distant. South Mountain is in sight, and farther east is Harper's Ferry. One of the cliffs, just outside the corporation, is known as Rumsey's Walk. Pacing its heights, an inventive genius, James Rumsey, conceived the plan of the

[^88]first steamboat, and built a boat which antedates Fulton's by more than twenty years, and launched it on the Potomac in 1785. ${ }^{1}$

State Normal School, Glenville.
The State Normal School at Glenville was established by an act of the legislature passed in February, 1872, and was opened in pursuance thereof in January, 1873. In 1885 there was a State appropriation of $\$ 5,000$ made for a new building, and in 1887 $\$ 2,000$ additional were granted for the purchase of furniture and apparatus. As in the other normal schools of the State, there are two courses, the normal and the academic, arranged on the lines prescribed by the board of regents; but "any studies desired may be pursued in addition to those in the normal curriculum, and every pupil is always furnished with all the studies he can successfully pursue." Boarding, with room, fuel, and light, can be had at from $\$ 2$ to $\$ 2.50$ per week. "Boarding is lower priced here than at any other school of high grade in the State." Term reports, containing the number of days absent, the number of times tardy, and the average grade in each branch studied, and the results of examination in each branch, made up from the records of the school, are transmitted through the pupils to the parents or guardians of every pupil. There is a small but very useful library of reference books, and a cabinet of philosophical apparatus complete enough for the illustration of ordinary text-books on natural philosophy ${ }^{2}$.

The students registered (1889-90) numbered 96; 19 seniore, 23 middle class, and 54 juniors. The faculty consists of the principal, two regular assistants and two assisting students.

## NORTH CAROLTNA.

## State Normal and Industrial School, Greensboro.

The constitution of 1776 contained the following (Article XLI) :
A school or schools shall be established by the legislature for the convenient instruction of youth, with such salaries to the masters, paid by the public, as may enable them to instruct at low prices; and all useful learning shall be duly encouraged and promoted in one or more universities.

The constitution of 1868, Article IX, section 16, declares that-
The general assembly shall establish and maintain, in connection with the university, a department of agriculture, of mechanics, of mining, and of normal instruction.

A considerable amount of normal instruction was given previous to 1888, in connection with the University of North Carolina, by means of teachers' institutes, summer normal schools, and a normal course of three months in the university; and in 1888 a chair of pedagogy was established. But as the university is open to men only, this step increased the urgency of the demand for a school for women. It was said, as had been said in Virginia some years previously, that it took the State more than a century to learn that "youth" means girls as well as boys; that from threefourths to nine-tenths of the money used to employ instructors in higher education for boys is paid by State and national appropriations, or by the income from endowment funds; and that if the State proposed to pay for nearly all a boy's higher education, it ought to do at least as much for his sister. The justice of these views was clearly, forcibly, persistently, and one might almost say authoritatively, urged by the teachers of the State. The fourth annual session of the North Carolina Teachers' Assembly was held at Morehead City in June, 1887. It was one of the largest and most intelligent assemblages of teachers of one State ever seen in the

[^89]South. The chief topic discussed was the need of a State normal college for both sexes. The committee appointed at a prerious meeting (1886) to memorialize the general assembly for the establishment of a normal college was continued, with instructions to keep the subject before that body until the college was established. Each succeeding teachers' assembly passed similar resolutions and appointed similar committees. One is reminded of the importunate widow whose "continual coming" worried the judge. But though the argument of the committee was reenforced by the governor and the State superintendent, it was not until 1889 that the subject was seriously taken up by the general assembly. At that session the legislature was "almost persuaded," the bill presented by the committee of the general assembly haring passed the Senate, and failed in the House by but a few votes. At the next session, 1891, with the aid of the King's Daughters, Dr. J. L. M. Curry, and the North Carolina Farmers' Alliance, the assault was renewed and the fort surrendered.

The act establishing the institution required that it should be located "at some suitable place where the citizens thereof will furnish the necessary buildings or money sufficient to erect them." The town of Greensboro offered $\$ 30,000$ cash and a 10 -acre lot within the corporate limits-the last being a donation from two public-spirited citizens of Raleigh.
The buildings are beautiful without and comfortable within, and were expected to be ready for occupancy on the 28th of September, the day named for the opening of the school. The faculty consists of the president, Charles D. McIver, professor of (1) principles and history of education and the science and art of teaching, and professors in the following chairs: (2) history and English literature; (3) mathematics and German; (4) natural sciences; (5) physiology and hygiene, physical culture; (6) Latin and French; (7) vocal music and elocution; (8) industrial art; (9) domestic science.

It is intended that the school should embrace three departments: (1) The normal department; (2) the business department; (3) the domestic science department.
The object of the normal department is not only to give the very best literary and scientific training, butalso to give such a course in the principles and history of education and in the science and art of teaching as will give the student the ability and the inclination to teach others.
The business or commercial course embraces stenography, typewriting, telegraphy, and bookkeeping, and is intended for women who wish to make their own living but have no desire to become teachers.
The domestic science department recognizes the fact that the natural and proper position in life for the arerage woman is at the head of her own household. It includes theory and practice in sewing, cutting and fitting, cooking, care of the sick, and general household economy.
To complete the full course of instruction will require four years of work, and graduates will receive a diploma equivalent to a life certificate to teach in the public schools of North Carolina. ${ }^{1}$

## SOUTH CAROLNA.

The winged seeds of the "normal idea" had been wafted as far south as Charleston before the war; but what good seed could flourish amid the flames of civil strife? The people of South Caroiina had a State normal school, not in idea merely, but in actual existence, in 1860. It was called the "Girls' High and Normal School;" but as each .Congressional district was authorized to send fifteen students to the normal department, it was de facto a State normal school.

The commissioners of free schools, C. S. Memminger, chairman, in explaining the purposes of the school, say: "It is proposed to form into a special class all those [young women] whose purpose is to devote themselves to this honorable work [teach-

[^90]ing], and whose qualifications admit of their receiving the proper coure of instrmetion. * * * The power of teaching well comes not by intuition. * * * It comes as other arts come, by special training." ${ }^{1}$

Of course the school expired amid the flames.
In 1874 a State normal school was opened at Colunbia, and after a short career, full of promise, was closed by the withdrawal of the State appropriation.

## Wiathrop School.

In the summer of 1886, Prof. D. B. Johnson, superintendent of the graded schools of Columbia, went north on a professional visit to several normal schools, and, in an interview with the trustees of the Peabody fund, was assured of an annual appropriation of $\$ 1,500$ for the purpose of establishing, in Columbia, a training school for the teachers of South Carolina. In December, 1886, an act of the legislature was passed entitled, "An act relating to the Winthrop Training School for Teachers." The preamble and first section read thus:
"Be it enacted by the senate and house of representatives of the State of Sonth Curolina, now met and sitting in general assembly, and by the cuthority of the same:
"Section 1. That there is hereby founded and established, at Columbia, S. C., 'The Winthrop Training School for Teachers;' that the particular aim and object of caid school shall be to educate and train persons desirous of following the profession of teaching."

Section 2 constitates the board of school commissioners of the city of Columbia ex officio "Trustees of the Winthrop Training School for Teachers," and confers upon them the most ample powers for the execution of the trust.

Section 3 provides that the functions and duties of the trustees of the Winthrop Training School for Teachers shall be separate and distinct from those of the school commissioners of the school district of the city of Columbia.
Section 4 authorizes and empowers the trustees to receive donations and bequests, and to hold real and personal property to the amount of $\$ 100,000$ for the use and benefit of the school.

Section 5. "The said trustees are authorized and empowered to grant diplomas to all perions who satisfactorily complete the preseribed course of study and training in said school; and persons holding such diplomas will be entitled, without further examination, to teach in any of the public schools of the State as first-grade teachers."

The school was named in honor of Robert C. Winthrop, the rencaable chairman of the trustees of the Peabody fund.

The school is not altogether a free school; there is a fee for tuition of $\$ 2$ a month, or $\$ 5$ a term for each of the three terms of twelve weeks, if paid in advance at the begiming of the term. One young lady from each county is received free of tuition charges on the recommendation of the county board of examiners. The State of South Carolina makes amnual appropriation for 34 scholarships, of the value of $\$ 150$ each, a scholarship to be giren to one student from each county of the State; $\$ 30$ of this sum is given to the school for tuition, text-books, etc., and the remaining $\$ 120$ is given to the student in installments of $\$ 40$ each at the beginning of each term, to assist her in defraying her personal expenses of traveling, board, etc. This money is paid out to the students only upon the order of the State superintendent of education. The beneficiaries of the scholarships are selected by competitive written examinations in the different counties. In addition to the State scholarships, a scholarship for tuition is given by the school to the young lady in each county who receives second rank in the county examinations. Neither the State scholarship nor the tuition scholarship is given unless the examination proves satisfactory, and no scholarship is allowed to any person for more than one session. On the completion
of their course beneficiary students are required by law "to teach for one year in the common schools of the respective counties from which they were appointed, provided positions are offered them as first-grade teachers in such schools."

## COURSE OF STUDY.

The curriculum (catalogue 1889-90) includes the following studies and the methods of teaching them: Reading, spelling, English language, arithmetic, geography, physiology, history of the United States, lessons on form and color, lessons on plants and animals, elements of physics, penmanship, drawing, vocal music and calisthenics, psychology, history of education, school organization and management, and practice in teaching.

Applicants for admission are required to be not less than 17 years of age, and must express their intention of engaging in the profession of teaching. They must also pass a satisfactory entrance examination in reading, spelling, arithmetic, grammar, geography, history of the United States, and penmanship.

The school [says the superintendent] is a normal training school in all its courses. Its aim is strictly professional, and only those pupils are wanted who are ready to undertake the work with a feeling of personal interest in teaching as a profession. * * * The design of the school is to prepare for teachers young women who already have a good education by training them in methods of teaching and school management. * * * The normal class work extends through the course, and includes logical reviews of all subjects of common-school study from the teacher's standpoint. In each study the subject is analyzed into its divisions and subdivisions, arranged topically in logical order. In most of the common-school studies the outline is divided into an elementary course for the primary grades, and a secondary or scientific course for the higher grades. * * * The practice teaching is intended to be an application of the principles studied in the normal class, so that the whole course of training may give, not a servile imitation of methods now in use, but such independent, progressive teaching ability as will enable one to adapt herself to the needs of any school, whether graded or ungraded, in city or country.

The practice department of the school contains about 100 children, forming classes in the first, second, and third primary grades. These children are taught by the pupil-teachers, subject to the constant supervision of two of the teachers of the school. Opportunity is also given to the students to observe thoroughly the work done in the higher grades of the Columbia graded schools. ${ }^{1}$

The Hon. James H. Rice, State superintendent of public instruction, says in his report for 1888:

The legislature established a normal college for males within the South Carolina University. * * * The Winthrop Training School for Females was established two years ago. * * * By a happy arrangement with the trustees of the Winthrop Training School the students of both institutions have the privilege of attending upon the lectures of both colleges. It [the Winthrop Training School] was founded by Superintendent D. B. Johnson with slender means, and seemed as frail a bark as the Mayflower of the Pilgrim fathers. To the timid it promised nothing but disaster to mariners and crew. Under the skillful and practiced hand of the president it has weathered the storm. * * * This movement is rich in promise alike to the State and the young lady students. We secure trained talent for the schools and they have the means of making an honorable living. This is the first dollar South Carolina has given to educate her daughters, and it has been most worthily bestowed. * * * It is proper to say that this effort was made possible by the liberality of the Peabody trustees, through their accomplished secretary, Dr. S. A. Green. * * * Institutions for normal training are now a part of the ordinary educational machinery and need no vindication. * * * It is presumed that the State has only begun this work. Modifications may and will be needed in the plan of operations and the methods of assistance. She can never retrace her steps. ${ }^{2}$

[^91]
## GEORGIA.

## Normal and Industrial College for Georgha Girls, Milledgeville.

The original bill for the establishment of this institution was introduced into the Georgia legislature in July, 1889, and became a law in the following November. The corner stone of the college building was laid in November, 1890, and the college was opened on the 30th of September, 1891, with 88 pupils. The year closed with 171 regular matriculates, including 6 t normal students proper, and 92 special students. The second session (September, 1892) opened with 272 pupils coming from 94 different counties in Georgia. The college seems to have sprung, like Pallas from the head of Zeus, full grown and fully armed.

The building and grounds cost $\$ 100,000$. The annual appropriation from the State amounts to $\$ 18,000$, which is supplemented by a donation from the Peabody fund of $\$ 1,800$.

The title "Normal and Industrial" indicates the purpose of the college, which is to enable girls-
(1) To do intelligent work as teachers, according to the best modern methods.
(2) To earn a livelihood by the practice of some of the industrial arts suitable to women.
(3) To exert an uplifting and refining influence on the home circle and on general society.
(4) To acquire skill in those domestic arts that lie at the foundation of successful housekeeping.
The four principal departments, normal, industrial, collegiate, and domestic, do not form four distinct and separate schools; they are coordinate parts of one complete system, and are so related to one another as to form one harmonious whole.
The full normal course extends through four years. The professional studies for each year are: Freshman, Baldwin's School Management; Sophomore, Baldwin's Educational Psychology and observation visits to model school; Junior, Compayré's History of Pedagogy and observation visits to model school ; Senior, Practice teaching in Model School.
The model school was established and is maintained entirely by means of an annual donation from the Peabody fund. It serves both as a school of observation and as a practice school for students of the senior normal class. It is composed of forty children from 6 to 11 years of age divided into four grades.
The general, or literary and scientific course for normal students is identical with the collegiate course.

Freshman cluss.-Elementary algebra, Meiklejohn's English Language, Parts I and II; physics, American classics, Roman history, Cæsar, prose composition.
Sophomore class.-Algebra, completed; English Language, Parts II and III; chemistry, History of England; studies in Scott and Tennyson, Cicero and Virgil.
.Tunior class.-Geometry, plane and solid; critical study of Shakespeare's plays, geology and physical geography, ancient and mediæval history, Horace, Livy, Tacitus.
Senior class.-Trigonometry, arithmetic reviewed, critical study of English classics, astronomy, civics and current history, standard current literature, cooking.

All pupils who take the college course only, without the normal course, are expected to devote at least five hours a week to the study of some one of the industrial arts.

Care has been taken not to overcrowd the curriculum with a multiplicity of studies. The plan of instruction has been intensive rather than extensive. Every art and science is a microcosm, containing in itself the principle and essence of all other arts. and sciences; for instance, study chemistry well and you have the principle and essence of all science; study Shakespeare well and you have the principle and essence of all poetry; study the story of ancient Rome well and you have the principle and
essence of all history. Another reason for making the studies fewer than are usually found in college courses is that time may be had for the industrial arts, to which every pupil is required to give a fair share of her attention.

## INDUSTRIAL DEPARTMENT.

The studies in this department are, (1) stenography and typewriting; (2) telegraphy; (3) bookkeeping; (4) dressmaking; (5) free-hand and industrial drawing; (6) cooking.

In selecting these from all the arailable industries, the authorities of the college had regard primarily to their business value and secondarily to their culture value. ${ }^{*} *$ Carefully compiled statistics show that the first four arts mentioned have a greater business value for women than any other employments whatever. * * * Cooking, the sixth and last in the list, was selected, of course, almost entirely for its domestic or household value. * * * The design of this institution, howerer, is to educate the head as well as the hand, and its firm purpose is to avoid tirning out mere workwomen, ignorant of everything except the narrow craft by which they earn their living. No pupil, therefore, will be allowed to devote herself to the industrials to the exclusion of all other studies unless she can demonstrate to the president that she has already a fair English education. ${ }^{1}$

## FLORIDA.

The legislature of Florida passed an act in 1851 establishing two seminaries of learning, "one upon the east, the other on the west side of Suwanee River; the first purpose of which shall be the instruction of persons, both male and female, in the art of teaching all the various branches that pertain to a good common-school education; and, next, to give instruction in the mechanic arts, in husbandry and agricultural chemistry, in the fundamental laws, and in what regards the rights and duties of citizens." Four townships of land were granted to the State of Florida by the General Government (acts of 1823 and 1845) for the purpose of endowing two such seminaries, and the sale of those lands produced a fund for their support. The East Florida Seminary was located first at Ocala, Marion County, and was removed to Gainesville by an act of the legislature passed in 1866. The normal element, which was never strong, soon died out, and the need of it has not been much felt since 1887, when provision was made for the organization of two State normal schools, one for the white teachers and one for the colored.

In that year the legislature passed an act appropriating $\$ 4,000$ a year for the support of a normal school for white teachers, and locating it at De Funiak Springs, in Walton County, on the Pensacola and Atlantic Railroad, about midway between the Chattahoochee River and Pensacola.

The course of study covers two years. Graduates receive a diploma as licentiate of instruction, which is equivalent to a first-class life certificate within the State. The minimum age of admission is 16 years, and applicants must pass an examination in the common-school branches. Before being admitted students must pledge themselves to teach for two years in the State if a suitable opportunity is offered. Such students pay no tuition fees if residents of the State; nonresidents pay $\$ 5$ a quarter (ten weeks). The faculty consists of the president, two professors, and one assistant teacher. The last catalogue contains the names of ninety students, young men and young women.

The studies of the normal departments are as follows:
Junior, first term.-(1) Rhetoric and composition, four hours a week; (2) general history, four hours a week; (3) algebra, four hours a week; (4) Latin, four hours a week; (5) physiology, two and a half hours a week; (6) drawing, one and a half hours a"week.

Junior, second term.-(1) Rhetoric and history, four hours a week; (2) algebra,
four hours a week; (3) Latin, four hours a week; (4) physics, four hours a week; (5) geometry, four hours a week; (6) drawing, one and a half hours a week.

Senior, first term.-(1) English literature, history and essay writing, four hours a week; (2) algebra, four hours a week; (3) Latin, four hours a week; (4) physics, four hours a week; (5) geometry and plane trigonometry, four hours a week; (6) drawing, one and a half hours a week.

Senior, second term. - (1) Chemistry, four hours a week in class room and four in laboratory; (2) Latin, four hours a week; (3) spherical trigonometry, surveying, navigation, four hours a week; (4) astronomy, four houre a week; (b) civil government and Florida school law, four hours a week.

Psychology and pedagogy extend through the two years' normal course.
The following are stated as the "special features" of the school:
"(1) Tuition is free; (2) highest board only $\$ 10$ per calendar month; (3) no uniform required; (4) open to both sexes; (5) curriculum covers a period of two years; (5) diploma a life certificate in this State; (7) a school for mature personspupils 28 years of age in attendance; (8) a State institution under the direct supervision of the State board of education." ${ }^{1}$

## IV.

## NORMAL SCHOOLS IN THE NORTH CENTRAL DIYISION.

## OIIIO.

There is no State normal school in Ohio, although it was among the first, if not the very first, to recognize by legislative action the need of such an institution and to take some preliminary steps for its establishment. The general assembly in 1836 requested Prof. Calvin E. Stowe, ${ }^{2}$ who was then about to visit the countries of Europe, "to collect during his contemplated tour such facts and information as he might deem useful to the State in relation to the various systems of public instruction and education which had been adopted in the countries through which he might pass, and to make a report of the same, with such observations as he might offer, to a future general assembly." On his return Professor Stowe presented a report warmly advocating training schools for teachers as an indispensable factor of any State system of common schools, and especially recommending the establishment in Ohio of a normal school with model schools and schools of practice.

Two years later, Samuel Lewis, State superintendent of common schools, presented a report to the legislature in which he favored the establishment of a State university for the education of teachers and others.

In 1841, William Trevitt, secretary of state, urged the legislature to follow the example of Massachusetts in the establishment of normal schools. One of his successors, MIr. Galloway, recommended the planting of one normal school at Columbus. In 1851, Henry W. King, secretary of state, advocated the establishment of as many normal schools as the school system of Ohio should demand.
The only result of these earnest and long-continued efforts was the increased popularity of the cause, especially among teachers, which was evidenced by the upspringing of a number of independent normal schools, some of which, or their successors, are now doing good service.

In 1866, in response to the request of the general assembly, the Hon. Emerson E. White, then State school commissioner, presented a report coutaining a most lucid, elaborate, and convincing argument in favor of normal schools. He had made himself familiar with their organization and practical results by visits to some of the

[^92]most celebrated State normal schools then in operation, at Westfield, Framingham, Albany, Oswego, Trenton, N. J., New Britain, Conn., and Ypsilanti, Mich., besides the training schools at Boston and Philadelphia. He quotes, in support of his views, the opinions of some eminent educators: Rev. James Fraser, of England, who had been sent to this country by the royal commission on education to investigate our system of common schcols; Hon. Egerton Ryerson, chief superintendent of public education for Upper Canada; M. Guizot, then minister of public instruction in France; Victor Cousin, Horace Mann, Josiah Quincy, Edward Everett, George S. Boutwell, Mark Hopkins, Barnas Sears, George B. Emerson, Joseph White, Birdsey G. Northrop, John D. Philbrick, and others. But the testimony of this cloud of witnesses weighed not a feather with the legislators of Ohio. Dr. White then goes on to set forth his plan for maintaining one State normal school in connection with ten State normal institutes at an expense of $\$ 20,000$ a year, "a sum altogether insignificant when compared with the grand object it is to promote. The law making the appropriation might be called 'an act appropriating $\$ 20,000$ to keep the half of three millions of dollars from being squandered on incompetent teachers.' "

The lack of a State system of normal schools is to a certain extent compensated by teachers' institutes, independent normal schools, and the opening of a normal department in the Ohio University with an experienced teacher as principal and professor. Among the independent normal schools may be mentioned the

## National Normal School at Lebanon.

In the summer of 1855 some of the leading teachers of southwestern Ohio called a convention for the purpose of establishing a normal school in the vicinity of Cincinnati. The call also contemplated an institute of three weeks to be held in the buildings of the Miami University at Oxford, Ohio. About 350 teachers assembled in answer to the call. Among them were John Hancock, now gone to his rest, to his gain and our great loss, and Andrew J. Rickoff, still (1891) happily preserved to us. During this institute an organization was effected and legally incorporated, called The Southwestern State Normal School Association. The purpose was to establish and sustain a State normal school in southwestern Ohio until State aid could be obtained. Lebanon was selected as the most eligible site for the school. The trustees of the Lebanon Academy transferred their building and grounds to the normal school trustees, with an agreement to furnish eighty pupils for five years to aid in sustaining the school. Alfred Holbrook was elected principal, at a salary of $\$ 1,200$ a year, which he was expected to make out of the tuition fees. The school was opened in November, 1855, with about 95 pupils. For the first year the principal received, for his own and his wife's services, $\$ 320$. The school was then given entirely into the hands of the principal, who received for his services the second year $\$ 800$, the other teachers getting the same proportion of their nominal salaries. The number of pupils registered during the year was 257 . In the third year 335 pupils were enrolled. During the war the attendance fell off, but in 1866 the number of pupils was 709, and the twentieth annual catalogue gives the names of 1,500 different pupils. The catalogue for the year 1890 specifies the following "departments:"
School of common branches. Conservatory of music.

Preparatory school.
College of business.
College of teachers.
College of science.
College of engineering.
College of liberal arts.
College of law.
College of medicine.
College of Bible study.

School of phonography and typewriting. School of telegraphy.
School of elocution and oratory.
School of modern languages.
School of pharmacy.
School of elocution.
School of photography.
School of theology.

These departments are supervised and administered ly the president with the aid of 53 instructors and officers. ${ }^{1}$
In 1885 the legislature of Ohio made an appropriation for the establishment of a normal department in the Ohio University, the oldest collegiate institution northwest of the Ohio River. This action was a distinct recognition of the claims of normal education upon the State, and anindication that teachers are in need of professional preparation and are entitled to reasonable facilities for obtaining it. In accordance with this idea the college formulated two courses of study, a short course leading to a certificate, and a longer course leading to the degree of bachelor of pedagogy. The following are the required subjects for the degree of bachelor of pedagogy: ${ }^{2}$

Exercises per weck.
FRESHMAN YEAR.

|  | Fall term. | Winter term. | Spring term. |
| :---: | :---: | :---: | :---: |
| United States histery | 5 | 5 | 5 |
| Solid geometry. | 5 |  |  |
| Algebra - - .-. |  | 5 |  |
| Plane trigonometry |  |  | 5 |
| A foreign language. | 5 | 5 | 5 |
| Elocution | 2 | 2 | 2 |

SOPHONORE YEAR.


JUNIOR YEAR.

| A foreign language. English literature. History of cducation | 5 5 | 5 -5 |  |
| :---: | :---: | :---: | :---: |

SENIOR YEAR.


As students who receive this degree are expected to have not only a theoretical knowledge of education as a science, but also some practical knowledge of it as an art, they are urgently recommended to acquire some experience by teaching before completing the course. For such teaching, if done under the direction of the professor in charge of this department, the student may receive credit as a part of his elective work.

Psychology and the history of philosophy are regarded for the present as belonging to the normal department of the university; and, therefore, the methods of instruction in psychology may probably be taken as typical of the whole normal course. The following brief extracts from a monograph by the professor of psychology in the university throw some light on this important subject of "methods."

Text-books.-The extent of text-book work in psychology is one of the first practical questions that presents itself to the teacher. There is great danger that the work may become set, mechanical, and irreclaimably fixed in the lines of thought, and even of expression, of a text-book. Such abject servility may, to be sure, be

[^93]averted in some degree by original thought on the part of the instructor, but he will be singularly successful who entirely liberates his students from authorial despotism. Statements printed in cold type acquire a certain authority and repress independent unprejudiced thought. The tyrannical text-book is, moreover, very likely to banish from the class room the freshness and vivacity which distinguish oral discussion.
These objections to text-books are, however, balanced by many considerations. As a fixed and permanent basis for class-room work, text-books are invaluable. It is only with great difficulty that a course which proceeds entirely by lecture and discussion is thoronghly followed and systematized. * * *
Lectures or discussions?-Granting, then, that a considerable portion of the recitation period should be devoted to independent work, the alternative of lecture or of discussion is offered. In very large classes the lecture is the more effective way of covering a subject, for discussion being necessarily more or less individual is, owing to the numerous views presented, very liable to degenerate into aimless, profitless talk. * * * Cerainly, if properly used, the lecture is invaluable in presenting clearly and systematically to a large number an otherwise unwieldy mass of material. The lecture, however, in affording no opportunity for the expression of the doubts and perplexities of the student, betrays a fundamental weakness. Error will persist far longer, and be eradicated with much more diffculty than by the Socratic dialectic, for the lecture does not educe and thus correct or eliminate the student's mistakes. It leaves him to stumble along by himself, and deprives him of close intellectual contact with the instructor. * * *

The three cuxiliaries.-An ideal alliance of the instructor's three auxiliaries might be negotiated somerrhat on the following terms: The text-book should be used only in preparation for the recitation, and not, except in a very general way, for the conduct of the recitation itself. Lectures intended to throw the subject under consideration in fresher and stronger lights should be frequently given and should form an important, and indeed a rital, part of the course of study. The greater part of the class-room work, however, should assume the form of discussion of the subject-matter furnished by text-books and lectures, while by the suggestive questions of the Socratic dialectic the student may be further aided and stimulated. * * * By some such judicious combination of methods the field of psychology may be clearly and fully placed before the mind of the student, his interest roused and concentrated introspectively, and his power of original thought educed and developed. ${ }^{1}$
The supreme place which the study of psychology holds in the normal department of the Ohio University may be inferred from the following extracts from "An open letter to young teachers:"

Never before in the history of the world has such emphasis been laid on the importance of studying mind and pedagogy and the history of education as at the present. Not merely in such highly civilized countries as France, England, Germany, and Italy, but in Mexico, in the South American Republics, even in Jamaica, there is abundant evidence to show that men are coming to see the absurdity of mind doctors who have made no study of mind, of educational practitioners who have made no study of the art of education and the science that underlies it. * * * Do you intend to be a live teacher, determined to live by the best light of your own generation, or a fossil contented to make such preparation as was deemed sufficient a hundred years ago? If you are determined to succeed, then you will try to give yourself the qualifications necessary to success. You are living to-day and what you need is an outfit suited to to-day and not to a hundred years ago. Where will you get this preparation? * * * You ought to attend an institution which makes a specialty of preparing teachers for their life work. How many institutions are there in the State which make a special study of mind in its relations to education and which make a special study of the art and science of education? Unless I have been misinformed, there is but one, and that is the Ohio University at this place. [The italics are the author's.] There are indeed other colleges which have normal departments, and there are normal schools, but it is not the name but the thing that you want, and the thing-an institution which makes a specialty of preparing teachers for their life work, by making a careful study of mind in its relation to education and of the science and art and history of educationis to be found in this State at Athens. ${ }^{2}$

[^94]
## INDIANA.

## State Normal School, Terre Haute.

The first section of the constitution of Indiana contains the following article: "Knowledge and learning generally diffused throughout a community being essential to the preservation of a free government, it shall be the duty of the general assembly to encourage, by all suitable means, moral, intellectual, scientific, and agricultural improvement, and to provide by law for a general and uniform system of common schools wherein tuition shall be without charge and equally open to all." In accordance with this constitutional provision it was enacted by the general assembly in 1865 " that there shall be established and maintained a State normal school, the object of which shall be the preparation of teachers for teaching in the common schools of Indiana." This act provided for the location and erection of a building, the admission of students, the organization of the school, and the amnual appropriation of funds for tuition and expenses. The diploma of the normal school is by law equivalent to a State certificate, relieving the holder from county examinations. The board of trustees has authority to grant certificates of proficiency to such teachers as have completed any of the prescribed courses of study, and to give diplomas to graduates who have taught satisfactorily for two years. By a recent order of the board of trustees, all candidates for graduation are required to hold a county hicense to teach for a period of not less than two years.

The departments of the school are the following: Department of history and philosophy of education, of grammar and composition, of biology and geology, of reading, rhetoric, and literature, of history, of geography, of mathematics, of Latin, of mental science and methods, of music, of drawing and penmanship, of physics and chemistry. Each department is under the charge of a separate professor, with such assistants as are found necessary from time to time.

Courses of study.
FOUR YEARS' COURSE.


THREE YEARS' COURSE.

| First year: | *F |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| First term. | chology (general nature of mind). | manship. | *Arithmetic | *Grammar.. |  |
| Sccond term. | *Educational psy- | *Mathematical | do | do |  |
|  | chology (stages of knowing). | and physical geography. |  |  |  |
| Tliird term......... | *Educationalpsychology (feeling and will). | *Physical and political geography, with map drawing. | *Reading... | * United States history. |  |
| Second year : <br> Fourth term |  |  |  |  |  |
| Fourth term. | Methods (illustrated by reading and language). | *Physiology ...... | Composition | do | Latin. |
| Fifth term.......... | *Methods (illustrated by number, history, and geography). | do | Algebra | General history. | Do. |
| Sixth term. | History of education. | * Jiusie, drawing.. | .do | General history or rhetoric. | Do. |
| Third year: <br> Seventh term |  |  | Geometry |  |  |
| Eighth term........ | *Philosophy of education. | Physics or botany. | .....do...... | * Advanced composition. | $\begin{aligned} & \text { Do. } \\ & \text { Do. } \end{aligned}$ |
| Ninth term. | *Practice in training school. | Physics........... | Botany ..... | *Graduating thesis. | Do. |

Note.-Thirty-six terms' work is necessary to complete this course. The subjects marked thus* are required; the remaining subjects may be clected by the student.

The four years' course is designed to meet the needs of those students who wish to make thorough and extended preparation for public school work.

The three years' course is intended for young persons of limited scholarship who expect to confine their teaching to the district and graded schools of the State.

There is also a two years' course for graduates of commissioned high schools. Many cities do not maintain a training school for educating their own teachers, and this course is designed to supply the place of training schools for such cities, and thus to relieve the school officers from the necessity they feel of employing as teachers the graduates of their high schools who have had no training in teaching.

In addition to the courses described, there is a course of one year for college graduates, to meet the needs of those graduates who wish to enter the field of teaching and superintending schools and who feel the need of professional training for this work. This course assumes that the student has already acquired a liberal knowledge of the subjects taught in the public schools, and that his purpose is to add such professional knowledge as college professors and school superintendents peculiarly need.

The "practice work" continues through two terms. It consists of observation and teaching in the practice schools, which form one department of the normal school. The pupils taught are children belonging to the regular grades of the Terre Haute school system. This work consists of three kinds-(1) Lessons given daily by the students before the practice class as a whole; (2) lessons given daily at different hours when none or only a part of the practice class is present; (3) the observation of lessons given by the teacher in charge of the room. While a lesson is being taught the other members of the class take careful notes. On the following day it is carefully discussed by the members of the practice class and the teacher in charge of the room. In this discussion four things are done. (a) The point of the lesson is distinctly stated; (b) it is classed as favorable or unfavorable; (c) the principles that are the ground for considering it favorable are stated; (d) an explanation is made in order to show that the principles stated underlie the given act of teaching.

The average term enrollment for the session 1890-91 was 526. The whole number
of different students was 932 . The total number of different students since the organization of the school in 1870 is $6,943 .{ }^{1}$

## HLMINOIS.

## State Normal University.

A general meeting of the friends of free schools assembled in Bloomington, Ill., on December 26, 1853. Three topics were thoroughly discussed at this meeting: The duty of the legislature to create the office of State superintendent, to establish and maintain a normal school, and to organize a State teachers' association. The normal school question provoked a long and spirited debate, the same objections being urged as had been made twenty years before in other States and have been annually repeated in some quarters ever since.

After the adjournment of the convention the Illinois State Teachers' Association was organized. The most prominent topic in all the early meetings of this association was the organization of a normal school. There were three parties in the contest: The normal school men, who wanted a separate institution for the exclusive purpose of training teachers; a large class of educators, who desired to have either an industrial university with a normal department or a normal school with an industrial department, and, thirdly, those who favored the founding of normal departments by the State in connection with denominational colleges already established.

At the meeting of the association in 1856 it was resolved "That the educational interests of Illinois demand the immediate establishment of a State normal school for the education of teachers." In the following February the legislature passed, and the governor approved, "An act for the establishment and maintenance of a normal university."

This act of the legislature provided for a university, although what was established was in fact a normal school. The intention was to gather around the new institution the different colleges-classical, agricultural, industrial, law, medical, etc.-which should finally constitute a great university.

It was the duty of the State board of education "to fix the permanent location of the normal university at the place where the most favorable inducements are offered for that purpose." The board advertised for proposals, and several cities and towns competed for the prize. The bid of McLean County ( $\$ 141,725$ in real estate and subscription pledges) was so far ahead of the others that the board located the university "on the 160 acres of fine rolling land within three-quarters of a mile from the junction of the Illinois Central and Chicago and Alton railroads,' upon the condition that the full amount of the MeLean County subscription of $\$ 70,000$ should be legally guaranteed within sixty days, in default of which the location was to be made at Peoria. They employed Abraham Lincoln to draw up a form of bond or guaranty to be signed by responsible citizens of Bloomington.

The corner stone of the university building was laid on September 29, 1857, but the financial crisis of that year caused the work to be temporarily discontinued, and hence the buildings were not thoroughly completed until the early part of 1861. The total cost of the buildings, with all the incidental expenses, books, and furniture, was about $\$ 200,000$, a large part of which was raised and utilized by the strenuous and persistent efforts of Gen. Charles E. Hovey. The courts having decided that the normal university was a private institution belonging to the board of education as a corporation, and therefore that the State was not liable for the debts of the board, the legislature of 1867 enacted and declared that the State Normal University is a State institution, the property of the State of Illinois, and held in trust by the board of education.

[^95]During the long years while the great building was rising to completion the school work was carried on in a cramped and inconvenient building called Major's Hall. It must have been a queer old place, and many of the inhabitants, teachers, and students were sui generis. H. B. Norton, one of the students of those early days, wrote thas to the committee of the Quarter-Centennial Celebration:

We were daily conrened in the upper story of Major's Hall. I suppose that these younger generations of normalites are not a ware that such a building ever existed. The walls of the old house were rickety, and iron girders with huge S's at the ends held in place the brick masonry. Our assembling room was the third story. In the second story were recitation rooms, rather dark, and ill adapted to our needs. Grocery and hardware stores occupied the first floor. The building was heated by a coal stove in each room, and as Illinois coal is gaseous and explosive, the stove doors were frequently blown open with loud sounds and clouds of yellow smoke. C. E. Hovey was principal in those days, but Ira Moore was the one most directly in charge. Dr. Willard, looking rery pale and frail, soon began to open his wonderful budget of philological knowledge. Hewett came within a month after my arrival, I think. He was a small man with a lig head in those days. He had very demonstrative boot heels, and especially hated cats, and trent to sleep in Baptist meetings. He used to give us prodigious lessons in history and geography. He couldn't draw maps, but made us draw rery nice ones. I remember his geography lessons even unto this day. The names of the branches of the Amazon, the forms and heights of the Andean and Himalayan plateaus-these are mine yet, and will be to all eternity. My history work has not stayed with me so well. There was once a slight unpleasantness between my class and their teacher as to how General Greene got a way from Cornwallis. It was quite a double and twisted business anyhow, and we inwardly yowed that we wouldn't learn it. The teacher gave us hard words and low marks, but our obstinate stupidity won the day. * $*_{*}^{*}$ We were shabbily dressed in those days. I think my pantaloons were generally too short, and my coat seemed to have been made for some other person. We were very poor but very plucky. We boarded ourselves, mainly on corn mush; washed the floors and built the fires at the normal hall, worked hard, lived hard, and were poorly provided with all things. Our parents were sad-faced, struggling pioneers of the prairies, but we were cheery, resolute, and happy in our life and our work. To the toiling youth of frontier homes thirsting for knowledge the Illinois Normal University opened the gateway to a new life. We loved it, rejoiced in it, and were thoroughly loyal to its name and fame.

The school saw but little of its principal in those years. Two miles to the northward, across the sodden prairies, in the rainy autumn of 1858, were clay pits, heaps of brickbats, half complete foundations for a stately structure yet in embryo. The construction fund was exhausted, the State heavily in debt, business everywhere distressed and languishing-truly a somber prospect for the completion of a building demanding, on the basis existing before the war, $\$ 100,000$. It would be as easy to-day to raise a million. To secure these needed funds was the task which Charles E. Hovey set before himself. It was a labor for Hercules. His own fortune was pledged over and over. Had his plans failed he would have been weighted for life with hopeless bankruptcy. This enormous task he undertook and carried through. He had a place on the programme of the school's daily work, but his classes generally wrought out their own salvation. But in the winter of 1860-61 the building was completed. * * * We of the pioneering days need no reminder of the grand work which could hardly have been performed by another than Gen. Charles E. Hovey.

We were free in our conduct to a singular extent. No school rules rested upon us. Our hours and methods were wholly our own. We lived as we pleased, formed our friendships and associations, made our calls and managed our affairs entirely at our own choice and pleasure. Very few schools were ever so slightly governed. I do not believe that our successors of to-day can be journeying under any similar slackness of reins. Nevertheless, the record of those years was a thoroughly Spartan one. We were from Puritan households, disciplined in self-restraint. Industry and poverty were our safeguards.

A magnificent park, stately buildings, a beautiful and prosperons city, methods well ordered and polities established, splendid museums and laboratories, a wealthy and more cultured generation of students-these are the pleasant things that greet the view as you gather to the silver wedding of our Alma Mater. It is not true that the former days were better than these, but we who saw the working out of the beginnings had also our joys, struggles, and coronations, and we received a training
which, if less orderly and exhanstive than that rendered now, nevertheless gave us some measure of fitness for our life work. ${ }^{1}$

The first president of the university was Charles L . Hovey, but at the beginning of the civil war he entered the Army as colonel of the Normal Regiment, which he had organized. Nine of the instructors-Leander II. Potter, Ira Moore, J. H. Burnham, Aaron Gove, Julian E. Bryant, Joseph G. Howell, Edwin Philbrook, Samuel Willard, and E. R. Roe-accompanied him as officers, and a majority of the male Students as privates. Dr. Richard Edwards was president from 1862 to 1876; Dr. Edwin C. Hewett from 1876 to 1891.

John W. Cook is the present president (1892).
The facuity of 1892 consists of the president and 22 professors and assistants. The "summary" of the normal department shows 5 special students, 跑 seniors, 21 middle class $A, 36$ middle class $B, 117$ middle $C, 91$ junior $A, 138$ junior $B, 241$ junior C; total in normal department, 688.

Course of situdy.

| Studies. | First year. |  |  | Second year. |  |  | Third year. |  |  | Fours a week. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. |  |
|  |  |  |  | $\begin{aligned} & \dot{9} \\ & \frac{0}{3} \\ & \vdots \\ & 10 \\ & i=1 \end{aligned}$ |  |  |  | $\begin{aligned} & \text { in } \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |
| Elements of pedagogy | * |  |  |  |  |  |  |  |  | 2 |
| Pedagogy............ |  | * | * |  |  |  |  |  |  | $4 \frac{1}{4}$ |
| Elementary psychology |  |  |  | * |  |  |  |  |  | $4 \frac{1}{2}$ |
| Practice teaching...... |  |  |  |  | \% | * |  | * | * | 5 |
| Advanced psychology and Rosen |  |  |  |  |  |  | * | * | * | 5 |
| Illustrative teaching............... |  |  |  |  |  |  | * | * | * | 3 |
| School laws of Illinois-three wee |  |  |  |  |  |  |  |  | \% | 5 |
| Reading and dictionary..... | * | * |  |  |  |  |  |  |  | $4 \frac{1}{2}$ |
| Spelling.................. | * | \% | * |  |  |  |  |  |  |  |
| Grammar . . | * |  | * |  |  |  |  |  |  | $4 \frac{1}{2}$ |
| Rhetoric. |  |  |  |  | * |  |  |  |  | $4 \frac{1}{2}$ |
| Criticism. |  |  |  |  |  | * |  |  |  | $4 \frac{1}{2}$ |
| English literature.... |  |  |  |  |  |  | * |  |  | 5 |
| Shakespeare and themes |  |  |  |  |  |  |  | * |  | 5 |
| Arithmetic................ |  | * |  |  |  |  |  |  |  | $4 \frac{1}{2}$ |
| Algebra |  |  | \% | \% |  |  |  |  |  | $4 \frac{1}{2}$ |
| Geometry . |  |  |  |  | * | * |  |  |  | $4 \frac{1}{2}$ |
| Bookkeeping-eight w゙eeks |  |  |  |  |  |  |  |  | * | 5 |
| Drawing. ................ | * | * | * | * | * | * |  |  |  | 2 |
| Writing.. |  | * |  |  |  |  |  |  |  | 2 |
| Geography ........... | * | * |  |  |  |  |  |  |  | $4 \frac{1}{2}$ |
| History of the United States |  |  | * |  |  | * |  |  |  | $4 \frac{1}{2}$ |
| Civil government... |  |  | $\cdots$ | \% |  |  |  |  |  | $4 \frac{1}{1}$ |
| Ancient history. |  |  |  |  | \% |  |  |  |  | $4{ }^{1}$ |
| Physical geography. |  |  |  |  |  | * |  |  |  | $4 \frac{1}{2}$ |
| Mediæval history .. |  |  |  |  |  |  | * |  |  | 5 |
| Zoology . . . . . . . . |  |  |  |  |  |  |  |  |  | $4 \frac{1}{2}$ |
| Physiology.. |  |  |  |  | * |  |  |  |  | $4 \frac{1}{2}$ |
| Botany... |  |  |  |  |  | \% |  |  |  | $4 \frac{1}{2}$ |
| Physics. |  |  |  |  |  |  | * | \% |  | 5 |
| Chemistry |  |  |  |  |  |  |  |  | * | 5 |
| Vocal music |  |  | * |  |  |  |  |  |  | 2 |

The * shows that the study is pursued at the time indicated.
Latin, Greek, German, astronormy, advanced algebra, trigonometry, surveying, analytic geometry, calculus, advanced serence study, political science, and ad vanced pedagogy are optional studies.

The model department has enrolled 613 pupils in high school, grammar school, intermediate school, and primary school. Deducting names counted twice, the whole number of different students for the year is 1,236 .

Candidates for admission to the normal department are required:

1. To be at least 17 years of age, if young men; 16 , if young women.

[^96]2. To produce a certificate of moral character.
3. To sign the following declaration:

I hereby solemnly declare that my purpose in attending the normal university is to fit me for teaching in the public schools of Illinois and that I will carry out this pledge in good faith; and I do further pledge myself to report to the president of the university semiannually where I am and what I am doing for three years after graduating at said institution.
4. To pass an examination before the county school superintendent in reading, spelling, writing, arithmetic, geography, United States history, and the elements of English grammar sufficient to entitle them to a second-grade teachers' certificate.

Each county in the State is entitled to gratuitous instruction for two pupils in the normal university, and each representative district for as many pupils as there are representatives in the district. The selection is made in the following manner: The school superintendent of each county receives and registers the names of all applicants; these applicants are examined, and from the number found to possess the requisite qualifications the pupils are selected by lot. The same mode of selection obtains in the representative districts. If vacancies occur in any county or representative district the president of the university is authorized to fill them.

Graduates from the normal department are entitled to receive a State certificate good for five years.

LABORATORY METHODS.
The pupil enters the laboratory and finds on the table before him some apparatus, accompanying which are some printed directions of what he is to do with the material before him. After seeing that his apparatus is in proper order he proceeds as directed, and having completed the experiment, at once writes out neatly, accurately, and tersely the experiment in full, embracing these points: (1) What I did; (2) What I saw; (3) What I conclude. (Ruled tablets of uniform size are used for this work, and at the close of the term the leaves which are daily detached for the separate exercises are bound in permanent form.) The pupil writes up his work without consulting the text-book or his fellow pupils, and hands his results to the instructor before beginning another experiment. (Should his work be unsatisfactory, he is required to perform it again until the intended facts are made clear to him. After a few days' work, repetition is seldom needed.) The pupil is thus taught to be independent in his efforts and to cultivate his reasoning powers. He acquires control of his hands; he learns how to put things together and get results; he studies things in relations; he prepares himself for everyday life, whether it be in the schoolroom, in the workshop, or in whatever department of life.

The experiments are arranged in systematic order, so that the pupil is led step by step into a more complete knowledge of the subject under consideration. The apparatus is as simple and inexpensive as it is possible to use and be assured of good results; and pupils are taught how to construct it, so that they can teach this work in the common schools without waiting for expensive, showy apparatus to be furnished by school boards. * * * About one hundred experiments are performed each term. ${ }^{1}$

## Soutmern Ilfinois Normal University, Carbondale.

The act of incorporation was passed in 1869, but classes were not opened till 1874, owing to unavoidable delays in the commencement and in the completion of the building. It was a magnificent building-almost too magnificent. The young iadies complained of the fatigue of climbing four lofty stories, and the height of the ceilings prevented the comfortable heating of the rooms by the furnaces originally used. Sixteen thousand dollars expended in steam-heating apparatus put an end to all complaints on the last count, and an accidental fire November 26, 1883, reduced the height of the ceilings to zero. It broke out in the mansard story over the Museum. Water tanks had been provided for such emergency, but unfortunately they were below the fire, and water will not rise above its level even in a university. An effort was made to bring into service the small fire engine belonging to the university, but

[^97]owing to "a defect in the construction of the water pipes" a stream could not be thrown on the fire. Four elements of safety were present, water, hose, engine, and willing hands, but they could not be correlated, and in less than two hours the house was in ruins. The willing hands saved all that could be saved-books, furniture, apparatus, even doors and windows, valued at $\$ 75,000$, including the basement and the walls that were still standing.

Two days rest, or rather, indeed, two days change of work, and recitations went on as usual in rooms in some of the business blocks kindly provided by the citizens.

English and Latin course.

|  | Studies. | Normal. |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | First year. |  |  | Second year. |  |  | Third year. |  |  | Fourth year. |  |  |
|  |  | 1 | 2 | 3 | 4 | $b$ | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| I........ | Psychology . |  |  |  |  |  |  | $\dagger$ | $\dagger$ |  |  |  |  |
|  | Pedagog y.... |  |  |  | $\dagger$ | $\dagger$ |  |  |  | $\dagger$ |  |  |  |
|  | School law |  |  |  |  |  |  |  |  | $\dagger$ | + | + | $\dagger$ |
|  | Practice teaching. Botany ......... |  |  |  |  |  | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |  |  |  |
|  | Physics...... |  |  |  | + | $\dagger$ |  |  |  |  |  |  |  |
|  | Physiology .... |  |  |  |  |  | $\dagger$ |  |  |  |  |  |  |
|  | Geology ..... |  |  |  |  |  |  |  |  |  | $\dagger$ |  |  |
|  | Astronomy Arithmetic | $\dagger$ | $\dagger$ |  |  |  |  |  |  |  |  | $\dagger$ | $\because$ |
| III...... | Algebra ....... | + | I |  |  | $\dagger$ | $\dagger$ |  |  |  |  |  |  |
|  | Geometry .... |  |  |  |  |  |  | $\dagger$ | $\dagger$ |  |  |  |  |
|  | Bookkeeping -.......... | $\dagger$ |  |  |  |  |  |  |  |  |  | $\dagger$ |  |
| IV ...... $\{$ | Grammar............. |  |  | $\dagger$ |  |  |  |  |  |  |  |  |  |
|  | Rhetoric.............. |  |  |  |  |  |  | $\dagger$ |  |  |  |  |  |
|  | English literature ..... |  |  |  |  |  |  |  |  |  | + | $\dagger$ |  |
|  | Elocution .... |  |  |  |  |  |  |  |  |  |  |  |  |
| V....... $\{$ | Spelling ...... |  |  |  |  |  |  |  |  |  |  |  |  |
|  | History ........ |  | $\dagger$ | $\dagger$ |  |  |  |  |  |  | $\dagger$ | $\ddagger$ |  |
|  | Civil government. |  |  |  |  |  |  |  |  |  |  |  |  |
| VI.......\{ | Drawing..... | One term |  |  |  | $\dagger$ |  |  |  |  | $\dagger$ |  |  |
| VII...... | Vocal music. |  |  |  |  | $\dagger$ |  | $\dagger$ Opti |  |  |  |  |
|  | Physical cultur |  |  |  |  |  |  |  |  |  |  |  |
| VIII.... | Greek |  |  | $\dagger$ |  | 1 | + |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |

The $\dagger$ indicates the place of the study in the course.
The $\ddagger$ means half-term study.
The "English course" differs by the omission of Latin and Greek, and is comprised in three years.
On the evening of the fire, while the embers were still smoking, the mayor of Carbondale called a mass meeting of the citizens. It was resolved to build a temporary schoolhouse, and in less than forty working days the students were installed in their new quarters, a comfortable frame building with fourteen rooms. Here the school rested for four years till the completion of the permanent building, for which the general assembly in 1885 made an appropriation of $\$ 152,065$.
The school work is conducted in three distinct departments--the normal, the high school, and the preparatory. The preparatory is subdivided into grammar school, intermediate, and primary. By the last catalogue (1891-92) there were in attendance in the normal department 342 students; in the high school, 41 ; in the preparatory, 315 (grammar school 239, intermediate 38, primary 38)-total, 698. The average per term was 452 .

To be admitted to the normal department students must have completed their sixteenth year and must be able to pass an examination equivalent to the requirements of a second-grade certificate. To obtain free tuition a student must sign a
pledge to teach in the public schools of the State for three years, or at least as long as he has been a student of the university. The pledge comes into effect only after graduating and 'on the expressed condition that " $a$ situation can be had with reasonable effort." All giaduates recommended by the faculty and approved by the board of trustees are entitled to a State certificate, granted by the State superintendent of public instruction, good in any county of the state for five years.

TRAINING DEPARTMENT.
The strictly professional work of our normal school is made up of three distinct parts, in the first of which are found practical and economic pedagogy. In practical pedagogy our pupils are given, by text-book and lecture, a knowledge in outline of the child's powers and the order of their development. By the same methods, also, they are given a knowledge of the methods of teaching the branches usually found in the common schools. In economic pedagogy the attention of pupils is directed to the organization and management of schools and classes, to the end that every child in school or class shall secure his individual and personal right to instruction and training. The discussion of special subjects in both practical and economic pedagogy is followed by reports of observations made in the training school, the reports covering the special topics previously discussed. After the economic pedagogy, and as a supplement to it, the school law of the State is taken up and its chief provisions mastered.

The student of pedagogy, having completed the elementry course pointed out in the preceding paragraph, is put in charge of a class, and his work as teacher is carefully supervised. The preliminary study of methods has put him in a state to teach and manage his class intelligently, and has given him increased power to profit by the superintendent's instructions. One year of this practice teaching is required of all who are graduated from our school. The daily task, not counting the preparation, covers about half an hour of time. This teaching work covers the second section of the course in pedagogy.

Haring completed the first two divisions of the professional course, the student is prepared to take up the higher pedagogical studies. These include a full course in psychology, a thoughtiul discussion of the conditional principles of all right teaching, and a study of men and methods prominent in past educational efforts. For the advanced course, then, the studies are psychologic, philosophic, and advanced pedagogy. As an aid to easy reference the three branches of the higher course are grouped and known as theoretic pedagogy, and for the same reason the three in the elementary course are collected and recognized as practical pedagogy. ${ }^{1}$

MHCIIGAN.

## State Norval School, Ypsilatti.

The State Normal School of Nichigan was established by the legislature in 1849. The organic law reads as follows:

Be it enacted by the senate and house of representaives of the State of Michigan, That a State normal school be established, the exclusive purpose of which shall be the instruction of persons, both male and female, in the art of teaching and in all the various branches that pertain to a good common-school education; also to give instruction in the mechanic arts and in the arts of husbandry and agricultural chemistry, in the fundamental laws of the United States, and in what regards the rights and duties of citizens.

Commenting on this enactment, Superintendent Gregory, in his report for 1859, says:

The main design is to be a school for teachers, where they may receive instruction peculiarly adapted to their profession, though the law contains some rhetorical flourishes about giving instruction in the mechanic arts and in the arts of husbandry and agricultural chemistry, etc. The normal school is to the primary schools what theological seminaries are to the churches. It is simply the teacher's' college and a school for professional training.

But the desire for normal schools was manifested long before the enactment of this law. In 1836 Superintendent Pierce, in his official report, wrote enthusiastically on

[^98]the merits of the Prussian system and recommended the adoption of a similar plan in Michigan. His successors, Superintendents Sawyer, Comstock, and Mayhew kept up the agitation, and it was during the superintendency of the last that the law just quoted was passed by the legislature.
Proposals were received by the board of education from several points in the State, each offering to donate lands and sums of money to secure the location of the school. The most favorable came from Ypsilanti, offering an eligible lot for a building site, a subscription of $\$ 13,500$, the use of temporary buildings, and the payment of the salaries of the teachers of the model school for five years. The State board of education enlarged the grounds and erected a brick building at a cost of $\$ 15,200$, which was ready for use in the autumn of 1852. This building was partly destroyed by fire in 1859 , but was rebuilt and ready for the reception of students in September, 1860. An additional building was finished in 1869. Other much-needed buildings were added in 1878 and 1882. The entire cost of all the buildings from the establishment of the school to the last-named year was about $\$ 84,000$. Since that time extensive alterations and additions have been made at the cost of $\$ 60,000$, and there is now ample accommodation for an annual attendance of 900 students in the normal and 300 in the other departments.
The management of this school was for several years a series of experiments. It was not intended at first to be a purely professional school. It occupied the educational field in common with other literary and scientific institutions, but provided in addition some training in the science and art of teaching. The question was serionsly discussed in the State Teachers' Association and elsewhere whether it was not time for the normal school to abandon academic work and maintain a true American normal school, devoted exclusively to professional instruction and training. The State board of education was requested by the faculty to prepare a course of study adapted to the proposed new departure. The committee appointed by the State board to investigate the subject reported that the normal school should, if possible, be brought more into sympathy with the high schools of the State, and should assume a more purely professional character. For the accomplishment of these objects two plans were suggested. One was to elevate the standard of academic attainment required for admission and to remodel the course of study so as to combine academical and professional study during the entire course. The other plan was to require all academic preparation to be made prior to admission to the normal school. The committee did not recommend either plan, but proposed a compromise, which was adopted and met the fate of all compromises-failure to attain either object. It was abandoned after a trial of about two years. There were many districts in Michigan, as there are still in every State, in which it is impossible for young persons to obtain academic instruction suitable in kind and adequate in extent to serve as a basis for a purely professional normal course; and these are the very places where the need of trained teachers is most urgent.

In the summer of 1871 a new departure was made in the constitution of the school of observation and practice. A plan similar to that followed at the Oswego Normal School was tried for two years, but proved unsatisfactory and was abandoned. It was found that the practice school must be entirely under the same management and control as the normal. Divided authority is fatal to efficiency. ${ }^{1}$
As the normal school is now organized (register of 1890) students are offered a choice from several courses of study, arranged to meet the demands of the various grades of schools and the needs of different classes of teachers. Students graduating in any of the courses are entitled to a certificate of qualification to teach in the public schools of Michigan. The three-year courses lead to such a certificate, good for five years. The four-year courses lead to a life certificate and a diploma. The advanced (six-year) courses and the course for college graduates lead to the degree
of bachelor of pedagogy. In all the courses certain studies are "required" and certain others are "elective;" that is to say, chosen by the student, with the advice and consent of the principal. Any person holding the degree of bachelor of pedagogy in this school may upon application receive the degree of master of pedagogy upon the following conditions: (a) He shall furnish evidence satisfactory to the State board of education that he has been engaged in teaching or in school supervision continuously and with pronounced success for five years since receiving the bachelor degree; (b) he shall prepare and present a thesis acceptable to the State board of education upon some subject connected with the history, science, or art of education, the board reserving the right to assign the subject of such thesis.

In defending the right of the normal school to give advanced academic instruction the principal says:

The function of the normal school is to equip teachers both professionally and academically for duty in any place in these public schools to which they may be called, whether such schools are primary or secondary in the character of the instruction offered by them. No teacher is so equipped unless his own studies have been carried considerably beyond the limit to which he is required to conduct his own pupils. It follows, then, that the normal school graduate ought to be furnished with an education that carries him considerably beyond the limits of any secondary education that he may be called upon to give. In other words, he ought to pursue his own course of training so far that there shall be an ample margin between what he knows and what he may at any time be called upon to teach. * * * This margin of knowledge in case of those who complete advanced courses in this normal school comprises a liberal course in literature, art, and science. ${ }^{1}$

COURSES OF STUDY.
Studies offered in the three and four years' courses, showing also the number of weeks which Art and manual training: Weeks.

1. Penmanship..................................................................... 10
2. Drawing ...................................................................................... 20
3. Advanced drawing..................................................................... 20

Civics:
4. Civil government.............................................................................. 10
5. Political science.......................................................................... 10

English:
6. Reading and orthoepy, teachers' academic review............................ 10
7. Grammar, teachers' academic review ............................................. 10
8. Rhetoric ............................................................................................ 20
9. English literature....................................................................................... 20
10. Advanced English literature................................................................. 10
11. American literature.................................................................................. 20
12. Old and middle English............................................................................. 20
13. Study of masterpieces...................................................................... 20

History:
14. United States history. ...................................................................... 20
15. United States history and civil govermment, teachers' academic review... 10
16. General history .......................................................................... 20
17. Grecian and Roman history . ............................................................. 20
18. English constitutional history...................................................... 20
19. United States constitutional history .................................................. 20

Languages, ancient:
20-27. Latin, 4 terms, each............................................................... 20
28-31. Greek, 4 terms, each................................................................... 20
Languages, modern:
32-36. French, 5 terins, each ............................................................ 20

Mathematics:
44. Bookkeeping............................................................................... 10
45. Arithmetic, teachers academic review ................................................. 10
46. Algebra, I. ................................................................................. 20

[^99]47. Algebra, II ..... 20
48. Plane geometry ..... 20
49. Solid geometry ..... 20
50. Higher algebra ..... 20
51. Trigonometry ..... 10
52. Surveying ..... 10
Music:
53. Vocal music ..... 20
54. Advanced vocal music ..... 20
55-58. Voice culture, 4 terms, each ..... 20
59. Harmony ..... 20
60. Advanced harmony ..... 20
61. Musical composition ..... 20
62. History and literature of music ..... 20
63. Solo singing, I ..... 20
6 t . Solo singing, II ..... 20
65. Conducting, etc ..... 20
Natural sciences:
66. Physiology and hygiene ..... 20
67. Botany ..... 20
68. Zoology ..... 10
69. Comparative Zoology ..... 10
70. Geology ..... 20
71. Geography, teachers' academic review ..... 10
Physical sciences:
72. Physics ..... 20
73. Advanced physics ..... 20
74. Chemistry ..... 20
75. Advanced chemistry ..... 10
76. Astronomy ..... 10
77. Instrumental astronomy ..... 10
Professional studies and exercises:
78. Psychology ..... 20
79. Psychology applied ..... 20
80. Professional training in arithmetic ..... 5
81. Professional training in geograply ..... 5
82. Professional training in grammar ..... 5
83. Professional training in reading ..... 5
84. History of education ..... 10
85. Physical technics ..... 10
86. Training in physical science ..... 10
87. Biological laboratory practice ..... 10
88. Practice teaching ..... 20
89. Practice teaching ..... 10
90. Practice teaching ..... 10
91. Practice teaching ..... 20
92. Kindergarten instruction and methods ..... 20
93. Senior rhetoricals
Studies $54,56,57,58$, and 60-65, inclusive, are excluded from studies to be credited in making up a course, except when the student is pursuing the music course. Studies 86 and 87 are interchangeable in all courses. Work in any ancient or modern language is not credited in making up the amount due in any course until a record in such language covering at least three terms has been earned.
Advanced studies offered io students in advanced courses.
Weeks.
94. Advanced psychology ..... 10
95. Discussions and comparisons of educational systems and theories ..... 10
96. Advanced practice teaching and supervision ..... 20
97. Entomology ..... 20
98. Sanitary science (lectures) ..... 10
99. Meteorology ..... 10
100. General geometry and calcuids ..... 20
101. Advanced rhetoric ..... 20
102-105. Latin, 4 terms, each ..... 20
106-109. Greek, 4 terms, each ..... 20
110. Studies in German and French literature ..... 20

First hour.-Advanced drawing. Algebra I. Algebra II. Elementary physics. French IV. Geology. German I. History and civil government. Latin I. Latin IV. Old and Middle English. Psychology. Reading and orthoepy. Rhetoric. Training in physical science. Voice culture I.

Second hour.-Algebra I. Algebra II. American literature. Chemistry. German II. General history, Greek II. Higher algebra. Psychology applied. Practice teaching. Vocal music. Zoology, first ten weeks. Comparative zoology, second ten weeks.

Third hour.-Arithmetic, preparatory. Arithmetic, first ten wreeks. Arithmetic, secoind ten weeks. Chemistry. German III. Geometry I. Geometry II. Grammar, first ten weeks. Grammar, second ten weeks. Harmony. History of education. Latin I. Physiology and hygiene. Practice teaching.

Fourth hour.-Arithmetic, first ten weeks. Arithmetic, second ten weeks. Civil government. Elementary drawing. Elementary physics. French III. German I. Grammar, preparatory. Grammar, first ten weeks. Grammar, second ten weeks. Greek and Roman history. Latin II. Latin III. Practice teaching. Training in physical science. Voice culture II.

Fifth hour.-Advanced English literature. French II. Geography, first ten weeks. Geography, second ten weeks. Greek III. Latin II. Musical composition. Penmanship, first ten weeks. Penmanship, second ten weeks. Rhetoric. Reading and orthoepy, first ten weeks. Reading and orthoepy, second ten weeks. Training in physical science.
Sixth hour (afternoon.)-Professional work in arithmetic, grammar, reading, geography.

SECOND TERM.
First hour.-Algebra I. Algebra II. Adranced rocal music. Advanced drawing. Elementary physics. English literature. German I. German IV. Latin I. Latin IV. Physiology and hygiene. Psychology applied. Physical technics, second ten weeks. Rhetoric. Surveying, second ten weeks. Trigonometry, first ten weeks. United States constitutional history.
Secondhour.-Algebra I. Algebra II. Advanced physics. Botany. English constitutional history. French II. French III. Geometry I. Geometry II. Greek II. History of education. Political science, second ten weeks. Practice teaching. Training in physical science. United States history. Voice culture.

Third hour.-Arithmetic, first ten weeks. Arithmetic, second ten weeks. Botany. Civil government. German II. Grammar, first ten weeks. Grammar, second ten weeks. Latin I. Latin II. Peychology. Practice teaching. Training in physical science. Vocal music.

Fouth hour.-Arithmetic, preparatory. Arithmetic, first ten weeks. Arithmetic, second ten weeks. Advanced hamony. Elementary drawing. Elementary physics. German I. General history. Grammar, first ten weeks. Grammar, second ten weeks. Literature of music. Latin III. Physiology. Practice teaching.

Fifth hour.-Adranced chemistry, first ten weeks. Astronomy, second ten weeks. Geography, first ten weeks. Geography, second ten weeks. German III. Greek III. History and civil government. Latin II. Penmanship, first ten weeks. Penmanship, second ten weeks. Rhetoric. Study of masterpieces. Training in physical science. United States history. Voice culture IV.
Sizth hour (afternoom.)-Professionai instruction in arithmetic, grammar, reading, geography.
The enrollment in the normal school proper in 1870-71 was 231, and the number increased gradually and regularly till the end of the year 1876, when the number was 449. In each of the next seven years the enrollment was less than 400, but in the year 1883-84 it sprung up to 475, and every succeeding year has shown an annual increase, the number in 1800-91 being 909. During its existence it has graduated 1,761 young men and women, nearly all of whom became public school teachers in Michigan. The average number of graduates in the last five classes exceeded 100.
The general supervision and control of the school is in the hands of the State board of education, consisting of three members elected by the people and holding office for six years, together with the State superintendent of public instruction, who is a member and secretary of the board, ex officio.
Current expenses for the year ending June 30, 1891, were. ..... $\$ 64,636.40$
From the interest on the permanent fund ..... 5, 260. 19
From admission fees, etc. ..... 5, 451.21
Balance ..... 53, 918. 00
Met by legislative appropriation.
Principals.
Adonijah S. Welch ..... 1853-1865
David P. Mayhew ..... 1865-1870
C. Fitz Roy Bellows (acting principal) ..... 1871
Joseph Estabrook ..... 1871-1880
Malcolm M. Vica ..... 1880
Daniel Putnam (acting principal) ..... 1881-1883
Edwin Willetts ..... 1883-1885
Daniel Putnam (acting principal) ..... 188.5-1886
John M. B. Sill ${ }^{\text { }}$ ..... 1886

The training school is a department of the normal school. It is organized as a regular eight-grade school of 250 pupils and a well-equipped kindergarten of $2 t$ children below regular school age. The course of study extends from the kindergarten to the high school, and embraces the subjects and amounts of work usually required in first-class city graded schools. The work in the training department is under the charge of the director, assisted by two critic teachers, a model primary teacher, and a kindergartner. Under careful supervision of this normal corps the actual teaching is, in the main, in the hands of the senior class. These are assigned to the work of teaching and observing by the director, and are daily met for criticism and instruction by him or by the critic teachers. The model primary room is conducted as a schiool of observation. ${ }^{2}$

## WIGCONSIN.

## Normal Experinents.

The legislature of Wisconsin in 1857 passed a law entitled "An act for the encouragement of academies and normal schools," appropriating 25 per cent of the interest arising from the sale of the swamp lands of the State for the purpose of aiding such colleges and academies as might comply with certain regulations. The design of the law was twofold: First, to aid institutions of learning which had labored efficiently in the cause of education, although they had hitherto been entirely dependent on private enterprise for their support. Second, to enable such institutions to render an equivalent for the funds received from the State by preparing persons for teaching. For the carrying out of this law a board of regents was established, consisting of the Governor and the State superintendent of public instruction ex officio, but without a rote, and 9 members appointed by the Governor, by and with consent of the Senate. This board of regents had authority to make all by-laws and needful regulations for carrying into effect the provisions of the act not inconsistent with the constitution and by-laws of the State. Section 10 provided that all the income of the fund contemplated by the act shall be distributed to the colleges, universities, and academies severally (except the State University) which shall establish and maintain normal classes in proportion to the number of pupils instructed in such classes, according to regulations prescribed by the board of regents, until the amount awarded to any one of such schools shall reach the sum of $\$ 3,000$ annually. It was further provided that whenever any town, city, or village in the State shall propose to give a site and suit-

[^100]able buildings and fixtures for a State normal school, the board of regents may in their discretion apportion to the same annually a sum not exceeding $\$ 3,000$ for the support and maintenance of teachers therein.

The board of regents, looking doubtle:s to the experience of the New York academies, appear to have been anxious to prevent the academies aided under this act from becoming mere high schools with a normal annex-on paper. They say that the following subjects must be studied in the normal department: "Education, its nature and design; physical education; intellectual education; moral education; resthetical education; the history of education; an examination of the powers of the mind, especially with reference to receiving and communicating knowledge; schoolhouse architecture; organization and classification of schools; modes of teaching different subjects; rewards and punishments; the office of teacher, his duties to himself, his school, and the public; the duty of the State in reference to educating its citizens; the educational policy of Wisconsin." It was proposed that these studies should be carried on chiefly by the aid of lectures and in connection with the two years' course in ordinary academic branches. Students, before being admitted, were required to pass an examination on reading, spelling, arithmetic, elementary algebra, physiology, history of the United States, descrip,tive geography, and composition.
At the meeting of the board of regents in 1859 the following course of study was adopted:

First year.-Higher arithmetic, algebra, Latham's English Language, plane and solid geometry, drawing, Anglo-Saxon roots and derivations, chemistry, theory and practice of teaching.

Second year.-Trigonometry and surveying, botany, physiology, natural philosophy, geology, meteorology, rhetoric, physical geography, theory and practice of teaching.

Third year.-Constitutional history; Latin, French, or German; comparative philology, logic, intellectual philosophy, analytical geometry, calculus, descriptive geometry, drawing, educational history.

In 1859 Dr. Henry Barnard, of Connecticut, was appointed agent of the board of regents with instructions "to visit and exercise a supervisory control over the normal depart:nents of all such institutions as should apply for a participation in the normalschool fund, and to conduct county teachers' institutes and give normal instruction in the same." Dr. Barnard's labors had a stimulating and encouraging effect, but they were unfortunately cut short by a long period of severe illness.

In 1860, twenty institutions presented claims for a share in the normal fund in proportion to the number of pupils in each who had pursued normal studies according to the requirements of the board of regents. Among these institutions $\$ 4,640$ were distributed, in sums varying from $\$ 40$ to $\$ 740$. The institutions to which these sums were distributed were Beloit College, Lawrence University, Galesville University, Wisconsin Female College, Milwaukee Female College, Platteville Academy, Milton Academy, Walworth County Institute, River Falls Academy, Richland City Institute, Allen's Grove Academy, Moricon High School, Kenosha High School, Oshkosh High School, Racine High School, Janesville High School, Fond du Lac High School, Beaver Dam High School. Five of these expanded afterwards into State normal schools-Platteville, River Falls, Oshkosh, Walworth (Whitewater), and Milwaukee.

State Normal Scefol System.
In Wisconsin, as in Pennsylvania, the county institutes were the inmediate ancestors of the normal schools. In the year 1860 there were held 47 institutes, reaching 31 different counties and bringing together 4,346 teachers and persons interested in the canse of education. In connection with these institutes there were delivered 200 public addresses, which reached at least 10,000 persons directly interested in the
cause of public instruction. By these means new life was given to the school system of the State. Patrons of the schools were led to know what good schools are and how they are to be obtained. Teachers were led to think and to strive to qualify themselves better for their responsibilities. In the schools new and more rational methods of instruction began to be adopted in place of the old-time rote system. The demand for institutes was greater than the supply, and the desire found its satisfaction only in the establishment of normal schools.

The State Normal School at Platteville was opener in 1868, at Whitewater in 1868, at Oshkosh in 1871, at River Falls in 1875, and at Milwaukee in 1885.

The exclusive purpose of these normal schooks, as expressed in the organic law of 1857, was "thie instruction and training of persons, both male and female, in the theory and art of teaching and in all the various branches that pertain to a commonschool education, and in all subjects needful to qualify for teaching in the public schools; also to give instruction in the fundamental law of the United States and of this State in what regards the rights and duties of citizens." It will be seen from this that in these schools academic instruction was at first not only permissible but mandatory; consequently they were obliged to maintain preparatory departments. The following are at present the requirements for admission:

1. Any applicant holding the diploma showing that he has satisfactorily completed the course of study for common schools as laid down in the manual of the department of public instruction will be admitted to the junior preparatory without examination.
2. Any candidate will be admitted without examination to the senior preparatory (a) who holds a full third-grade certificate gained within one year, or (b) who furnishes satisfactory evidence of having completed the second year's work in any free high school of this State, or one of equivalent course.
3. Any candidate who holds a duly signed diploma of graduation from any high school in the State, or who holds a first-grade certificate, still in force, granted by any school superintendent in Wisconsin, will be admitted to normal courses without examination.

Other candidates for admission are examined thoroughly in arithmetic, geography, spelling, penmanship, reading, and English grammar. The following set of questions will indicate the standard for admission in arithmetic. The questions in other subjects are nearly of the same grade.

Entrance examination-Arithmetic-Time, \& hours.
[From catalogue of Oshkosh Normal School, 1890.]

1. From a cask of wine worth $\$ 1.20$ a gallon one-sixth part is drawn and replaced by wine worth 80 cents a gallon; what is then the value of the wine in the cask?
2. What per cent of the area of the floor of a room 35 feet square would be left uncovered by 147 yards of carpet 30 inches wide, allowing 5 per cent waste of carpet in fitting?
3. If stock bought at 10 per cent discount pays 5 per cent on the investment, at what price should the same stock be bought to pay 6 per cent?
4. An estate agent bought two houses; the first cost three-fourths as much as the second; in selling, he gained 20 per cent on the first and lost 5 per cent on the second; his net gain was $\$ 160$. Find his net gain per cent.
5. A society collected for charitable purposes a fund of $£ 960$; each member paid as many pence as there were members in the whole society. How many members were there?
6. A miller exchanged flour worth $\$ 5.40$ a barrel for hay worth $\$ 9$ a ton. If the farmer asked $\$ 10.50$ for the hay, what price should the miller put on his flour?
7. It cost $\$ 800$ to fence a farm 80 rods square. How much more will it cost to fence a farm of equal area in the form of a rectangle four times as long as it is wide?
8. A speculator bought a piece of land at $\$ 1,500$ and afterwards sold it for $\$ 1,795.40$; the buying and selling were done through a broker who charged 2 per cent for each transaction. Find the broker's fee.
9. Two trains start at the same time from London and Exeter and go toward each other at the rate of 24 and 32 miles an hour, respectively. When they meet it is
found that one train has run 24 miles more than the other. How far is it between the cities?
10. A dealer imported 50 chests of tea containing 30 pounds each, invoiced at 45 cents a pound. It paid a duty of 15 per cent on the invoiced price, and $\$ 17.50$ freight; he found 5 chests were damaged so that he had to sell them for 50 cents per pound. At what price per pound must he sell the remainder to gain 20 per cent on his entire outlay?
The attendance at the several schools on the 1st of September, 1890, was as follows:

|  | Normal students. | Teachers. |
| :---: | :---: | :---: |
| Platteville | 204 | 14 |
| Whitewater | 184 | 16 |
| Oshkosh | 206 | 20 |
| Riyer Falls (including preparatory) | 130 | 11 |
| Milwaukee......................... | 72 | 11 |

Three courses of study have been provided by the board of regents:
I. An elementary course of two years and a half.
II. An advanced course of two additional years.
III. A professional course of one year. This course is intended principally for graduates of the University of Wisconsin, or of a college having an equivalent course, and who have had one year's experience in teaching; but applicants who pass a satisfactory examination at the school in all the branches required by law for a firstgrade county certificate and who furnish proof of three years' successful experience in teaching are admitted.
The ordinary professional work of the schools is distributed through the elementary course and the last year of the advanced course, and includes school economy, school organization, school management, school law, theory of teaching, history of education, mental science, and twenty weeks' practice in the model school for each student. The instruction in this department is given partly by conversation lectures and partly from text-books. The text-books of this class used in the Whitewater school are Raub's School Management, Wisconsin School Laws, Burke's Laws of Public Schools, Swett's Methods of Teaching, Sully's Psychology, Quick's Educational Reformers, Browning's History of Educational Theories, White's Elements of Pedagogy, Bain's Education as a Science.
The general arrangement of studies as to years will be best understood from the subjoined table.

Course of study, Stute Nomal Schoor, Whiteuater, Wis.
ELEMENTARY.

| First year. |  | Second year. |  | Fifth term. |
| :---: | :---: | :---: | :---: | :---: |
| Arithmetic, 10 wecks; algebra 10 weeks. | Arithmetic. 13 weeks; algebra, 7 weeks. | Plane geometry .. | Book keeping, 10 weeks; physical geography, 10 weeks. | Algebra, 10 weeks. |
| Descriptivegeography | Geography, 10 weeks; physiology. 10 weeks. | Botany, 10 weeks; word analysis, 10 weeks. | Physics, 10 weeks; reading, 10 weeks. | Physics, 10 weeks: physiology, 10 weeks. |
| Language lessons, 10 weeks; orthoepy, 10 weeks. | $\begin{array}{r} \text { Reading, } 10 \\ \text { Weeks; English } \\ \text { gramar, } 10 \end{array}$ | Composition...... | History of United states. | Civil government, 15 weeks. |
| School organization; obscrvation in model school. | School economy, 10 weeks. | Theory of teaching. | Methods of teaching. | Practice teaching. |
| Vocal music....... | Drawing.......... | Drawing, 10 weeks. | Practice teaching. | Drawing, 10 weeks. |

Course of study, State Tromal School, Whiterater, Wis.-Continued.
ADYANCED.


Calisthenies and chorus practice throughout the course. Composition and recitations. Classes in penmanship and spelling are maintained eonstantly for students of all grades who need such practice.

The training department or model school in the several normal schools is conducted in three divisions, primary, intermediate, and grammar; there being three grades (one year each) in the first, three in the second, and two in the third. Some idea of the "methods" used and recommended may be formed from the subjoined outline of the primary course in reading, taken without abridgment from the catalogue of the State Normal School at Oshkosh, for the year 1889.

> Reading.

## PRIMARY GRADE, FIPST YEAR.

I. Before coming to school the child has made progress in spoken language to such an extent that he can enunciate the words of a vocabulary more or less extended, and he associates with those words the ideas they express.

As reading, in its beginnings, is learning to recognize in written or printed signs words already familiar to the learner in spoken language, economy, simplicity, and the necescity of interesting the child all demand that the words chosen for this first work should come from the child's own rocabulary and possess a lively interest for him. This vocabulary may be ascertained and interest secured by leading the child, by conversation upoin some familiar object-one present is best-to furnish the words for his own first lesson; and, as ideas in isolation are less instructive than those in relation, get him to furnish a sentence, thus leading him from the first to use the unit of expression.

This sentence should be written upon the board with its initial capital and terminated with its appropriate punctuation mark.

Lead the child to talk about the idea expressed that the association between form and sound and sense may be fully established.
II. Isolate the word that has the liveliest interest for the pupil and have him copy it upon his slate.

This primarily to impress the autline of the word upon his memory.
Incidentally, writing and spelling are begme.
After a few words have been taught, compare the form of those words in such a way that the pupil will begin to realize that words are made up of parts. For example, erase the $h$ in hat and ask what the word thus obtained is. Then place e before the last word and ask what it now is. Call the letters which you erase and substitute by name that the pupil may learn the names of any which he does not already know.
III. By easy work in phonic comparison enable the child to master the pronunciation of new words. For example, the child is acquainted with the word at; also with the powers of $b, f, m$, and $p$ in words already known. If these elements are uttered and followed by the word "at" the pupil will easily recognize the words bat, fat, mat, and pat thus formed.
IV. Draw out the pupils to make stories about present objects, or familiar objects not present, or pictures, thus cultivating language and furnishing reading matter in which they will take an interest. This should be written upon the board and read one or more times by the members of the class. For seat work, this should be copied by the class upon their slates.
V. Change from script to print, preparatory to taking up the reading book, by using a chart having words in both texts side by side, or by means of cards prepared by the teacher for that purpose.
VI. Work should early be begun in helping the child to quickly recognize the form of words with which he is already somewhat familiar, thus preventing a drawling and unnatural style in reading. To accomplish this, the teacher may point out and the child pronounce the most difficult words before he begins the reading of any particular passage or paragraph. Keep a list of the words studied upon the blackboard where it can easily be seen by the class. Make sentences from this list, varying the arrangement as much as possible. Add the new words as learned. Review constantly. He should by some or all means be led to discriminate between word pronouncing and reading.
VII. As it is easier to prevent than to cure, from the first pay careful attention to enunciation, correct pitch, and correct inflections.
See that the pupil reads in distinct, pleasant tones, with distinct articulation. Do not allow a high, strained key. By arousing the child's imagination, get him to use the same key and inflections which he would use were he talking instead or reading.
The teacher should, as often as necessary, assist by furnishing a model. A good motto is, "Talk when you read; read as you should talk." This necessitates an understanding, on the part of the pupil, of what he reads.

Make sure by questions and explanations that he understands what he is to read before he begins. Encourage him to find out all he can for himself, by examining the pictures illustrating his lessons.
VIII. Voice culture should begin with the child's school work. Attention should be paid to the position of the child, whether sitting or standing, while producing tones. Judicious breathing exercises and vocal gymnastics should be practiced. Pleasent, natural, flexible tones should be secured and practiced by pupil and teacher. Singing and reading should go hand in hand, and it is desirable that the same teacher should teach both. Occasional exercises in simultaneous reading should be given, but the teacher must carefully guard against harsh tones and indistinct utterance.
IX. Finish the First Reader, and before taking the Second be sure that the child has had all the supplementary reading that is necessary to make him thoroughly familiar with the meaning, pronunciation, and spelling of all the words he has thus far had.

> PRIMARY GRADE, SECOND YEAR.
I. The method given in the first year's work for pronouncing new words by means of phonic comparison should be continued and expanded. If the books in use furnish no lists for phenic spelling the teacher should select such a list from the lesson to be read, and by comparing these new or unfamiliar words with those already known, lead the child to determine for himself their pronunciation. This phase of the work may well be emphasized, however, not beyond the point of lively interest for the pupil.
Provide seat work for pupils of this grade by selecting from the succeeding lesson, and arranging in lists those words which have parts in common, as rack, lack, back, whack. Head these lists by similar words familiar to them and set them to determining for themselves the pronunciation of the unfamiliar ones. Ask them to copy upon their slates those which they thus determine and bring them to class.
II. Continue the method given in the first year's work for securing a ready pronunciation of words which are pronounced only with hesitation.
For creating and sustaining an interest in the lesson, precede the reading it by some carefully considered questions.
These should be of such a nature as will stir the imagination to see what is really in the lesson, and secure an interest in it. Care should be taken that the impression gained should not be dimmed by toc much questioning or the admission of irrelevant questions.
If the pupil understands what he reads he will be interested if the selection is suitable.
III. Methods for securing expressive reading may be extended in this year's work, and may be considered under two heads, viz, the physical element and the mental element.
(A) As physical power is so large a factor in expressive reading, as good a degree as possible should be secured by attention to the following exercises: (1) Good standing position, including carriage of the head and shoulders. (2) Good supply of breath, secured by judicious breathing exercises. (3) Good articulation. The work in phonic spelling will do much toward the accomplishment of this. Classify lists of words or phrases involving skill in articulation, and give the class a three or five minute drill before beginning the reading lesson.

Secure good pronunciation and enunciation by a similar drill.
Pupils readily engage in and are profited by gymnastic drill of the speech and vocal organs
(B) Mental element. Cultivate this element by the following means: (1) By the methods used for making the pupil understand what he reads (see 1I). (2) By assisting the pupil's inagination. The following are a few of the many ways in which this may be done. Let pupil A ask a question or make a statement to B, standing by his side. Then let $\bar{B}$ go across the room or outside the door while $A$ repeats his remark or question. This would constitute a lesson in force. Let a pupil read something expressive of joy and follow it, at once, by something expressive of pity, thus getting him to use different degrees of pitch. Compare pure and whispered qualities of roice by reading something expressive of joy, followed by something expressive of fear or secrecy. Teach degrees of rate in a similar way.

Assign the different parts of a colloquy to different pupils and have them take their places before the class to read it.

Note.-Strong force, low pitch, and impure quality should not be taught to immature voices.
(3) By relieving the mind of the task of doing too many things at once.

Have the pupil recite selections from memory.
In this way he may expend his mental energy in expressing thought and feeling and be relieved of the task of recognizing word forms, of keeping the place in the book, and of holding the book itself.
IV. As the object of all this is good reading, and as this can be secured only by much practice, get as much reading as possible done by the class.

Have the reviews read by one pupil, the others listening.
If the teacher will sometimes read the review to the class, the pupils will be interested and profited.

Let the class read selections at sight, or those to which they have given no previous study. This will aid them in quickly recognizing word forms and enable them to do more reading than they otherwise could.

Care should be taken, however, that the selections for sight reading should not be too difficult.
Appoint individuals to prepare and read before the class selections which the others in the class have not seen.
V. Finish the Second Reader and furnish supplementary reading sufficient to make the pupil thoroughly familiar with the vocabulary thus far gained. Narratives are better for this purpose than additional readers of the same grade.

## PRIMARY GRADE, THIRD YEAR.

I. The methods of work at this stage suggest themselves when we attempt to answer the following questions:
(1) What has the lesson told the child?
(2) Can he express by means of the voice, and with distinctness and fluency, that which the lesson has told him?
II. To make the results under the first head as full as possible, the following steps are suggested:
(1) An explanation by the teacher of those allusions which the pupils do not understand.
(2) Lead the pupils to determine for themselves the new idea in a sentence when it contains one that is obvious.
(3) Get at the meaning of difficult words by aid of the context or by placing these words in such sentences that more light will be thrown upon their meaning.

Call out from the class synonyms for these difficult words, if possible.
(4) Have the pupils paraphrase the little poems in their readers.

Note.--These suggestions assume that the reading matier is on a level with the comprehension of the pupil, and that, therefore, this will aid, not crowd out, the actual practice in reading.

As sentences are vehicles not only of thought, but emotion, no pupil should be allowed to feel satisfied with his work when he has expressed thought only, especially in sentences where the emotion predominates, as is often the case in the reading for this grade. It is not easy to give general directions for the accomplishment of this desirable result, buc it can be done, if the teacher and pupils are in such close sympathy that she can interest them strongly in that which interests her.

If the above conditions can be established, then give simple directions, good examples, and abundant practice.
III. For the purpose of securing distinct, fluent utterance, practice the exercises given for that purpose in the first and second year's work.

Let them also give short whispering exercises.
Have the final consonant, or consonants, distinctly given; but do not emphasize this practice to the sacrifice of fluency.

During this year require the pupils to establish the habit of looking up from the text while reading. A valuable sight drill and greater naturalness of expression are secured by this.

Teach the marking of the long and the short voweis.
IV. The power to articulate clearly and easily, and to command varied rate, pitch, force, and quality, must become automatic or no such thing as expressive reading is possible. Early training may make these processes as automatic as walking or the use of the pen; but if the consideration is deferred until late in school life it will on! y be accomplished in those cases where the ambition is strong enough to submit the pupil to a long and tedious discipline.
V. Finish the Third Reader and increase the amount of supplementary reading.

## Practice Teaching.

The principal of the Oshkosh school, in his report for 1878-79, writes:
The work of practice teaching has been increased and improved until the problem whether a student teacher could ever be trained to control and discipline a class as in his own school has ceased to be a question. As in other phases of training, some learn the art with difficulty, and are required to work a longer period, but nothing is more clearly proved than the fact that tact in teaching is a cultivable trait.

Tife Kindergarten.
After much deliberation and discussion of the principles, objects, and practices of the kindergarten, the board of regents determined to establish a kindergarten in one of the normal schools as a model for observation and practice. Accordingly, they opened at Oshkosh what they claimed to be the "first kindergarten officially and directly connected with any State normal school in the United States." ${ }^{1}$

Kindergarten culture [says the report for 1880] is designed to correct many of the faults of our common schools, where knowledge is generally imparted in a concentrated form by teachers and text-books; where the child is crammed with the greatest possible amount of what might be termed positive knowledge in the least possible time, in many instances to the detriment of his healthy development. Kindergarten work will develop healthfully and harmoniously all the faculties of the child, as an organism that needs but to have its surroundings brought into harmony with its nature to grow into beauty and usefulness. It does not drive, but leads. The restless disposition of a child, so trying to the parent and the teacher, and so often firmly repressed, is made useful and a source of happiness and pleasure to the true kindergartner. The methods and discipline ordinarily pursued in our common schools have a tendency to dwarf the physical development of a child. The kindergarten cultivates the same by frequent changes and a wise combination of exercises of body and mind. * * * Kindergartening in the common schools of our State may not be an accomplished fact for many years to come, but the board of regents have thought it wise to give our normal pupils a theoretical and practical knowledge of its principles, aims, methods, and apparatus, in order that they may be able to apply those methods and principles in their future school work as far as circumstances will permit. If our students are to be missionaries for higher views of education, they should certainly be made acquainted with all the educational systens and methods deserving consideration. Among these systems none have received more earnest attention at the hands of prominent educators than Froebel's system of kindergartening.

The experience of the school more than fulfilled the expectations of the board of regents. The kindergarten was at first used as a school of observation merely; but a few years later it was used, as the other model departments were used, as a school of practice; and it was found that the lessons learned in the kindergarten by the normal students gave them a much clearer insight into the underlying principles of all school work and helped to solve many vexatious problems in school management.

## State Normal School, Milifackee.

The State Normal School, located in Milwaukee, was authorized by an act of the legislature passed in 1880. The grounds and buildings, provided by the city of Mil-

[^101]waukee at an expense of $\$ 53,000$, were presented to the State in 1885, and the school was opened in September of that year. It is claimed as a great advantage to this school that it is situated in a great and growing city, in which there are large commercial and manufacturing industries, a public library of 60,000 volumes, an art museum, and a museum of natural history. Every school is largely controlled by its local environment, and one of the chief functions of this school is to take the place of a city training school. Accordingly, students are admitted from the high school, without examination, on presenting a certificate of having completed the first three years of one of the existing courses of study in the high school at Milwaukee. The regular normal course may be completed in two years, and comprises (a) a review of all the branches of study taught in the common schools; (b) a critical study of physics, chemistry, and natural history, with the methods of presenting these subjects in the schoolroom; (c) a course in English language and literature, history of the United States, civil government, and political economy; $(d)$ a course in school management, history of education, science of education, and psychology. Every student is required to spend at least forty weeks teaching in the model school under the supervision and direction of the training teacher, but no one is permitted to begin the work of teaching until he has studied psychology.
The following is a syllabus of the lessons on the "Elements of political economy," mentioned in (c) above:

ELEMENTS OF POLITICAL ECONOMY.

1. Fundamental notions of value, wealth, labor and capital. The three forces or factors that enter into the production of wealth. Adrantages, disadrantages, and limitations of division of labor.
2. The mechanism of exchange: Various forms of currency. Banking functions. Bimetalism. Some common errors in regard to money. Regulation of production and exchange by legislative enactment, and popular fallacies respecting the same. Nature and cause of panics.
3. Distribution of profits: Rent, interest, natural and legal rate, usury laws, profits on capital and on business. Wages, real and nominal, of skilled and unskilled labor; of men and women. The "wage-fund" doctrine. Cooperative societies. Trades unions and strikes. Principles and methods of taxation. Revenue of the State, and of the United States.
4. The use of wealth: Productive and unproductive consumption. Economic significance of luxury. Subsistence and population.

Debates upon topics pertaining to this study encouraged, and students led to read both sides of disputed questions. Text: Laughlin, Walker.
It is to be regretted that the catalogue from which this admirable syllabus is taken contains in its "Arrangement of Studies" no notice of the place or time it occupies in the school work. ${ }^{1}$

MINNESOTA.

## State Normal School, Winona.

Near the close of the session of the first legislature of the State, August 2, 1858, an act was passed preparing for the establishment of three normal schools. This legislation was suggested by Dr. John D. Ford, of Winona, and secured by his efforts through the legislative delegation from. Winona County. At the first meeting of the State normal board of directors it was resolved, "That the first normal school be located at Winona, provided the subscription from Winona of $\$ 7,000$ be satisfactorily

[^102]secured to the uses of said school." This was at that time the only State normal school west of the Mississippi.

On the evening of the 9 th of November, Lieatenant-Governor Holcombe, president of the board of directors, delivered an address on the subject, "Education with reference to the establishment of the first normal school of Minnesota," which is said to have done much to elevate, if not to create, that sentiment of earnest support of educational interests which has marked the history of the city of Winona.

In the first annual report of the normal board to the governor the claims of the school to generous support and its vital relation to the common schools of the State were set forth in a clear and forcible manner. The board also urged in this report that "a competent superintendent of public instruction be appointed;" that "a general supervision of the subjects of schools, school-teaching, and school lands is absoluiely necessary," and that " the school lands should be put into a condition to realize the largest possible annual fund." To the credit of this normal board and its secretary, Dr. Ford, it may be said that the first State tax for school purposes was authorized and levied upon their urgent recommendation.

An appropriation of $\$ 5,000$ having been secured, it was decided to open the school on the first Monday in September, 1860. Prof. John Ogden, of Columbus, Ohio, was elected principal at a salary of $\$ 1,400$. In his inaugural address, Professor Ogden said:

It shall be the leading object of the normal school so to distribute its labors and other exercises that all the faculties of the pupil, physical, intellectual, moral, and spiritual, shall be addressed in due proportion, at the proper time and in the proper manner; and so to develop, strengthen, elevate, and purify these powers in the student and so train him in the educational processes that he may readily apply them to the education of the children and youth committed to his care. More pains shall be taken to make teachers than mere scholars, well knowing this to be the point upon which normal schools fail more frequently than upon any other. Here, then, fellowteachers and friends, in this brief outline, behold my ideal of a school. Behold my type of a national education. Behold what your schools ought to be, and every school must be, if we ever expect to meet a tithe of that weighty obligation resting upon us, the public servants of this great and growing Commonwealth.

At the session of the legislature in 1861 a special act was passed creating the first board of education of Winona. This board was to consist of one school director from each ward of the city, with the principal of the normal school and such members of the normal board as were residents of the city. The idea was to copy somewhat aiter the Oswego plan of uniting the jurisdiction of the normal and the public schools of Winona, and using the public schools as graded and model schools; but in the following year this law was repealed and the joint jurisdiction ceased.

Professor Ogden resigned the principalship of the school in December, 1861, for the purpose of entering the Union Army. In his letter of resignation he said:

My distracted and dishonored country calls louder for my poor service just now than the school does. * * * My brethren and fellow-teachers are in the field. Some of them, the bravest and the best, have already fallen. Their blood will do more to cleanse this nation than their teaching would. So will mine. I feel ashamed to tairy longer.

The school was continued for another term under a temporary principal and was then suspended until November, 1864. The reasons for this suspension were: (1) The interest in the great struggle then pending overshadowed everything else; (2) competent teachers could not be found to take charge of the school; such men were generally in the war; (3) the means for the support of the school were inade-quate-the State had made no appropriations beyond the first $\$ 5,000$; (4) the State was too busy in the war to care for its educational interests.

During the session of the legislature in the spring of 1864, at the earnest solicitation of the citizens of Winona, an act was passed renewing the appropriations to the school and reestablishing it on a permanent basis. This act provided that the sum
of $\$ 3,000$ be appropriated for the current year, $\$ 4,000$ for the following year, and $\$ 5,000$ annually thereafter. No movement, however, was made to reopen the school until the following September, when Prof. William F. Phelps, formerly principal of the State Normal School of New Jersey, was elected principal, and entered immediately upon the duties of his office. His rare ability as an organizer and disciplinarian was at once apparent in the prompt and efficient measures taken to reestablish the school and to raise it to the high standard which it subsequently attained. The following extract from his first annual report indicates the policy of the school under the administration of twelve years which followed the reopening:

The normal school aims to educate and train teachers to a proper conception of the principles and to a skillful execution of the practice of their difficult art. It seeks to impart to them an accurate knowledge of those subjects which they are required to teach, that they may teach with intelligence and taste. It must, moreover, labor to develop in them all those excellences of character which will make them fit examples to those who are to be brought under their influence and molded into intelligent and virtuous citizens. It must thoroughly imbue them with a love for their work. It must generate in them the true esprit de corps. It must make them acquainted as far as possible with those multifarious and complicated processes which are best calculated to draw out the faculties of the young and bring their threefold natures into harmonious and healthful activity. In fine, the normal school should inspire its pupils with those comprehensive views of education which should shape all their measures and methods, and thus enable them, by an inteliigent and judicious adaptation of means, to aim directly at the development of all that pertains to a noble and symmetrical manhood and womanhood.

Up to this time the school had been held in one of the city buildings (now the Winona library building), the use of which was given without cost-another eridence of the friendliness of the citizens to this struggling institution. The legislature of 1866 made the first appropriation of $\$ 10,000$ for a school building. The whole of this sum was used in constructing a foundation, an important measure which committed the State fully to the completion of the building. The corner stone was laid on the 19th of October, 1866. In the spring of 1867 an appropriation from the legislature of $\$ 50,000$ was secured for building purposes, and the building was occupied by the school in September, 1869, though not completed till the following December. It is acknowledged to be, even at this date (1892), one of the most nearly perfect buildings of the kind in the Northwest. Its admirable adaptation to the existing and prospective wants of the school and its nearly faultless construction are largely due to the experienced judgment and wise forethought of the principal.
The growth of the school in numbers, in reputation, and in all the characteristics of an excellent training school continued without marked interruption until 1876, when the legislature failed to make the usual annual appropriation for the support of the three normal schools of the State. The normal board was called in extra session, and several propositions to close the schools at once were roted down by a bare majority. The opposition to these proposals was led by the Hon. Thomas Simpson, the resident director at Winona. Finally the board took action, which was intended merely to give the schools a chance for continuance if they could find any means of existing without involving the board or incurring a debt. The resident director at Winona determined that the school should not go down. He made a temporary reduction of the teaching force, some abatements of salaries, and some extra charges for tuition. By these means the school was kept in vigorous operation until the following year, when the appropriation was not only restored but was made permanent. The action at Winona had much to do with inspiring a like spirit and determination on the part of the local management of the schools at Mankato and St. Cloud.

During the summer of 1876 Principal Phelps resigned to accept the presidency of the State Normal school at Whitewater, Wis., and Prof. Charles E. Morey was elected to the principaiship, which he held until his resignation in 1879.

Principal Morey made an important change in the organization of the school by extending the elementary course; establishing an advanced four-years' course of sturly (designed to prepare teachers for the principalship of high and graded schools), and a professional course of one year for graduates of high schools and colleges.

On the resignation of Mr. Morey, Prof. Irwin Shepard, the present incumbent (1892), was elected president, and since that time the growth of the school in numbers, efficiency, and popularity has continued without interruption. The first teachers' institute in the State, in 1859; the first State convention of county superintendents, in 1866; and the first institute of normal instructors, in 1872, were all held at the Winona Normal School.

The first class which finished the course of this school numbered 16 members, and was graduated in June, 1860. Since that date 34 classes, numbering about 1,000 members, have been graduated, and nearly 6,000 other students received instruction for one or more terms. These students, as well as the graduates, have fulfilled their pledges to the State with fidelity and success.

The school was the first in the West to follow the example of Massachusetts in introducing industrial drawing as an essential part of the course. The laboratory methods of studying the natural sciences have always been followed, and from the very first objective teaching took the place of memoriter recitations. In 1880 a kindergarten and a kindergarten training department were organized.

In 1871 an association was formed for the promotion of the knowledge of art, science, and literature, in which the residents of the city cooperated with the authorities of the normal school. The plans of the society provided for "the fitting of rooms in the first State normal school building for a museum of natural history and physical science and for a department of drawing and the arts of design; the collection, classification, and arrangement of specimens in natural history and archæology, and of models in physics and the fine arts; the collection of facts and objects pertaining to local or general history; the establishment and support, on the grounds of the normal school, of a botanical garden; the arrangement and ornamentation of the grounds; the gathering of a library of standard works in all departments of science, literature, and art; the preservation of all collections; and the elevation of the public taste by lectures and other appropriate means."

Previous to the organization of this society citizens of Winona had placed in the normal school building for the use of the students private collections of minerals and other specimens. The proprietorship of these collections was vested in the new society. The collections were increased from time to time by additional contributions, and were arranged in the geological hall of the normal building in 1878. The museum has now become one of the most extensive in the West. The principal sections are, (1) numismatics, (2) archæology and ethnology, (3) mineralogy, (4) geology and paleontology, (5) zoology.

Two spacious rooms in the fourth story are deroted to the exhibition of art sub-jects-autotypes from the old masters, many fine engravings and paintings, and a small collection of busts, casts, and models.

## State Normal School, Mankato.

On the 6th of October, 1868, there were gathered in the vestry of the Methodist Episcopal Church at Mankato, Minn., 27 young people who had presented themselves in response to notices given at teachers' institutes to enter the second State Normal School of Minnesota. The school was then and there organized under the principalship of Prof. George M. Gage. Actual work was begun the next day and for some time the daily sessions of the school were held in the vestry, while a brick building for its use was being erected by Mr. John J. Shaubut. From day to day the attendance increased, and when the school took up its abode in Mr. Shaubut's building
the normal class numbered upward of 40 . The State normal board had been notified at its meeting in June, 1868, that the citizens of Mankato had complied with the law relating to the establishment of normal schools, and $\$ 5,000$ were deposited with the treasurer of the prudential committee. The committee selected and purchased the present site, and erected in 1869 a building which for several years furnished ample room for the growing school. In 1873 Professor Gage was succeeded as principal by Miss Julia A. Sears, who held that position for one year and was followed by Dr. D. C. John. In 1880 Prof. Edward Searing became the principal, afterwards styled president, and has since continued at the head of the school. Its growth was steady and continuous, from 27 pupils to over 600 , including a model school of 239 , and from 3 teachers to 13.

The chief purpose of the school is special instruction in the science and art of teaching, but, as in nearly all other normal schools in the country, a thorough system of academic instraction is at once the basis and, to a large extent the medium of professional instruction. Few pupils come with sufficient attainments and intellectual discipline to qualify them for immediate entrance upon a purely professional course of instruction. In the normal department there are two courses of study, one of three years, called the elementary course, and one of four years, known as the advanced course. The studies of the two courses are identical for the first two years, and correspond almost exactly to those of the State Normal School at St. Cloud, given below.

The number of normal students, according to the last catalogue, was $305 .{ }^{1}$
State Normal School, St. Cloud.
This school was opened in September, 1869, in the hotel building known as the Stearns House, where it was conducted until the completion of the present building in 1875. The old building has since that time been used as a ladies' home. The object of the school is to train teachers for the public schools of the State, and no effort is made to secure students for the academic course alone, for, while such are admitted as "tuition students," they simply share in the education expressly provided for those who are to become teachers.
There are two courses of study-the elementary and the advanced. The elementary course comprises three years, the advanced course four years. It is the settled policy of the school to raise its standard of admission from year to year until the time shall come when all students can derote themselves wholly to professional work.

## ELEMENTARY COURSE.

First year.-Drawing, syntax, composition, word analysis, arithmetic and algebra, physiology, penmanship; physical, mathematical, and political geography; botany.

Second year.-Psychology and methods, botany or algebra, English history or Latin, United States history, English literature or Latin, bookkeeping, civil government.

Third year.-Elemental principles of and methods in arithmetic, grammar, geography, and reading; physics, chemistry, psychology and practice, moral philosophy, geometry.

ADYANCED COURSE.
Junior year.-Elemental principles of and methods in arithmetic, grammar, geography, and reading; chemistry or Latin, physics, psychology and practice or Latin, moral philosophy, geometry.

Senior year.-Latin, geology, history and science of education, practice, English history and literature, astronomy, general history, drawing.

[^103]
## PROFESSIONAL COURSE.

Methods, psychology, history and science of education, school economy, practice, elemental principles of and methods in arithmetic, grammar, geography, and reading; drawing.

Exercises in vocal music, elocution, essay writing, and spelling are maintained throughout these courses of study.
The professional course is intended especially for graduates of high schools and colleges. It consists of the strictly pedagogical branches, with practice teaching and a review of the elementary subjects from the teaching point of view.
In the regular course a full half year is given to the subject of detailed methods of instruction in the branches which involve the elements of knowledge. These "methods" are not empirical, but are the result of a careful application of the laws of mind to the arrangement and grading of work, to the art of questioning, to the acquisitive and elaborative processes, and to the recitative or reproductive states of knowledge. Pedagogy is regarded as applied psychology.

A full half year is given to practice teaching in the model school. This work is done under the immediate supervision of a skilled teacher, who helps the student to apply the laws of mind in the actual work of the schoolroom. "It is thus not blind experimentation, trusting to luck that somehow the right way will at last be discovered or hit upon by experience, but it is scientific prevision and insight applied to work. It is work with a conscious purpose, with the advantage of a preformed ideal and a definite knowledge of its conditioning laws. It is no more blind than is the work of a Faraday or a Tyndall in natural science."

The school is well furnished with apparatus for work in physics, physiology, and chemistry, and a carefully selected cabinet for illustrations in geology, mineralogy, and natural history. Chemistry is taught by a combination of class work and laboratory practice. The student during the afternoon of each day performs all the experiments for himself in the laboratory; on the following morning, in the classroom, he reports upon his researches, and, aided by the teacher, text-book, and classmates, he corrects his judgments and prepares for the experimental work of the afternoon.

The total number of students in the normal department (1890) is 195, 26 being in the advanced course and 169 in the elementary. The model department is divided into three grades, averaging about 40 each. The faculty consists of the president, Thomas J. Gray, and 13 professors and instructors. ${ }^{1}$

## IOWA.

## State Normal School, Cedar Falls.

On the 6th of September, 1876, the State Normal School of Iowa was opened at Cedar Falls with an enrollment of 27 students At the end of the year the enrollment was 155; at the end of the second year, 237; at the end of the third year, 252; fourth year, 339; fifth year, 334; sixth year, 352; seventh year, 301.

The site and buildings, owned by the State and previously occupied as a soldiers' orphans' bome, were transferred to the normal school for its accommodation. It was known at the time that the buildings were inadequate to the requirements of a great school such as this was destined to be; but it is the beginning that costs, and here was at least a begimning. It is not surprising to learn that for many years the cry of the school was that of the horse-leech, "Give, give!" In the second biennial report the board of directors asked for a library and reading room, a room for a museum and apparatus, a room for general assembly, a room for chapel, more rooms for recita-
tions, and more rooms for dormitories. They asked also for an increased appropriation, because the school had doubled in size since it was organized, necessitating the employment of students to assist the overworked teachers, and because it was difficult to obtain competent teachers at the salaries the board could afford to pay. In the third biennial report the same requests were repeated in almost the same words.

In 1881 the board asked the general assembly for an appropriation of $\$ 30,000$ for the construction of an additional normal building. The request was granted, and the new building was ready for occupation and was formally dedicated in June, 1883. The board expressed their gratitude, but reiterated their request for a larger appropriation to enable them to pay the teachers better salaries-"a sum sufficient to make their compensation equal to that paid for like services in similar institutions in adjoining states." The board was well pleased with the new building. "It is three stories high and is furnished with all modern improvements. It contains a chapel, a model school room, a library, two society halls, chemical and physical laboratories, offices, cloakrooms, music rooms, recitation rooms, and dormitories." But while acknowledging the obligation, the legislature is gently reminded that increased accommodations will bring in an increased number of students, and an increase of students necessitates an increase of teachers, and an increase of teachers means an increased appropriation for current expenses.

The sixth biennial report keeps up the demand. The principal needs a residence, a cottage outside of the college walls within which he has been compelled to reside to the great discomfort of his family. The school needs a new dormitory to accommodate not less than a hundred sleepers. It needs an addition to the library, for one-half of the books were the personal property of the retiring principal and retired with him. It needs a liberal appropriation for a chemical laboratory. It needs a new supply of pianos; "the board are certain that could the proper authorities overhear them they would quickly replace them with the best." (It is to be hoped that the "proper authorities" were spared the infliction.) Next to music comes cleanliness. The school needs a laundry with modern appliances, for "washerwomen quit without notice, and the weather at times prevents drying." The school being a mile and a half from the city, and the team in use being old (one horse, over 20 years), a new team and bus are indispensable. The main hall must have a new roof, the floors must be renewed or repaired, electric lights must be furnished, and for the supply of all these wants the board asks only an appropriation of $\$ 61,800$. Most of the abovementioned requests were granted by the legislature; but the seventh biemnial reportthe latest that the editor has seen-renews the application for a cottage for the president, for electric lighting, for an additional number of teachers, for more books in the library, and for additional apparatus for the illustration of the natural and physical sciences. The estimate of expenses for the next two years is $\$ 62,100$.

The growth of this school in popularity, efficiency, and professional character has more than kept pace with the growth of its enviromment; it has been always ahead of the latter. Like an endogenous plant, it has grown from within. Every call for additional external facilities has been preceded by a call from the living organism that admitted of no refusal. The school was opened in 1876, with five teachers: The principal in the chair of mental philosophy, moral philosophy, and didactics; a professor of ancient languages and natural science (though ancient languages do not appear in the printed curriculum); a professor of mathematics and English literature; a teacher of geography and history; and a professor of vocal and instrumental music. The students were arranged in two classes-senior elementary and junior elementary. In 1879 two teachers were added: A teacher of elocution, drawing, and accounts; and an assistant. In 1883 another teacher was added for natural science and as assistant in mathematics. In the same year the elementary course was discontinued, and the school became more decidedly professional, and next year the model school was opened. At this time the normal course was taught in three classes, each occupying ED $99-\mathrm{VOL} \mathrm{II}-150$
one year-senior didactic, middle didactic, and jmior didactic, with a post-graduate didactic course attended by one student. The enrollment had now reached 408 in the normal and 68 in the model school. "Careful count," says the principal in his report for this year, "justifies me in saying that 92 per cent of all whom we enroll enter upon the work of teaching." The principa: also expresses his opinion that "the greater benefit derived by the State from the school is derived from the nongraduates and not from the graduates." The reason given is that there are nine times as many of them, and the limited preparation of the many will, in the aggregate, exceed in usefulness the extended preparation of the few.

Aiter ten years' service the principal, J. C. Gilchrist, retired and Homer H. Seerley took his place with eight colleagues, the new chair being that of "methods." There are now (1892) four courses of study open to those who are preparing for the profession of teaching:
(1) The scientific course, of four years.
(2) The didactic course, of three years.
(3) The supplementary course for high-school graduates, of two years.
(4) The professional course for college graduates, of one year.

The following table exhibits in detail the work of the several successive years:
Coupse of study-English course.

| Derartments. | First year. |  |  | Second year. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | First term. | Second term. | Third term. | First term. | Second term. | Third term. |
| Langrage.... | English grammar. | English grammar and composition. | Etymology and word analysis. | English literature. | English literature. |  |
| Mathematics. Science ..... | Arithmetic Geography | Arithmetic.. | Bookkeeping Physiology. | Algebra . <br> Physical ge- | Algebra ..... | Algebra. Botany. |
| History |  | United States history. | Constitution of United | ograph | Ancient history. | $\begin{gathered} \text { Medi æ y al } \\ \text { history. } \end{gathered}$ |
| Art. | Blackboard work. | Reading and music. | Penmanship and drawing, books. | Reading and music. | Penmanship and drawing, a d- | Elocution and music. |
| Didacties | Theory of education. | $\underset{\text { methods. }}{\text { Primar }}$ | Methods of instruction. | $\begin{aligned} & \text { School econ- } \\ & \text { omy. } \end{aligned}$ | vanced. <br> Principles of education. | School laws. ${ }^{1}$ |
| Departments. | Third year. |  |  | Fourth year. |  |  |
|  | First term. | Second term. | Third term. | First term. | Second term. | Third term. |
| Language.... <br> Mathematics. | Geometry .. | ( deometry . . | Rhetoric..... | English classics, history of English language. Advanced algebra spherical trigon ometry. <br> Laboratory work. | Ancient literature. <br> Analytical geometry. | Logic. |
|  |  |  | Trigonometry, ${ }^{2}$ survering. |  |  |  |
| Science . | Physics.... | Zoology, physics, and chemistry. | Geology, chemistry. |  |  | Astronoray. |
| History . | Modern history. |  |  |  | Political economy. | $\begin{aligned} & \text { Moral sci- } \\ & \text { ence. } \end{aligned}$ |
| Didacties .... | Psychology. | Philoso phy of education. | Philosoph 5 of education. ${ }^{\text {a }}$ | True order of studies. | History of education. |  |

${ }^{1}$ Half-time study with constitution and laws of Iowa.
${ }^{3}$ Two lessons per week. ${ }^{2}$ Three lessons per week.

There is also a "Latin elective course," which differs from the English course principally in substituting Latin (Cæsar, Virgil, and Cicero) in the second, third, and fourth years for some of the language lessons in the other course.

The last available catalngue (1890-91) contains the names of the faculty for that year: The president, professor of psychology and didactics; a professor of English language and literature, a professor of mathematics, a professor of geography and history, a professor of methods, a professor of the Latin language, a professor of physical science, a professor of natural science, a professor of didactics and methods, an instructor in the English language, an instructor in mathematics, an instructor in penmanship and drawing, an instructor in rocal and instrumental music, an instructor in elocution and physical culture, an instructor in applied English, and an instructor in history and civics. A comparison of the functions of this faculty with those of the first and subsequent faculties will give a good example of evolution and differentiation in normal-school work. The career of this school has been traced more minutely and in greater detail than that of some others because it seemed trpical of natural growth in accordance with the necessities of the enviromment. ${ }^{1}$

## Mssouri.

## State Normal School, Kirkstille.

In 1870 the legislature of Missouri made provision for two State normal schools, one to be located north and one south of the Missouri River. The school for the first normal district was located at Kirksville, and opened as a State institution on the $2 d$ of January, 1871. Adair County roted $\$ 100,000$ to secure the location of the school, with the understanding that the annual current expenses would be met by the State. The first amual State appropriation was for $\$ 5,000$; the last (1890), for $\$ 12,500$.
Previous to the legislation which provided for the establishment and maintenance of the State normal schools, a private normal school had been conducted for three years and a half by Prof. J. Baldwin with such efficiency and popularity that it was adopted as the State normal school of the district without any change in the faculty or the course of study. The building is 180 by 90 feet and four stories high. With the grounds, furniture, apparatus, and library, the cost was $\$ 150,000$. All the morements of the school are regulated by bells rung by an electric clock, the first clock of the kind ever used by any school for a similar purpose.
There is no boarding hall or dormitory. Board in respectable private families costs from $\$ 2.50$ to $\$ 3$ a week. Tuition for the year costs $\$ 20$, payable in four quarterly installments of $\$ 5$ each. The work of this school is special. It does not offer a general, academic, college, preparatory, or seminary education. Those, and those only, are invited to attend who want to learn how to teach. ${ }^{2}$
The means employed for the training of teachers are:
(a) Thorough study by the students: They are expected to study their lessons and to become familiar with hard study.
(b) Careful and critical recitation under the direction of the teacher: Students are expected to recite without assistance from the teachers.
(c) The study of teaching: This includes three distinct courses of study. The first embraces the object, means, and methods of teaching; the motives of the teacher and the methods of organizing, conducting, and governing schools. The second treats of the methods of teaching the various branches of study. The third relates to the study of the mental and moral powers, their nature and culture.

[^104]Programme of daily recitations.
FIRST TERM, SEPTEMBER 2, 1890, TO JANUARY 22, 1891.


SECOND TERM, JANUARY 27 TO JUNE 11, 1891.

|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 8.40 |  |  | Opening | exercises an | announc | ents. |  |  |
| 9.00 .. | Teaching . | Ethics.... | (a) | Rhetoric.. | Drawing | Civil gov- | Arith- |  |
| 9.40 .- | Geology .. | Trigo nometry and surveying. | (a) | Geometry. | English literature; American authors. | Bookkeeping (optional). |  | $\begin{gathered} \text { Geogra- } \\ \text { phy. } \end{gathered}$ |
| 10.20 |  |  |  | ing, calisthe | nics, and r |  |  |  |
| 11.00 .. | Teaching. |  | (a) | Music .... | Algebra .. | Physical g eography. | $\begin{gathered} \text { Gram. } \\ \text { mar. } \end{gathered}$ | $\begin{aligned} & \text { Pen man - } \\ & \text { ship. } \end{aligned}$ |
| 11.40 .. | History of education. | General history. Elocution. | (a) | Beginner's Latin, c o n cluded. | ............ | Algebra .. | Physiology. | Grammar. |
| 12.20 |  |  |  | Noon lunch | and rest. |  |  |  |
| 12.50 .. | Institutes a 11 d grad ed schools. | Virgil .... | $\begin{aligned} & \text { School } \\ & \text { econo- } \\ & \text { my. } \end{aligned}$ |  | Zoology .- | Elocution |  |  |
| 1.30 .. | English literature. |  | Music ... | Elements of psy-cholo g y, methods. | $\begin{aligned} & \text { Begin - } \\ & \text { ner's } \\ & \text { Latin. } \end{aligned}$ |  | United States history. | $\begin{aligned} & \text { Arithme- } \\ & \text { tic. } \end{aligned}$ |
| $2.10 \ldots$ | Horace ... | Chemistry | History of education. | Physics... |  | Botany .. |  | Elements of elocution. |
| 2.50 .. | Dismi | sion. |  |  |  |  |  |  |

$a$ The elementary graduating class will observe and teach in the model school.

The model department was established in November, 1882, for the purpose of exhibiting the best methods of classification, teaching, and discipline, which the normal students could observe and take part in as instructors and afterwards imitate when they become teachers of public schools. Members of the graduating classes are required to teach under the careful criticism of experienced teachers, and no one is graduated or licensed to teach in the schools of the State who does not satisfactorily stand this test. Each day a meeting of the student teachers is held by the principal of the model school, when the criticisms of the day are read and discussed and the work for the next day arranged. This school of practice is necessarily a local school, composed almost entirely of small children. It was not established for the convenience of Kirksville, but because it was considered to be "just as necessary an instrument of a normal school as a library, laboratory, or gymnasium." Several times a week classes from the model school are taught by members of the method classes of the normal in the presence of the class, the principal of the model department, and other members of the faculty. At the close of the lesson the class is dismissed, and the method and manner of the teacher are freely and fully discussed by all presentfaults pointed out and improvements suggested. The following "directions" are given to student teachers in the model school:
A. Require and secure: (1) Good conduct in class room. (2) Quict and orderly movements passing to and from class room. (3) Erect position of pupils. (4) Promptness and accuracy. (5) Neatness of blackboard work.
B. (1) Make a careful preparation for each lesson, including both matter and method of the recitation. (2) Stand before the class. (3) Request rather than command. (4) Ask definite questions and give positive directions. (5) Show pupils how to study and how to recite. (6) Be energetic, thorough, firm, clear, and efficient.
C. Cautions: Guard against much talking, dependence on the text-book, scolding, and fault-finding.
D. Strive to secure: (1) Thorough study, clear recitation, a lively interest, close attention, rapid progress. (2) Use visible illustrations and illustrative objects as much as you can with profit. (3) Keep the recitation room in good order.

Reading: Require pupils to sit and stand erect. (2) Have a short preliminary drill in vocal sounds, phonetic spelling, exercises in articulation, pitch, force, and rate. (3) Give frequent examples of good reading. (4) Require papils to understand both the meaning of the words and the thought of the reading lesson. (5) Require pupils to read naturally and with pure tone. (6) Have variety in manner and method. (7) Let the pupils bring choice extracts from books, papers, and magazines and read them in class.

Spelling: (1) Use the written spelling method. (2) Pronounce each word distinctly and but once. (3) Require the writing to be neat and plain. (4) Have missed words rewritten at each lesson. (5) Review misspelled words daily. (6) Keep a list of missed words and use them at review.

Geography: (1) Have a map before the class. (2) Have the pupils draw maps on the board. (3) Have the lesson written on the board by parts of the class. (4) Have the lesson recited by topics, and without questions. (5) Use the globe, objects, and pictures for illustrations. (6) Drill upon the pronunciation and spelling of the difficult names.
Arithmetic: (1) Have much blackboard work. (2) Aim at accuracy and neatness first, rapidity next. (3) Aim to secure intense mental action. (4) Give original examples as tests. (5) Require definite and logical explanations and analyses. (6) Let pupils acquire ability to perform the operation before drilling on rules and explanations.

Grammar: (1) Have all definitions illustrated by original examples. (2) Keep the blackboard in use. (3) Dwell on new points until well understood. (4) Practice writing sentences, abstracts, correspondence, etc. (5) Dwell on common errors. ${ }^{1}$

## State Normal School, Warrensburg.

This school was established in the spring of 1871 in pursuance of an act of the general assembly dividing the State into two normal-school districts, and authorizing

[^105] year 1890-91, pp. 23-31.
the establishment of one normal school in each district. After a sharp competition between different points, the school for the second district was located at Warrensburg, in Johnson County. In order to secure this location, the citizens of Johnson County yoted $\$ 128,000$ in county bonds, the citizens of Warrensburg voted $\$ 45,000$ in city bonds, and private citizens donated a campus of 15 acres within the city limits, valued at $\$ 8,000$, making the original cost to citizens of county and town $\$ 181,000$.

The first session of fourteen weeks closed on the 18th of August, 1871, with an enrollment of 87 students. The last catalogue (July, 1892) shows an attendance of 874 students in the normal department, 341 men and 533 women.

Applicants for admission must be at least 16 years of age, present satisfactory evidence of good moral character, and pass a satisfactory examination in spelling, reading, descriptive geography, English grammar, United States history, and arithmetic to percentage. They must also execute in good faith a declaration to teach school in the State of Missouri.

The course of study consists of four years. The first two years constitute the elementary section; the last two the adranced section. Students completing the work of the elementary section receive a "certificate of graduation," which is valid as a State certificate for two years. Those who complete the advanced course receive a diploma with the degree of "bachelor of scientific didactics," which is equivalent to a State certincate for life.

Like other normal schools the school at Warrensburg has had to fight its way to popular recognition. It was charged with being only a local institution, and therefore undeserving of State support. It was alleged that the graduates did not teach, and that they preferred to teach outside of the State. Even the practice departments encountered strong opposition on the ground that the children of the town in the immediate vicinity of the school were receiving their education at the expense of the State. But these and other allegations of like character have been shown to be baseless, and the success of the school seems to be fully established, as it has certainly been deserved.

> Course of study.
[The * indicates when a subject is studied, and figures in last column show the number of weeks devoted to it.]


Course of study－Continued．

| Elementary section． | Preparatory： one year． |  | Elementary normal． |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | First year． |  |  |  | Second year． |  |  |  |  |
|  | Class H． | Class G． | Ciass F． |  | Class E． |  | Class D． |  | Class C． |  |  |
|  | 范 ETE <br> 荡 |  |  | $\begin{aligned} & \text { Seeond and fourth } \\ & \text { terms. } \end{aligned}$ |  | $\begin{aligned} & \text { Second and fourth } \\ & \text { terms. } \end{aligned}$ |  | $\begin{aligned} & \text { Second and fourth } \\ & \text { terms. } \end{aligned}$ |  | $\begin{aligned} & \text { Second and fourth } \\ & \text { terms. } \end{aligned}$ |  |
| History： <br> History of the United States． Civil government．．．．．．．．．．． | ＊ | ＊ | ＊ | ＊ |  | ． |  |  |  |  | 40 10 |
| Art： <br> Penmanship． <br> Frce－hand drawing ．．．．．．．． | ＊ | ＊ |  |  | ＊ | ＊ |  |  |  |  | 10 20 20 |
|  |  |  |  |  |  |  | ＊ | ＊ |  |  | 10 |
| Reading and yoice culture． Elocution | ＊ | ＊ |  |  | ．．．－ |  |  | ＊ | ＊ |  | 20 20 |
| Vocal music．．．－．－．－．－．．．．．．．．．．．． |  |  | ＊ | ＊ |  |  |  |  |  |  | 20 |
| Professional studies： |  |  |  |  |  |  |  |  |  |  |  |
| Elementsof mcatalscience Methods of teaching ．．．．．． |  |  |  |  |  |  | ＊ |  | － | ＊ | 10 20 |
| School management ．．．．．．． |  |  |  |  |  |  |  | ＊ |  |  | 20 |
| Practice teaching．．．． |  |  |  |  |  |  |  |  | ＊ | ＊ | 20 |

Advanced normal．


[^106]In addition to the professional work laid down in the course，principles and methods of teaching and class management receive careful attention in connection with the academic studies and in the school of practice．
Daily program.
FIRST TERM, 1892-93.

THIRD TERM, 1892-93.

|  | Practice | Plysies | Primary methods | Zoology | Algebra | History, readins | History | Wri |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $2 \ldots \ldots \ldots \ldots$$3 \ldots \ldots \ldots \ldots$$4 \ldots \ldots \ldots \ldots$ | Virgil ........... | Advancedalgebra | Practice ......... | Schoolmanage- ment. | English analysis | Physiology, arithmetic. | Arithm | W |
|  | Spclling, calisthenies, rest. |  |  |  | Physical geogra- |  | Spelling, cali | thenies, rest. |
|  | History of education. | General history... | Elocution with methods. <br> Rhetoric. | Free-hand drawing. <br> Botany |  | Arithmetic, physiology. <br> Physiology | Writing, geography. <br> Arithmetic $\qquad$ | Geography. <br> Arithmetic. |
|  | History of art.... | Latin lessons |  |  | Physical geogra- phy. |  |  |  |
|  | is |  |  | Noon intermission. |  |  | Noon inte | ermission. |
|  | Astronomy .......- | Botany $\frac{1}{2}$......... | Practice | Elcments mental science. | Civies | Composition, American literature. | Writing .......... |  |
|  | Geology .......... | Moral science <br> Practice | Plane geometry .. | Vocal music, elocution. <br> Algebra | Frec-hand drawing. | Grammar <br> Vocal music $\qquad$ $\qquad$ | Grammarand composition. <br> Vocal music..... | Grammar and composition. Reading. |
| FOURTH TERM, 1892-93. |  |  |  |  |  |  |  |  |
| 2.............. | virgil ............ | Physics. <br> Advanced algebra | Primary methods. | Zoology, algebra. School manage- | $\begin{aligned} & \text { Algebra ............ } \\ & \text { English analysis. } \end{aligned}$ | History, reading.. Physiology, arithmetic. | $\begin{aligned} & \text { History ............ } \\ & \text { Arithmetic ....... } \end{aligned}$ | Writing. Reading. |
|  |  |  |  |  |  |  |  |  |
|  | Spelling, calisthenics, rest. <br> History of educa- |  |  | Spelling, calis | sthenics, rest |  | Spelling, cali | thenies, rest. |
|  | History of education. | ....................... | Elocution ........ | Free-hand drawing. <br> Botany | Physical geography. | Physiology, arithmetic. <br> Physiology ....... | Geography <br> Arithmetic $\qquad$ $\qquad$ Geography. Arithmetic. Noon intermission. |  |
|  | History of art.... Noon in | Latin reader rmission. | Rhetor | Noon intermission. |  |  |  |  |  |
|  | Astronomy $\frac{1}{2}$. | Botal | Elementary phys- ics. | Elcments mental science. | Civies | Composition, Amcrican literature. | Writing .......... | Grammar and composition. Reading. |
|  | Institute reviews . | Gencral history... | Plane geometry .. | Vocal music, clocution. | Free-hand drawing. |  | Grammar and eomposition. |  |
|  | Geology |  | Bookkeeping . | Algebra........... | Map drawing. | Vocal musie | Vocal music... |  |

The State Normal School for the third district was established by an act of the legislature approved March 22, 1873. This act created a board of regents for the management of the school, consisting of the State board of education and four regents appointed by the governor. There were several bids for the location, and the board selected Cape Girardeau. Pending the erection of a new building the school was opened in one of the public schoolhouses of the city. The new building is an elegant and substantial structure, four stories high, and sufficient for the accommodation of 500 pupils.

The course of study, constructed with special regard to the preparation of teachers foi common and high schools, is substantially the same in the three State normal schools, though each school makes a special adjustment for its (real or supposed) special needs. The full course occupies four years-three in the "elementary" and one in the "adrance" course. Those who complete the elementary course receive a certificate which authorizes them to teach for two years in the public schools of the State. Graduates from the adrance course receive a diploma attesting the degree "Bachelor of Scientific Didactics." The "Dachelors" who teach successfully in the public schools in the State after receiving their diploma, and who complete a course of post-graduate reading prescribed by the board of regents, may be granted the degree of "Master of Scientific Didactics." The post-graduate course is comprised in four divisions-history, poetry, fiction, and professional, as follows:

First Year.-Mistory.-Prescott's Conquest of Mexico, Lossing's National History of the United States, Motley's Dutch Republic, Hume's England. Poetry.-Homer's Iliad, Thompson's Seasons, Pollock's Course of Time, Coleridge's Ancient Mariner. Fiction.-Scott's Waverley and Ivanhoe, Irving's Knickerbocker History of New York, Dickens's David Copperfield, Johnson's Rasselas. Professional.-Holbrook's Normal Methods, Tate's Philosophy of Education, Northend's Teacher and Parent, Porter's Elements of Intellectual Science, Root's School Amusements.

Second Year.-History.-Macaulay's England, Guizot's History of Civilization, Irving's Life of Washington. Poetry.-Moore's Lallah Rookh, Tennyson's Harold, Longfellow's Hiawatha and Evangeline. Fiction.-Henry James's Portrait of a Lady, Howell's Undiscovered Country, George Eliot's Mill on the Floss, Goldsmith's Yicar of Wakefield. Professional.-Fitch's Lectures on Teaching, Gregory's Christian Ethics, Barnard's Object Teaching and Methods, Herbert Spencer on Education, Bain's Logic, Quick's Essays.

From 1883 to 1889, inclusire, 26 graduates received the degree of master of scientific didactics, and between 1877 and 1890 (both inclusive) 95 received the degree of baehelor of scientific didactics.

The enrollment of students the first year (1873-74) was 57-28 ladies and 29 gentlemen; for the last year ( $1889-90$ ), 361-164 ladies and 197 gentlemen.

Tiuition is free, but an "incidental fee" of $\$ 3$ a term ( $\$ 6$ a year) is charged.

## KANBAS.

State Normal School, Emporla.
In the first month of the second year of her statehood, Kansas laid the legislative foundations of three great institutions-the State University, the State Agricultural College, and the State Normal School. There were grave doubts of the ability of the State to make the necessary appropriation to start the normal school at an early day; but in 1864 the legislature passed an act appropriating $\$ 1,000$ to the State Normal School to be used exclusively for the salaries of teachers. Prof. Lyman B. Kellogg was the first principal. In his report five years later, Principal Kellogg says: "On the 15th day of February, 1865, 18 students ( 15 more than were
greeted by Father Peirce in Lexington, when the first nomal school of Massachusetts was opened, and 1 less than President Hovey had at the beginning of the J1linois University), were gathered in a room belonging to the district school of Emporia. With them there was one teacher. The 18 students had settees borrowed from a neighboring church. The teacher's seat was a chair, borrowed from the county treasurer's office. There was no teacher's desk; there were no text-books, maps, or other appliances. The parable of 'The Sower' was read, the Lord's Prayer repeated, and the normal school of Kansas was openec."

One room of the public schoolhouse of Emporia was occupied by the normal school during the first term. An assistant teacher being needed and no room being available, a citizen, whose children were attending the school, built a one-story frame building, $1 \frac{1}{x}$ by 20 , near the school and gave the use of it to the school withont charging rent.
A new building for which the legislature had made an appropriation of $\$ 10,000$ was occupied by the school in January, 1867. The assembly room was capable of seating comfortably 120 pupils, and was the best audience room at that time in the city. The school, as usual with normal schools, outgrew its accommodations. In 1872 the legislature appropriated the sum of $\$ 50,000$ for the purpose of erecting a new normal-school building at Emporia, in addition to and comected with the building then occupied by the school. This appropriation was conditional on the city of Emporia contributing $\$ 10,000$ to the same purpose. The condition was complied with and a handsome building erected, the dedication exercises being held in June, 1873.

In 1876 , instead of the usual appropriation bilhs for salaries and other expenses of the State normal schools, the legislature introduced a section into the miscellaneous appropriation bill allotting several sums to each of the chree normal schools to pay current expenses up to March, 1876, with the prorision that these appropriations shall be received in full for all claims against the State, and that said schools cease to be maintained at the expense of the State; and the State shall not be liable for any expense in excess of this appropriation, and that the Leavenworth and Concordia normal schools cease to be State institutions. These two schools had been established under laws of 1870 and 1873, respectively.

Being without funds to pay a faculty, the board discharged all the teachers with the exception of the president, Dr. Pomeroy, who was continued without salary to conduct the school. He was authorized to charge tuition fees and employ such teachers as he deemed necessary, but without expense to the board. Notwithstanding all these difficulties over 100 pupils were enrolled in the various departments during the year. The school was carried on for seven years on the tuition fees received from students and whatever money might be raised from the sale of normal lands.

The building completed in 1873 was an unlucky one. The tornado of April, 1878, tore off nearly half the roof of the stone building, rolled up two-thirds of the tin roof of the other, and demolished several chimneys and windows. The rain went through the ceilings from roof to basement, loosening the plastering and damaging the furniture.
The heating apparatus was very unsatisfactory, and yet on the morning of October 26,1878 , the entire building was destroyed by fire. Nothing was saved of the normal property-library, museums, apparatus all perished, with the library of the president and his household goods.

During the week following the fire the citizens of Emporia at a public meeting declared in favor of early steps for the erection of a new building. The result of their earnest efforts was that the legislature appropriated $\$ 25,000$ for the rebuilding of the State Normal School, provided that the city of Emporia and Lyon County
should contribute the sum of $\$ 20,800$. The erection of the building occupied about a year, and the house was so near completion by May, 1880, that the school took possession on that day.
There was no more room in this building than there had been in the other. Students continued to crowd in until the enrollment reached 746 , three times the number that had been registered before the fire.

In 1887 the legislature made an appropriation of $\$ 25,000$ for the purpose of adding a wing to the building. The new building is a stately and beautiful edifice, admirably adapted to the purposes of the school. The main corridor is about 200 feet long, and the entire building contains 50 rooms. The rooms devoted to the kindergarten and the model school are furnished with all the modern appliances in the way of modèling boards, sand pans, number rods, reading boxes, balances, measures, charts, maps, geometrical forms, gifts, collections of the most common and most interesting minerals. The gymnasium is well supplied with apparatus for physical exercise. Besides wands, clubs, and dumb-bells for light gymnastics, there is suitable apparatus for heary gymnastics. From $\$ 1,000$ to $\$ 1,500$ a year are now appropriated for apparatus and museum. ${ }^{1}$

Great attention seems to be paid to the physical condition of students, as would appear from the following blank:

DATA FOR CALISTHENIC LEDGER.


| Age. | Breadth: |
| :---: | :---: |
| Weight. | Head |
| Height. | Neek |
| Knee.. | Shoulders .......................... |
| Sitting ..... | Waist............................................................. |
| Sternum | Length: |
| Girth: | Right shoulder elbow.. |
| Head | Left shoulder elbow. |
| Neek | Right elbow tip. |
| Chest, repo | Left elbow tip. |
| Waist ..... | Left foot... |
| Hips | Horizontal |
| Right thigh | Stretch of arms.. |
| Left thigh.. | Capaeity of lungs. |
| Right knee. | Strength of - |
| Left knee. <br> Right ealf. | Lungs .... |
| Leit ealf... | Legs....... |
| Right instep | Chest. |
| Left instep. | Upperarm. |
| Right upper arm | Forearm.. |
| Left upper arm. | Total............................... |
| Left elbow... |  |
| Right forearm | Development.. |
| Left forearm. | Vision ...... |
| Right wrist | Hearing |
| Left wrist. | Pulse: |
| Dejth: | Natural.............................. |
| Abdomen. |  |



Approved by

[^107]There are several courses of study, of which the following condensed table will give a good general idea:

Courses tubutated alphabetically.
[The $\dagger$ indicates when the subject is studied.]

| Studies. | First year. |  | Second year. |  | Third ycar. |  | Fourth year. |  | Weeks. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A. | B. | C. | D. | E. | F. | G. | H. |  |
| Arithmetic | $\dagger$ |  |  |  |  |  |  |  | 20 |
| Algebra. |  | $\dagger$ | $\dagger$ |  |  |  |  |  | 40 |
| Astronomy .- |  |  |  |  |  | $\dagger$ |  |  | 10 |
| Bookkeeping |  | $\dagger$ |  |  |  |  |  |  | 10 20 |
| Calisthenics. | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |  | $\dagger$ | $\dagger$ | $\dagger$ |  |
| Chemistry |  |  |  |  | $\dagger$ |  |  |  | 20 |
| Civil law........... |  |  |  |  |  |  |  | $\dagger$ | 7 |
| Drawing............. | $\dagger$ | $\dagger$ | + | $\dagger$ |  |  |  |  | 40 |
| Elocution | $\dagger$ |  |  |  |  |  |  |  | 0 |
| English literature |  |  |  |  |  |  |  |  | 0 |
| Essay (weekly).. |  |  | $\dagger$ | $\dagger$ | $\dagger$ |  |  |  | 40 |
| General history....... |  |  |  |  |  | $\dagger$ |  |  | 20 |
| Descriptive geography <br> Physical geography |  | $\dagger$ |  |  |  |  |  |  | 10 10 |
| Geology .............. |  |  |  |  |  | $\dagger$ |  |  | 20 |
| Geometry . |  |  |  | $\dagger$ |  |  |  |  | 20 |
| Grammar and composition. |  |  |  |  |  |  |  |  | 10 |
| History of education.................... |  |  |  |  |  |  |  |  | 20 |
| Kindergarten and primary methods |  |  |  |  |  |  |  | $\dagger$ | 10 |
| Latin (optional) .................... |  |  | $\dagger$ | $\dagger$ | $\dagger$ | $\dagger$ |  |  | 80 |
| Methods of teaching. |  |  |  |  |  |  |  |  | 10 |
| Mental science. |  |  |  |  |  |  | $\dagger$ |  | 20 |
| Music .......... |  |  | 1 | $\dagger$ |  |  |  |  |  |
| Oration (weekly). |  |  |  |  |  | $\dagger$ | $\dagger$ |  | 40 |
| Outlines and reviews.. |  |  |  |  |  |  |  |  |  |
| Philosophy of education |  |  |  |  |  |  |  | $\dagger$ | 10 |
| Penmanship... |  | $\dagger$ |  |  |  |  |  |  | 10 |
| Physics and metcorology |  |  |  | $\dagger$ |  |  |  |  | 20 |
| Physiology and hygiene. |  |  |  |  |  |  |  |  | 20 10 |
| Rhetoric, elements of |  | $\dagger$ |  |  |  |  |  |  | 20 |
| School economy and management. |  |  |  |  |  |  |  |  | 10 |
| Teaching and criticism |  |  |  |  |  |  | $\dagger$ | $\dagger$ | 40 |
| Trigonometry and surveying |  |  |  |  |  |  |  |  | 20 |
| Zoology ............... |  |  |  |  | $\dagger$ |  |  |  |  |

Presidents.
Lyman B. Kellogg. ..................................................................... . 1865-1871

C. R. Pomeroy .............................................................................. . . . . . 1873-1879

Randolph B. Welsh............................................................................ . . . . $1879-1882$
Albert R. Taylor .......................................................................... . . . . 1882

## NEBRASKA.

## State Normil School, Peru.

The germ from which the Nebraska State Normal School sprung was the seminary at Peru, Nemeha County. The trustees offered the seminary building to the State for normal school purposes, and the legislature, in 1867, accepted the offer, established the State normal school at Peru, appropriated $\$ 3,000$ to aid in fitting up the building, and assigned 20 sections of land as an endowment fund. A new building was erected in 1873 , and enlarged in 1885. The seminary idea predominated at first. Tuition in the seminary was charged at $\$ 8$ a term; in the normal department, $\$ 8$; in the model school, $\$ 6$; Latin, extra, $\$ 2$. "Mizsic on melodeon, $\$ 10$; ornamental branches at usual rates." State students, two from each State senatorial district, who signed a declaration to teach for three years in the public schools of the State, were admitted at half rates.
But the normal idea finally prevailed, and the school is now purely professional,
and is free to all students properly qualified on paying $\$ 5$ for matriculation fee and a contingent fee of $\$ 1$ to cover breakage in the laboratories. There are two courses of study, the elementary and the higher.

The elementary course, which embracestwo full years of study, is designed to prepare teachers for common ungraded and lower grade schools, and hence, in addition to a critical study of all common branches, it comprises a thorough course of instruction in the organization and management of ungraded schools, the methods of teaching the different branches, the art of rendering the elements of learning pleasant to the young, and the use of illustrative apparatus for primary schools.

The higher course is designed to furnish students wishing to become strictly professional feachers such education and training as will thoroughly qualify them for the discharge of the duties of any educational position in which they may be called to labor; and hence, in addition to the elementary course, it comprises a three years' course in the higher branches, including professional instruction in the laws of mental development with their application to teaching; the science, philosophy, and history of education; school laws in general, and the school system of N ibraska in particular; and school gradation, supervision, and management.

Each year is divided into three terms. The figures indicate the number of terms given to the several studies in the year. It is to be regretted that no intimation can be given of the number and length of the weekly recitations.

Ehementary Course.-First year.-Arithmetic, 3; geography and map drawing, 3; language and composition, 3 ; reading and word analysis, 1 ; civil government, 1 ; bookkeeping, 1.

Second year.-Arithmetic, 2; physiology, 1; United States history and geography, alternately, 2; drawing, 1; grammar and sentential analysis, 2; general reviews, with methods and practice, 2 ; school economy and general principles of education, 1 .

Higher Course.-First year --Algebra, 3; physics and chemistry, 3; rhetoric, 1; English composition, 1; botany, 1; Latin (optional), 3.
Second year.-Geometry, 2; trigonometry, 1; zoology and botany, 1; geology, 1; school laws, zoology, 1; general history, 1; English literature, 1; political cconomy, 1; Latin (optional), 3.

Third year.-Psychology, 3; astronomy, 1; moral philosophy, 1; logic, 1; science of education, 1 ; art of instruction, 1 ; methods of teaching, 1 .

Vocal music, penmanship, and orthography are daily exercises, and constitute part of the regular course. Laboratory practice is required of all students in the higher course.

During the year 1891 there were 454 students in attendance, including 95 students in the practice school who were admitted without matriculation, and whose names do not appear in the catalogue. Of these, 12 graduated from the higher and 48 from from the elementary course.

The faculty consists of the principal, George L. Farnham, A. M., and twelve professors and instructors.

The annual appropriation from the State is $\$ 17,550 .{ }^{1}$

## SOUTI DAKOTA.

## State Normal School, Madison.

The State Normal School was located at Madison during the session of the legislature of 1881-82, the citizens of Madison agreeing to donate to the Territory one quarter section of land 1 mile from the city limits as a site for school buildings. The location being thought too far from town, a lot of 20 acres within the city was chosen and work upon the building commenced in the spring of 1884. In the meantime the normal school had been opened in 1883, with 11 pupils. The second year closed with 4' pupils on the register. The legislature of 1884-85 having made an appropriation of $\$ 13,600$ for finishing the building and $\$ 14,000$ for running expenses for two years, the school moved into the new building on the $2 d$ of November. On the 4th of February following the building was entirely destroyed by fire. Before the
fire was extinguished the board of education called a meeting. Ascommodations were secured in the opera house, the Methodist Church, and the Baptist Church. Next morning the school went on as usual. Not a recitation was lost. On the 6 th of March the citizens of Dakota yoted to raise $\$ 25,000$ to rebuild the normal schoolhouse and finish the dormitory. The corner stone of the new building was laid on the 20 th of July. It is a massive structure of granite and is the handsomest building of its size in the State. It is thoroughly ventilated and well warned by steam.

The act establishing this normal school provides that its "exclusive purpose shall be the instruction of persons, both male and female, in all the various branches that pertain to a good common-school education; also, to give instruction in the mechanical arts, in agriculture, in chemistry, in the fundamental laws of the United States, and in what regards the rights of citizens." Candidates for admission must be 14 years of age, of good moral character, and well versed in the common-school studies. It is stated in the last annual catalogue that the sole design of the school is to educate and train competent teachers for the public schools of the State; that all studies are selected for their pedagogical value, that there are no optional studies, and all the professional studies, the methods, and practice work must be actually taken.

The following is the programme of daily recitations for the fall term of 1892:
Programme.

| Professor. | First period. | Second period. | Third period. | Fourth period. | Fifth period. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Beadle. | General history. | Psychology | United States history. <br> A. Algebra..... English literature. | Pedagogy....... <br> Geometry <br> B. Grammar .... <br> Drawing $\qquad$ <br> Ad. geography. | B. Aríthmetic. <br> American classics. <br> Vocal music. <br> Civil government. |
| Dempsiter.. | Ad. Arithmetic . | B. Algebra. |  |  |  |
|  | Composition and rhetoric. |  |  |  |  |
| Mawson | ution ...... | Roovsiology. |  |  |  |
| Pryne | B. Geography .. | B. Reading. |  |  |  |

Miss Herrig will give methods in the fifth period, and penmanship will lee given in the third period.

Each student in the normal school, who is a citizen of the State, pays $\$ 12$ a year for tuition, and nonresidents of the State pay $\$ 30$ a year. Board and furnished rooms in the city of Madison cost from $\$ 2.50$ to $\$ 3.25$ per week. The cost in the dormitory, which is exclusively for ladies, is only $\$ 2.35$ per week.

The model school is a graded school of eight years, in which students from the normal department are required to put their methods and principles into practice, with the aid of critic teachers, who, plan the subjects and supervise their daily work. The aim of the faculty is to make the model school the best elementaryr school in the State.

The arerage daily attendance in 1889-90 was 118; in 1890-91, 122, and the same in 1891-92. The number of first-year students on the last register was 125; second year, 33; third year, 22. ${ }^{1}$
V.

## STATE NORMAI SCHOOLS IN THE SOUTH CENTRAL DIVISION. MENNESSEE.

## Peabody Normat College, Nashtille.

The trustees of the Peabody fund, being convinced by an actual examination of the facts, as well as by the logical conditions of the question, that the greatest want of the South was a supply of trained teachers, authorized their agent, Dr. Barnas

Sears, to establish and foster normal schools. The State of Tennessee. seemed to him to offer many advantages as an "experimental station." Accordingly he came to Nashville in 1873 and proposed to contribute from the Peabody fund $\$ 6,000$ a year for the support of a normal school if the State legislature would appropriate a like sum. A bill for this purpose was introduced into the senate. It passed three readings in the senate, and would have passed the third reading in the house had the session lasted two days longer.

A bill of the same purport was introduced into the next legislature and was defeated on its first reading. The State was not in condition to make an appropriation of $\$ 5,000$ in addition to other and more imperative claims. The bill was amended by leaving out the appropriation clause and passed without difficulty. It was under this act that the normal school was established. The State board had neither money nor buildings, but the trustees of the University of Nashville came forward and tendered the use of their building and grounds; and so under the auspices and by the mutual cooperation of three boards-the State board of education, the university trustees, and the trustees of the Peabody fund--the Peabody Normal College was opened on the 15th of September, 1875, with Dr. Eben S. Stearns, chancellor of the University of Nashville, as president and two lady teachers as assistants. ${ }^{1}$ At first there were only 13 students enrolled, but the school grew steadily and in 1887 numbered 177 students. After the death of Dr. Stearns, in 1887, Dr. William H. Payne, of the University of Michigan, was elected to the presidency. The school has an annual appropriation of $\$ 10,000$ from the State, which was first given in 1881; the other expenses are met by the Peabody board of trust and the University of Nashville. For a few years after the opening of the college it received $\$ 3,000$ annually from the Peabody fund, and in October, 1876, Dr. Sears, the general agent, announced that a limited number of scholarships, worth $\$ 200$ each, would be given under certain conditions. Next year, 19 students from various States took advantage of this offer, and the number increased gradually until it reached 114. Tennessee had no Peabody scholarships until 1883, but as early as 1880 the legislature had established 25 scholarships of $\$ 100$ each for the students of that State. The Peabody scholarships are distributed at present (1892) as follows: Alabama, 13; Arkansas, 10; Georgia, 14; Louisiana, 8; North Carolina, 14; South Carolina, 10; Tennessee, 14; Texas, 9; Virginia, 14; West Virginia, 8. They are awarded on competitive examination by the respective State superintendents upon a uniform set of questions prepared by the president of the college and sent to the State superintendents. Applicants are required to be not less than 17 years of age nor more than 30; of irreproachable moral character; in good health, with no physical defects, habits, or eccentricities which would interfere with success in teaching, and have a purpose to follow teaching as a vocation. The minimum literary qualifications for securing a scholarship are the following: The ability to read fluently, to spell correctly, and to express thoughts in grammatical English; to solve problems of moderate difficulty under all the ordinary rules of arithmetic, and to demonstrate any ordinary arithmetical principle; to locate the principal cities, rivers, and mountains of the world, and to give the boundaries of any specified State of the Union; to parse the words of any ordinary English sentence, and to correct ungrammatical English; to solve equations with two unknown quantities, and to describe the leading events in the history of the United States. It is expected that the standard for entrance will be raised from year to year. For the year 1891-92 scholarship students are advised to come with one year's preparation in Latin. A scholarship is good for any two successive years above the freshman class.

[^108]The general curviculum is divided into the following departments:


#### Abstract

Greek, one year, three times a wek ..................................................................... 4 Latin, one year, three times a week ................................................................... 15 Psychology, half year, three times a week........................................................... I Pedagogy, one year, three times a week................................................................ 7 Mathematics, one year, three times a week .................................................. 10 English and rhetoric, one year, three times a week ......-................................ 15  German, one year, three times a week................................................................ 4 History and geograply, one year, three times a week .................................... 9 Chemistry, one year, three times a week................................................................ Biology, one year, three times a week ....................................................................... Physics, one year, three times a week .................................................................. 3 Astronomy, half year, three times a week.............................................................. 1 Drawing, one year, three times a week ............................................................. Vocal music, two years, two hours a week. Each department is divided into several courses; Greek, for example, into 4 ; pedagogy into 7 . A full course comprises 5 exercises a week, whether in recitations, laboratory work, or lectures. It is not necessary that the exercises constituting a full course should be in one and the same branch of study.

The college degree proper is that of licentiate of instruction. To obtain this degree the student must complete 18 full courses, of which the following are prescribed:


Courses.
In Latin . .............................................................................................. $2^{\frac{2}{5}}$
In psychology and pedagogy-............................................................................... 2
In mathematics ................................................................................................. 3童

In chemistry .............................................................................................. $\frac{3}{3}$

In biology .....-............................................................................................
In music........................................................................................................ $\frac{13}{\frac{3}{3}}$


From the other courses offered the student must choose and complete enough to make in all 18 full courses.

Scholarship students are credited on entrance with 5 full courses, and students have the privilege of being examined for advanced standing in any prescribed study if application is made within two weeks after entrance. If the examination is satisfactory credit is given for the study thus passed.

The main purpose of this college is the professional education of teachers for the more responsible positions in the public-school service of the South. In itsacademic work it aims to give its students a liberal education of the collegiate type, and to impart to them an appreciable measure of the scholarly spirit. But while a generous scholarship is indispensable to high excellence in teaching, the Peabody College recognizes that a teacher must be something more than a scholar. He must add to his general scholarship a comprehensive knowledge of educational doctrine, history, and methods; and this constitutes the professional work of the coilege. It is intended that this professional instruction shall be a characteristic feature of the college and that it shall be of a higher grade than has hitherto been given in any institution in the South. ${ }^{2}$

The aim, purpose, and tendencies of this great normal school can not be thoroughly understond without reforence to the views of the celebrated educator now at the head of the institution. Referring to the grafting of a normal school upon the ancient stock of the University of Nashville, Dr. Payne said in his inaugural address:

The transformation of the literary department of this university into a nomal college, while at first sight an innovation in scholastic history, is really a return to the primitive purpose of university organization. In its origin and purpose the ancient university was a corporation of student teachers-of young men who sought the very highest intellectual culture of the time in order that they might become the teacher's of the ignorant. A necessary condition imposed for obtaining the bachelor's degree was that the candidate should have taught previous to his graduation, and the condition on which the master's degree was stibsequently granted was the express obligation to teach a certain number of years after graduation. Even to-day we hear an English educator of high rank asserting that the "true function of universities is to teach and to supply the world with teachers." To what nobler use, then, could this venerable university be converted than to the preparation of young men and women for the higher and more responsible places in the public-school service. * * * There is no better place than this to reaffirm a truth that is in danger of being forgotten, that the primary and fundamental qualification for teaching is generons scholarship, a confirmed love for the scholarly vocation, a high degree of intellectual training. $\%$ * So far as my knowledge goes, this is the only normal school in this country which proposes to make its academic work of collegiate grade, and it is in such a school, placing before it such an aim, that I can most heartily labor. Normal schools of the ordinary type, with an academic course of the secondary or high school grade, have their manifest place and function, and should be established and liberally sustained in every State, but these will never suffice to give proper tone and inspiration to public education. For this necessary purpose there must be schools whose intellectual training is of the collegiate or university type. In this institution the middle, senior, and baccalaweate classes represent the higher aims to which I refer, while the junior class constitutes the normal school as distinguished from the normal college.

But acalemic work of a high grade does not of itself constitute a normal college. This is a distinetly professional school in its constitution and purpose, and so the instruction it offers must be in part professional. The teacher must be a scholar and something more-more by that special kind of knowledge which fits him for his spe(ific duties. This snecial knowledge is the theory, the history, and the art of cducation. ${ }^{1}$
These sentiments of Dr. Payne are reiterated and omphasized in his baccalaureate address of May, 1890:
The teaching profession is composed of two very unequal classes: the few who are leaders in educational opinion, and, compared with them, the almost innumerable host of teachers who carry into effect the plans and orders of their superiors. All well-conceived plans for the education of teachers must take this distinction into practical account, and there must be two classes of professional schools based on these two orders of endownent and duty; there must be a few West Points for educating the commissioned officers of the great army of teachers, and a much larger number of subordinate schools for the dissemination of " true opinion," for teaching subjects and methods to the rank and file of that mighty host of men and women who are the word's teachers. It is not conceivable that the entire teaching class can ever be ingeired by the scientific or the proiessional spirit-that spirit which animates the discoverer and sets him apart for life service in the schoolroom. * * * I merely state a fact, and I state it in the mildest way, when I say that university and college men have but little respect for the scholarship that is produced in normal schools. This lack of respect does not proceed from rivalry, for any real rivalry between schools of such radically different grades is wholly out of the question. I think the feeling is caused for the most part by the assumption on the part of normal school students of scholarship and learning which they do not have. * * *

Normal schools profess to do work which their rank and organization make it impossible for them to do; their graduates are in some sort compelled to assume a competence which they do not have; and so they forieit the respect of men who are really scholarly. I wish to say explicitly that so far as intent goes, the only fault that can justly be attributed to the State normal schools of the day on the score

[^109]named is that they are overambitions. Without exception, so far as I know, these schools are administered by men whose good intent and honesty of purpose are beyond the slightest question. * * *But there are other so-called "normal schools or nomal colleges" of whose honesty of purpose I can not speak with so much confdence. They are merely academies laneled with the trade-mark, "normal," and their advertised excellence consists in their being more than the equivalents of the "old-time" colleges and universities. In other words, they mropose to do in two years what farvard and Yale attempt to do in four. In these "independent" schools the word "normal" connotes a mode of diagranming a sentence, a short cut to a mastery of Latin, or some mere mannerism in teaching.

I have assumed that in its rank, organization, and am this institution belongs to the smallor and higher class of schools whose function is the edueation of men and women for the more commanding places in the public-school service of the country. * * * It is not the province of this college to duplicate any normal school of the existing type. ${ }^{1}$

The Peabody board of trust has lately made an appropriation of $\$ 12,000$ for a model school building, and this school is now in successful operation. It is a school of primary grade containing 40 children, from 6 to 10 yoars of age, taught by the most approved modern methods. It is a school of "observation" merely, in which students can study the work done by accomplished teachers; not an experimental school, "where children are to be practiced on by novices."

There is now in the South a demand for men who are competent to act as city and county superintendents, and one of the functions of the Peabody College is to train men for this useful and honorable career. Ample opportunities are presented for thorough instruction in scientific school supervision.

A commodious grmasium has been erected and furnished with the most approved apparatus. Besides the general exercises, in which all are expected to participate, unless for good reason excused, special exercises are prescribed for individual cases, based on a careful diagnosis of each student's physical condition. The gymnasium also furnishes a pleasant diversion from study, and gives recreation of mind as well as exercise of muscle. ${ }^{2}$

## ATATBAMA.

## State Nordal College, Florence.

The Alabama State Normal College was established in 1873 as the "State Nomal School" with an annual State appropriation of $\$ 5,000$. In 1881 the State appropriation was increased to $\$ 7,500$ per annum. In 1887 the board of directors was delocalized, no two members being appointed from the same county, and the name was changed. to "Alabama State Nomal College." Prior to 1888 the course of study was largely academic, little attention being pairl to professional instruction. This was in part due to the fact that such instruction was best adapted to the students in attendance. Even as late as 1891 we are told:

The experience of all [?] normal schools is that they must do academic work. Teachers, consciously or unconsciously, imitate their instructors. This is especially true if chey have been educated in schools where 110 particular attention is paid to methods of imparting knowledge. They come forth with no a wakened thought upon the importance of correct methods, and with all their attention fixed upon the matter to be taught; consequently they repeat what they have seen, both as to the art of instruction and the management of she school. Many of the schools from which the normal college is supplied with students can not send forth those who are thoroughly prepared in the various branches ot study, while not one in twenty of the teachers in these schools has had any special training for his work. Theoretically it may he desirable to confine the work of the normal college to strictly professional subjects, but practically it is not as yet possible.

Since 1888 more attention has been given to the professional training of teachers, and such instruction is now the leading feature of the institution.

[^110]There are in the same building two distinct schools, each with its own organization, the State Normal College and a Model Training School. The president and critic of the former are, respectively, superintendent and principal of the latter. This arrangement is mutually advantageous; it affords for pupil teachers of the normal college a field for observation and practice in teaching, and it secures to children in the model school better instruction than they would otherwise be likely to have.

The course in pedagogics proper covers a period of three years. The work of the second year is largely practice work; in the third and fourth years practice and theory are combined. In the second year the aim is to teach pupils to prepare and give lessons as regards matter, method, and manner. The lessons are written, submitted to the teacher for correction, and given to classmates, who endeavor to act the part of the pupils for whom the lesson is intended and who afterwards present criticisms to be reviewed by the teacher. In the third year the philosophy of methods is discussed.

There are two courses, the adranced and the professional. The advanced, or regular course, occupies four years. The professional course requires but one year and is intended for teachers of experience and graduates of high schools and colleges who do not wish to take the regular course, partly because it traverses a large field with which they are already acquainted, and partly because they do not wish to be placed in the same "form" with boys and girls of 15 , the minimum age for admission. In the following table the right-hand column is the professional course; the advanced course includes the whole:

Cemricula. ${ }^{1}$

| Year. | Term. | Mathematics. | Science. | Language. | Form study and drawing. | Pedagogies. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| First..... | Each | Arithmetic | Geography; map draw ing; physical gcography. | Language lessons; grammar; composition. | Study of type forms, modeling in clay; stick and tablet laying; paper folding and paper cutting; (Prang, s shorter course.) | During two recitation periods the pupils are taught a variety of subjects according to improved methods. This done by members of the senior class, under the superviteachers. |
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|  |  |  |  |  | Study of type |  |
|  |  |  |  |  | iorms; ex- | Lessons on the |
|  |  |  | Physiology ... |  | press $i$ ideas | senses, objects, |
| Second.. | Fall .... | Aigebra |  | Grammar critically reviewed; rhetoric. | by making, by | and qualities. <br> Lessons on place, |
|  |  |  |  |  | drawing, by | number, form |
|  | Winter Spring.. |  |  |  | frst princi- | color, and |
|  |  | Algebra .... <br> Algebra .... | Physiology ...Botany ...... | $\xrightarrow[\text { Qheneral his- }]{\text { Rhe }}$ tory. | ples of deco- | force. |
|  |  |  |  |  | ration; con- | Lessons on occu- |
|  |  |  |  |  | yentionaliz- | pations, miner- |
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|  |  |  |  |  | ${ }_{\text {(Pran }}^{\text {course.) }}$ g's |  |
|  |  |  |  |  | Oobject draw - |  |
|  | Fall |  |  |  | ing; working |  |
|  |  | Algebra | Natural philosophy. | United States history or Latin. | drawings; |  |
| Third.... |  |  |  |  | constructions; perspec- |  |
|  | Winter | Plane geometry. | Natural philosophy. |  | tive (linear); | raphy. |
|  |  |  |  | mentor | beauty in or- | Methodsin arith- metic |
|  |  | Plane ge-ometry. |  | Bookkeeping or Latin (Cæsar). | nament; ar- | methods in lan- |
|  | Spring.. |  | Natural philosophy. |  | in colored | guage. |

[^111] Ala., 1890-91.

Curricula-Continued.

| Year. | Term. | Mathematics. | Science. | Language. | Form study and drawing. | Pedagogies. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fourth .. | Fall | $\begin{aligned} & \text { Solid ge- } \\ & \text { ometry. } \end{aligned}$ | Chemistry.... | Writings of select English and American authors or Latin (Cæsar). | Outline of art history; how to introduce drawing in our public schools: how to teach chil- | $\left(\begin{array}{l}\text { Recitations; } \\ \text { school govern- } \\ \text { ment; applied } \\ \text { psy chology; } \\ \text { practice teach- } \\ \text { ing. } \\ \text { School organiza- }\end{array}\right.$ |
|  | Winter . | Trigonometry. | Chemistry .... | Essays, or ations, a nd select reading s, or Latin (Cic- | serve, to think, and to cxpress their thoughts by drawing; re- | teacher; school cthics; applied psychology; practice teaching. |
|  | Spring.. |  | Chemistry .... | ero). <br> Preparation of theses or Latin (Virgil). | vicw of primary and intermediatc work (Prang's course.) | Schoollaws; tems; history of education; apogy; practice teaching. |

The income of the school is derived from several sources, as exhibited in the "Annual report of the president to the board of directors" at the annual meeting, June 10, 1890:

State appropriation.................................................................. $\$ 7,500.00$
From Peabody educational fund. ....................................................... 1, 200.00
From tuition fees....................................................................................... 2, 396.93
From incidental fees........................................................................ 1,538.00
From miscellaneous sources (specified) ............................................. $1,301.95$
13, 936.88
To students not less than 15 years of age who take the required course of study and pledge themselves to teach for two years in the public schools of Alabama, tuition is free; to others it is $\$ 6$ for each term of twelve weeks in the Model Training School, and $\$ 8$ for each term of the same length in the Normal College. Each student, however, is required to pay an incidental fee of $\$ 2$ at the beginning of each term. Boarding in pleasant private families can be had at from $\$ 10$ to $\$ 13$ a month. The number of students in attendance in the normal department in the session of 1890-91 was 218.

Srate Nopmal School, Troy:
The legislature of Alabama, in 1887, authorized the establishment of a State normal school at Troy on the condition that the city should furnish grounds and buildings adapted to the requirements of the school. The city complied with this condition at an expense of $\$ 25,000$ and the school was opened in 1888. The State appropriation of $\$ 3,000$ was found to be entirely inadequate, but was supplemented by $\$ 1,200$ from the Peabody fund and by tuition fees averaging over $\$ 2,000$. Students who take the legal obligation to teach two years in Alabama are free of tuition, with the exception of an incidental fee of $\$ 3$ a term. Those who enter for general education only are charged $\$ 30$ a year.

Like many of the Northern schools, the school at Troy has had to nght its way. An effort was made in the legislature of 1891 to withdraw the appropriation, and a committee was appointed to investigate the subject of normal schools. The report was highly favorable, as will be seen by the following extract:

The State may choose as to the manner of caring for her poor and vicious. She may take the children of the poor and so strengthen them by education as to save
them from the poorhouse, or she may enlarge the poorhouse to receive them and their progeny. Alabama must build more schools or more jails and penitentiaries. Which it shall be is a question for your decision. As to your present decision, you know better than any others what it is to be; we may all be assured of the final decision as to public schools in Alabama. They have come to stay and grow as in other sections of our country, and this means that they will get more than a niggardly support. Alabama will yet attain greater things in the education of her masses.
The public school, once seen and admitted to be a necessity, we may better judge as to our next point-the means of rendering effective this great agent of the people's intellectual, moral, industrial, and material well-being-good and well-trained teachers. There are some good teachers who became so by their own self-training, just as there are some people who become great scholars without attending school, or as some lawyers, physicians, or ministers become professionally skilled without taking a course at a professional school. But it has been found that schools are helpfal to scholarship, and that few ever get scholarship outside of their walls. It has likewise been found that professional schools give more systematic and extensive training than is likely to be secured without them. The normal school is the teacher's professional school, as is the medical the physician's, the mechanical the machinist's, the military the soldier's, the naval the sailor's. The State aids in the maintenance of schools for other professions, although these do not enter her direct employment after graduation, but are dependent upon fees derived from practice for all their remmeration. Not so with the teachers. They are to be employed by the State. In this they are like army and naval oficers. The Amy and Nary are Govermment enterprises, and to secure success in the management of these the Government trains her own officers in schools erected and supported by the Government for that purpose. This insures skill, uniformity, and efficiency. When the State undertakes a vast system of public schools to insure skill, uniformity, and efficiency in management she trains her own commanders (teachers) like the Govermment, at least in part. * * * In view of the facts heretofore enumerated, we hereby express it as our best judgment that it would be unwise to abolish the normal schools, and we recommend their continued and increased support, as their necessities may be made to appear from time to time in the future. ${ }^{1}$

The report of the committee was adopted by a close yote, and the normal schools are safe, at least for the present.

The State Normal College, as it is now called, of Troy, Ala., embraces two schools.
I. Normal College, including the departments of (1) pedagogy and ethics; (2) English and civics; (3) pure and applied mathematics; (4) Latin language and literature; (5) natural science; (6) rocal and instrumental music; (7) physical training and education; (8) art, painting, and drawing; (9) penmanship and business.
II. Model schools: (1) High-school departinent; (2) intermediate department; (3) primary and kindergarten department. The entire work from the entrance of the kindergarten to graduation from the normal college is carefully graded and occupies twelve years.

The departments of elocution, music, art, and business receive no support from the funds of the board before mentioned.

The number of students in the normal school proper seems to have been, in 1880, 177; in the high school 12t, and in special departments (music, elocution, art, and business), $239 .{ }^{2}$
A late circular gives the following:

> Courses of study.
(1) Pedagogic, elementary and complete, three and four years, respectively; leading to the degree of bachelor of pedagogy.
(2) Scientific, four years, embracing the branches most essential to a modern education, thorough ant practical. Degree, bachelor of science.
(3) Philosophic, five years, embracing both pedagogic and scientific courses. Degree, bachelor of philosophy.
(4) Music, yocal and instrumental, a thorough two years' course.
(5) Art, painting and drawing in its various forms, a two years' course.

[^112](6) Commercial bookkeeping, penmanship, business forms and laws, et al., as demand may be.
(7.) Elocution, embracing voice, gesticulation, physical culture, all on the Delsartean theory.

To such as complete the elementary, the perlagogic, or the philosophic course, a State life certificate is granted, which relieves the holder from further examination, and is an eridence of professional training and qualification which is recognized throughout the State.

Philosophice course of stetly.

| Pedagosic course. |  |  | Scientific course. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Class term. | Pedagogic. | English civics. | Mathematics. | Latin language. | Natural science. |
| Jinior: <br> Summer.. | Methods of teaching. | Phetorie and elocution. | Algebra and plane geometry. | Cœsar, composition. | Zoology. |
| Fall | School management. | Rhetoric and elocution. | Algebra and plave geometry. <br> Plane geometry | Cæsar, composition. | Zoology and entomology. |
| Winter | School government. <br> Readings. | $\begin{aligned} & \text { English litera- } \\ & \text { ture. } \\ & \text { English litera- } \\ & \text { inre. } \end{aligned}$ |  | Cæsar, compesition. <br> Tirgil, scansion | Physics. |
| Spring. ${ }^{\text {a }}$. |  |  | University algebra and solic geometry. |  | Botany. |
| Middie: <br> Summer ... <br> Fall | Practical psychology methods of teaching. Science of education. | Civics | Applied geomctry and conic sections. | Roman history. | Physical phe nowena easy cxperi ments. cluemisty. |
| Fall |  |  | Applied geometry and conie sections. <br> Plane trigonometry. | Roman histors. Virgil, scansion. |  |
| Winter | Philosophy of education. | Civics and United States history. |  |  | 2emistry. |
| Spring. | Practice teaching. | Civies and United States history. | Spherical trigonometry and surveying. | Cieero, Amieitia, composiiion, higher syntax. Horaee, odes | Physieal geog raphy. |
| Senior: Summer... | Practieal psychology, history of edueation. <br> Logic. | Lecturesin politieal economy. | Analytical geometrs. |  | Geolog: |
| Fall |  |  | Analytical geometry. | $\begin{aligned} & \text { Horace, odes, } \\ & \text { meters, Ro } \\ & \text { man litera- } \\ & \text { ture. } \end{aligned}$ | Geology. |
| Winter | Ethics......... | Politieal economy. | Analytieal geometry. | Horace, satires, <br> Latin philosophy. <br> Selections from Latin poets, meters, mythology. |  |
| Spring. | School superrision and institute work. | General history lectures. |  |  | Astronomy. |

N. B.-The philosophic course (B. Ph.) covers both the pedagogic and scientific. The pedagogie (B. P.) exeludes midde and junior Latin. The scientific (B. S.) exeludes junior pedagogy and fourth terms, middle and senior.

The model school is divided into three departments-primary, intermediate, and high school. The number of students in the normal department for the year 1889-90 was 177, excluding high-school pupils, "irregulars," and special collegiates (music, elocution, art, and business). The grand total enrollment of different names was 505.

## Alabana Normal Cothege for Girls, Livifoston.

The Livingston Female Academy, which was incorporated in 1840, is now called the Alabama Normal College for Girls. The State legistature of 1882-83 made to the girls of Alabama the first gift which the women of the State had ever received from the public treasury-an annual appropriation of $\$ 2,000$ and a donation of $\$ 500$ to
enable the directors of the Livingston Academy to add a normal department to the existing institution.
The full course of the college includes three departments-primary, intermediate, and collegiate. The normal course is identical with the collegiate, but with the addition of methods of teaching common-school studies, history of education, school laws of the State, and practice teaching.
The number of normal students (1891-92) is 35 .
The whole number of normal graduates since 1884 is $72 .{ }^{1}$

## IOUISIANA.

State Normal School, Natchitoches.
The Louisiana State Normal was founded by an act of the general assembly in 1884. Under the provisions of that act the State board of education located the school at Natchitoches and appointed a board of administrators, but in 1888 it was enacted "That the board of administrators of the State Normal School shall consist of six competent white citizens, who shall be selected and appointed by the State board of education-one from each of the five circuits of the courts of appeals, and one from the city of Natchitoches." The school was opened in November, 1885, under Dr. Edward E. Sheib as president, who continued in charge till 1888, when he resigned and was succeeded by Prof. Thomas D. Boyd, who is now at the head of the institution.
The school grounds contain about 20 acres under fence and 80 acres of open woodland. The property, formerly occupied as a convent by the Sisters of the Sacred Heart, was purchased by the town and parish of Natchitoches and donated to the State for the use of the normal school. The buildings are comfortable, but entirely too small for the accommodation of a school which is growing so rapidly as this has done. The attendance in the normal department for the years 1888-1892 (both inclusive) was as follows: $42,44,84,138,163$. The State appropriation for the last two years was $\$ 12,500$ each year; $\$ 2,500$ of this amount for insurance and repairs. A liberal donation from the Peabody fund- $\$ 3,650$ over that of former years-supplemented the State appropriation and enabled the school to continue without interruption in its prosperous career.

The faculty consists of the president, 5 professors, and 5 assistants and specialists. The course of instruction covers three years of eight months each, as follows:

First year.-Arithmetic, English grammar and composition, geography, history of United States, physiology and hygiene, pemmanship, and bookkeeping.
Second year.-Advanced arithmetic, algebra, rhetoric, English literature, zoology, botany, general history, psychology, civil government, and history of education.
Third year.-Geometry, English literature, physics, chemistry, psychology, ethics, pedagogy, methods of teaching, school management, and practice teaching in the practice school.

PRACTICE SCHOOL.
In the practice school, consisting of four primary grades, the usual branches of such grades, including drawing, vocal music and calisthenics, are taught by the most approved modern methods. These grades are in charge of trained normal graduates, and form as indispensable an adjunct to a normal school as is the workshop to a school of practical mechanics, or the hospital to a medical college. For an hour each day the members of the senior normal class, divided into groups, are required to give lessons in these grades. This work is not mere experiment nor observation, but bona fide teaching under the direction of trained specialists. The work is reduced to a system, each student teacher being required to prepare the lesson beforehand in all its details, according to a plan devised by the training teacher. At the expiration of the practice hour the members of the senior class again assemble in their

[^113]class rooms, when their work is subjected to the criticism of their classmates and of their training teacher, who point out all errors both in government and in instruction. No young teacher could go through this daily experience for months without acquiring much of that presence of mind, that self-control, that fertility of resources, and that ready knowledge of methods and devices which give the surest guaranty of success, not only in the schoolroom, but in any other field of human endeavor. ${ }^{1}$

Admission. -The school is open to students of either sex. Applicants are required to be at least 16 years of age, and of good moral character; they must declare their intention to remain at the normal school until graduation unless sooner discharged, and must certify in writing their full intention to teach in the public schools of Louisiana for one year after graduation; they are also required to pass a satisfactory examination in the ordinary common school branches, "unless exempt from such examination by virtue of an adequate diploma or teacher's certificate." On successfully completing the course of study the student receives a diploma which entitles the holder to a first-grade teacher's certificate, which is valid for four years. ${ }^{2}$

## VI.

## STATE NORMAL SCHOOLS IN CALIFONIA, OREGON, AND ARIZONA. CALIFORNEA.

When the first normal school in California was opened, July 1862, but eight out the thirty-four States then in the Union had established State normal schools. These schools numbered 14 in all, distributed in the order of the date of opening as follows: Massachusetts, 4; New York, 2; Pennsylrania, 3: Connecticut, 1; Michigan, 1; New Jersey, 1; Illinois, 1; Minnesota, 1. Besides these, Philadelphia, Boston, and St. Louis each had a flourishing city normal school.
The necessity for the establishment of a State normal school in California was first urged by a few gentlemen in San Francisco, among whom were the State superintendent, Andrew J. Moulder; his successor, John Sweet; and the city superintendent, Henry B. James. By the earnest efforts of these gentlemen a city normal school was established in San Francisco in 1857. The sessions of the school were held weekly and the attendance of the city teachers was made compulsory. This school was continued until 1862; its graduates numbered 54 .
In his annual school reports of 1859 and 1860 State Superintendent Moulder recommended the establishment of a State normal school, but both of the succeeding legislatures adjourned without action. When he appealed personally to the members of the legislature to pass the law organizing the school, not a few.of them admitted that they did not know what a normal school was.

During the session of the first California State 'Teachers' Association, held in San Francisco, May, 1861, a committee was appointed to examine and report upon the subject of normal schools. This report was embodied by Superintendent Moulder in his report to the legislature of 1862, and earnestly commended by him to their consideration, with the statement that an appropriation of $\$ 5,000$ would be sufficient to establish the school and put it in successful operation. The result of the combined efforts of the State superintendent and the teachers' institute was that an act was passed by the legislature, May 2, 1862, providing for the establishment of a State normal school and appropriating $\$ 3,000$ for its support for five months. The first and second sections of this act read as follows:

1. The board of education of the State of California, together with the superintendents of common schools in the cities of San Francisco, Sacramento, and Marysville, are hereby constituted, ex officio, a board of trustees for the normal school of the State of California, as hereinafter provided.

[^114]2. Such board of trustees shall be known and designated as the "Board of trustees of the State Normal School," and they shall have power to establish and maintain in the city of San Francisco, or at such other places as the legislature shall hereafter direct, a normal school for the free instruction in the theory and practice of teaching of such citizens of this State as may desire to engage as teachers in the public schools thereof; to prescribe a course of study for such normal school, and the text-books to be used therein; to examine, employ, and fix the salaries of teachers therein; to hold stated examinations of the pupils attending such nermal school, and to award certificates and diplomas as leveinafter provided; to arrange and carry into effect all the details necessary to carry out the purposes of this act.

## San Francisco.

In pursuance of this act the board of education accepted the offer of the San Francisco board of education, tendering to the normal school the use of a racant room in the high school building, together with apparatus. The offer was accepted, and the board advertised that the school would be openel on the third Monday in July. A large attendance was anticipated and there was much discassion as to the proper apportionment of seats, so that each county in the State might secure its proportionate privileges in the school, while at the same time sufficient advantages should be afforded "to the greater number of persons who will undoubtedly seek admission to the school from our large cities." The number of pupils to be admitted during the first term was finally limited to 60 , provided that at least 1 pupil shall be admitted from each county. The expectation that a large number of students would apply for admission was not realized. On the day appointed for examination only 5 applicants presented themselves. Three days afterwards the school was organized in a room on the ground floor of the high school building, with Ahira Holmes, of San Francisco, as principal. The number of students increased until at the close of the term the school numbered 31, of whom 3 were young men. A considerable number of those admitted were found to be exceedingly deficient in the knowledge of the common-school branches, as well as in the mental discipline and intellectual vigor necessary to pursue the studies of the course to advantage. The declaration required by the trustees at admiscion was as follows: "We, the subscribera, do hereby declare that it is our intention to engage permanently in teaching in the common schools of this State, and that it is our object in resorting to this school to prepare ourselves for the discharge of this important duty; and we moreover pledge ourselves to remain at least one term in the school, and to observe faithfully all the regulations of the institution so long as we continue members thereof."

The unfortunate and unnecessary word "pemanently" no doubt frightened off many girls who were also candidates for matrimonial honors, but who might have taught school for several years with great success. In the pledge now in use the objectionable word is omitted.

The act establishing the school provided for but one session of five months, but the board decided to open a second session and trust to the liberality of the legislature to camy it through. Their expectation was not disappointed. During the term three speciai teachers were employed-in music, drawing, and calisthenics, respectively. The whole number of students in attendance during the year was 50 . The subjeets taught were practical and mental arithmetic, physical and descriptive geography, English grammar and analysis, rhetoric, composition, reading, penmanship, algebra, plane geometry, physiology, natural philosophy, vocal music, and theory and practice of teaching.

The school began its second year no longer an experiment but an established State institution. Its first year of work had proved both the necessity for its existence and its possibilities of usefulness. The legislature of 1863 repealed the first act establishing the school and passed a second act, substantially the same, embodying it as part of the State school law and making an appropriation of $\$ 6,000$, which was double the original appropriation for the first year.

In January, 1864, the school was reorganized and divided into senior, junior, and subjunior classes, and a regular course of study for each class was preacribed by the board. By the new regulations each member of the senior class was required to spend one week in the model school and to write a full report of the work done while there. The haste of pupils to graduate was a great hindrane to the best success of the school, as it has been even in the best of schouls to the present day.
The following extracts from a letter written by a gradiate of the class of 1864 will give some idea of the difficulties encountered in the early days of this school:

My introduction to the school was made in the fall of 1862 . It was then held in a side room of the high school of San Francisco. The room resembled a hat room deprived of its racks and improvised with rickety seats. The normalites were intruders upon the domain of the high-school pupils; hence hat no rights that they could call theix own. Ahira Holmes was prineipal, vice-principal, assistant, and professor to all the 25 normalites-that is, when they were in attendance.

In the begiming of 1863 we were moved to a tumble-down, two-story wooden structure on Fourth street. The place we went to was worse than the place re leit; for while it stood on what may well be termed a stable foundation, it was shaky, and its outside stairs upon their two posts were shaky. When vehicles went rumbling over their cobbled way we suspended our class exercises; we had to, for the tremble, rattle, roar, and clater drowned human voices. We had other misiortunes-there were no maps, apparatus, nor books of reference in or about our school. We had one piece of furniture in addition to our seats and desks-a piano, hired by the pupils.

During the first term the school waned and waxed. In waning it went down to about 20 pupils; then it ran up to 30 ; it trembled in the balance. The pupits held comeil what to do-to forsake the institution in a body, or continue faithful to the end. The decision was to stay with the school-old house and all. We were faitioful to the end. From that time the school has gone on to prosperity.

The year of 186t-65 shows a continued increase of attendance and in the general efficiency of the school. The growing interest and confdence throughout the State in normal-school work are shown by the fact that twenty-three counties were represented by the new students admitted during the year. An arrangement was made with the San Francisco board of education by which four normal students were detailed each week to teach either as substitutes or assistants in the public schools of the city. This arrangement did not prove altogether satisfactory.

In June, 1865, Mr. George W. Minns, principal of the Boys' High School of San Francisco, was elected principal of the California State Normal School. The school opened for the year on the 10th of July, in Dashaway Fall, the model school being for a time disbanded. Aiter six weeks it was transferred to the Lincoh School building, then just completed. In Eeptember it was again removed, this time to a primary-school building. Here the normal school found a permanent home during the remainder of its stay in San Francisco, and sang the song of the Psalmist (Rouse's version)-

> Woc 's me that I in Mesach dwell
> A sojourner so long,
> That I in tabernacles Cwell
> To Kedar that belong!

By an act approved March, 1866, the State board of education was made to consist of the governor, the State superintendent of public instruction, the principal of the Normal School, the superintendents of schocls of San Francisco, Sacramento County, Santa Clara County, San Joaquin County, and two professional teachers nominaicd by the State superintendent and elected by the board. By the same act the State board of education, with the excention of the principal of the State Normal School, was constituted the board of trustees of the State Normal School.
The revised school law provided that the graduates of the Normal sichool showid receive State certificates of a grade to be determined by the State board of examination. Under this provision some graduates received diplomas, and others, first, second, or third grade certificates, the standing of each member being determined
by taking into consideration the recitation records during the term, the report of success in the training school, and the result of the written examination at the close of the term.
SAN José.

In May, 1868, Dr. William T. Lucky being principal of the Normal School, the subject of a permanent location for the school began to be agitated, and in 1870 the legislature selected San José as the location and enacted a law providing for the selection of a site and the erection of a building. Some amendments were made to the laws governing the school, the principal change being in the constitution of the board of trustees, which was made to consist of the governor, the State superintendent of public instruction, and five others to be appointed by the governor. The same act appropriated $\$ 24,000$, biennially, "which said appropriation shall be set apart at the commencement of each fiscal year to support the State Normal School."
The corner stone of the first California State Normal School building was laid October 20, 1870, with imposing Masonic ceremonies conducted by the Grand Lodge of the State. The first session of the school in San José was opened in June, 1871, in rooms temporarily furnished by the city board of education. The new building was completed in 1876 at a cost of about $\$ 285,000$. Though but imperfectly adapted to school purposes, it was a handsome building, both in architectural design and in details of finish, with numerous porticoes supported by Corinthian pillars, handsome entrances, wide corridors, and spacious halls. It is unfortunate that so large an amount of time, money, and skill should hare been expended on a building constructed almost entirely of wood. In November, 1873, a preparatory class was organized, whose special work was a thorough review of the elementary branches in preparation for the work of the junior class. During this year the senior class began regular practice work in the training school, the classes of which were made up of pupils from the public schools of the city. But in the following year the training school was opened as a pay school independent of the city schoo!s, and soon became nearly self-sustaining.

In 1876 the course of study was extended to three years-junior, middle, and senior. In this year the legislature raised the annual appropriation to $\$ 24,000$.
With the school year of 1879-80 came a catastrophe which resuited in giving the strongest possible proof of the ritality of the school and of its hold upon the contidence of the people. On the morning of Tuesday, February 10, 1880, the building was totally destroyed by fire, originating, it is supposed, in a defective chute. The total loss was estimated at $\$ 304,000$. The board of education of the city of San José promptly tendered the high-school building for the use of the normal school, making arrangements to accommodate the high-school classes in other schools. Thus the school was enabled to continue its work with but one day's interruption.

On the 12th of April, 1880, the legislature passed a bill appropriating $\$ 100,000$ for the erection of another building at San José for the use of the State Normal School, and work on the new building was at once begun.
During the legisiative discussions in reference to the normal school twe assertions were made which did the school great injustice. One was that the normal school was a San José or Santa Clara County high school, and therefore should not be sustained by the state. In answer to this it was shown that during the current year 275 students had entered from counties outside of Santa Clara. The other allegation was that the graduates of the normal school were not as well qualified as many graduates of high schools; that they could not pass the examination to enter the junior class of the university, etc. To this it was replied that the normal school is not a high school, nor is it a preparatory school for the university. It has for its object the preparation of teachers for the district schools of the State. The most advanced graduates of the high schools find it hard work in one year to complete the review
studies and the training required in the normal school. One-thind of the time of this year is devoted to the study and practice of teaching. The mere assertion that after this year's work students are not as well prepared to teach as those who know a little more Latin or French can carry but little weight.

Work on the new building was begun in Nay, 1880, and was prosecuted with such vigor that the school was able to occupy its new quarters in May, 1881. The new edifice, though plainer in its exterior than its predecessor, is well adapted to the purposes of the school, being modeled after the most approved normal-school structures in the East, and it has been pronounced by well-informed persons who have had ample opportunities for observation to be inferior to none on the continent at the time of its erection. Notwithstanding its spaciousness the school gave promise of rapidly outgrowing its accommodations.
In Febraary, 1881, the legislature made an appropriation of $\$ 25,000$ for improving and fencing the normal-school square. The grounds were carefully laid out, walks and drives graveled, flowers and trees planted. New lawns have from time to time been laid out and additional flower beds and trees planted, so that the grounds are now a place of deliglatful recreation to the students and an ornament to the city.
In no way is the intellectual life of a school more clearly indicated than in the increasing use of the library. With the occupation of the new building came the employment of a special librarian, who kept the library open all day. The arrangement in the course of study of a stady hour at the school building for each pupil opened the door to an increased use of reference books and gave some additional time for general reading. Visiting committees from the legislature, seeing both the usefulness of the library and the need of more books, recommended special appropriations for the benefit of the library, which were cheerfully granted. This in turn reacted upon both teachers and students, who, finding that more and better books were provided, were induced to make more and better use of them. In addition to these inducements the topical method of study, now growing in use and favor, by which the student is given a subject to investigate rather than a portion of some book to master, necessarily led to the demand for many books on each subject. The importance to the student of this familiarity with books can scarcely be overestimated. The library numbered in 1889 about 3,500 volumes. By the contimed liberal appropriations of the legislature new books are added yearly, and an additional building is now needed.

By the course of study adopted in 1884 it is provided that each member of the senior class should spend one recitation period each day for three-fourths of the year in the training department - the first ten weeks in observation and the last five months in teaching. During the half term spent in observation, the pupits write out, as regular exercises, criticisms upon the work of pupil teachers and analyses of model lessons given by the regular critic teachers, besides receiving special lectures upon the work they have observed. During the five months of actual practice work they are required to make special preparation for each recitation under the supervision of the regular critic teachers, who give both class lectures and individual criticism. From the one class with which it began, the training department grew until it included four distinct subdivisions-primary, intermediate, grammar, and advanced grammar. From the time the pupil enters the lowest junior class until he graduates his attention is kept fixed on the fact that he is learning each subject with a view of imparting it to others, and the method of presentation is made a subject of continued observation. The pupil is thus from the beginning trained to teach. The philosophy of the work he has not at first culture enough to appreciate, or even to understand. As he advances to riper scholarship he receives about one hundred and twenty lectures, beginning with an outline of mental philosophy, upon methods of teaching, grading, and disciplining a school. These lectures cover not only the philosophy of education, but practical and detailed instruction in the minutiæ of
teaching. Students are required to take copious notes of those lectures and to rewrite them for future reference. They thus are enabled to carry away with them voluminous notebooks of original work, intended and fitted to be guidebooks to young teachers when they come to reduce theory to practice.
In 1887 a workroom was fitted up and provided with tools for the use of pupils. For the first year instruction was given only by the regular teachers, but this not proving satisfactory, a slilled mechanic was emploved during a part of the year to superintend the workshop. Attendance was entirely optional, but the results were satichactory. An exhibit of students' work at the close of the term showed fancy tables, easels, footstools, etc., all of creditable workmanship. ${ }^{1}$

Principals.
Ahira Holnes ........................................................................ . . . 1862 -1885
(eeorge W. Minns ............................................................................ . . . . $1885-66$
Menry P. Canlton ................................................. 1866-67 and part of 1858
George Tait .................................................. July, 1867, to February, 1868
Winliam T. luckey -...................................................................... . . . $1868-1873$
Charles H. Alicn . ........................................................................... . . . . . . 1873 -1889
C. W. Childs ....................................................................... July, 1889

Los Axgeees.
In March, 1881, an act was passed by the legislature establishing a "Pranch State Formal School in Los Angeles Comty," the site to be selected and the luilding located by the board of trustees at San José. The school was opened in August, 1882, in a handsome and convenient building in the city of Los Angeles. The attendance the first year was 126 in the normal department, and 150 in the training school. The course of study arranged was the same as that of the school at San José, and both in the organization of the school and its management the parent institution was closely followed, and with most satisfactory results.

The legislature of 1880 made an appropriation of $\$ 10,000$ for building and furnishing a gymnasium. Wach student is required to practice calisthenic or gymnastic exercises for one recitation every day under the supervision of a ckilled and careful instructor.
The number of students entered on the catalogue of 1890-91 was, in normal classes, 288; in model and practice school, 200.

Chico.
The legistature, in 1887, created another branch normal school, to be located at Chico, in northern California. It was opened in 1889 with 80 pupils, under the prin(ipalship of Prof. Edward T. Pierce; this number had increased to 120 by the end of the school year.

## ORFGON.

## State Normal School, Monmouth.

Monmouth, the seat of the Oregon State Normal School, is in Poik County, 2 miles west of the Willamette River and 70 miles from Portland by rail. The State Normal School was established at this place in 1883. The necessity for such an institution was manifested by the fact that as soon as the school was opened students began to gather in from different parts of the State, and during the first year 101 were enrolled. The enthusiasm spread, and the number in attendance the second year was double that of the first; the fourth year showed an enrollment of 227 ; the fifth year, 261; the sixtl year the attendance was so large that it was found necescary to suspend the model school until the new building should be completed. The new
building is a magnificent brick structure especially adapted to its peculiar purpose, and is the gift of Polk County to the normal school.
The normal curriculum is divided into three courses. 'ihe elementary occupis one year; the regular, two years; and the advancen, one year. The elementary comse includes, as professional studies, object teaching and use of apparatus, methods in arithmetic and grammar, methods in geography, reading, and history, and school organization; in mathematics, arithmetic; insciences, geography, map lrawing, and history; in English, grammar, analysis, and composition; in art, ete., elocution, vocal musie, penmanship.

In the regular course the studies of the first year are, professional: school management, teaching in graded schools, hygiene of schoolroom, methods in mathematics and science; mathematical: algebra; science: philosophy and chemistry; English: rhetoric, English literature, ancient and mediæval listory; art: elocution, rocal music, penmanship.

Second year, professional: civil gorernment, Orgeon school law, constitution of Oregon, history of education; mathematical: geometry and bookkeeping; science: physiology, geology, astronomy, botany; English and mental science: ancient and medieval history, modern history, mental science; art: elocution, vocal music, penmanship.

The studies of the advanced course are, school gradation, school supervision, institute work, philosophy of education; trigonometry, surveying, mechanies; commercial law, political economy, moral philosophy, logic; German, French; Cæsar, Cicero, Virgil.

The graduating class of 1889 numbered 36 ; that of 1890, 21.
Graduates of the State Normal schools of Oregon receive diplomas good for six years in any pablic school of the State; after which, if successful in teaching, they are entitled to life diplomas.

There are four other State Normal schools in Gregon, located, respectively, at Drain, Weston, The Dalles, and Ashland. ${ }^{1}$

## ARERONA.

## Territorial Nommal School, Tempe.

This school was established by an act of the thirteenth legislature, amended and reenacted in 1887. The objects of the school are declared by said act to be the instruction of persons, both male and female, in the art of teaching and in all the branches that pertain to a good common school education; also to give instruction in the mechanical arts and in husbandry and agricultual chemistry, in the fundamental laws of the United States, and in what regarls the rights and duties of citizenship. Applicants for admission are required to be not less than 15 yeare of age, and should be able to parse the words of any ordinary sentence; to solve any problem in arithmetic up to and including decimal fractions; to bound any State or Territory and to locate the principal rivers and cities of the world; to write a legible hand, and to read intelligently.

The Normal School building is a brick structure, 60 by 70 feet and one story high. A 10 -foot hall extends through the buiding from north to south. The building is surmounted by a high roof, leaving a space of 8 feet between the roof and the ceiling. The entire structure is surrounded by a veranda 12 feet wide. Ventilators admit the passage of air in every direction.

Tuition is free to those who obtain an appointment from a member of the legislature and to those who sign the declaration that they attend the school fur the purpose of preparing themselves for teaching in the public schools of Arizona.

[^115]All others are charged $\$ 1$ per month. In order to graduate the student must be at least 13 years of age, must have attended the school for a period of at least twentytwo weeks, and must pass a written examination in all the studies of the course. Graduates receive certificates which entitle them to teach a grammar school in any county in the Territory.

The regular course of study requires three years for its completion. The studies of the first year are reading (3), geography (3), grammar (3), history (3), drawing (3), arithmetic (3), spelling (3).

The studies of the second year are geography (1), arithmetic (2), spelling (3), writing (1), rhetoric (1), zoology (1), bookkeeping (1), physics (1), physiology (1), algebra (3), botany (1), pedagogy (1).

The studies of the third year are grammar (1), arithmetic (1), pedagogy (2), algebra (2), geology (1) (optional), school law and ethics (1) (optional), geometry (2), chemistry (1), civil government (1), astronomy (1), English literature (1).

Each school year is divided into three terms, and the figures above indicate the number of terms devoted to that subject in each year.

The following is the syllabus of the lessons in pedagogy:
Practical pedagogy.-Brief study of the mind; the teacher; the pupil; the parent; the school house and grounds; school management; discipline; recitations.

Theoretical pedagogy.-More complete study of the mind and senses; cultivation of the mind and senses; cultivation of memory, judgment, reason, imagination, etc.; the emotions; the will; nature and use of punishment.

Iistory of education.-Biographies of noted educators; discussion of their methods, theories, and attainments; a thorough examination of the educational value of common public schools.

School law and elhics.-The right; the conscience; motives; passions; habit; different ethical systems. An analysis of the school law of Arizona.

The faculty consists of the principal, filling the chairs of language, mathematics, and pedagogy; and one professor, teacher of reading, history, literature, and natural science.

The number of students, session of $1890-91$, was $30 ; 27$ in the junior class, and 3 in the senior. ${ }^{1}$

## VII.

## NORMAL SCHOOLS FOR COLORED TEACHERS.

The preceding chapters have been devoted to the consideration of normal schools for white students controlled by the State and supported wholly or in great part by the State. It was considered unadvisable to take up the history of normal schools for colored people in the same comection, because the two classes are so different that they afford no grounds for comparison. They arose under different circumstances, were carried on by different agencies, and were actuated by different purposes. The former sprung out of a growing conviction of the necessity of better teachers for the common schools; the latter from the want of any teachers. The one had a single purpose in view-the elevation of the common schools by the agency of qualified teachers; the other had for its purpose the elevation of a race by the creation of suitable schools. The progress of the one has been largely professional and inteliectual, with occasional deviations in the direction of higher education, the industries, and resthetics; the progress of the other has been in a small degree purely professional; in still larger measure academic, moral, religious, and industrial, with occasional flights into the region of classical and scientific learning and considerable dalliance with music. There are few institutions of the latter class known by title as "normal schools." There are "normal universities," "normal colleges," "normal and collegiate institutions," "normal seminaries," and many universities and colleges with "normal departments."

The establishment and maintenance of the State normal schools hitherto consid. ered have been due aither to the State solely, or to the State aided by local communities, and occasionally to local communities aded by the State. The origin of colored normal schools (the phrase is used for brevity and not by preference) was due to one or more of the following instrumentalities:

1. The National Govermment.
2. Religions or philanthropic associations.
3. Individual generosity.
4. State govermments.

It is obviously impracticable, within the limits necessarily prescribed to this essay, to notice all the normal institutions or departments included in these classes. A selection of typical instances will be made, but the actual conditions and prospects of practical normal training will not be accurately representer without carefully weighing the report of the Hon. J. L. M. Curry to the trustees of the John F. Slater fund, from which the following extracts are made:

In some of the towns and cities there is possibly an unwise multiplication of denominational or independent schools. Christian denominations are rivals in their establishment, in getting the largest number of pupils, and in making the most attractive exhibition. It seems to be a weakness and an error common to all to seek to catalogue as many names as possible. The aggregate names, not the habitual and average attendance, but all who for any time, one day or several months, have matriculated. This militates against the usefulness and popularity of the free schools. In so far as these institutions not under State control impair the efficiency of, or divert attendance from, the public schools, they are mischievous; for the great mass of chitdren, white and black, must more in the future than at present depend almost exclusively upon the State schools for the common branches of education. These schools, permanent, not subject to caprice or varying seasons, incorporated into the body politic, must be the chief factor in the education of the people. * * * The schools aided by the Slater fund give instruction in the primary grades, and a preponderant percentage of the pupils never get beyond what should be taught in a good public school. The normal work is generally superficial, and is appended to the curriculum more as a future expectancy than as a present realization. [The italics are the editor's.] These schools have unquestionably improved the negro teachers in the South. Teaching always derives benefit from the discipline, the knowledge, the culture of those who teach, and it would be unjust and unkind to withhold proper acknowledgment of the improvement of the teachers and of the cause of it. Nevertheless it is indisputable that the normal training is lacking in system, thoroughness, and the application of educational psychology. Persons are called and commissioned as teachers because they have passed creditably through the literary course of these schools. Such preparation for their work is excellent, essential, because professional skill must rest on scholarship, but it does not come up to modern requirements and possibilities. The normal work, as aided by us, shou!d be more professional and more systematically and concentratively adapted to the preparation of teachers for school work. The higher literary instruction should be supplemented by a course suited to training teachers to teach. Improved teaching is the prime need of our school; and the surest and cheapest method of adrancing general education and of meeting our obligations as a board is to aid in providing qualified teachers.

In all the schools some industries are tanght, rather for the purpose of preparing the pupils for making a living by a trade, and of aiding in the maintenance of the schools by the sale of products, than for the development of the powers of the mind, and gaining a truer and ampler knowledge of the world "and of things as they exist in nature and are used in the industrial arts." These industries, thus pursued, do good to the individual negro, but they are an infinitesimal factor in working out the problem of "uplifting the lately emancipated population of the Southern States." Physical labor has been found advantageous in restraining appetites and preventing vicious indulgences, in dignifying and elevating manaal labor as proper in itself, in economic production, in the manufacture of products, the sale or consumption of which helps in the dificult and ever recurring problem of how the school shall live from year to year; but the rationale of the use of tools and of construction, with examples of the application of science to art, may often be the best function of the manualtraining school. Even where skillful and intelligent superintendents were found by us, the foremen were often merely mechanics, without general education, performing their work without understanding the principles involved. A blacksmith heats and
hammers and welds iron and puts it into shape, but he does nothing more. It is a wrong to the men, to the schools, to the race, to allow such supericiality, such weåry apprenticeship. The first need in a shop, as in a school, is a competent instructor. . . . I venture to recommend strongly larger appropriations for strictly normal work, and that what is given for that end be applied to the salaries of teachers of whose competency the educational committee is satisfied.

The Miner School, Washington, D. C.
The first attempt at the education of colored girls as teachers was made in Washington, D. C., about the beginning of the year 1852.

Miss Myrtilla Miner, a lady of Northern birth and an experienced teacher, had been for some jears previous to this time a governess in a Sonthern family. There she became impressed with the conviction that colored children had need of education, that they were capable of education, and that, under the conditions then prevailing, they could be educated only by teachers of their own race. So she came, alone and unknown, to Washington on the 3 d of December, 1851, to carry her conrictions into practical operation. She began on a small scale. She rented a small house, and gathered some 25 girls into it, and by rigid economy made the enterprise nearly self-sustaining. Contributions from personal friends in the North supplied what was lacking.

So the school went on for four years amid many discouragements, but gradually gaining strength, when, by Miss Miner's influence, a society was formed styled "The Washington Association for the Education of Free Colored Youth." The trustees were Samuel M. Janney, Loudoun County Va.; Johns Hopkins, Baltimore; Samuel Rhoads and Thomas Williams, Philadelphia; G. Bailey, M. D., and L. D. Gale, M. D., Washington; W. W. Bellows, D. D., New York; A.E.Stowe, D. D., Andover, and Henry Ward Beecher, Brooklyn. The association issued a circular in 1856 making a strong appeal for "funds to build an edifice for a normal school for the education of colored female teachers already established in the city of Washington." Their design was "to receive the more intelligent daughters of this [colored] people, educate and return them to their homes, to extend as parents and teachers the blessings of knowledge and religion." "They would open an asylum where they may be brought, emancipated, educated, taught housewifery as well as science, and thus be prepared to becone teachers." An eligible site of 3 acres within the city limits had already been purchased, and the association asked for $\$ 20,000$ to erect a suitable building. The enterprise was retarded for some years by the ill health of Miss Miner. Work and worry had undermined a constitution naturally delicate, and in 1861 she went to California hoping to regain her lost vigor. But an injury caused by being thrown from a carriage robbed her of her little remaining strength, and she returned to Washington in July, 185t, to die. The Miner School is her only monument, and a few words will complete its history to date (1892). ${ }^{1}$

In 1863 Congress passed an act to incorporate the institution for the education of colored youth in the District of Columbia. This was the original Miner School.

In 1877 an agreement was entered into between the trustees of the Miner School fund and the trustees of the public schools by which the former undertook to build a suitable schoolhouse between Fourth and Seventeenth streets west and R and P streets north, upon plans prepared by a joint committee of the two bodies, and the latter to take entire charge of the building. The trustees of the Miner School reserved the right to appoint teachers.

Dual managements are rarely successful. The contract was terminated in 1887. The Miner School has now no connection with the public schools, and as a normal school has ceased to exist. ${ }^{2}$

[^116]Howard University Nomal and Prmparatohy Dgpamment, Washimgron, D. C.
The Thirty-ninth Congress conferred upon the Howarl Univerwity a charter with the most liberal provisions, specifying the following departments: Normal, collegiate, theological, law, medicine, and agriculture. The nomad department was opened in May, 1867, in a building leased by the Freedmen's Bureau for that purpose, on Seventh street, near the northern limits of the city. A farm of 150 acres, situated on the heights on Serenth street north, and overlooking the city and the surrounding country, was afterwards purchased and the university buildings were erected thereon.

The report of Howard University for the year 187.4 states that the normal department is conducted under a joint committee of the university and the institution for the education of colored youth. The aggregate attendance for the year was over 300 , the average for each term being 107, and the number of graduates for the year 7 . In 1886 the number of normal students was 31 , arranged in three classes, junior, middle, and senior. In 1887 there were 43 names in the normal department. In 1888 there were 53 names. The last catalogue, 1891, has 150 students in the "normal and industrial department," but it is impossible to say how many are "normal" and how many are "industrial." The normal students proper can not, however, exceed 34, being the number in the junior, middle, senior, and post-graduate classes. The nornal department has a principal and 5 instructors in the following chairs: English grammar, arithmetic and civics; mathematics and history; English composition, French and German; geography, and United States history. The industrial department has a superintendent, a matron and preceptress and 7 instructore, 1 in sewing, 2 in mechanical drawing, 1 in printing, 1 in bookbinding, 1 in carpentering, and 1 in tin work.

There is nothing in the normal course in the junior and middle jears to distingiish it from an ordinary high-school course. In the senior year students may take, in the second term, "theory and art of teaching or chemistry;" and in the third term, "methods of teaching or natural philosophy." History of education is the only prescribed pedagogical study in this normal school. Even the post-graduate course has no pedagogical element. ${ }^{1}$

## Marylatid.

The Baltimore Colored Normal School is a survival of the "Baltimore association for the moral and educational improvement of the colored people." On the 2Sth of November, 1864, 26 philanthropic citizens of Baltimore met in a private house, pursuant to an invitation by printed circular, "to consider the best means by organized effort, in view of the present condition of the colored people of the State, to promote their moral, religious, and educational improvement." At his meeting a permanent organization was formed under the title given above, a constitution adopted, officers appointed, and a "special finance committee of ten to proceed at once to mise moner." A special executive committee was also appointed and instructel "to start a school for the colored people, to rent rooms for the purpose, to procure teachers and furnish the school; also to rent and furnish rooms for the pemanent occupancy of the board of managers, for which purposes they are authorised to draw upon the treasurer at their discretion." ${ }^{2}$

Immediately after the Christmas holidays, January 3, 1865, a school for colored children was opened under the auspices of the association in the rooms of one of the colored churches, and a few days later ground was broken in the counties by the opening of a colored school in Easton, Talbot County. At the end of the year there were 7 colored schools in the city-16 rooms crowded to their utmost capacity-and 18 schools in the counties. The total expenditure for the year was $\$ 17,556.95$. This

[^117]amount was raised from several sources--collections by the finance committee, donations from Society of Friends in England, Pennsylvania Freedmen's Relief Association, appropriations from the city treasury, etc. A circular had been sent to 250 ministers in charge of congregations, Christian and Hebrew, asking for aid and sympathy, and specially requesting "whatever you may think or do, please acknowledge the receipt of this note." Twenty-three of the 250 did acknowledge it, but the only material aid from this source came from 2 rabbis-Rabbi Hockheimer and Rabbi Shold-each of whom sent a "contribution" with his reply to the circular.

Outside of collections by the finance committee and the annual appropriation of $\$ 10,000$ from the city treasury, the main reliance of the association was on the New England Freedmen's Aid Association. "They have never failed us, nor have we ever called on them for assistance without receiving a cheerful and liberal response. Without their constant sympathy, encouragement, and generous aid our work would have amounted to but a small result, and very likely not have been continued."

One great difficulty with which the executive committee had to contend was the lack of competent teachers. White teachers met with no encouragement. Colored teachers were but poorly qualified. Both white and colored had to run the gauntlet.
Owing to the still existing prejudices of our people, many of these teachers who have left comfortable homes to devote themselves to this great missionary labor have, instead of sympathy and encouragement, met with much harsh treatment. We instance the stoning of the children and teacher at Easton; the rough handling and blacking of the teacher at Cambridge; the indignation meeting held at Church Creek, Dorchester County, when resolutions were passed to drive out the teacher at that place; and last, but not least, the burning of church and schoolhouse at Millington, Kent County. These, with such outrages as the burning of colored churches in Cecil, Queen Amne, and Somerset counties, to prevent schools being opened in them, and the impossibility to obtain board for a white lady teacher in Annapolis add no little to the troubles of your committee. ${ }^{1}$
A normal school for colored teachers was felt to be a necessity, and with the promptitude which characterized all the operations of the association and its officers a normal school was opened in the second year of the association schools. Its first shelter was in a rented building, but in December, 1867, it was removed to the permanent home which it still occupies-a Friends' meetinghouse, altered and specially adapted to its new uses. The secretary of the executive committee, Joseph M. Cushing, in the third and last annual report, says to the members of the association:

In presenting this third annual report of our association we welcome you to this normal-school building, just now ready for your occupancy. It seems eminently fitting that this old meetinghouse, which for so many years has witnersed the peaceful assembling of the Friends for spiritual communion, should hereafter be devoted to the dissemination of light and knowledge among those who have all their lives sat amid darkness and ignorance; that from this place the peaceful influences of education should issue to supplement and improve the results of war. This school is the legitimate result of our exertions for the past three years and is necessitated by our success in the work we have aimed to accomplish. We have now in operation in the counties of Maryland 73 schools, numbering nearly 5,000 , and at the same time there are 50 new schoolhouses ready for occupancy and 39 others in course of erection, which will be finished during this year. ***
To supply this immediate need of teachers in Maryland and also to answer the calls that will speedily come from the States farther South this normal school is open. Hence will go forth men and women thoroughly trained for the work of teaching, to carry to their own race the mental freedom from superstition and ignorance needed to perfect the freedom from bodily thraldom which emancipation has accomplished. This building will stand, a protest eloquent in its silence against all assertions that the African race will not learn and can not be taught.
The operations of the association in the city, the Colored Normal School excepted, were terminated in the fall of 1867 by the schools being incorporated into the publicschool system of the city. There were remaining 73 schools in the counties which

[^118]were ruming at an expense of about $\$ 50,000$ a year. These also were taken off the hands of the association in 1888, and became part of the State system of public education. Nothing is now (1892) left in visible and tangible form of the work of the old association but the normal school and the schoolhouses scattered over the State, many of them still used for their original purposes. But the stirring memories of those early days, the enthusiasm which carried the actors beyond the limits of what soberminded people deemed possible, the brotherly feeling that brought help from North and East and from beyond the Atlantic, the dangers and the glories of "Timbuctoo"" will never pass away.

> "For freedom's battle onee begun, Bequeathed from bleeding sire to son, Though baffed oft, is ever won."

The normal school is fortunate in having no sensational history. It lost two principals by resignation and one by death, but still continues on the even tenor of its way. The income is derived partly from a State appropriation and partly from tuition fees. The instruction given is principally academic; it has been found practically impossible to retain pupils long enough for them to benefit by purely professional studies. There are three grades, normal, grammar, and primary. Graduates from the normal department have no difficulty in obtaining places, and in general they make very acceptable teachers. The number of pupils in all grades has for many years averaged about 200 . $^{2}$

## Virginta.

The Hampton Normal and Agricultural Institute stands on the east shore of Hampton Creek, not far from Fort Monroe. The earliest English civilization on this continent was established at Lampton, and the first slaves brought to America were landed only a few miles off. The American Missionary Association purchased the site on which the institute now stands-an estate of 120 acres, then known as "Little Scotland"-fitted up the necessary buildings, and opened the school in April, 1868, with 20 scholars, on a manual-labor basis. Through liberal grants from the Freedmen's Bureau and donations from Northern friends a large schoolhouse was erected, in which 300 students could recite. The farm was supplied with buildings, stock, and tools. An industrial department for the manufacture of clothing was built up, and a printing office was established, in which the various branches of the printing trade were taught. In June, 1870, the institute received a charter from the general assembly of Virginia creating a corporation with power to choose their own successors and to hold property without taxation. In 1872 the general assembly passed an act giving to the institute one-third of the agricultural college land grant of Virginia. Its share was 100,000 acres, which was sold for $\$ 95,000$. Nine-tenths of this money was invested in bonds bearing 6 per cent interest. The other tenth was expended in the purchase of aditional land, increasing the size of the farm to 185 acres. The number of pupils at the close of the fifth annual session was 213 , representing diferent sections of Virginia and North and South Carolina.
The normal course of study at this time included an academic course in the English language, elementary mathematics, natural science and history. Among the eight additional "miscellaneous" studies is one called "drill in teaching."

[^119]The receipts of the institute from its organization to June 30, 1873, were as follows:

1. From American Missionary Association ..... $\$ 34,600.00$
2. From societies and individuals, through A. M. A. ..... 21,378. 16
3. From Bureau of Refugees, Freedmen, and Abandoned Lands ..... 58,327. 89
4. From interest oi endowment fund ..... 2, 244.34
5. From interest of State Agriculture College land fund ..... 7, 480. 50
6. From trustees of Peabody fund ..... 3, 400.00
7. From Hampton students (vocalists) ..... 10, 971.30
8. From other sources ..... 89, 623.86
9. From donations for endowment fund ..... 43, 941.22

The following extracts from the first report of the principal, Gen. S. C. Armstrong, made to the trustees in 1870, 'will show the ideas which, being logically followed for over twenty years, have made this institute the greatest school of the kind in this country, or in any country, and the model of many other great schools of similar purpose:
What should be the character of an educational institution devoted to the poorer classes of the South? * * * Plainly a system is required which shall be at once constructive of mental and moral worth and destructive of the vices characteristic of the slave. What are these vices? They are improvidence, low ideas of honor and morality, and a general lack of directive energy, judgment, and foresight. * * * His deficiencies of character are, I believe, worse sor him and the world than his ignorance. But with these deficiencies are a docility and enthusiasm for improvement and a perseverance in the pursuit of it which form a basis of great hope and justify any outlay and the ablest service in his behalf. At Hampton we are trying to solve the problem of an education best suited to the needs of the poorer classes of the South by sending out to them teachers of moral strength as well as mental culture. To this end the most promising youths are selected. The poverty of these pupils has required the introduction of manual labor.

The plan of combining mental and physical labor is a priori full of objections. It involves friction, constant embarrassment, and apparent disadvantage to educational advancement, as well as to the profits of various industries. But to the question, "Do your students have sufficient time to study all their lessons faithfully?" I should answer, "Not enough, judging from the common use of time, but under pressure they make good use of the hours they have; there is additional energy put forth, an increased rate of study which makes up for the time spent in manual labor, while the physical vigor gained affords abundant strength for severe mental labor." Nothing is of more benefit than this compulsory waking up of the faculties. * * * However the future may decide the question, our two years' experience of the manuallabor system has been satisfactory. Progress in study has been rapid and thoroughI venture to say not excelled in any school of the same grade; there have been a steadiness and solidity of character and a spirit of selif-denial developed, an appreciation of the value of opportunities manifested, which would not be possible under other conditions. * * * There are two objective points before us, toward one or the other of which all our energies must soon be directed as the final work of this institute. One is the training of the intellect, storing it with the largest amount of knowledge, producing the brightest examples of culture; the other is the more difficult one of attempting to educate in the original and broadest sense of the word-to draw out a complete manhood. The former is a laborious but simple work; the latter is full of difficulty. It is not easy to surround the student with a perfectly balanced system of influences. The value of every good appliance is limited and ceases when not perfectly adjusted to the higher end. The needle, the broom and washtub, the awl, the plane, and the plow become the allies of the globe, the blackboard, and the text-book. * * * But what should be studied in a course like this? The end of mental training is a discipline and power not derived so much from knowledge as from the method and spirit of the student. I think too much stress is laid on the importance of choosing one of the great lines of study-the classic or the natural sci-ence-s-and too little upon the vital matter of insight into the life and spirit of that which is studied. Latin, as taught by one man, is an inspiration; by another, it is drudgery. * * * Our three years' course, with but little preliminary training, can
not be expected to furnish much. Our students can not become adranced enough in that time to be more than superficialy acquainted with Latin and Greek; their knowledge would rather tend to cultivate their conceit than to fit them for faithiful educators of their race. The great need of the negro is logic and the subjection of feeling to reason; yet in arranging his studies we must exercise his curiosity, his love of the maryelous, and his imagination as means of sustaining his enthusiasm.
An English course, embracing reading and elochition, geography, mathematics, history, the sciences, the study of the mother tongue and its literature, the leading principles of mental and moral science and political economy, would, I think, make up a curriculum that would exhaust the best powers of ninetcen-twentieths of those who would, for years to come, enter the institute. * * * Of all our work that upon the heart is the most important; there can be no question as to the paramome necessity of teaching the vital precepts of the Christian faith and of striving to awaken a genuine enthusiasm for the higher life that shall be sustained and shall bo the strong support of the young workers who may go out to be examples of their race. * * * I think we may reasonably hope to build up here, on historic grounds, an institution that will aid freedmen to escape from the dificulties that surround them by affording the best possible agency for their improvement in mind and heart, by sending out not pedagogues, but those whose culture shall be upon the whole circle of living, and who, with clear insight and strong purpose, will do a quiet work that shall make the land purer and better.

The trades taught are carpentry and woodworking, harness making, shoemaking, the trades of the wheelwright, blacksmith, and tinsmith, house painting, printing, tailoring, steam engineering and gas fitting, and the rudiments of the machinist's trade.

The normal department employs 19 teachers in the following subjects: Mathematics, English literature, reading and elocution, history, grammar and composition, writing, geography, civil government, political economy, natural philosophy, natural history, physiology, and methods of teaching. The senior class receives daily lessons in the art of teaching and members of the class visit the training school daily for observation and practice.

The estimated cost of tuition is 870 a year for each pupil. This does not include board, clothing, or books.

The total enrollment for the year ending July, 1890, was 692-443 men and 259 women. Of these, 85 men and 46 women were Indians.

## NORMAL AND COLLEGIATE INSTITUTE, PETERSBURG.

The Virginia Normal and Collegiate Institute was established by an act of the general assembly of 1881 and 1882 for the higher education of the colored youth of the State and with special reference to the training of teachers. The act of incorporation appropriated $\$ 100,000$ of the proceeds of the sale of the Atlantic, Mississippi and Ohio Railroad for the erection of suitable buildings and $\$ 20,000$ annually for the support of the institute. The corner stone of the main building was laid July 4 , 1883, and in October of the same year the institute was opened in the three depart-ments-academic, normal, and preparatory. The extreme length of the building is 367 feet, and the width through the center building is 126 feet. It is four stories in height, including a mansard roof, which contains a loity observatory. It is calculated to accommodate 750 pupils.

The act of 1881 was supplemented by another, which was approved May 20, 1887, which provided "that the school shall be known as the Virginia Normal and Collegiate Institute, and shall embrace a normal department and a collegiate department, and also such professional departments as may be deemed expedient and proper. In the normal department shall be taught such branches as are usually taught in well-organized normal schools, and in the collegiate department shall be taught such branches as are usually embraced in a college curriculum." The act makes the institute subject to the government and control of a board of visitors consisting of seven members, of whom the superintendent of public instruction is a member and ex offio chairman. The other six members are well-qualified colored men, appointed by the State board of education, subject to confirmation by the senate.

The president of the institute and all professors and teachers are required to be colored persons. The board of visitors are given ample powers for the management and control of the institute, and are required to act under the direction and supervision of the State board of education, by whom they may be removed for failure to perform their duties. The board of visitors has the power to appoint a number of State students (colored) equal to twice the number of members of the house of delegates, and apportioned in the same manner. Such students must be between 15 and 25 years of age, and are selected by the superintendents of schools of the respective counties and cities. They are required to enter into a written contract to engage in teaching school or other educational work.
Another act of the same assembly provides that the president, professors, and teachers of the Virginia Normal and Collegiate Institute shall be required during 'every year to conduct a summer normal school, without additional salary, for the benefit of the colored teachers of the public schools and those who expect to become teachers; said school to commence not later than the 1st of July and to continue for a term of five weeks. Students attending this summer normal school are allowed to occupy the institute buildings and to board in like manner as the regular students of the institute, the charge for board and lodging not exceeding $\$ 2$ a week.
The number of students in the college department (catalogue of 1889) was 11-all men; in the college preparatory, 20-17 men and 3 women; in the normal, 295-138 men and 157 women. The number of "State students" was 145 . The model school consists of pupils-about 40 in number-between 6 and 15 years of age, who are taught mainly by the graduating class of the normal department. The normal course is completed in three years, and embraces arithmetic, geography, English grammar, United States history, reading, drawing, writing, and physiology in the junior year. The additional studies for the middle year are physics, algebra, general history, English classics, civil government, botany, and bookkeeping. In addition to the studies already mentioned, students of the senior year learn chemistry, rhetoric, psychology, Latin grammar and reader, school management, methods of teaching, moral science, astronomy, and political economy.

## West Virginia.

storer college, marpers ferry.
The story of the founding of Storer College, as told by Miss Kate J. Anthony, of Providence, R. I., is full of instruction and as interesting as a romance. Only a brief sketch can be given here.

In February, 1867, President T. B. Cheney visited Mr. John Storer, of Sanford, Me., in behalf of Bates College. During the conversation he said to Dr. Cheney: "I have determined to give $\$ 10,000$ to some society which will raise an equal amount toward the founding of a school in the South for the benefit of the colored people." Dr. Cheney pointed out the advantages of Harpers Ferry as a location for such an institution and pleaded for time to raise the necessary supplement of $\$ 10,000 \mathrm{among}$ the friends of the colored people in the Free Baptist Church, of which he was a minister. Mr. Storer extended the time to the 1st of January, 1868. It was Mr. Storer's wish that the institution should eventually become a college, and be so chartered; with a proviso that it be operated as a normal school or seminary till the endowment fund should be adequate for college purposes, and that it be open to both sexes without distinction of race or color. The greater part of the necessary amount was raised during the year, and Harpers Ferry was settied on as the location most advantageous for the school. Dr. Cheney received hearty sympathy and encouragement and a promise of $\$ 6,000$ from the Freedmen's Bureau. The Government had four large brick mansions on Camp Hill, and in one of these-the Lockwood House-the school was opened on the 2d of October, 1867. Finally, through the earnest support of Mr. Fessenden in the Senate and of General Garfield in the

House, the four buildings, with 7 acres of land, became the property of the institution. But for Govermment aid and the fostering care of the Freedmen's Burcau, the coilege could not have been maintained. Before the time had expired for the collection of the additional $\$ 10,000$, Mr. Storer died, and Senator Fessenden, with whom Mr. Storer's bequest had been deposited, decided that he could not legally transfer it until the conditions were legally fulfilled. Double the necessary amount had been pledged, but pledges could not be received as equivalent to cash. On the last day of grace the executive committee was nearly $\$ 3,000$ short, and this amount had to be raised before midnight. "There are emergencies," says Miss Anthony, "when men wrest success from seeming impossibility. We can not now enter into details, but the requirements were met and Storer College saved, though that day is often referred to as the black Wednesday."
The next important step was to obtain a college charter. After much opposition this legislation was secured from the legislature by a majority of 1 .
The school grew rapidly. It began in October with 19 pupils; in Jantary it numbered 3b, and in March 75. Lockwood House proved inadequate for the increasing numbers, and one of the other buildings was fitted for chapel and school purposes, and opened in 1869. In 1882 a new school building was erected with money raised from church auxiliaries and young people's societies in the North.
It is unpleasant to remember, and yet it would be unwise to forget, the opposition which such schools met in the early postbellum days. Let Miss Anthony tell the story, "with considerable abridgment by the present editor:"

We have mentioned opposition. Perhaps it is not well to dwell much upon this in these better days, but some reference is requisite to a true comprehension of what has been achieved. Shortly before the normal school was established a teacher in the vicinity wrote home: "It is unusual for me to go to the post-office without being hooted at, and twice I have been stoned on the streets at noonday."
It was considered necessary that our lady teachers have a military escort as they went from place to place. But when Storer College was set in their midst prejudice and opposition intensified to fever heat. * * * We can only hint at facts; the thrilling incidents and experiences of those early days would fill a yolume. Naught but an unfaltering trust, an undaunted courage, and noble self-sacrifice could voluntarily endure and cope with these adverse elements, and such was the spirit that permeated and upheld our brave workers.

The change in public sentiment is indeed marked and wonderful. To-day the inhabitants of Harpers Ferry hold a true interest and even a pride in the college. Some of its old opponents are now numbered among its most devoted iriends. And no person in the community is held in higher honor or warmer esteem than Mr. Brackett [principal], once of all men most hated and despised. ${ }^{1}$
The college is (1892) organized in three departments-academic, normal, and preparatory. By the last catalogue on hand there were 47 pupils in the academic, 180 in the normal, and 88 in the preparatory. The whole number of different pupils was 273. The normal course covers three years; it is mainly a grammar-school course, but instruction in the theory and art of teaching is given in the third year. The State of West Virginia provides annually for eighteen scholarships, including tuition and the use of books. The school gives eighteen scholarships.

The industrial department was commenced in 1887, originating in a donation of $\$ 2,000$ from Mrs. Mary L. De Wolf, of Illinois, made in memory of her deceased husband, whose name it bears. There is also a sewing department for girls. ${ }^{2}$

## Nohth Caroliva.

> ST. AUGUSTINE'S NOORMAL SCHOOL, RALEIGH.

The St. Augustine's Normal School and Collegiate Institute was incorporated in 1867 and opened at Raleigh in 1868. Its purpose was declared to be "the education

[^120]of teachers for the colored people of the State of North Carolina and elsewhere in the United States." The first trustees, 11 in number, were the bishop, 5 clergymen and 5 laymen of the diocese of North Carolina. "The board, thus constituted, filling its own racancies and perpetuating itself, the religious character of the school and its relation to the church as one of its institutions were amply secured." In 1869 the board received a bequest by the will of the Rev. Charles Avery, amounting to $\$ 25,000$, upon condition that it should be securely invested and the interest used for promoting the education and elevation of the colored people of the United States. The Freedmen's Bureau gave to the school $\$ 6,248$ to be expended in buildings. In 1870, and subsequently, the school received from the Barry fund gifts amounting to $\$ 26,716$. The last available catalogue of the school states that its object is threefold: "To afiord young men and women of the colored race superior advantages for obtaining a thorough academic education, to train and equip teachers for efficient service, and to prepare young men for the holy ministry."

There are four buildings belonging to the institution-the main school building, the boarding hall for the female students (called the Smith building after the founder of the school), and residences for the principal and the vice-principal. The main school building is of brick, four stories high, 85 feet front by 44 feet deep.

Candidates for admission to the lowest grade are required to be able to read and write and to perform the four fundamental operations of arithmetic in whole numbers. The normal course extends through four years. In the first year, in addition to the common-school studies, physical geography, natural philosophy, and bookkeeping are taught; in the second year, algebra, geometry, rhetoric, physiology, history of England, civil government, and the art and science of teaching; in the third year, geometry, astronomy, chemistry, psychology, general history, and the art and science of teaching; in the fourth year, trigonometry, geology, English literature, political economy, moral science, and the history of pedagogy. Vocal music and English composition are continued through the whole course. Instruction in dressmaking is given to all the girls in the boarding department, and there is a carpenter shop for boys. The number of students in the several departments, by the catalogue referred to, was as follows:
Theological department (candidates, 3 ; postulants, 9) ............................... 12
Collegiate department (males, 12; females, 5) ........................................... 17
Normal department (males, 33; females, 23)............................................. 56
Primary department (males, 23; females, 22) ............................................... 45
130
Mentioned twice ........................................................................................... 11
Total................................................................................................ 119
state nommal school at fayetteville.
The general assembly of North Carolina passed an act, which was ratified on the 9th of March, 1877, for the establishment of normai schools. The first section prorides for a normal school for white teachers in connection with the State university, and appropriates $\$ 2,000$ a year for its support. The second section enacts "that it shall be lawful for the State board of education to establish a normal school, at any place they may deem most suitable, either in connection with some one of the colored schools of high grade in the State, or otherwise, for the teaching and training of young men of the colored race, from the age of 15 to 25 years, for teachers in the common schools in the State ior the colored race; and to aid in the expense of carrying on such normal school the State board of education is authorized and instructed

[^121]to draw upon the treasury for an amount not to exceed $\$ 2,000$ annually for the years 1877 and 1878." An amendment was passed in 1879 authorizing the admission of females and the establishment of a preparatory department in connection with the normal school. The appropriations for the years 1877 and 1878 were by the same act directed to be paid annually until the general assembly should otherwise provide.

In accordance with this legislation the State board of education established at Fayetteville a normal school for the training of teachers for the colored schools of the State. The school was held in a large and commodious building provided by the colored people of the city. The attendance for the first term was 58 ; for the second term, 67 ; for the third term, 85 . In 1890 the attendance had increased to 145 , of whom 75 were in the normal department proper. The course of study includes the usual grammar-school branches in English and mathematics, with Latin and first lessons in Greek and Wickersham's "Methods of Teaching." All students are required to give a written pledge to engage in teaching in the public schools of the State for at least three years, but it has been found that this pledge was hard to keep; many of the students engaged in teaching luring the racation and many others were anxious to do so, but could get no employment.

STATE NORMAL SCHOOL, SALISBURY.
This is one of the four schools established by the legislature of North Carolina in 1881 for educating and training colored teachers in the arts and methods of imparting instruction in the several branches of study taught in the public free schools of the State. The course of instruction embraces four years of three terms eachpreparatory, junior, middle, and senior. Methods of teaching and kindred subjects have no definite place in the printed curriculum, but "map drawing, object lessons, composition, and lectures on pedagogics" are given during the entire year. The subjects of the senior year are Latin, Greek, algebra, geometry, astronomy, chemistry, zoology, botany, history, rhetoric, and civil government. Boarding, lodging, fuel, and lights are given to young women at the institution boarding house at $\$ 3$ per month. The number of students in the normal department is $21 .{ }^{1}$

STATE NORMAL SCHOOI, PLYMOUTH.
The State Normal School for colored teachers at Plymouth, N. C., was established in 1881 by an act of the general assembly appropriating a small sum for that purpose. Applicants are required to be at least 15 years of age and to possess a knowledge of addition, subtraction, multiplication, and division, and also to be able "to read pretty well in Holmes's Fourth Reader." Tuition is free to all students who are residents of the State. There is a three-years' course of study in addition to a preparatory year. The junior and middle years are confined principally to commonschool studies, with algebra, moral science, botany, and civil govermment. The senior year adds English and American literature, general history, rhetoric, logic, geometry, bookkeeping, natural philosophy, political economy, Latin, and pedagogics.

The new building is a large and beautiful structure and will accommodate 250 students.

Boarding in private families costs from $\$ 5$ to $\$ 8$ a month.
The number of students enrolled in 1890, exclusive of the preparatory class, was 87, of whom 5 were seniors. The faculty consisted of the principal and two professors. ${ }^{2}$

STATE NORMAI. SCHOOL, GOLDSBORO.
In accordance with an act of the general assembly of North Carolina the State board of education established a State normal school at Goldsboro in the fall of 1888 for
the education of teachers for the colored race. It is hoped that this school will help to furnish teachers properly equipped for their work. In many of the eastern counties the proportion of the school fund assigned to the colored people had been allowed to lapse for the lack of competent colored teachers. Rooms were provided and comfortably furnished in the graded-school building belonging to the city, and in the fourth year the number of students in all the departments was 139 . Only 15 of them, however, could be fairly reckoned as normalites. An industrial department has recently been added; the boys are taught carpentry and painting, and the girls needlework, laundering, and cooking. ${ }^{1}$

## South Carolina.

## AVERY NORMAL INSTITUTE, CHARLESTON.

The Avery Institute was opened on the 1st of October, 1865, in the State Normal School building in Charleston, which was offered for the purposes of the school by Gen. Rufus Saxton, assistant commissioner of the Freedmen's Bureau. The school commenced with a corps of 20 teachers and 1,000 pupils, who occupied all the available space in the building. The school was removed from the normal building in September, 1866, and transferred to the military hall in Wentworth street, which could only accommodate 800 pupils. In 1888 it was removed to a new building on Bull street and its name changed from the Saxton School to the Avery Institute, in honor of the philanthropist who had given a large part of his fortune for the benefit of the colored race. The Rev. F. L. Cardozo, the first principal of the school, was aided the first year by a corps of 20 teachers, 10 Northern whites and 10 Southern colored teachers. The third school year, there being but 400 scholars and the school assuming the position and condition of a normal school, there were but eight teachers besides the principal, and all from the North.

The building to which the school was transferred in 1868 was erected at a cost of $\$ 25,000$ by the American Missionary Association, by which the property is owned and the school supported.

The total enrollment of pupils for the year ending June, 1891, was 395, 156 being in the normal department. The normal course of study is academic for the first and third years. The second and fourth years include school economy and methods and science of education. The college preparatory course adds Latin and Greek to the full normal course.

The design of the school is stated to be "mainly professional; that is, to prepare in the best possible manner the pupils for the work of orgainizing and teaching public schools." It consists of five subnormal grades and four normal department classes. Parallel with the normal course is the college preparatory course, which covers four years. There is no boarding department, and the patronage, therefore, is mostly local. ${ }^{2}$

SCHOFIELD NORMAL AND INDUSTRIAL INSTITUTE.
This school was established in 1868 by Martha Schofield, under the Germantown branch of the Freedmen's Union Commission. The object of the school is not only to impart book learning to the boys and girls, but to teach them the everyday duties of life, so as to fit them for filling honorable and useful positions in the home, in the church, in the schoolroom, and in the community. The course of study may be completed in four years. In the first three years the ordinary grammar school studies are pursued; in the fourth or senior year geometry, natural and moral philosophy, civil government, rhetoric, methods of teaching, and school economy. The principal industries are printing, carpentry, cobbling, sewing, and painting. The

[^122]expenses of the school are about $\$ 5,000$ a year, of which $\$ 500$ come from the John F. Slater fund and two-thirds of the remainder from voluntary contributions.

In 1890 there were 360 papils, of whom 40 were in the normal department. The teaching corps consisted of the principal and seven assistants-four in the literary and three in the industrial department.

The Rev. A. D. Nayo visited this school in 1886, and writes: "I regard it in some respects the best of its kind I have seen in the South. Unlike the majority of this class of institutions, the Schofeld School has not come up by the backing of a religious denomination, but has been established by the devoted and energetic services of its founder, Miss Martha Schofield, and her associate, William T. Rodenbach, continued through seventeen years." ${ }^{1}$

## Georgia.

## ATLANTA UNIVERSITY.

The beginning of the Atlanta University was made by the American Missionary Association, aided by the Freedmen's Bureau. The original design was to establish one central institution for higher education, beginning with normal and preparatory departments, which were to grow into a college and finally into a university. A charter was obtained in 1857, and the first building was completed in 1869-a substantial four-story brick building with boarding accommodations for 40 women. The number of students the first year was 89 . The legislature of 1870 voted an annual appropriation of $\$ 8,000$, a part of which was used in erecting a new building similar to the first. In 1871 a wing was added which accommodated 40 additional pupils. The legislature of 1872 refused to grant any aid, and the school became dependent upon the American Missionary Association and private benevolence. The legislature of 1873 passed almost unanimously an act making an annual appropriation of $\$ 8,000$ to this institution. The appropriation was made on condition that the money should not be paid till a commission consisting of certain members of the faculty of the University of Georgia had approved the plan of the trustees for its expenditure, and the further condition that there should be educated, free of tuition, one pupil for every member of the house of representatives, to be nominated by the members. In 1871 one young man graduated from the preparatory department and entered Oberlin College, where he was graduated in 1875. In 1872 another left the freshmen class and entered West Point. In 1873, 1874, and 1875 a class of four was graduated each year from the higher normal department. In 1876 the whole number of students was 240 , of whom 68 were in the higher normal department. In 1879 the university received an official risit from a committee of the State board of examiners. The following extracts from their report may be interesting:

Your committee were impressed with the fact that the colored race, whether of pure or mixed blood, are capable of receiving the education usually given at such institutions. Whether they will be able to build, and build usefully, upon the foundation thus laid remains to be seen. * * * Referring to the rery able report of your committee of last year, your present committee desire to express their gratification that it has apparently been heeded by those in inmediate control of the university. The objectionable sectional books have disappeared from the library, and your committee are assured not only that "those Northern teachers do not try to alienate their papils from old masters and homes and from their native State," but that every effort is used to counteract any tendency toward such alienation. \% \% \% Your committee recommend that the State commissioners of the university be instructed to examine the text-books used with power to reject such as may prove objectionable; and it is believed that the facuily will heartily approve such a plan, as your committee feel satisfied that such books (if there be such now in use) bave been adopted with a perfect unconsciousness of any objectionable feature. Your committee so think because free and candid conversations with the president and various members of the faculty have convincel them that the faculty are animated by a sincere desire

[^123]to elevate the colored race upon its own merits, are free from any leveling tendencies, and recognize the fact that their pupils' true interests are to live in harmony and accord with their late owners, now, as in the past, their best friends.
The report of the State board of examiners for the following year states "that they were much gratified to learn that the future of the institution is very flattering. It is your committee's opinion that the State has acted wisely in her appropriation to the Atlanta University, and that a continuance of it is to her best interests."
The State appropriation of $\$ 8,000$ a year was continued until January, 1888. The following extract from the report of the board of visitors in 1887 will show the probable reason why the appropriation was discontinued:

We find in attendance at the Atlanta University a number of white students of various ages and both sexes, most of them having more or less connection with the memhers of the faculty or other officers, and one at least entirely unconnected with the officials. We mention these relations of the white students, not with the intention of suggesting that there is any real difference between allowing the attendance of children of the faculty and children of those other than the faculty, but in order that all the facts may be known. We have ascertained by conference with members of the iaculty that it is their avowed intention to receive al, white children who apply for admission into the school; and we interpret this, in connection with certain publications of theirs, as a desire to break down the existing barriers against the coeducation of the two races. We desire to say that we regard this practice as not only intrincically wrong, but as being in this case an improper use of the money appropriated by the State to this institution. In every enactment which the legislature has made upon this subject since and including the year of 1874, as well as in the constitutional delegation of authority to make it, the apprupriation has been made for the benent of the colored race alone. Indeed, the act of 1874 in terms devotes the sum of $\$ 8,000$ per annum solely to that people, and that act is in the nature of a contract by which they receive that sum in lieu of other moneys. It occurs to us that the admission of white children to a participation in the benefits of this appropriation, aside from any violation of the general policy of the State, is in this case a misuse of public moneys.
The catalogue from which this extract is taken (1887-88) contains the following note:
Three facts may be properly cited as illuminating this passage in the report of the board of visitors:
First. Only one-fourth of the money for the current expenses of the school came from the State, the remainder being largely furnished by the gifts of benevolent friends of education.
Second. Only 7 children, to whom the objections of the committee would apply, were in attendance cut of more than 400 , of whom 1 was the child of a missionary of the American Missionary Association residing in the city, and 6 were children of teachers in the school, some of whom were reciting to their own parents.
Third. The class of children to which objection was made was in attendance when the law under which the committee acted was passed thirteen years before; and, to a very limited extent, has been in attendance ever since, with the full knowledge of all parties and with no objection or criticism.
The whole number of pupils in attendance in 1891 was 596, representing sixty-two cointies in Georgia. There were in the-
College course........................................................................................... 20
Preparatory course .................................................................................. 51

Normal course ......................................................................................... . . . . 82


The normal school includes, besides the usual high-school branches in English and science, "School economy and primary methods" in the junior class and pedagogics with practice teaching in the senior class.
The mechanical course covers three years, two of wood working and one of metal working; it is required of all boys above the third grade, in addition to their regular studies in other courses. Seven and a hall hours each week are given to this work.

Boys are also taught some of the principles of farming and gardening, and attention is given to the raising and care of stock. The girls are taught various branches of household science, such as plain sewing, dressmaking, cooking, and laundry work, under experienced teachers. There is a large and well-appointed printing office in the principal University building, in which instruction is given to optional classes, both of boys and girls, without extra charge. ${ }^{1}$

## Florids.

## STATE NORMAL COLLEGE FOR COLORED STUDENTS, TALLATASSEE.

The constitution of the State of Florida, adopted in 1885, requires, Article NII, section 14, that the legislature at its first session shall provide for the establishment, maintenance, and management of such normal schools, not to eraceed two, as the interests of the public education may demand, In accordance with this constitutional requirement, the legislature of 1887 passed an act establishing a normal school for white teachers at De Funiak Springs and a normal school for colored teachers at Tallahassee, similar in all respects to the normal school for white teachers and subject to the same supervision and direction by the State board of education. The same annual amount ( $\$ 4,000$ ) was appropriated to meet the current expenses of each school.

The school was opened in 1887 in a building erected for the purpose, a comfortable and weli-arranged structure, furnished with the most improved furniture and apparatus. It is organized in two departments-preparatory and normal. The normal course covers a period of two years. Graduates receive the degree of licentiate of instruction and a teacher's certificate of the first grade, good for life. The normal course for the junior year includes algebra, geometry, Latin, general history, physics, and English composition; and in the senior year, astronomy, moral and mental philosophy, science of govermment, theory and prackice of teaching, and a continuation of Latin and history. Candidates for admission are required to be 16 years of age or more, to be thoroughly grounded in all the common-school branches of study, to have a rudimentary knowledge of Latin, algebra, and general history, and to possess the requisite moral and physical qualifications.

A joint committee of the legislature visited the school officially in May, 1889, and made a rery favorable report, from which the following extracts are taken:

Though less than two years have passed since this institution was established, yet eyen now the wisdom of such an undertaking is demonstrated by the results. Wuch of the work at present is of necessity academic in its nature, for the reason that many of the students have not had the opportunity to acquire that thorough and intelligent knowledge of the branches to be taught which is absolutely essential to the succestul teacher. * * * The preparatory department is devoted principally to a review of the common English branches, conducted in the improved methods of normal instruction. It thus serres the double purpose of a training school and an academic course. The normal department is occupied with the higher branches of education and pedagogics. * * * The needs of the school we find to be: First, dormitories, where students from outside the town can be accommodated, protected, and controlled; and, second, an industrial department, where a knowledge of tool craft can be given to the teachers, who in turn can give to the youth of the common schools such manual training as will enable them to become intelligent and skillful producers of wealth.
The number of students enrolled the first year was 52 , and the second year $55 .{ }^{2}$

## Kentucky.

STATE FORMAL SCHOOL, FRANKFORT.
This school was opened in 1887. Its object, as stated in the act of assembly by which it was established, is the "preparation of teachers for teaching in the colorerd public schools of Kentucky." Candidates for admission are required to be at least

[^124]16 years of age, to be of good health, to give satisfactory evidence of good moral character, and to sign a pledge to teach in the colored common schools of Kentucky a period equal to twice the time spent as a pupil in the normal school. In addition to these requirements, every applicant for admission must hold a teachers' certificate or a certificate of graduation from a common school or pass an examination by the faculty on the subjects of instruction prescribed for common schools and attain an average of not less than 65 per cent, but on no subject less than 50 per cent. The school numbered 58 students in 1890, under the care of a principal and three assistants. Tuition is free to all colored residents of Kentucky who fulfill the required conditions; to nonresidents the tuition fee is $\$ 2$ per month. ${ }^{1}$

## Tenvessee.

fisk university.
The American Missionary Association opened a school among the escaping fugitives that took shelter under the guns of Fortress Monroe only five months after the war began. This was the first freedmen's school in the United States, but missionaries and teachers followed up the march of the Army and schools quickly took the place of encampments. The first freedmen's school in Nashville was established by the Rev. J. G. McKee, of the United Presbyterian Church, in October, 1863, but his school was abandoned when city schools were opened to colored children. The Fisk School was opened in January, 1866, and took its name from General Fisk, who was chief of the Freedmen's Bureau for Tennessee and the adjoining States. The school was then and is still supported by the American Missionary Association of New York. In August, 1867, a charter was obtained for Fisk University, with the expectation that it would grow with the growing wants of the colored people, and the expectation was not disappointed. In 1871 the old hospital buildings, which the school had used for five years, were so sadly out of repair as to be incapable of further service. At this crisis George L. White, a music teacher in the institution, conceived the idea of training a company of colored singers and carrying them through the Northern States on a concert tour. For some months he made scarcely money enough to meet current expenses, but at length the tide turned, his troupe became famous, and at the end of their first concert season they had netted $\$ 20,000$. Another season brought in $\$ 20,000$ more. The troupe then made a tour through Great Britain and returned with $\$ 50,000$. Thus Jubilee Hall was sung into existence, and was dedicated on the 1st of January, 1876.
The building is situated about 1 mile northwest of Nashville, and the surrounding grounds, belonging to the University, cover 25 acres. The greater part of the work of construction was done by colored men connected with the University.

At the dedication service Gen. Clinton B. Fisk made a very interesting address, from which room can be found only for a few sentences:

It is a decade since many of us, who share in this day's joys, participated in the inauguration of Fisk School, established in yonder vacated army barracks, under the auspices of the American Missionary Association by two of its most faithful, sagacious representatives, Rev. E. M. Cravath and Rev. E. P. Smith, who, after a survey of many inviting fields, decided that here, in this central city of the South, they would plant a university for the higher education of the freed people. It was the day of small things; and to an observer who did not with prophetic soul scan the future, the idea that a university should be the outgrowth of the beginning of ten years ago was absurd. Let us not despise the day of small things. When a young clergyman, centuries ago, landed from the Old World on the shores of New England in search of health, and failing to obtain it exchanged both the Old and the New World for Heaven, and in dying bequeathed $£ 400$ sterling for the founding of a college, he little knew how well he was building, and that Harvard would become a household word the wide world over. And when a few poor ministers of the gospel in Connecticut brought together each a few books and said, "We give these for the founding

[^125]of a college," they had no conception that their act was the first step in the creation of Yale. * * * The history of the rise and progress, successes, disappuintments, and triumphs of Fisk University would reveal a story replete with illustrations of heroic Christian faith and a sublime courage which knows no such word as fail. The demand from every section of the country inhabited by the freed people for educational facilities exceeded the ability of the American Missionary Association and kindred organizations to supply. * * * Year by year, after the undertaking of ten years since, grew upon us the perplexing problem of obtaining the means to purchase a new site and erect the permanent initial building of Fisk University. When, through decay of the old buildings and the urgent demands for increased facilities, the solution of the problem became imperative, there was found one man equal to the emiergency.

The son of a village blacksmith who, from limited advantages of culture, had risen to the position of a successful country school teacher, a brave and gallant soldier of the army of the Union, and a most faithful stafi officer in my own military family, became the man of all work in the hour of our greatest need; and to no human agency nor to all other human agencies combined are the triumphs of this glad hour so much indebted as to George L. White. He conceived the idea of coining the slave melodies of the old plantation and the camp meeting into gold and silver wherewith to purchase this commanding site and upon it erect Jubilee Hall. How well do I remember when this good brother wrote me at my home in St. Louis and asked me to loan him $\$ 300$ to take his singers north of the Ohio River. I wrote him not to think of such a thing; that he would bring disgrace upon us all, and told him to stay at home and do his work. He wrote back that he trusted in God and not in General Fisk. Next we see him marching onward with his little band. Reachng the city of Cincimnati destitute, he went down to our old friend Halstead of the Commercial, and said to him, "You are a friend of General Fisk; I have some students of his who are going to sing Sunday morning at such a church. I have no money to pay for the advertisement, so you will please say in your paper that they are here." This was on Friday, and they were to sing on Sunday. Saturday morning's paper announced that General Fisk's Negro Minstrels from Tennessee were in the city and would sing at such a church next morning at 10.30 o'clock, and advised everybody to go. Everybody did go, as it was something really wonderful to witness a negro minstrel performance in a church on Sunday. The story of the Jubilee Singers fills a volume. In America they conquered social prejudices, and by their modest, Christian demeanor, which they have so happily retained, commanded the respect and generous patronage of the best and highest in the land. Beyond the sea, they have twice received hearty welcome and God-speed from the noblest and best of England, Scotland, and Ireland. ${ }^{1}$

The first class was graduated from the college department in May, 1875, ten years after the founding of the Fisk School, 2 young men and 2 young women receiving the degree of B. A. The same year 3 were graduated from the normal department. The normal faculty is composed of the president, Rev. E. M. Cravath, and 7 instructors. The number of students in this department in 1890 was 67 . The total attendance in all departments was 523, representing nearly all the States of the South and Ohio, Illinois, Indiana, Nebraska, and Minnesota. The normal curriculum is in two divisions, elementary and advanced, each occupying two years: First year, Latin, algebra, English history, and physical geography; second year, in addition to the above, arithmetic, English literature, bookkeeping, physiology, school economy, and primary methods; third year, ancient history, rhetoric, plane and solid geometry, practice teaching; fourth year, review of arithmetic, grammar, geography and history, mental science, moral philosophy, astronomy, geology, physics, practice teaching.

Industrial training is not made a prominent feature, but all students who board in the University are required to devote one hour every day to such forms of labor as may be required of them. By a special appropriation from the John F. Slater fund, a printing office has been properly furnished, and the art of printing is taught to 15 young men every year.

Systematic instruction in woodworking, according to the most approved modern methods, is given to young men, the course lasting for three years. Nursing, cook-

[^126]ing, plain sewing, and dressmaking are taught to the girls. A department of physical training for both men and women has also been lately opened. ${ }^{1}$

CEYTRAL TENYESSEE COLLEGE, NASHVILLE.
At the close of the war, in 1865, the condition of the emancipated slaves attracted the attention of patriots, philanthropists, and Christians, North and South. All the leading religious denominations of the North entered this field of missionary work. The Missionary Society of the M. E. Church appropriated $\$ 10,000$ to establish a school for freedmen in the South, and placed the money under the direction of Bishop D. W. Clark, who purchased a church building in Nashville and opened a school under Rev. O. O. Knight as principal and three colored women as assistants. The school was composed of scholars of all ages and sizes-grandparents and grandchildren were in the same class. They were poorly clad, and mostly homeless wanderers from the plantation. They found shelter in the army barracks, in abandoned houses, in cellars or garrets, in stables or other outhouses. Yet, in the midst of this destitution, they were hungry for education. Local preachers were taught some Biblical truths while they were studying the primer and the spelling book. This was the beginning of the theological department.
This school was chartered in May, 1868, by the legislature as the Central Tennessee College. The charter contains a provision that " not less than two-thirds of the members of the board of trustees shall at all times be members in regular standing in the Methodist Episcopal Church in the United States of America." The trustees are authorized to confer such literary, professional, and scientific degrees and diplomas as are usual in such institutions, with the proviso that "they shall at all times maintain a biblical department for the education of young men who have been properly approved as candidates for the Christian ministry." Medical, law, and other departments were also organized subsequently.
It is said that in 1865 over 800 pupils were enrolled, but in September, 1867, the school opened with a small attendance, as a fee of $\$ 1$ per month was charged, and the public free schools for colored children were opened for the first time in Nashville. But with the smaller attendance the character of the students began to change for the better, and the demand for teachers being very great, the normal department was organized in harmony with the main object of the school, which was to educate teachers and preacbers. The first catalogue was issued for the year of 1889-70. It reports an enrollment of 241,9 in the preparatory, 17 in the theological, 76 in the academic, and the remainder in the intermediate course. In 1872 the buildings would no longer accommodate the students. To meet this emergency a band of students of the college, known as the Tennesseeans, sung through the North so successfully that $\$ 18,000$ were raised, and a new building erected, which was occupied at the opening of the school year of 1875 . During this year the medical department was opened in the basement of the new building. The dental department was opened in 1886, and the department of pharmacy in 1889. The John F. Slater industrial department was opened in 1884 for the practice of carpentry and printing. A blacksmith and wagonmaking shop was opened in 1888, and a tin shop in 1889. In October, 1890, the mechanic-art shop was dedicated to the training of young men for useful work in wood, iron, brass, and steel, in the manufacure of steam engines and scientific and philosophical apparatus. This was the first shop of the kind opened to colored youth in this country.
Since the opening of the free schools in Nashville, the number in attendance has increased with great regularity every year from 150 in 1869 to 613 in 1891. The whole number of students, reckoning from the beginning of the schooi in 1865, is about 6,000 . The number of graduates in the different departments is, junior nor-
mal, 39; senior normal, 11; academic, 13; scientific, 3; college, 18; theological, 14; pharmacy, 4; dentistry, 13; medical, 119. ${ }^{1}$

LE MOYNE NORMAL INSTITUTE, MEMPHIS.

In 1870 Dr. F. Julius Le Moyne, of Washington, Pa., gave $\$ 20,000$ to the American Missionary Association for the purpose of founding an English school for colored youth at Memphis, Iem. From this fund the necessary buildings were erected, leaving about $\$ 11,000$ as an endowment fund. The school was opened in September, 1871, and has since been sustained by the association and this endowment fund. For the first two years the school was under the immediate care of Prof. J. H. Barnum, formerly of Oberlin. In October, 1873 , Mr. Barmum was succeeded by D. E. Cottle, of Connecticut. Soon after Mr. Cottle assumed the duties of principal, yellow fever began its ravages in the city. The teachers remained at their work, although directed by the association to leave the city if they thought best. They were unwilling to desert their work in the hour of danger, but early in November Mrs. Cottle was attacked and died. Mr. Cottle survived her only a week, and the school was closed till January, 1874.

The school has had several names. It started as "The Le Moyne Normal and Commercial School." It was afterwards "The Le Moyne Normal School," and it is now known as "The Le Moyne Normal Institute." The school was designed to accommodate 250 pupils, but it became necessary to enlarge it from time to time, until now over 500 pupils are in regular attendance, It is declared to be the purpose and plan of the school to give a thoroughly practical English education, with special normal training for those who intend to engage in teaching. The normal course is in two divisions, elementary and advanced. The advanced course includes plane geometry, astronomy, physics, geology, history (sacred and profane), mental and moral philosophy, pedagogics, and practice teaching. In addition to these studies there is a special professional or teachers' course, of which the following is an outline:

1. (a) A knowledge of the human mind and its application to the work of education. (b) The order and conditions of the development and growth of mental faculties. (c) General principles of education. (d) Methods of school government and organization.
2. Object and aims of education.
3. Motives to mental activity.
4. Laws that govern attention, and the conditions of its proper training.

Each student-teacher receives thirty-two wecks of practice teaching under the direction of a critic teacher.

Manual training or industrial education has an important place in the course of study, both in the normal and in the lower grades. The girls have a systematic course of lessons in plain needlework of all kinds and some fancy work. In the eighth school year they have daily recitations in the theory of household economy and in cooking. Girls of the ninth year do practical work in the experimental. kitchen. In addition to daily lessons of forty minutes, the class has actual practice in cooking certain days of the week, when the class time is extended to two hours. On each practice day four dishes are usually prepared by the girls under the supervision of the regular instructor.

Provision has been made to give the boys some practice in the use of woodworking tools and in typesetting and printing. For the woodworking classes fourteen benches and as many sets of carpenters' tools are provided. The slop is also furnished with a number of lathes and other foot-power machinery. The main object of this work is to train the eye and the hand of the pupils, and to make them perfectly familiar with the construction, care, and use of the tools. The entire time

[^127]of a special instructor is required in this department, as is also the case in the printting office and in the girls' department of industrial instruction.

The total number of students for the year in the normal department, including two preparatory classes, is 158 . In the grammar and primary grades there are 450 pupils.

The faculty consists of the principal, A. J. Steele, with 16 instructors and assistants. ${ }^{1}$

## NORMAL DEPARTMENT OF ROGER WILLIAMS UNIVERSITY.

On the 13th of February, 1883, the Nashville Normal and Theological Institute was incorporated under the laws of the State of Tennessee as The Roger Williams University, and trustees were chosen under the direction of the board of the American Baptist Home Mission Society, by which the university is chiefly sustained. Candidates for admission are required to be able to read in the fourth reader. Young men and women, whose abilities and characters give promise of special usefulness, and whose circumstances render it necessary, are furnished with help sufficient to enable them to remain in school. In order to receive this assistance a student must commend himself to the faculty by diligence and progress in his studies, by freedom from bad habits, and by the manifestation of a good conscience and a worthy Christian character. The State of Tennessee has established for "children of Tennessee of African descent" fifty normal scholarships worth $\$ 50$ each, and the Roger Williams University is one of the schools which students may attend and enjoy this bounty. A State scholarship gives a student in this university his board and tuition for six months. State normal pupils "must be at least 17 years of age, of irreproachable moral character, of gentlemanly or lady-like habits, presumed good health, declared intention to make teaching a profession, and intention to teach at least two years in the public schools." Applicants for scholarships are examined in spelling, reading, penmanship, English grammar, rhetoric, geography, arithmetic, algebra, bookkeeping, physiology, United States history, elements of geology, and elements of agriculture, with the understanding, however, that, if no applicants are able to satisfy all these requirements, those who come nearest to the standard will be appointed.

In 1891 there were in the theological department 21 students; in the college department, 17 ; in the college preparatory, 25 ; in the normal department, 39. The total number of registered students was 226-101 men and 125 women-coming from 12 different States, but a majority from Tennessee. The normal course provides for the teaching of "pedagogics" in the senior year only, where it takes its place with 10 other studies.

FREEDMEN'S NORMAL INSTITUTE, MAIYVILLE.
This school is under the management of the Religious Society of Friends. It was opened in 1876. In 1877 it had an enrollment of 125 students. It is claimed that "those who go out from this institution to teach have been so thoroughly trained by actual class and school work done by themselves, under the supervision of the principal, that their own schools will compare favorably with those taught by our best modern teachers."

Three courses of instruction are provided-a teacher's elementary course of two years, a teacher's advanced course of one year, and a classical course of three years. In the last available catalogue there were 68 students registered in the first year of the elementary course, three in the second year, two in the advanced course, and three in the classical course. A great majority of the pupils are in the preparatory and primary departments. The institute is conducted by the principal with 10 assistants. The theory and practice of teaching finds a place in the elementary but not in the advanced course.

George Sturge, an English Friend, gave to the Yearly Meeting of Friends for New England a fund, the income of which enables the committee having charge of the Freedmen's Normal Institute to reduce the expenses of students. Forty students for the fall term and 60 for the spring term are admitted to the normal class and receive 75 cents per week toward their expenses. Such students are expected to remain until they are qualified to teach in the common schools, and to teach in such schools for as many weeks as they were in the normal class receiving the benefit of the Sturge fund. ${ }^{1}$

## Alabama.

state cormal and lidustrial school, hentsylle
The State Normal and Industrial School at Huntsville, Ala., was organized in May., 1875. It had then only two teachers, an income of $\$ 1,000$ from the State, and no property. The State appropriation was raised in 1878 to $\$ 2,000$. For the first two years the school occupied a little church and some small rented houses. By the practice of the strictest economy a sum sufficient to purchase property was saved. A beautiful location was selected and a fair prospect of permanence was secured. Although the school received help from the Peabody education fund and the John F. Slater fund, and from friends North and East, the aim was, from the beginning, to draw its support mainly from the State, and all expenditures are estimated upon the basis of State funds. The legislature of 1885 raised the annual appropriation to $\$ 4,000$. The school grounds comprise about 4 acres fronting on one of the prettiest thoroughfares in the city. Palmer Hall, the principal building, is one of the best school edifices in the State. The chapel has a seating capacity of 500 . The general assembly of Alabama of 1890-91 made this school the beneficiary of that part of the Congressional grant given under the act approved August 30, 1890, "to the more complete endowment and support of the colleges for the benefit of agriculture and the mechanical arts." The institution is thus a normal, mechanical, and agricultural school for the colored people of Alabama. The new era of the school was inaugurated by the purchase of 182 acres of land 3 miles north of Huntsville on which the necessary buildings have been erected. The president's report for the session ending August 31, 1891, records the following departments:
I. Department of mechanic arts.-Section 1, carpentry; section 2, printing; section 3 , mattress making; section 4 , shoemaking.
II. Department of Agriculture.-Section 1, farming and horticulture; section 2, dairy and live stock.
III. Department of English language and literature.
IV. Department of mathematical science.
V. Department of physical science.
Vi. Department of natural science.
VII. Department of economic science.-Section 1, laundering; section 2, cooking; section 3 , sewing.

Among these "departments" the "normal" is conspicuous by its absence, but among the "courses of study" will be found a normal course of three years, the first year giving "practice in training school;" the second year, theory and practice of teaching, and the third year, theory and the practice of teaching with "school law." Comparing the title, "State normal and industrial school," with the printed programme, one is reminded of Falstaff's poor "half-pennyworth of bread."

In order to be admitted into the normal and industrial departments of the institution, a pupil must be 14 years of age, of good moral character, and able to read and write and understand arithmetic to fractions. Tuition is free, and boarding expenses are $\$ 8$ a month, of which $\$ 7$ are paid in cash and $\$ 1$ in work. "The aim of instruc-

[^128]tion," says the president in his last report, "is to turn out practical men and women. Our plan is a combination of the constructive and instructive methods. The student sees his efforts constantly producing useiul articles for home use or for the market. In the construction of an ordinary table there are all the steps from the first lesson of the apprentice to the finishing touches of the skilled cabinetmaker, and so on through all the departments of industry. Hence, the various industries soon return something to the institution and offer opportunities for students to help themselves through school."
Schedule of daily exercises.-Rising, dressing, and arranging rooms, 5 to $5.30 \mathrm{a} . \mathrm{m}$. ; study hour, 5.30 to 6.45 ; devotion, 6.45 to 7 ; breakfast, 7 to 7.50 ; school, 8 a . m. to 1 p. m.; dinner, 1 to 2; general work, 2 to 4 ; recreation, 4 to 6 ; tea, 6 to 7 ; devotion, 7 to 7.15 ; study, 7.15 to 9 ; retiring taps, 9 .
The school employs 16 teachers, and the last catalogue registered 326 pupiis, of whom 96 were in the normal department proper. The teachers are assigned as follows: To mechanic arts, 4; to agriculture, 2; to English language, 4; to mathematical science, 1; to physical science, 1 ; to natural science, 1 ; to economic science, 3. ${ }^{1}$
tuskegen normal and industrial institute.
The Tuskegee Normal School was established by an act of the legislature of Alabama, passed in 1880, and was opened in a church July 4, 1881, with 30 students and 1 teacher. The school has now (1891), including the night school and the training school, 730 pupils, of whom 212 are in the normal department. The normal course includes reading, speliing, arithmetic, geography, grammar, history, physiology, rhetoric, literature, algebra, geometry, physics, botany, bookkeeping, school laws of Alabama, theory and practice of teaching, music, drawing, civil government and political economy, mental and moral philosophy. The theory and practice of teaching is one of the eight subjects pursued by the senior class. The industrial department has advanced to a high state of efficiency; it is subdivided into the following branches:

1. Agricutlure.-The farm of 1,480 acres not only furnishes valuable employment for students, but supplies largely the demands of the school.
2. Brickmaking.-On the farm have been found beds of clay suitable for making brick. From these beds the students have made bricks enough (and have laid them themselves) to build four substantial buildings for school use.
3. Carpentry.-The shop is furnished with several sets of tools, and the students are taught to make fences, build cottages, make and repair furniture, etc.
4. Printing.-The office is well furnished and is under the management of a firstclass printer. The students do much job work for the school and the surrounding country.
5. Blacksmithing. - At present the blacksmith and wheelwright shops are combined. This department does all the work for the school and farm, and much for the town and country.
6. Tinsmithing, shoomaking, harness maling.-All the roofing is done by students from the tin shop, and a large quantity of tinware is furnished the boarding department.
\%. Sexing.-Much of the dressmaking for the girls and all the plain sewing of the school are done in this department. In connection with it is a sales room, in which the products of the sewing room are offered for sale to the students.
7. Laundry.-Here the girls are taught the art of washing and ironing after the most improved methods. Very little machinery has been introduced.
8. Sawmill.-A large portion of the farm is covered with pine forest, which supplies the mill with timber. A planing mill is attached which dresses the lumber for

[^129]use. Without the sawmill, the brickyard, and the carpenter's shop it would have been impossible, with restricted means, to put up the buildings required by the institute.

Tuition is free. The price of board, incluling waching, lights, fuel, etc., is $\$ 8$ per month. Students are given an opportunity to work out $\$ 2$ or $\$ 3$ per month, so that with a good outfit of clothing $\$ 50$ is sufficient to carry an industrions student through the school year of nine months.

The appropriation of $\$ 2,000$ annually made by the State legislature at first was increased in 1883 to $\$ 3,000$ annually. The whole State appropriation is used to pay tuition, for all other expenses the school looks to its friends, North and South. The school property is (1892) ralued at $\$ 125,000$, andi is entirely free of debt.'

## EMERSON INSTYTUTE, MOBILE.

The Emerson Institute is one of a large number of schools organized soon after the war by the American Missionary Association for the benefit of the freedmen in the South, and kept up after the special need for such aid ceased to be severely felt. The building known as the "Blue Coliege," on Government street, was at first occupied as a primary school, and afterwards (1873), by the liberality of Mr. Emerson, of Rockford, Ill., it developed into a normal and academic institute. In the same year the building was destroyed by fire, but the school was maintained under great disadyantages until 1878, when it was removed to a new building in Holley's Garden. Four years later this house also was burned, and the school work was carried on in church buildings. In the summer of 1882 another and larger building was erected, and in 1889 an industrial building was added, in which the boys are taught woodworking and the girls to sew and cook. The "normal course" includes geometry, physics, general history, English literature, mental science, geology, astronomy, and the "science of education." The whole number of registered students (1891) is 322 , of whom 28 are in the normal department. ${ }^{2}$

## Minssissippi.

## TOUGALOO UズIVERSITY.

In 1869 the American Missionary Association purchased 500 acres of land, with a fine mansion upon it, at Tougaloo, 7 miles north of the State capital, and proceeded to open a school for the education of colored persons. There is a little romance connected with the early history of the place. Prior to the war a wealthy bachelor owned a valuable plantation of over 2,000 acres in the very heart of the State of Mississippi. A charming young lady, to whom he was paying his addresses, promised to become his wife if he would build her the finest house in the State. The condition was accepted, and the house soon began to show its grand proportions; but while the ardent lover was preparing as $\$ 25,000$ cage for his bird a rival carried ofit the bird. The cage remained stationary, and was used as a storehouse for cotton, until the officers of the American Missionary Association had their attention called to it as a farorable location for their projected school.

Two other buildings were soon after erected, and when the school was chartered by the State in 1871, there were comfortable accommodations for 60 boarding students. In the early history of the school it was adopted by the State as one of its normal schools, but, on account of the difficulty created by having two boards of trustees to run the same institution, the State withdrew its support in 1877. Two years later a board of visitors was appointed to visit the school annually and report

[^130]directly to the legislature. Since that time the State has appropriated from $\$ 2,000$ to $\$ 3,000$ annually for the support of the school. The foundation of a new hall, to replace Washington Hall, which had been destroyed by fire, was laid in 1882. It was called Strieby Hall, in honor of the oldest living secretary of the American Missionary Association. In the fall of the came year a blacksmith's shop was built, and in the next two years carpenter and tin shops were added, making a good beginning of an industrial department, which has since been liberally aided from the "Slater fund." In 1888 a small building was fitted up as a "Girls' Industrial Cottage," which served to make a beginning in that line of work. During 1886-87, through the generosity of Mr. Stephen Ballard, of New York City, a two-story building was put up on the old site of Washington Hall, and was called "Ballard Hall." This building furnishes ample accommodations for the schoolroom work in all the grades below the normal department. The "Ballard shops" were also completed during the year, furnishing ample room for all the shops under one roof. These two buildings were completed with the $\$ 5,000$ given by Mr. Ballard. They are substantial, commodious, and cheap. All of the work upon them was done by students trained in the industrial department. ${ }^{1}$

The school is arranged in four grades-primary, intermediate, grammar, and normal. The normal course also embraces four grades of one year each. The subjects in the first grade are composition, algebra, physiology, and physical geography; in the second grade, algebra, rhetoric and literature, natural philosophy, and bookkeeping; in the third grade, geometry, geology, general history, and botany; in the fourth grade, political economy, mental science, moral science, pedagogics, Scripture history, review of common branches, and composition.

The number of students in June, 1890, was, in the normal grade, 33; grammar, 90; intermediate, 160; primary, 100; total, 383.

The course of training in the industrial department is, first year, carpentry; second year, blacksmithing and wheelwrighting; third year, painting, turning, and tinning. All the young women are taught to sew and mend. Dressmaking is taught to a limited number. Class instruction and practical lessons in cooking are given every day. Four girls each month have the privilege of keeping house in the "Cottage," and while learning to cook and plan for themselves, they also lighten their expenses.

STATE NORMAL SCHOOL, HOLLY SPRINGS.
The State Normal School at Holly Springs was opened in 1870 for the purpose of training teachers (colored) for the public schools of the State. Only such persons as intended to become teachers were admitted to full membership. The enabling act of the legislature provided that "each representative in the State shall be entitled to send one pupil each term of twenty weeks of said school, said pupil to be recommended by the representatives to the board of trustees. The person thus admitted shall be free of tiition: Provided, The applicant shall be of good moral character and shall sustain a satisfactory examination and sign a declaration of intention to follow the business of teaching common schools in this State for at least the term of three years."

The last catalogue (1891) gives the number of registered students as 170 -young men, 93; young women, 77. There are reported as studying geometry, 8; algebra, 24; Latin, 6; theory and practice of teaching, 9; pedagogy, 4; psychology, 8; English grammar, 108; reading, writing, and spelling, 120.

The course of study as published in the first catalogue of the institution is worthy of preservation. It is in some respects a model.

Cotrese of study, tubular vieu', $18 \% 0$.


Optional studics: Latin, Greek, algebra (advanced), trigonometry (advanced), analytical geometry, calculus, zoology.

JACKSON COLLEGE
This institution was at first known as the Natchez Seminary. It is one of the 17 institutions founded and sustained for the education of preachers and teachers for the colored people of the South. It was opened in 1877, but no catalogue was issued until 1880, when the seminary had on its roll 31 students preparing for the ministry, 46 preparing to teach, and 40 general students. The design of the seminary was declared to be "to aid those men who have a divine vocation to the sacred ministry to obtain a better understanding of the Holy Scriptures; to aid them to take a connected view of the Christian doctrines; to learn the best methods of teaching the way of salyation; to study the composition of persons; to become practically acquainted with the usages of the Church of Christ, etc."

Another design of the school was "to afford a good opportunity for study and instruction to young men and women who wished to be prepared to teach the public schools." The courses of study extended through five years, embracing the ordinary grammar school and high school branches of study, with mental and moral philosophy, biblical interpretation, semon-making, preaching, church polity, and systematic theology. The expenses were very low-tuition, $\$ 1$ a month; room rent, $\$ 1$ a month; washing, $\$ 1$ a month, and board $\$ 5$ a month. Among the 23 rules for the seminary and family, the first deserves special notice: "There are no penalties for misconduct; none remain who fail to regard our simple rules."

In 1882 the "art of teaching" was added to the normal course, but it has no place in the printed curriculum of 1884 . In 1855 the seminary took possession of its new building in Jackson, Miss., a fine brick structure three stories high, with a basement, erected by the Home Mission Society. It was then called Jackson College.

Though the name of a "normal department" has been kept in the catalogues to the present time, there is no evidence of any distinctive normal instruction being given. The following are the subjects assigned to the several instructors: Theology,
natural sciences, history, mathematics and music, and English studies. The normal department, so called, is really preparatory to the academic department, for "the academic course comprises all the studies of the normal course and two years of study in addition."

The John F. Slater fund provides for the industrial department. Students of both sexes are taught such branches of useful and practical knowledge as will enable them to earn their living by the labor of their hands. The young women have a sewing room and the young men have shops in which work is done in carpentry, lathe work, tin work, and brick laying. ${ }^{1}$
The following summary is from the catalogue of 1890:
Preparing for the ministry. ..... 23
Preparing to teach ..... 42
In industrial department ..... 213
Converted to Christ ..... 19
Nales ..... 114
Females ..... 149
Total ..... 263

## Louisiana.

## STRAIGHT UNIVERSITY, NEW ORLEANS.

In the spring of 1869 a few gentlemen conceived the idea of planting this university to meet an acknowledged want of the colored population. The Freedmen's Bureau and the American Missionary Association at once pledged their cooperation. A site was selected on one of the most beautiful streets in the city. The American Missionary Association purchased the grounds, and the Government assured the erection of buildings to the value of $\$ 20,000$. An act of incorporation was secured "with the power to confer all such degrees and honors as are conferred by universities in the United States of America." While the buildings were in process of construction a normal department was opened in one of the churches, and 60 students were registered. The institution bears the name of one of its most liberal benefactors, Seymour Straight. From the first there was contemplated the organization of a law department, a medical department, a collegiate department, a normal department, an academic department, and an elementary department. Time has not quite fulfilled all the expectations of its founders. The theological department is still in existence, with 6 students; the college with 9 , including 2 preparatory classes, and the normal with 64 . The academic and lower grades number 483. The faculty of the college department is the same as the faculty of the normal department, and the printed curriculum of the normal course indicates no strictly professional training, with the exception of psychology and science of education, in the fourth year, which divide the attention of the student with civil government, astronomy, geology, and English literature. ${ }^{2}$

## NEW ORLEANS UNIVERSITY.

The New Orleans University was chartered by the legislature in 1873, but a regular normal department was not opened until 1883, when there were 25 normal students on the roll, the course of study being "a review of the studies of the grammar department with lectures on managing schools and teaching, together with practical exercises in the same." In 1885 the department was arranged in two divisions, the normal scientific and the normal language divisions. The difference is sufficiently indicated by the titles. The whole number of students in the normal department was 14. In 1888 the number registered was 9 . In 1889 the number of normal students was 27,

[^131]and the course was extended from two years to three, "methods of instruction and practice teaching" forming part of the curriculum in each term of every year. The number of normal students in the next two years was 38 and 39 , respectively. The aggregate number of students attending the University was $562 .{ }^{1}$

## Arkangas.

## BRANCH NORMAL COLLEGE OF THE INDUTSTRIAL UNIY゙ERSITY゙, PINE BLUFF.

The Branch Normal College is a department of the Arkansas Industrial University, established pursuant to an act of the general assembly approved April, 1873. It has been in operation since September, 1875. The enabling act requires the branch college to be governed by the same rules and regulations as the principal college, and makes it the duty of the board of trustees "to furnish the branch college with professors and teachers and other necessary employees, equal in numbers, attainments, and other desirable qualifications to those furnished and employed in sail principal normal college;" "to prescribe the same books and the same course of study," and "to confer upon graduates thereof like honors, commendations, and degrees to those bad or given in said principal normal college." The appointment of students to this branch college, like appointments to the parent university at Fayetteville, is rested in the county courts. Ali students thus appointed are entitled to four years' free tuition upon the payment of $\$ 5$ matriculation fee at the time of entering the school. The number of possible beneficiaries is about 400, and the arerage number of actual beneficiaries about 200 , of whom one-third are in the normal department proper and two-thirds in the preparatory. The course of study has two divisions-the normal, leading to the degree of licentiate of instruction, and the classical, to the degree of bachelor of arts, the former occupying four years and the latter six. Pedagogics has a place in the second year of the normal course, history of education and school management in the third, and science of education in the fourth. The optional studies are reading and spelling, elementary chemistry, elementary botany, zoology, surveying, and ethics. Latin, geometry, plane trigonometry, algebra, physics, general chemistry, and psychology are obligatory.

The "normal course of study," according to the last announcement, "is not what goes by that name in many of our institutions-that is, a mere preparation for teaching the common-school branches-but differs from the usual college curriculum merely in the omission of one or two branches of higher mathematics, and having less in Greek. The institution is strictly confined to the higher branches, and children who are not somewhat adyanced in the common-school branches are not admitted." ${ }^{2}$

It is interesting to compare the course of study outlined above with the printed programme for the year 1879-80, when the "real work of the normal" commenced.

First year.-Latin, algebra, plane geometry and trigonometry, physical geography, history, English diction, and elocution.

Second year.-Latin, plane and spherical trigonometry, descriptive geometry, inorganic chemistry, chemical physics, zoology, rhetoric, botany, and analytical geometry.

Third year.-Latin, solid geometry, differential calculus, integral calculus, mineralogy, geology, organic chemistry, English literature, and logic.

Fourth year.-Latin, natural philosophy, mental philosophy, moral philosophy, political economy, history of civilization, civil polity, evidences of Christianity, Constitution of the United States, international law, philology, and history of inductive sciences. ${ }^{3}$

Must we sometimes apply the definition of faith to school catalogues-"the substance of things hoped for, the evidence of things not seen?"

[^132]This institute was established by the Indiana Yearly Meeting of the Religious Society of Friends in 186t. The normal grade was instituted in 1869. The college department was organized in 1872.

For admission to the preparatory or normal course the student must have completed McGuffey's Fourth Reader, Swinton's Language Lessons, Eclectic Primary Geography, and Ray's Practical Arithmetic to decimal fractions. The course of study in the "preparatory and normal department" can be completed in three years. The first year is devoted to arithmetic, geography, and grammar; the second, after completing arithmetic and grammar, to history of the United States and bookkeeping; the third year to algebra, physics, physical geography, physiology, and civil government. Pedagogy is added for those who desire the diploma of the normal course. There are 5 students in the college department and 89 in the "preparatory and normal." The number of students in the normal department (1890) is 89. ${ }^{1}$

## Texas.

## TILLOTSON COLLEGIATE AND NORMAL INSTITUTE, AUSTIN.

This school was founded by the American Missionary Association and is conducted under its auspices. It takes its name from the Rev. George J. Tillotson, of Weathersfield, Comn., who contributed largely in money and personal efforts to the erection of the main building. It was opened on the 17th of January, 1881, and at the end of the second year had an enrollment of 283 students, of whom 50 were pursuing the normal course.

The object of the institute is to furnish to the colored people an opportunity to acquire a thoroughly practical common-school education; to prepare those who propose to take a more extended course for entrance to the highest educational institutions of the land; to train teachers for all positions in the public schools.

There are two normal courses, "elementary and higher," each occupying two years. The studies of the first year are arithmetic, algebra, physical geography, reading, rhetorical exercises, history of Texas, vocal music, carpentry, sewing, cooking. Second year: Algebra and arithmetic completed, rhetoric, rhetorical exercises, physiology, botany, school economy, primary methods, carpentry, dressmaking, cooking. Third year: Plane geometry, physics, English and American literature, general history, elocution, rhetorical exercises, carpentry (optional). Fourth year: Astronomy, zoology, mental philosophy, civil government, rhetorical exercises, methods of teaching, practice teaching.

The number of students in the elementary course (1891) was 24 ; in the higher, $3 .{ }^{2}$
STATE NORMAL SCHOOL, lRAIRIE VIEW.
This school owes its origin to an act of the legislature of Texas approved April 19, 1879, which authorized the establishment at Prairie View (formerly called Alta Vista) of a normal school for the preparation and training of colored teachers. The act requires the board of directors of the Agricultural and Mechanical College of Texas to organize such a school as soon as practicable, so as to admit one student from each senatorial district, and at least three students from the State at large, to be taken from the colored population of the State, and to be not less than 16 years of age at the time of their admission. All students admitted are required to sign a written obligation binding each student "to teach in the public free schools for the colored children of their respective districts at least one year next after their discharge from the normal school and as much longer than one year as the time of their

[^133]connection with the normal school shall exceed one year," and for the same rate of compensation as other teachers of such schools receive. The directors are also required to make rules by which students can obtain certificates of qualification as teachers, which will entitle them to teach without further examination. The sum of $\$ 6,000$ a year was appropriated for the support of the school. This sum was afterwards increased, the appropriation for $1889-90$ being $\$ 10,000$ for the normal and $\$ 5,000$ for the industrial department.
Candidates for admission must sustain a satisfactory examination, conducted by a board of examiners appointed by the senators of the several districts of the State, in arithmetic as far as decimal fractions, orthography, English grammar and composition, history of Texas, and history of the United States. The course of study embraces three years. In the first year reading and spelling, grammar and geography, inventional geometry, drawing, writing, vocal music, and calisthenics. In the second year the same studies are continued, with algebra, physiology, and lectures on professional work and school management. In the third year there is a general review of common branches, with special reference to teaching them, and, in addition, natural philosophy, plane geometry, bookkeeping, rhetoric, English literature, general history, psychology, and civil government.

The industrial department is made subordinate to the normal features of the school. No attempt is made to equip students thoroughly in any particular line of the industries, but liberal provision has been made and shops have been furnished for the instruction and practice of young men in the principal operations of wood and iron working.

Girls have a special teacher who instructs them in the different kinds of sewing, both by hand and on machines, in cutting and fitting, in cooking, laundering, and general housework.

There are 225 acres of land belonging to the school. About 100 acres are cultivated in farm and garden. Lectures are defivered to the students on soil, fertilizers, cultivation of different crops, the care of orchards, stock raising, and care of cattle. A branch of the United States experimental station has been placed in charge of the agricultural department of this school.

The number of students enrolled in June, 1890, was 129.. One student from each senatorial district and 15 from the State at large were admitted free of charge for board and tuition, and those who show a decided ability for teaching may be returned for a second year. The number of graduates from 1885 to 1889, inclusive, was 78, of whom all but 7 were reported in 1890 as "teaching" and 6 as "having taught." ${ }^{1}$

## Missouri.

## LINCOLK INSTITUTE, JEFFERSON CITY.

Lincoln Institute had its origin in a fund of $\$ 6,379$ contributed by the Sixty-second and Sixty-fifth regiments of United States Colored Infantry when discharged from service in January, 1866. The school was opened in September of that year and was taught in rented buildings. In June, 1871, the present Lincoln Institute building was completed. It is a substantial brick structure, 60 by 70 feet, conveniently arranged and eligibly located upon a prominent hill just outside the limits of Jefferson City. The grounds contain 20 acres. The legislature of 1879 appropriated $\$ 15,000$ for the support of the institute; but this appropriation was found to be unconstitutional, being a grant of public money to a corporation. At the suggestion of Governor Phelps the board of trustees met and unanimously voted to transfer the institute to the State. The bill was then immediately approved, and the legisłature

[^134]in succeeding years made liberal appropriations for its current expenses and also for repairs, buildings, library, and apparatus.

There are four departments-the college, the preparatory, the normal, and the elementary. The object of the normal department is to prepare teachers for the colored schools of the State. It has two courses of study; the first covers two years and the second four. Students who complete the two years' course receive graded certificates, entitling them to teach the branches named therein for two years from the date of graduation. Graduates from the four years' course receive diplomas which authorize them to teach in any county in the State without examination. Pedagogics has no definite place in the printed course of study, but " principles and methods of teaching, class management, and school government receive attention throughout the course, also spelling, elocution, and composition;" and normal students are required to participate in the teachers' institute, which is held biweekly.
By an act of the thirty-sixth general assembly an industrial department was established in connection with the institute. The object of this department, which was opened in October, 1891, is "to give the students an opportunity to learn trades and to study those branches of knowledge pertaining to agriculture."
The faculty consists of the president, 4 professors, and 2 assistants. The superintendent of the industrial department is a graduate of the manual training school of St. Louis.
The number of pupils enrolled in the normal department (catalogue of 1891) is 42 ; in the elementary, 151; in the preparatory, 11; in the college, 1; total, 205. ${ }^{1}$

## VIII.

## CITY NORMAL AND TRAINING SCHOOLS.

The city training school, call it by what name we may, would seem to be the simplest of all normal school problems. Given a city of a certain population, increasing at a certain probable rate, a definite school system, a printed course of instruction, a number of principals selected by merit or by personal or political favoritism, it should not be difficult to train a sufficient number of assistants every year to aid these principals in the instruction and government of the schools. But the evolution of the training school has not been accomplished on purely professional lines. The need of good assistant teachers is the ostensible cause and furnishes the public with a sufficient motive; but other ends have also to be served. The school government is a close corporation; the school-teachers must be selected from among qualified residents of the city; the outside world must be kept out that home labor may be protected. But this very protection adds to the embarrassment of the school authorities in the selection of teachers, for there are three home applicants for every vacancy. The training school weeds out some of the incompetents, and the choice becomes more restricted and less embarrassing. The work of the training school, however comprehensive in theory, is practically restricted to the graduating of young teachers who will satisfy the demands of the principals and the superintendents in numbers not too large for the needs of the schools and yet not so small as to give the school directors no opportunity for choice. The school curriculum must not be too modern, for that would offend the old-fashioned principals; neither must it be antiquated, for that would not suit the progressive superintendents:

As if the problem were not already sufficiently complicated, the public steps in and demands that young people who are not to become teachers should have equal opportunities of higher education with those who are to receive professional instruction, hence the title "high and normal school," with which nearly all such institutions have been ushered into the world, and which has connected them as closely as were the Siamese twins. But the general, if not the universal experience, has

[^135]been that a school, like a locomotive, can not run on two lines, however slightly divergent, at the same time. It will be switched off either to the high school track or to the normal track. In the end the trains are divided, to the great advantage of both.

It has not been thought advisable to give many samples of the city training school. One might almost say, ab uno disce omnes. The Report of the United States Commissioner of Education for 1889 gives a list of 58 city training schools and classes, attended by 538 students. Most, if not all of these, are connected with city high schools and have no independent history. The experiences of the cities of Philadelphia, Boston, New York, and Chicago contain valuable lessons, and the history of the New Xork College for the Training of Teachers is exceedingly interesting.

GIRLS' FORMAL SCIOOL, PIIILADELPHIA.
The act of the legislature of Pemnsylvania, passed in 1818 , providing "for the education of children at public expense within tre city and county of Philadelphia," gave to the controllers of public schools the power "to establish a model school in order to qualify teachers for the sectional schools and for schools in other parts of the State." At that time the Lancasterian system was in the prime of its popularity, and the "model school" allowed by the act was organized by Joseph Lancaster himself in a building still standing on Chester street above Race. This model school was used as a school of practice to train teachers and monitors, and to serve as a pattern to other schools of the same class. [One of the earliest recollections of the writer is of a visit made when he was a boy to a great Lancasterian school in a manufacturing city. The master stood on a high platform brandishing his rod of office in full view of some 300 pupils. Six small galleries, seated with benches raised in three or four ascending tiers, gave accommodation to from 12 to 20 small urchins in each gallery, over which presided 12 monitors. The children comned their lessons under monitorial supervision and the noise was like the distant roar of the much vexed ocean. The presiding genius on the platform touched a little bell and called, "Sand class, come up!" The sand class came up, and gathered around a shallow trough, 3 by 4 feet and 4 inches deep, filled with molding sand of the best quality, on which the master proceeded to illustrate the mysteries of the alphabet. Years passed on, and the galleries became recitation rooms, about 12 feetsquare, arranged around a central hall, and the boy monitors were supplanted by ladies. For many years the school buildings of Philadelphia continued to attest their Lancasterian origin, but finally the pendulum swung around to the opposite side, and a schoolhouse became a series of rooms, each in many cases as independent of the others as if they belonged to different countries. This independence extended largely to the schools of the system, if system it can be called which had been compared, before the revolution of 1883, to a "fortuitous aggregate of educational atoms." So much "obiter dictum" may help to a better understanding of the history of the Philadelphia Normal School for Girls.]

About the year 1836, the model school, having lost its distinctive character as a school of practice, became in effect one of the grammar schools of the city, though it still retained its name. Twelve years later the controllers of the public schools converted the so-called model school into a normal school for the purpose of qualifying young ladies to become teachers. It is claimed that this is the first normal school not under State control established in any city in the United States. The school was opened on the 1st of February, 1848, under Dr. A. T. W. Wright as prineipal, with 6 assistant teachers and 106 pupils. The course of study required two years for its completion. The school was popular from the beginning and soon outgrew its accommodations; a new building was erected for its use and the norma! school was transierred to it in 1854 along with the model school, which still kept up its connection with the normal. This model school was discontinued as such soon after, and in lieu thereof a school of practice was organized. In 1857 Mr. Philip A.

Cregar was elected principal, and in 1859 the "Girls' Normal School" became the "Girls' High School." In 1861 the name was again changed to "Girls' High and Normal School," and the course of instruction was so modified as to give professional training solely in the last year of the course. These changes indicate the gradual growth of public sentiment in respect to the higher education of girls and the fitting of them for teachers.
In 1865 Prof. Geo. W. Fetter, the present (1892) principal, was elected, and under his wise and efficient management the school has done a great work for popular education in Philadelphia. The school building, which was new in 1854, became antiquated before a score of years had passed, and in 1876 the school was transferred to a new home, one of the largest and best arranged schoolhouses at that time in existence. It was dedicated on the 30th of October, amid congratulations on past success and prophecies of future prosperity. The Hon. Simon Gratz gave voice to the sentiments and wishes of the people when he said in his opening address: ${ }^{1}$

And now, with a building which, in point of elegance and fitness, will rival any in the land, a corps of teachers who would do honor to any institution of learning, an enlarged and comprehensive course of study which will cultivate and sharpen the reasoning faculties, stimulate thought, and store the minds of the pupils with an ample stock of useful knowledge, and last, but of the first importance, that indispensable adjunct, a thoroughly organized school of practice in which constant opportunity may be had for testing the ability of the pupil to make practical application of her theoretical knowledge of methods of teaching and of discipline, may we not reasonably expect to achieve such results as will make the school worthy of the pride of our citizens?

The following is the course of study adopted in 1876, from which it will be seen that the word "High" need not have been removed from the official title, unless as a prophecy of good things to come:

Course of studly in the Girls' Normal School of Philadelphia, 1876.

| Class A, one year. | Class B, one year. | Class C, one year. | Class D, one year. |
| :---: | :---: | :---: | :---: |
| Mental science. <br> Literature. <br> Geology. <br> Logie. <br> Arithmetic. <br> Composition,rhetoric <br> Elocution. <br> Natural philosophy. <br> Astronomy. <br> Synonyms. <br> Music. <br> Theory of teaching. <br> Trigonometry. | Algebra. <br> Moral seience. <br> Physiology. <br> Drawing. <br> Arithmetic. <br> Composition,rhetoric. <br> Elocution. <br> Cliemistry. <br> Botany. <br> Mythology. <br> Musie. <br> General history. <br> Geometry. <br> Physical cxereises. <br> Penmanship. | Algebra. <br> Moral seience. <br> Grammar. <br> Drawing. <br> Arithmetic. <br> Composition,rhetoric. <br> Reading. <br> Orthography. <br> Geography. <br> Etymology. <br> Music. <br> General history. <br> Geometry. <br> Physical exercises. <br> Penmanship. <br> Constitution of United States. | Algebra. <br> Grammar. <br> Drawing. <br> Arithmetic. <br> Composition,rhetorie. <br> Reading. <br> Orthography. <br> Geography. <br> Etymology. <br> Music. <br> Amcrican history. Geometry. <br> Physical exercises. Pcnmanship. |

The course of study has naturally changed during the many years of the existence of the school, both in its academic and its professional work, in order to keep pace with the advance of educational thought throughout the country. This school was among the first in the country to introduce a course of physical training, and for a number of years has had a complete and systematic course of instruction in this department. It was also one of the first institutions to introduce several forms of manual training suitable for girls. Sewing was introduced in 1881, and has been taught with success since that time. Cookery became one of the regular branches in 1887, and thus pioneered its introduction into the grammar schools of the city. Other changes are gradually made in the course of study to meet the demands of the time, until in 1887 the following quite complete course in academic and pedagogical training was adopted.

[^136]Course of study in the Girls' Normal School.


The growth and work of the school will be indicated by the following facts: The school opened February 1, 1848, with 106 pupils and 7 teachers, including the principal. In 1865 it contained 270 pupils and 10 teachers. Since that time the most remarkable increase in numbers has been made that can be found in the history of any normal school in the country, with the possible exception of the one in New York. It now (December, 1892) contains 1,850 pupils, with 54 teachers. Since its estallishment 5,772 pupils have graduated. Of that number 4,878 have been engaged in teaching in the public schools of the city. At the present time nearly 2,400 of the teachers in Philadelphia are graduates of the school, including a large majority of the women principals of the city.

The school has also done a great work for Philadelphia in addition to its training of the teachers of the public schools. One of the graduates has filled the pulpit, quite a number have distinguished themselves in literary work, several have stridied medicine and are successful practitioners, many have adopted art work as their profession, and a few have gone as missionaries to foreign lands. Two of the 7 assistant superintendents of the public schools of the city are graduates of the institution. But perhaps the greatest work of the school is found in the many happy homes into which the mother educated in the school has carried the influence of its culture, sending out of refined home circles the future citizens and rulers of the city.

With the growth of population and the increased interest in education, it was seen some four or five years ago that the building was inadequate to meet the demands for the higher education of the young women of the city. It was then proposed to reorganize the school by making of the present school a girls' high school and erecting a new building for the girls' normal school. Superintendent MacAlister, in his report for 1889, says: "The necessity for some radical changes in the normal school is now realized I believe by a large proportion of the members of the board of public - education." The idea of a division of the institution into two different schools-a high school and a normal school--soon became the prevailing one. Professor Fetter, in his report for 1890, says: "A new building and a division of the school are now imperatively demanded."

The reorganization contemplated by the friends of the school is being carried into effect by Superintendent Brooks. The high and the normal schools are to be separated, making of them two distinct schools under different supervision and control. The new building for the normal school, which will be ready for occupancy in September next, will be one of the finest edifices of the kind in the country. The present building will then be used for a new girls' high school, which, in accordance with the present plan, will probably embrace three distinct courses of study--one intended to prepare young women for admission into the normal school, a second to cualify them for a business or a commercial life, and a third to give a higher education to such as do not desire to become teachers or enter upon business pursuits.

The normal school will have a two years' course, including the science and the art of teaching. The following outline will indicate the proposed scope of the normal course:

> A.-The science of teaching.
I. Mcthods of culture.-(a) Physical culture, (b) mental culture, (1) intellectual, (2) resthetic, (3) moral.
II. Methods of instruction.-( $(a)$ Language, (b) mathematics, (c) physics, (d) history, (e) the arts.
III. School economy.-(a) School preparation, (b) school organization, (c) school employments, ( $d$ ) school government, (e) school authorities, ( $f$ ) school systems.
IV. The philosophy of educution.
B. -The ant of teacking.
(1) Observation of model teaching.
(2) Practice in model schools.
(3) Preparation of school apparatus.

Each of these topics will be subdivided into departments of instruction to be completed in the tyo years. ${ }^{1}$

BOSTOA NORMAL SCHOOL.
Dr. Edwin P. Searer, superintendent of schools in Roston, writes as follows in his report for 1891:

One chief function of superintendent and supervisors is to provide a supply of competent teachers for the schools. This is the function of the normal school, too; but the normal school furnishes only a portion of the supply, namely, that which comes from the city itself. There has always been and there always will be a portion of the supply coming from outside the city.

This latter portion is in some respects the more important of the two. It happens sometimes that the policy of taking teachers from outside the city is discouraged, such a policy being supposed to make against the interests of the normal school or of its graduates; at othertimes the same policy is favored because of the pressing need to appoint experienced teachers rather than beginners in the most difficult places. So practice fluctuates, but within limits; for the necessity of employing some teachers from outside the city never wholly disappears even in the primary and grammar schools. With the supply of male teachers for these schools and of all teachers for high schools the normal school has little or nothing to do.

A normal school was established in 1852 by the city council, on the recommendation of the school board, as a part of the public-school system of Boston. In 1854 the school board, with the view of adapting the school to the double purpose of giving to its pupils both high-school and normal instruction, introduced a few additional branches of study, made a slight alteration in the arrangement of the course, and called it the Girls' High and Normal School. Under this name the school was continued until 1872, when the school board, finding that the normal element had been gradually absorbed by the high school, and had almost lost its independent, distinctive, and professional character, returned the normal school to its original condition as a separate school. Since then, under the name of the Boston Normal School, its sole work has been the fitting of young women for the office of teaching.

The course of study in this school is all pursued with special reference to teaching, and is as follows: (1) Psychology and logic, (2) principles of education, (3) methods of instruction and discipline, (4) physiology and hygiene, (5) the studies of the primary and grammar schools, (6) observation and practice in the training school, (7) observation and practice in the other public schools, (8) science of language, (9) phonics, (10) gymnastics, (11) vocal music, (12) drawing and blackboard illustration, (13) special study of the theory and practice of the kindergarten for those members of the postgraduate class who desire to qualify themselves for teaching in that department.

There is a postgraduate course of one year in this school for the further study of the principles of education and methods of instruction, and for observation and practice in teaching; and pupils attending this course may be employed as substitutes or appointed as permanent teachers.

In 1876 the Rice districe was constituted a training school, where the normal pupils have an opportunity of gaining by observation and practice a familiar acquaintance with the discipline and instruction of the Boston sohools. The training school contains eleven grammar and seven primary classes, numbering about 1,000 pupils.
${ }^{1}$ Reports of the public schools of Philadelphia; personal observation and correspondence.

A certificate that a candidate has completed the fourth year of the high-school course is accepted as proof of qualification for admission. The course of study in the Boston high schools embraces the following subjects: Composition; rhetoric; English literature; ancient, mediæval, and modern históry; civil government; botany; zoölogy; anatomy and physiology; chemistry; physics; astronomy; arithmetic, including the metric system; algebra; geometry; plane trigonometry; Latin, or French or German; vocal music, and drawing.
The board of supervisors do not admit to an examination for a situation as teacher any person who is not a graduate of the Boston Normal School, or of one of the State normal schools, unless such person has had at least one year's experience as a teacher.
The following table shows how the time of the students is occupied:
FIRST TERM.

| Subjects. | Hours per week. | Number of weeks. |
| :---: | :---: | :---: |
| Psychology | 5 | 20 |
| Physiology and hygiene | 4 | 16 |
| Aritnmetic................ | 4 |  |
| Oral expression and composition | 3 |  |
| Penmanship.............. | 3 |  |
| Grammar | 3 |  |
| Geography .. | 4 | 20 |
| Drawing..... | 1 | 20 |
| Vocal music Gymnastics: | 1 |  |
| Theory.. | 1 | 20 |
| Practice (12 minutes daily). |  |  |

SECOND TERM.


## THIRD TERM.

| Principles of education. | 5 | 7 |
| :---: | :---: | :---: |
| Logic .. | 5 | 3 |
| Language: |  |  |
| Oral expression and composition. | 4 | 3 |
| Science and language...... | 4 | 4 |
| History. | 4 | 3 |
| Arithmetic.. | 3 | 10 |
| Elementary science: |  |  |
| Plants | 4 | 2 |
| Animals | 4 | 6 |
| Color... | 4 | 2 |
| Drawing. | 1 | 10 |
| Kindergartening | 2 | 10 |
| Gymnastics: |  |  |
| Theory......................) | 1 | 10 |
| Observation and practice in public schools (all day, 10 weeks.) |  |  |

The work of the postgraduate class includes: (1) A further study of the principles of education, with special reference to their appplication in teaching the different subjects of the regular course, and in school discipline; (2) the history of education.

## THE NORMAL COLLEGE OF NEW YORK CITY.

The statute empowering the board of education to establish the free academy (now the College of the City of New York) for boys also empowered it to establish one or more similar institutions for girls. The legislature of 1847 intended to extend to each sex equal educational advantages, but the board of education neglected to carry out the provisions of the statute as regards girls. More than twenty years after the passage of the law the board of education established an institution for girls, in some respects similar to that for boys and in some respects inferior. Twenty years later the legislature passed a bill making the Normal College for Girls a real college, with all the powers appertaining thereto, and thus carried out the intention of the men who governed the State forty years previously.

In the fall of 1888 the board of trustees established an academic course of study, and an academic class was formed from volunteers from the normal freshman class. It started with 83 students; in 1892 it numbered 51 . The falling off was caused by removals from the city and by the return of a few to the normal department.

Of late years the college has been embarrassed by the difficulty of limiting the admissions to the number which the building could accommodate. The number enrolled in 1890 was 1,766 , but the number which could be efficiently instructed and comfortably seated was only 1,500 . The simplest remedy seemed to be to raise the scholastic requirements for admission, but this would have been resisted by the principals, and would have been very unpopular. The difficulty was evaded temporaxily by changing the "plan of marking," and as this contains some valuable pedagogic suggestions, it is quoted in full from President Hunter's report of 1892:

The plan of marking. -The plan was as follows: 1,000 was made the maximum mark that could possibly be attained; and this number was divided into 250 for arithmetic, 250 for English grammar, 150 for geometry, 100 for English composition, 100 for drawing, 100 for speliing, 25 for geography, and 25 for history. The subjects requiring reason and judgment received a value equal to two-thirds of the whole, while the purely memoriter subjects received only one-twentieth. The power to draw and the ability to spell are not infrequently natural endowments, they are certainly not signs of intellectual development; and yet on account of their importance, especially to teachers, each received a value of one-tenth. English composition, being really a part of English grammar, received also a tenth, for the reason that to the latter a very high mark had already been assigned. The low value given to geography and history, even had they been regularly taught, was perfectly correct; for the instruction heretofore in these subjects was little more than memorizing, which a child of 12 could accomplish perhaps better than a student of 15. Many candidates, weak in arithmetic, which is the foundation of the mathematical studies, and in English grammar, which is the foundation of the study of the English language, crept into the college on the strength of their memories, and at the expiration of a few months were compelled to request a leave of absence on account of personal illness, which simply meant inability to cope with the college curriculum. It goes without saying that geography and history could be so taught as to develop the higher mental pow-ers-reason, judgment, and imagination. But the fact remains that as a rule they are not so taught, and until they are it seems wise to give them a minimum value as factors for admission. The proof, however, lies in the result. The introductory class, formed from the admissions under this method of marking, is the best and strongest the college has ever had.

## Detailed sechedule of the course of study.

NORMAL COURSE.


Detailed schedule of the course of study-Contmued.
NORMAL COURSE-Continucd.

${ }^{1}$ Mathematics the first term and physical science the second term.
${ }^{2}$ Every third week.

Detailed schedule of the course of study-Continued.
NORMAL COUPSE-Continued.

| Department. | Subject. | Topics. | Text-book. | Time. |
| :---: | :---: | :---: | :---: | :---: |
| Modern language ... | French $\qquad$ <br> or <br> German | senior-continued. <br> Second term—Fourth year-Cont'd. <br> Grammar completed. Dictation. <br> Translation. Selections on peda- gogy. Conversation. Reading. <br> Literature of nineteenth century. <br> $\int \begin{gathered}\text { German literature. Translation. } \\ \text { Composition. Letter-writing. }\end{gathered}$ <br> Selections on pedagogy. Conversation. | $\left\{\begin{array}{l} \text { Noëi et Chapsal .. } \\ \text { Aubert ............ } \\ \text { Schlegel ............ } \end{array}\right.$ |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  | (History ......... | $\left\{\begin{array}{l} \text { The educational reformers, Come- } \\ \text { nius, Pestalozzi, Froebel. Lec- } \\ \text { tures. } \end{array}\right.$ |  |  |
| Pedagogy. | Training ........ | Moral and physical, of children ... | Fit |  |
| Natural science .... | Practice ......... <br> Physical geography. | Same as first term. <br> fFirst term's course continued. <br> Geology and zoology. Lectures... | Maury . |  |
| Mental science. | Psychology ..... | $\left\{\begin{array}{l} \text { Emotions and will. Applications } \\ \text { to morals and school govern- } \\ \text { ment. Lectures. } \end{array}\right.$ | Janes. Sully . |  |
| Physical science. |  | Electricity. Lectures ............. | Netos. |  |

Drawing.-Instruction in drawing is given one hour a week in every class throughout the course. The lessons are of such a nature as to enable teachers to illustrate on the blackboard with ease and facility, and to cultivate the eye and hand with the view of preparing pupils for industrial pursuits. There is also instruction in modeling during the second and third years.

Music.-During the freshman, sophomore, and pedagogic years instruction is given in the science and art of music, including musical notation, relation of musical sounds, musical scales, musical intervals, elements of harmony, exercises in reading and writing music, and methods of teaching music.

Chorus singing in all the classes one and one-half hours a week.
All students are obliged to study Latin during the entire course. A choice is permitted of French, German, or Greek, so that, in addition to English, only two languages can be pursued. The total enrollment of the college in 1891 was 1,748 students, of whom 1,333 elected French, 574 German, and 41 Greek.

## COOK COUNTY NORMAL SCHOOL, ILLINOIS.

"The Cook County Normal School has weathered many storms and has survived the test of nearly a quarter of a century," says the president of the board of education in a late report. Under the superintendence of Col. Francis W. Parker it has become, as was to be expected, a school sni generis. It will be difficult, therefore, to give a satisfactory account of it on conventional lines. Colonel Parker, as principal, occupies the chair of psychology and pedagogics. The vice-principal teaches mathematics, history of education, civics, and political economy. The other studies and exercises are provided for as follows: (a) History and literature; (b) the natural sciences; (c) elocution and the Delsarte system of expression; (d) drawing and methods in art; ( $e$ ) physical culture; ( $f$ ) painting, modeling, wood carving, illustrative drawing; ( $g$ ) Sloyd and pasteboard work; ( $h$ ) principles and methods of the kindergarten; (i) vocal music; ( $j$ ) kindergarten; ( $k$ ) geography; ( $l$ ) curator of museum and assistant teacher of sciences; ( $m$ ) assistant teacher of history and literature; ( $n$ ) assistant teacher of mathematics; (o) assistant teacher of vocal music, penmanship, and primary methods; ( $p$ ) librarian, secretary-treasurer, and assistant teacher of literature; $(q)$ assistant teacher of language; $(r)$ assistant teacher of science; ( $s$ ) superintendent of home handwork; ( $t$ ) assistant teacher of reading; ( $u$ ) teacher
of taxidermy and collector for museum; ( $v$ ) assistant teacher of elocution; (w) assistant teacher of elocution and reading; $(x)$ manager of students' hall. The viceprincipal is also principal of the practice school.
The central motive of the normal school is to prepare candidates for vacant positions as teachers in Cook County. The conditions of graduation are: "(1) Attendance for one year (forty weeks) on the professional training class; (2) satisfactory evidence of a high appreciation of the duties, responsibilitics, and possibilities of the teacher's profession; (3) sufficient knowledge and skill to warrant the beginning of the work of teaching; (4) ability to control, govern, and teach a school fairly well; (5) a knowledge of the principles of education sufficient to guide the candidate to the discovery of right methods; (6) a love for children and a devotion to the work of teaching; ( 7 ) tact to adapt one's self to the circunstances and at the same time courage enough to cling to a growing ideal of the teacher's functions; (8) a close, earnest, indefatigable study of the science of education and of the subjects taught. A habit of preparing very carefully every lesson and all other work; (9) good health and an excellent character."

Graduates of a university, a college, or an acceredited high school are admitted to the professional training class; also teachers of three years' successful experience holding first-grade certificates.

Ideally [says Colonel Parker] a pupil should enter the training class equipped with knowledge and skill sufficient to begin the work of learning how to teach. They should also have the mental power to study economically the laws of the mind and the principles of mental growth. Long experience has fully demonstrated that very few graduates, if any, of a four years' high-school course have this requisite knowledge, skill, or power. Four years' course in a good college should supplement the high-school course before a student enters upon professional training. It is far preferable to have a college course without professional training than to have only a high-school course with professional training. The true requirements should be a college course and professional training. But the standard of admission to a normal school is governed by circumstances which do not admit of an ideal standard. When a majority of candidates for positions as teachers attain their purpose by two years in a high school and an examination it is obvious that an ideal standard of admission to professional training would close the doors of every normal school.

The legitimate studies and work of a normal school, according to Colonel Parker, are the history of education, psychology, pedagogics or the science of education, pedagogy or the art of teaching, and practice teaching. "Theoretically it is much to be preferred that a good knowledge of the science of education should be gained before a candidate enters upon the functions of his office, but, when there is such short time for preparation and there is also a failure of mental power to grasp the principles of education, apparently the only feasible plan to pursue is to use the most efficient means to arouse a strong desire to know these principles. This is done by practice teaching."

Unprepared, desultory, fragmentary teaching in practice schools is considered to be worse than worthless to the pupils taught and profitless to the pupil teachers; consequently the school endeavors to make the practice work of great profit to the pupils taught, as well as the best possible means on the part of the pupil teachers of learning to teach. The practice school is a regular public school, belonging to and supported by the city of Chicago. It embraces the usual eight grades of a public school and is divided, for the practice teaching, into groups of pupils, from six to eight in each group. Two groups are made into a section, and two sections form a division. Each group, each section, and each division has a leader, chosen from the training class by the critic teachers. There is a regular line of promotion, measured entirely by skill in teaching, from the lowest assistant of a group to the highest assistant; from assistant to group leader, then to section leader, division leader, and lastly to special assistant in a room. The time of practice teaching is one hour each day. The primary grades have three lessons in the hour of twenty minutes each; the grammar grades have two lessons of thirty minutes each; thus when there are 40 groups, 100 different
pupil teachers can give lessons during the practice hour. The reasons given for this arrangement of groups are that the teaching of small classes is better adapted to the abilities of novices, that pupil teachers have more practice in teaching than by any other plan, and that pupils receive more individual attention.

Every third week the group leaders are moved up one group, and by this plan the successful members of the training class teach in all grades during the year. Each of the rooms of the practice school is under the direct charge of a critic teacher. The critic teachers are chosen for their knowledge and skill as teachers of their respective grades, and for their ability to teach and train pupil teachers. Each regular member of the faculty has the general supervision of the work done in the practice school in the subject which that member teaches.
The professional training class works in three divisions. The first division consists of pupils who require least help from their teachers. The third division requires the most help. Whenever a pupil of the second or third division is capable of doing the work of his division he is promoted. If a pupil of the first or second division fails hopelessly, he is demoted. When one gives evidence of incapability for the work of a teacher he is advised to withdraw.
The three divisions of this class are divided into eleven working committees each, with a chairman and vice-chairman, and to each committee is assigned by its chairman some special work, such as the preparation of maps or the construction of illustrative apparatus. ${ }^{1}$

## NEW YORK COLLEGE FOR THE TRAINING OF 'fEACHERS.

The normal school in its latest and highest development may be most profitably studied in connection with the New York College for the Training of Teachers, which was chartered by the board of regents of the University of the State of New York in January, 1889. Unlike many so-called normal schools, normal colleges, and normal universities, its name strictly defines its purposes and fixes its rank. It does not propose a scheme of universal education, but simply to train for the profession of teaching those who have obtained elsewhere the elements of a liberal education. It is not a school. It is not a university. It is strictly a college; and a plan is now perfected by which it will become to all intents and purposes a department of Columbia College, under the control of Columbia College, under the control of the faculty of philosophy of that university. At the very outset the founders expressed their intention to establish a purely professional school (not a normal school "in the usual sense of that term"), in which the elements of a secondary education were not to be taught, but to be required of candidates for admission. A similar requirement is the condition of admission, at least on paper, to most of the State normal schools, but is seldom strictly enforced. Indeed, to have insisted on this password would in bygone days have closed the doors against almost every applicant, and even at present such a preliminary would prevent a large majority of those who are most in need of normal training from crossing the threshold. But while excluding secondary education as such, the New York College offers a very wide range of professional instruction-the kindergarten, the primary school, the high school, manual training, physical training, music, domestic economy, form and construction, physical and naturai science, language and literature, English and Latin, as well as psychology, philosophy, and history of education, and organization of schools. It seems to liave taken its motto from Terence--the reader will excuse the hackneyed quotation-" humani nihil a me alienim puto."

The history of the development of this college is extremely interesting. An association of philanthropic ladies and gentlemen of New York City had been formed in

[^137]1885 to promote industrial education. The work of this body grew rapidly, and in 1887 it found itself unable, through lack of means and trained teachers, to answer all the demands made upon it. At this juncture the association, known as the Industrial Education Association, invited Dr. Nicholas Murray Butler, then as now professor of philosophy and pedagogy in Columbia College, to become its president. He accepted the position and began at once to organize the work so as to carry out two plans that he had long cherished-one to put the steadily growing manualtraining movement upon a strictly educational basis, the other to found an institution of high grade for the professional training of teachers. The New York College for the Training of Teachers was then founded by him, and his plans were accepted by the Industrial Education Association, which thereupon dissolved, some of its members becoming trustees of the new institution. At first its means were small and its quarters cramped, and it devoted itself largely to preparing competent teachers of the several manual-training subjects. The college rapidly won the confidence of the community and of the country, and large sums of money were raised for its support and development. In two years (January 12, 1889) it was able to meet the conditions imposed by the regents of the University of the State of New York, and obtained from them a formal charter. In 1890 Dr. Butler, having accomplished the task that he had set before himseli, resigned the presidency of the college in order to devote himself exclusively to the work of his Columbia professorship.

The students cover a wide geographical range. The register for 1892 contains the names of students from eighteen States, from Canada and from South America.

The habitat of the college at present is No. 9 University place, New York, formerly the location of the Union Theological Seminary; but it has already outgrown its environment, and a new site has been obtained, the gift of Mr. George W. Tanderbilt, twenty-one city lots on block bounded by One hundred and twentieth street, One hundred and twenty-first street, Amsterdam arenue and the Boulerard, opposite the location chosen for the new buildings of Columbia College. One hundred and fifty thousand dollars are in hand for the promotion of this enterprise, 860,000 pledged, and New York is asked for $\$ 450,000$ more, which will doubtless be forthcoming in good time.

The public-spirited men and women who have founded and sustained this college are planning to make it yet stronger and better. * *** In the art of large giving which men and women of wealth are coming more and more to excmplify, there has been no lack of diversified experiment, from which experiment two principles, among others, have clearly emerged: First, that no form of beneficence can outrank gifts for education, for education does much to abolish the opportunity for charity, while it increases the quantity and refines the quality of life; second, that it is well to give to some educational agency with initiative in it, something which by virtue of new excellence will be widely imitated, either in generous emulation or through simple competitive sagacity. The college for training teachers has already had an influence for good on the public education of this city, State, and country. Its influence will grow in direct proportion as its faculty is increased and strengthened. ${ }^{1}$

Candidates for admission must be at least 18 years of age, must present a certificate of good moral character, and pass an examination in the following subjects unless exempted from examination under rules given below.

ENTRANCE EXAMMATIOAS.
English language and literature.-Grammar, analysis and the writing of a composition correct in spelling, punctuation, expression, and division by paragraphs. In 1892 the subjects for composition were taken from Shakespeare's As You Like It, Longiellow's Courtship of Miles Standish, Irving's Alhambra, Addison's Sir Roger de Coverley Papers.

Mathematics.-Arithmetic, including the metric system of weights and measures, plane geometry, five books of Davies' Legendre or Wentworth's Geometry, algebra as far as quadratic equations.

Geograplay.-Physical and political geography, especially that of the continents of North America and Europe.

History.-General history, so much as is contained in Swinton's Outlines; United States history, so much as is contained in Johnston's History of the United States.

Physiology and hygiene.-An elementary knowledge, such as is given by any of the school text-books ordinarily used.

Drauting is not insisted on, but it is considered desirable that candidates should be able to draw intelligently a group of models and possess a general knowledge of the principles of construction and design.

Graduates of colleges and scientific schools in good standing are admitted without examination; also graduates of high schools and academies in the curriculum of which all the subjects of the entrance examination are included; and candidates who hold a college entrance certificate given by the regents of the University of the State of New York.

Students of both sexes are received on equal footing.
Departments.-The following departments are now in operation (1892):
I. Department of the history and institutes of education.
II. Department of the science and art of teaching.
III. Department of natural science.
IV. Department of mechanic arts.
V. Department of yocal music.
VI. Departinent of form study and drawing.
VII. Department of physical culture.
VIII. Department of domestic economy.
IX. School of observation and practice.
I. The department of the history and institutes of education offers six courses, of which the first and third are required of all students.

Course 1.-Elements of psychology, two periods each week. James's Briefer Course is used as a text-book; but the class is led to base conclusions upon the Baconian system of observation and experiment rather than upon the use of books.

Course 2.-Devoted to advanced psychology and pedagogy, two periods each week. The aim of this course is to enable students to deal with children as individuals, by the application of psychologic principles, and by simple experiments in attention, association, imagination, and discrimination.

Course 3.-Two periods each week for half a year. Studies the principles of education in the light of their development. The text-book is Quick's Educational Reformers, but references are made to works on the history of education, systematic pedagogy, general history, and periodical literature.

Course 4.-One period each week. Takes up the principles of education on the basis of Rosenkranz's Philosophy of Education and Rosmini's Method in Education, with discussions of special topics in pedagogy and psychology.

Course 5.-Two periods each week. Is occupied with the history of educational institutions, theories, methods, and individual educational leaders, with critical reading of educational classics.

Course 6.-Gives a briefer course of elements of psychology. This is a Saturday class, and gives an opportunity to teachers who are engaged in the active duties of their profession during the week to renew and extend their theoretical studies in educational psychology. In this connection opportunity is afforded to advanced students to meet for one hour each week the professors of the department, members of the faculty, instructors and resident alumni for reviews of current literature and discussion of educational topics. The subjects discussed during the year 1891-92 related to the moral development and training of children.
II. In the department of the science and art of teaching there are eight courses, which, however, are not mutually exclusive. The first and third are required of all students; the second and fourth of all who are candidates for diphoma. The work of this department is closely related to that of the preceding, inasmuch as it makes a practical application of the philosophical principles therein formulated, and shows the connection between theory and practice. Observation and practice at every step in the work of the college accompany theoretical instruction. School organization, gradation and classification, courses of school study, and the preparation of programmes belong to this department.

Course 1.-Two periods each week. Methods of teaching language, number, and geography; elementary course.

Course 2.-Two periods each week. Mrethods of teaching literature, geometry, and history; advanced course.

Course 3.-One period each week. Principles of teaching with special reference to the application of the psychology of the feelings and the will to school organization and discipline.

Course 4.-Five periods each week. Practice teaching.
Course 5.-A Saturlay class. Methods of teaching; briefer course.
Course 6.-A Saturday class, for half the school year. Methods of teaching literature in secondary schools; study of typical authors, with discussions of methods, devices, and values.

Course \%.-A Saturday class, for half a year. Methods of teaching history in secondary schools; discussion of civil government, practical economics, and the concrete study of social problems in their relation to the work of the schools.

Course 8.-A Saturday class. Methods of teaching Latin; critical reading of typical passages from Latin authors; the essentials of etymology and syntax; prose composition and Latin rhetoric; methods in elementary work.
III. In the departinent of natural science the major course aims to prepare students to become-
(1) Teachers of science in State and city normal schoois.
(2) Teachers of science in high schools and academies.
(3) Supervisors of elementary science instruction in all grades of public schools. Candidates for admission must show an ability to comprehend, without instruction from the college, the elements of chemistry, physics, physiology, zoology, botany, and geology, so far as they can properly be taught in the common schools. Mere text-book knowledge is not sufficient. Some reputable laboratory work showing an alility to acquire knowledge at first hand is necessary to admission.

Some of the practical problems on which students labor in this department are these: How shall science be taught in public schools where the appropriation for equipment is insufficient; how to manage where there is no laboratory and everything has to be done in the ordinary class room; how pupils in large city schools may be brought into contact with nature; how to manage the details of a laborator: how to make experiments educative and not simply a diversion; how to reconcile an inflexible prescribed course of study with gratuitons information and illustrative experiments.

The head of the deparment and his assistants give the entire instruction in science in the school of observation and practice in the presence of the college students. Major students in this department observe this teaching at least nine periods a week during the year, making a selection, after consultation with the head of the department, from the following programme:

Chemistry, twice a week, each lesson eighty minutes.
Physics, twice a week, each lesson eighty-five minutes.
Zoology and physiology, twice a week, each lesson eighty-five minutes.
Botany and geology, twice a week, each lesson eighty-five minutes.
Nature lessons, in lower grades, once a week, each lesson thirty-five minutes.

A lecture on methods of teaching science is given once a week. Special instruction in the art of experimenting and in the construction of home-made apparatus is given once a week, and two periods a week in individual laboratory practice are required from every student in this course. A major course in science thus includes fourteen periods a week for one year, and a few weeks of practice teaching in the second year.

A minor course in science is arranged for students who desire a side light for courses in other departments of the college, or who seek preparation to teach some one science or to give object lessons in comnection with the work of elementary schools. It consists of selections from the work offered in the major course.

On Saturdays, from October to Easter, a lecture on methods of teaching natural science is given to teachers of New York City and the vicinity.
IV. The department of mechanic arts offers seven courses:

Course 1.-Four periods a week of eighty-five minutes each. A course in mechanical drawing designed for students who desire a practical knowledge of drawing and for those who intend to teach drawing in grammar and high schools.

Course 2.-Two periods a week. Mechanical drawing; in advanced courses.
Course 3.-Four to ten periods a week. In woodworking; (a) a course in mechanical drawing and woodworking for elementary schools which can be performed in the ordinary schoolroom at any school desk; and (b) a course of joinery and elementary wood carving suitable for grammar and high schools.

Course 4.-Four to eight periods a week. An advanced course involving joinery, carving, turning, and pattern making.

Course 5.-A Saturday class for teachers who can not attend the regular classes; an abridgment of course 3 .

Course 6.-Two periods a week. Given to the construction of simple apparatus for scientific experiments.

Course $\%$.-Four periods a week. Wood carving; a study in wood of some typical ancient and modern relief designs.

A conference of instructors and students in this department is held once a week to discuss important questions relating to drawing and manual training.
V. In the department of vocal music the tonic sol-fa system is employed as a means of training and developing the musical powers of the student, and also as the best medium for leading to an intelligent understanding of the staff notation. Two periods a week for one year are devoted to this study.
VI. The department of form study and drawing comprises a systematic course of study in the models and type forms given to children in the three years of the prinary school, modeling in clay, elementary decoration in the arrangement of simple goometric figures, cutting these figures from colored paper and pasting them, studies belonging to the kindergarten and primary schools especially, but useful as a foundation for more advanced teaching. Students who desire to become special teachers of form should be able on entering the college to pass an examination in free-hand drawing and light and shade.

The advanced course in this department embraces constructive drawing, patterns of typical solids, decorative drawing, conventional plant forms, drawing in charcoal, examples of ornaments in water colors, study of the schools of historic ornament, and principles of design. Throughout the course it is steadily kept in view that the purpose is not to make artists, but to train students to become teachers of drawing. The time devoted to this work is four periods a week for one year.
VIII. The department of domestic economy is maintained as a part of the manualtraining system of the college. The major course covers two years, the first year being devoted to psychology and methods of teaching (six periods a week), and chemistry and physiology with laboratory work (twelve periods a week). The second year gives four periods a week to physics and household hygiene, and fifteen periods a week to cooking, sewing, and practice teaching.

It will be noticed that the same professional training is given in this department as in other departments of the college. After attending lectures on psychology and methods of teaching, the student in the second year teaches classes in the model school, under the supervision of the professor of science and art of teaching, before teaching classes in cooking and sewing. By the study of physics and chemistry in comection with domestic economy the stadent acquires habits of close observation and careful experimenting and learns how to apply scientific methods to kitchen work. The course of six periods a week for one year includes practice in all branches of cookery; but more attention is given to economical and wholesome cooking than to the preparation of elaborate dishes. Students learn to operate with coal, gasoline, and kerosene, as well as with gas. In all the processes the aim is to study the conditions and learn to control them until uniform results are obtained.
Two periods a week are given to sewing-instructions in plain hand sewing, making patterns, study of textile fabrics and their manufacture, observation of sewing lessons given by an expert teacher, and practice teaching.

An elementary course in cooking or sewing may be elected by regular students who desire to equip themselves as broadly as possible for general school work.
IX. The Horace Mann School is related to the New York College for the Training of Teachers as its school of observation and practice. In this department every stage in the school life of a child, from the kindergarten through the high school, is represented, and the complete curriculum may be studied as one organic whole. The proper adaptation and adjustment of the school of theory to the school of practice has long been felt to be the crucial task in the arrangement of the normal-school curriculum. So difficult has been this problem that some schools have never attempted the solution; some have made the attempt and have abandoned it; some have accomplished the feat-on paper; some have established a school of practice without observation, and some a school of observation without practice; while some are still conscientiously strugggling with the experiment, and realizing that the "Echool of observation and practice" is like a loose tooth, more noticed for the pain it creates than for the service it renders. The New York College seems to hare succeeded in solving the difficalt problem. It has reversed the usual conditions, and in place of instruction with incidental training, it gives training with incidental instruction. In many normal schools, though the number is growing smaller, the students consider every hour not given to class recitations as so much time lost; but in schools like the New York College the time given to observation and practical teaching is felt to be all gain.
Students receive their practical training in the several grades of the Iiorace Mann School - the kindergarten, the intermediate school, the grammar school, and the high school. None are admitted to the kindergarten except such as present a high-school certificate, or its equivalent, or pass the entrance examination to the college. The course covers two years, and includes the theory of Froebel's system, psycholocy, kindergarten gifts and occupations, songs and games, vocal music by the tonic sol-fa method, form study and drawing, clay modeling and color, physical cuiture, and practice teaching.

Degrees.-It was formerly intended that the full course of the college should learl up to the degree of bachelor of pedagogy, but this degree has never been given by the college, and, under the conditions on which Columbia tates charge of it, probaby never will be. The college diploma is conferred upon sach students as have completed a course of stady covering two years, as follows:
Required:
Periods.
Department of history and institutes of education 8
Department of science and art of teaching - . . . . . . . ............................... 11
Department of kindergarten, Course I..................................................- 2
Department of form study and drawing, Course I....................................... I



#### Abstract

Elective: A major course or minor courses. The college certificate is conferred upon such qualified candidates as have completed a course of study covering one year, as follows:Required:Periods.Department of history and institutes of education................................... 4 Department of science and art of teaching ..... $2^{\text {• }}$ Department of physical culture ..... 2 Elective: In any department a major course together with such minor courses as will suffice to make up the required amount of work ..... 14 Total ..... 22

In the session of 1891-92 there were in attendance 119 regular students and 96 special, with 264 pupils in the school of observation and practice. For their instructioil and government there were 11 professors, 2 lecturers, and 21 instructors and other officers. ${ }^{1}$

The New York College for the Training of Teachers (says the New York Evening Post, in April, 1892) is not to be considered as an individual institution whose chief influence is confined to its own students and to the schools that these students enter as teachers, although it has already drawn its students from 18 States, and numbers among them both experienced teachers and graduates of colleges. This college is to be regarded as a type, an object lesson, and an experiment station. There are not lacking evidences that by its aggressive work it has helped to elevate standards in many quarters and to stimulate and guide the progress of educational reform.

Applying the principle of extension, the college has organized classes for the study of the kindergarten system in New York and in neighboring cities and towns and has sent specialists in manual training to numerous schools in the vicinity, so that more than 2,000 pupils are now under this instruction in 17 places within 50 miles of this city. By this means and through correspondence and independent investigation, the principles and methods of the college are being diffused over the country. The interest and approbation with which its development is watched by eminent educators are signified by the strongest testimony from the highest sources. ${ }^{2}$


## IX.

## PRIVATE NORMAL SCHOOLS.

The Report of the Commissioner of Education for the year 1858-89, page 961, contains the statistics of 46 private normal schools, distributed as follows:
Arkansas, California, Kansas, Louisiana, Michigan, Missouri, Pennsylvania,
Tennessee, Texas, Washington, West Virginia, each 1.............................. 11
Alabama, Georgia, Kentucky, Nebraska, North Carolina, Wisconsin, each 2..... 12
Mississippi, South Carolina, each 3.............................................................. 6
Illinois, Indiana, Ohio, each 4......................................................................... 12
Iowa...................................................................................................... 5
Total.............................................................................................. 46
Several of these have already been noticed in these pages under the caption of "Colored Normal Schools."
The number of normal students, "pupils in the science and art of teaching," is given in the report as 4,487 , and it is to be noted that about half of these are found in two schools, one in Indiana and the other in Iowa.
Of the 46 schools, 20 report no graduates for the year 1888-89; the remaining 26 report 315 graduates. The number of graduates for that year is, therefore, 7 per

[^138]cent of the whole number of students in attendance, or, rather, the whole number enrolled.

One of these schools was opened in 1833; 5 between 1865 and 1839 (both inclusive); 16 between 1870 and 1879, and 24 between 1880 and 1888 .

The most prominent must be regarded simply as business enterprises, and not as normal schools properly so called. They propose to fill a known want; they are conducted on business principles, and should be judged by business standards. They receive all who apply for admission, and base their claims to public patronage on the ground that they give good value for the money receired. A fair idea of their business methodis may be obtained from a perusal of their catalogues and circulars. A few specimens are given, the names being withheld for obvious reasons:
A. "Our courses of study are the best arranged and best carried out of any private normal in this country." "They are especially adapted to the preparation of men and women for entering the study of law, medicine, the ministry, and editorial life." "No more desirable location for a school can be found anywhere." "There are many cultivated people who are prejudiced against private normals. This is very natural when we consider the number and character of many schools of this kind.'" "In making your decision examine courses of study and decide at once against any school that promises to do thir'y weeks' work in ten weeks." "The men who have been in the institution since the present management took hold of it are teachere thoroughly prepared for their work in point of scholarship. In no sense were they place hunters. All were successful teachers." "The school is unexcelled in its mathematical, language, philosophical, chemical, and pedagogical departments, as compared with similar institutions. Our students who have attended elsewhere areforemost in their praise of this institution." "If you complete our course you will be well fitted for any position in life." "We have better buildings, better laboratory, and better location than our competitors. Our courses are more thoroughly carried out. We advertise nothing extravagantiy. We chaim that no normal school in the United States has a stronger course than ours, and that no school can offer as good advantages at so low a price. Students are allowed to enter any of the courses at any piace, with the understanding that they are liable to be put back if the faculty decides they are not qualified to go on. We say come, and if, after you have given us a trial, you don't like the school, you shall have your money."
This school has 13 teachers in addition to the president, and advertises a preparatory course, a teachers' course, one year; a scientific course, two years; a classical course, three years; with a musical department, a commercial department, a fine-art department, and a phonographic department. The number of students is betreen 400 and 500.
B. "The location is one of the best in the United States." "No place could befound anywhere better suited for being the seat of a flourishing school than 'B.'" "It is noted for its remarkably healthy climate. During all the history of the school there have been but two deaths among the students. Many who come here weak and sickly go away strong and well." "The building is not surpassed by any normal school in the West." "An education can be secured here in three years which will better fit a student for success in life than is generally received from colleges in six years." "The teachers' course as presented in this school is one of the most complete courses of study offered by any school." "Not only does this course prepare teachers for their great work, but it gives all who take it such thorough and practical training in the various branches, such honesty, genuineness, and individuality in his [sic] work, such strength and force of character, and such mental discipline as will enable him to take up any line and pursue it successfully." "Those completing this course in a satisfactory manner will be awarded a handsome diploma." "The faculty are all specially qualified for their distinctive lines of work. They areknown to be ladies and gentlemen of the highest moral character." "Pupils are

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admitted to the school without examination and take any classes that they feel able to take." "Its name and influence is always a great aid to its students for securing good paying positions."

This school offers a preparatory course, a teachers' course, a scientific course, a classical course, a business course, and a shorthand and typewriting course. There are 9 teachers, with an enrollment of about 250 students. The school has changed proprietors five times in ten years.

C is a stupendous institution and counts its annual enrollment by the thousand. "It is practical and meets the demands of the times." "It is the best established, most widely known independent normal school in the West." "Its reputation is sufficient to secure ready employment for its graduates, and more students of ' C ' are filling responsible positions than from any other." "The expenses at this school are less than at most schools." "We do as good work in every way as schools that charge twice and thrice as much, and incomparably more than most schools whose expenses are about the same." "Our graduates have made from $\$ 4,000$ to $\$ 12,000$ in the length of time that would have elapsed after they had completed the work here and before they had completed the same work in other colleges that do their work more slowly, but not more thoroughly than ours."
"No examinations are required for admission to any course or department in the college." "You can come at any time and find just such classes as you desire."
"We have the following well-equipped departments with an excellent faculty for each department: Classical, scientific, normal, common school, teachers' professional, review, elocutionary, civil engineering, business, pen art, phonographic, telegraphic, musical (piano, voice, organ, including pipe organ, guitar, violin, band, and orchestra), art, physical training. The members of the faculty are specialists in their respective departments."
"You can make no mistake by attending 'C.' If not as represented in this announcement, money will be refunded." "Don't pay extravagant school bills, but come to the cheapest, best school in the country." "Our students almost invariably leave school in better health than when they enter."
D. " ' $D$ ' is the best place to obtain an education. Every year it grows better. Its methods are the best; its instructors are experienced, cultured, and successiul; its expenses are as low as is consistent with proper living and instruction." "Now is the accepted time. The 'D' school offers a rare chance to obtain an excellent education. The time and money will be well spent, and we guarantee that you can not find elsewhere better inducements." "Only teachers of ability and successful experience are employed. We confidently assert that no similar institution can furnish instruction superior to that afforded by 'D.' We know that our methods are the best, the most conformable to the fundamental laws of education, and hence the most successful that can be employed."
"We advertise notling that we do not have." [The italics are in the original.]
"' $D$ ' invites all classes of pupils. Teachers, pupils from the common schools, young men and women preparing for business pursuits, or wishing to acquire a musical education, high-school graduates-all classes attend the normal at 'D,' and find work suited to their needs. No young man or woman, however backward in his studies, need feel any hesitation in enrolling among its pupils, as it adapts its work in the common branches largely to that class of students."
"No examinations are required to enter 'D.' Students upon entering will be assigned rank in the course they wish to pursue, according to previous preparation. Our work is so arranged that those entering in the middle of a term can find just such classes as they desire."
' $D$ ' has five teachers besides the principal. In the "literary department" it presents three courses-preparatory, teachers' advanced, and scientific. The following is the curriculum of the teachers' advanced course :

First ierm. -Natural philosophy, algebra, didactics, zoology, rhetoric, elocution.
Second term. - Natural philosophy, algebra, history of education, geineral history, elocution, rhetoric, and composition.

Third term. -General history, algobra, mental philosophy, plane geometry, vocal music.

Fourth term.-Bctany, algebra, English and American literature, didactics, oration.
Ten weeks constitute a term.
E. "Our facilities are the very best, and our rates defy competition." "In any case where pupils hesitate about coming to us on the ground that they are not sufficiently well advanced, we would like to say that such persons will be more highly benefited than others. The majority of our young people are of moderate scholarship. All pupils of whaterer grade can be accommodated." "The school employs only the best men and women as teachers in every department." "The classes are so arranged that students who may not be able to complete a full course in any department may enter at any time, study what is most desirable, and get full credit for what they accomplish." "Pupils can enter at any time with the assurance of finding classes suited to their needs."
"The managers of teachers' agencies tell us repeatedly that they can locate our graduates and undergraduates with much less dificulty than pupils from other sections." "Our graduates and undergraduates have passed the severest tests and always with the highest credit. They have met in closest competition the representatives of the best schools for positions in all walks of hife, and have invariably sustained themselves. So true is this that the fact has become widely known, and the demand upon us for trained teachers is much greater than we can meet. Our best pupils are everywhere commanding higher salaries than others for the same grade of Worc."
"The young people trained in ' E ' secure their positions more readily and give much better satisfaction than those trained in other sections."
"Teuchers' course-Ten weeks, arithmetic, geography, English grammar, theory and practice, spelling; ten weeks, physiology, mental science, history, theory and practice, penmansbip.'

The number of students registered in this course (cataiogne of 1897) is 152.
The other courses and departments advertised are preparatory, engineering, commercial, music, scientinc, elocution, and classic. The number of teachers is 12.

F is a "County normal school;" that is, an educational enterprise on business principles, having close relations with the school administration of the county. It was opened in 1870, and in 1892 had 318 pupils, of whom 248 were "normal," 56 in the high school, and 14 preparatory. The normal course extends through two years. The high school covers four. The normal studies of the first year are arithmetic, grammar, geography, history, reading, spelling, and physiology; art of school management, algebra, civil government, bookkeeping, Latin (elective), Shakespeare. The additional studies in the second year are geometry, literature, rhetoric, natural philosophy, botany, and mental philosophy.
"Before the establishment of this school many parents who wished to educate their children and who were not able to send them to college or State normal schools were compelled to keep them at home and confine their education to the narrow limits the district school then afforded. But this institution now offers them the same advantages as the State normal schools, with only half the expense. The teachers who have gone forth from this school have rendered universal satisfaction, and they have won for themselyes and for the school at which they received their training a flattering reputation. Our teachers are in demand and are commanding the best positions and highest salaries paid in the county. The school boards in a number of townships have paid the school the high compliment of refusing to hire any teachers but those it has prepared. During the past year [1892] every township
was represented in the school, and more than three-fourths of the whole number of teachers in the county were in attendance. This class [class in theory and practice of teaching] is under the supervision of the county superintendent, who is careful to make his instruction so effectual that the number of failures in our common schools may be brought down to the lowest number possible. Connected with the normal school is a model school of 50 pupils. Students are required to teach and criticise in this department until they are perfectly familiar with the best methods of teaching primary schools."
F is one of the youngest of the "independent normals." It is a "normal university." It presents a full assortment of courses, schools, and colleges, some in presenti, some in futuro-a preparatory school, a school of elocution, a school of fine arts, a sclool of music, a school of phonography and typewriting, a school of telegraphy, a college of teachers, a college of science, a college of literature or modern languages, a college of philosophy, a college of liberal arts, a college of business, a college of engineering and surveying, and colleges of law and medicine. The object of the college of teachers is to prepare young men and women thoroughly and speedily to teach a country school and all classes of a graded school up to the high school, and to pass the requisite county examinations for a certificate. The time required for this preparation is "two or three terms of eight weeks each." We learn from the catalogue (1890) that " F " "is authorized by law to issue diplomas and confer degrees usually conferred by educational institutions;" that it does not "depend on examinations, quarterly or annual, as giving any desirable or healthy stimulus to vigorous effort; that "here there is nothing to attract the attention from his work, and [he] has no less than twelve hours a day to devote to study," and that "all the teachers employed are of recognized abiiity."
The following gives the courses of study in probably the largest independent normal school in the United States. It will be noticed that the normal course proper cecupies but one year of forty-eight weeks:
Courses of study.

| Common-school course: <br> First term, 10 weeks. <br> Second term, 10 weeks. Third term, 10 weeks. Fourth term, 10 weeks. Fiith term, 8 weeks. | Arithmetic. <br> Arithmetic. Arithmetic. Algebra. Algebra. | Geography and map drawing. <br> Physieal geography. <br> Physiology. <br> Physiology. <br> Review. | Grammar. <br> Grammar and analysis. Composition. Rhetoric. Rhetoric. | Reading and orthography. <br> Reeding. <br> Vocal music. United States history. Civil government. | Penmanship. <br> Penmanship. Drawing. Didacties. Didacties. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Normal course: <br> First term, 10 weeks. Seeond term, 10 weeks. Third term, 10 weeks. <br> Fourth term, 10 weeks. Fifth term, 8 weeks. | Arithmetic. <br> Algebra. <br> Algebra. <br> Algebra. <br> Review. | Geography. <br> Geology. <br> Anatomy and physiology. <br> Botany. <br> Philosophy. | Grami iar and analysis. <br> Rhetoric. <br> Rhetoric. <br> Latin grammar or German. <br> Latin reader or German. | Reading and orthography Reading. <br> Civil government and United States history. English literature. <br> American literature. | Penmanship. <br> Vocal music. <br> Drawing. <br> Didacties. <br> Didactics. |
| Scientific course: <br> First term, 10 weeks. Sceond term, 10 weeks. Third term, 10 weeks. Fourth term, 10 weeks. Fifth term, 8 weeks. | Geometry. <br> Trigonometry. <br> Analytieal Geometry. <br> Astronomy. <br> Surveying. | Geology. <br> Chemistry. <br> Physics. <br> Botany. <br> Zoology. | Cæsar or German. Cæsar or German. Virgil or Mary Stuart. Virgil or Wilhelm Tell. Cicero or Wilhelm Tell. | English history. <br> English literature. English literature. American literature. Political ceonomy. | Penmanship. <br> Voeal music. <br> Drawing. <br> Didacties. <br> Didaeties. |
| Classic eourse: <br> First term, 10 wecks. sceond term, 10 weeks. Third term, 10 weeks. Fourth term, 10 weeks. Fifth term, 8 weeks. | Psyehology. <br> Logic. <br> Ethies and resthetics. Politieal economy. Literary eriticism. | Sallust. Cicerc. Horace. Taeitus. Juvenal. | Greek grammar. <br> Homer. <br> Sophocles. <br> Æsehylus. <br> Demosthenes. | Chaucer. <br> Spencer. <br> Milton. <br> Shakespeare. <br> Shakespeare. | Public lectures at the close of each term. |
| Business eourse: <br> First term, 10 weeks. Seeond term, 10 weeks. Third term, 10 weeks. | Bookkeeping. Aetual business. Actual business. | Arithmetic. Commercial srithmetic. Commereial law. | English. <br> Penmanship. <br> Rapid addition, etc. | Letter writing. <br> Reading and orthography. Penmanship. | Penmanship. Permanship. Debating. |
| Civil engineering course: <br> First term. <br> seeond term. <br> Third term. <br> Fourth term. <br> Fiith term. | ITigher algebra. Trigonometry. Analyties. Calculus. Review. | Geometry. <br> Land surveying. <br> Material and bridges. <br> Railroad engineering. <br> Leveling and city engi- <br> necring. | Geology. <br> Theoretical chemistry. <br> Physies. <br> Botany. | Grammar. <br> English literature. English literature. American literature. Rhetorie. | Geometrical drawing. <br> Perspective. <br> Projeetion drawing. <br> Penmanship. <br> Lettering.- |

This school is located at St. Francis, 2 miles south of the city limits of Milwaukee, near Lake Michigan. It was founded in 1870 by Dr. Joseph Satzmann. The aim of the instruction given in the normal school, as stated in the catalogue of 1890 , is (1) to ground the student in the knowledge and practice of Catholic faith; (2) to provide means of acquiring useful general knowledge; (3) to give such specific training as will best fit for work in the schoolroom. Students who complete the normal course of four years and otherwise show fitness to be intrusted with the instruction of children receive a diploma.
The following is the course of study:
First year.-Christian doctrine; Bible history; English; German; arithmetic; geography; penmanship; drawing; music.
Second year.-Christian doctrine; Bible history; English; German; aritlmetic; United States history and civil government; physiology; drawing; music.
Third year.-Christian doctrine; Bible history; English; German; general history; natural science; algebra; elocution; pedagogy; music.

Fourth year.--Liturgy; general and ecclesiastical history; literature; English; German; natural science; geometry; pedagogy; music.

The aim of the work in pedagogy is to familiarize the student with the best educational methods of the present day. A course in psychology and science of education forms the basis of the work. The organization, classification, and management of numbers, the requirements in a course of study adapted to the capacity and wants of children in the parish schools, the relation of the teacher to the pastor and to the congregation, and his duties and responsibilities as a citizen are discussed in lectures, supplemented by a text-book.
This is one of the few normal schools in the United States open to young men exclusively. The register for 1889-90 contains the names of thirty-two normal students. ${ }^{1}$

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## CHAPTER XLIX.

NECROLOGY FOR 1898.

AMTERECAN.
Abbot, Levi, in Mollis, N. H., Mar. 11; b. in Wilton, N. H., May 28, 1818; graduated at Yale University in 1840; taught in Alexandria, Ya., 1813-49; studied law at Harvard Law School, and was admitted to New Hampshire bar. Preferring teaching, in 1854 he went to Newark, N. J., first as teacher of classics in the Wesleyan Institute, later in an English and classical school of his own. In 1862 he remored to Hollis, where he was superintendent of schools until his death.
Andrews, Isriel Wr., in Danvers, Mass., Nov. 24; b. there July 1, 1820; left penniless by his father's death, he gained his education by hard work, studying at the Danvers public school, Mr. Alanson Valentine's private school, North Hampton (N. H.) Academy, Topsfield (Mass.) Academy, and later took a course at the classical school in Danvers. He was always prominent in the affairs of his town, and for nearly forty years was on its school board.
Andrets, Rey. Mark S., D. D., in Mobile, Ala., May 18; b. in Oglethorpe, Ga., Feb. 23, 1826; graduated at Emory College; taught several years, read law, but entered the ministry. In 1855, as agent, he raised the money to build the Tuscaloosa Female College, and filled a chair in that institation the following year. The remainder of his life was spent in the ministry.
Apple, Rev. Dr. Thomas, at Lancaster, Pa., in Sept., aged 68 years; professor of church history and New Testament exegesis in the Reformed Theological Seminary, at Lancaster, Pa.
Archer, Janes, in Jefferson County, Miss., Dec. 30; b. in Harford County, Md., Dec. 23, 1811; graduated at Yale University in 1830; was a planter up to the civil war and afterwards a teacher.
Austin, Edward, of Boston, Mass. He bequeathed $\$ 500,000$ to Harvard University, $\$ 400,000$ to Massachusetts Institute of Technology, $\$ 30,000$ to Radcliffe College, $\$ 30,000$ to Roanoke College-in each instance the interest to be used to aid needy and meritorious students and teachers- $\$ 10,000$ to the Harvard Bacteriological Laboratory.
Ayer, Josepmine Mellin Southwick, in Paris, France, Jan. 3; b. in Medway, Mass., Dec. 15, 1855; came in possession of great wealth at the death of her husband, John C. Ayer, the chemist; aided a great number of struggling American artists and singers. She gave $\$ 50,000$ for a clinical laboratory in Pennsylvania Hospital in Philadelphia, and $\$ 100,000$ to the founding of a women's and children's home in Lowell, Mass.
Balley, Chancellor, in Milldale, Va., May 11, aged 65 years; a native of Culpeper County, Ta.; in business in Philadelphia; served in the Confederate army; a member of the Virginia legislature; for twelve years superintendent of Spottsylvania County, Va., schools.

Barclay, Thomas Dougall, in Kent, Conn., July 30; b. in York, N. Y., June 5, 1846; graduated at Monmouth College in 1867; was principal of academy, Waiton, N. Y., taughé in Kent, Conn., and was principal of academy, Gilbertsville, N. Y. The rest of his life was occupied in the ministry.
Bartlett, Rev. Samel Colcord, D. D., Ll. D., in Hanover, N. H., Nov. 16; b. in Salinbury, N. H., Nov. 25, 1817; fitted for college at Pinkerton Academy; graduated at Dartmouth College in 1838, and at the Andover Theological Seminary in 1842; principal Caledonia Grammar School, Peacham, Vt., 1836-38; tutor at Dartmouth College, 1838-39; pastor at Monson, Mass., 1843-46; professor intellectual philosophy and rhetoric at Western Reserve College, 18£6-52; pastor Manchester, N. H., 1852-57, and at New England Church, Chicago, 1857-59; professor of Biblical literature, Chicago Theological Seminary, 1858-77; president Dartmouth College, 1877-92; and lecturer on the relation of the Bible to science and history and instructor in natural theology and evidences of Christianity, 1892-98. Dr. Bartlett was a large contributor to literature, both in periodicals and books. His work for Dartmouth College and Chicago Theological Seminary can not be overestimated. He was a Piblical scholar of eminence.
Bemler, Jacob, in Chicago, Ill., Mar. 15; b. in Bedminster, Pa., Dec. 20, 1815; acquired a district-school education; learned the carpentry and cabinetmaking trades; attained great financial success. Among the most important of his numerous public benefactions, always very quietly bestowed, were large endowments to Lake Forest University.
Bexvett, Edmund Match, LL. D., in Boston, Mass., Jan. 2; b. in Manchester, Vt., Apr. 6, 1824; graduate of the University of Yermont in 1843; was admitted to the bar in 1847. He practiced his profession in Taunton, Mass., for a number of years, being mayor of that city 1865-67; judge of probate and insolvency of Bristol County, 1858-83. From 1865-71 he lectured at the Harvard Law School, and from the latter date was professor and dean of the Boston University Law School. He edited a large number of important law works.
Bennetr, Joseph M., in Philadelphia, Pa., Sept. 29; b. in Juliustown, N. J., Aug. 16, 1816. He was engaged in the clothing business for a number of years in Philadelphia. Among his large benefactions was one of $\$ 500,000$ to the college for girls in the University of Pennsylvania and another sum to the deaf and dumb institute.
Betts, George Frederic, in New York City, Jan. 18; b. in Newburgh, N. Y., June 14, 1824; graduated at Williams College in 1844; studied law, but failing health compeiled him to forego its active practice, and he was clerk of the United States district court for nearly twenty years. He was actively connected with many philanthropic and charitable enterprises, being trustee for many years of the New York Institution for the Blind and the Five Points House of Industry.
Bissel, Wm. Church, in Humboldt, Nebr., Apr. 11; b. in Aurora, Ohio, June 8, 1810; graduated at Yale Divinity School, he turned to teaching as a profession. He taught near Lexington, Ky., 1837-41; in a young ladies' seminary at Ripley, Ohio, 1841-51; in eastern Illinois, 1851-68, and later at Humboldt, Nebr.
Blackmar, Edwn, in Newark, N. Y., Feb. 21; b. in Freehold, N. Y., Nov. 14, 1823; graduated at Union College in 1845; taught a number of years and then engaged in business.
Booth, Henry, in Minden, Nebr., Apr. 29; b. in Roxbury, Conn., Aug. 19, 1818; graduated at Yale University in 1840; taught for a year in Wellsboro, Pa.; graduated at Yale Law School in 1844; practiced that profession in Towanda, Pa., and Poughkeepsie, N. Y., and for two years had charge of the law department of the State and National Law School; assisted in organizing and had principal charge until 1870 of the law deparment of University of Chicago; was a judge of circuit court of Cook County, 1870-79, but still continued dean of the law school.

Bowner, Mrs. Saraf Lamsox, in Newton, Mass., July 27; well known as a philanthropist. She gave to education two buildings learing her name-one in Bombay, India, to the American Mission School, and the other to the American School for Girls, in Constantinople.
Brice, Calvia Stewart, in New York, Dec. 15; b. in Demmark, Ohio, Sept. 17, 1845; graduated at Miami University; served in the Army during the civil war; studied law at Ann Arbor; became prominent in railroad and financial circles, in association with Gen. Samuel Thomas; was United States Senator one term. He began his career teaching school. A scholarship in Marietta College is among his benefactions, the most of which were made to his alma nater.
Briggs, Millian Allen, in Providence, R. I., Jan. 12; 1b. in Pittsfield, Mass., Tuly 12, 1834; graduated at Williams College in 1860; studied theology at Madison University; was engaged in ministerial work a large share of his life; was at one time superintendent of schools at Cranston, and was three times elected to the school board.
Bristow, George F., in New York City, Dec. 13; b. in 1824; for nearly fifty years was teacher of music in New York public schools; author of several musical com-po-itions and member of a number of musical societies.
Brooks, Mathan Caflegton, M. A., in Philadelphia, Pa., Oct. 3; b. in Cecil County, Mrd., Aug. 12, 1809; was educated at West Notiingham Academy and at St. John's College, Annapolis, Md.; was principal of Franklin Academy in 1831-34; next of the Brookville Academy; was editor of the American Nuseum; was elected principal, in 1839, of the Baltimore High School; attempted to organize, in 1818, the Baltimore Female College, and published a series of books of the classics and a history of the Mexican war.
Broors, Wm. M., A. B., in Lincoln College, North Carolina, Dec. 15; b. Dec. 23, 1833; graduated at University of North Carolina in 1860; taught in North Carolina, South Carolina, and Mississippi.
Brotin, Leroy D., in San Luis Obispo, Cal., Jan. 13; was commissioner of common schools for the State of Ohio for one term, president of University of Nevada, and superintendent of public schools at Los Angeles, Cal.
Brece, Blayci K., in Washington, D. C., Mar. 17; b. a slave in Prince Edward County, Va., Mar. 1, 1841; removed to Mississippi with his master shortly before the civil war, and at its outbreak went to Hannibal, Mo., where he organized and conducted the first school in that region exchasively for negroes; acquiring a little money, he pursued his studies at Oberlin, but was unable to graduate; returned to Mississippi and became a planter, and at the same time entered politics. He filled the offices of sergeant-at-arms of the State senate; assessor, collector, sheriff, and superintendent of education for his county, and commissioner for the second levee district; was United States Senator 1875-1881, and was register of deeds during the Garfield-Arthur term, and President McKinley appointed him, in 1897, Register of the Treasury.
Bruxot, Felix R., in Allegheny, Pa., May 10; b. iu Newport, Ky., Feb. 7, 1820; graduated at Jefferson College at Canonsburg, Pa., and became a civil engineer; was engaged at Rock Island and Camden, Ill.; came to Pittsburg and engaged in steel manufacturing; performed an inestimable amount of relief work during the civil war; was president of the Indian Commission and of the National Reform Association, and at his death gave to philanthropy $\$ 237,000$, of which Western Pennsylvania University received $\$ 30,000$, Divinity School of the Protestant Episcopal Church $\$ 30,000$, and the Evangelical Education Society of the Protestant Episcopal Church $\$ 10,000$.
Buckinghant, Rev. Sanuel Giles, D. D., in Springíeld, Mass., July; b. in Lebanon, Conn., Nov. 18, 1812; fitted for college at Plainfield Academy; graduated at Yale University in 1833, and at Yale Theological Seminary in 1836; pastor Dillbury, Conn., 1836-46; Springfield, Mass., 1847-98; trustee of Williston Seminary forty years; member of Springfield school committee many years.

Burnima, Benjain Franklin, in Boston, Mass., May 21; b. in Groton, Yt., Nov. 30, 1830; graduated at Wesleyan University in 1852 and was admitted to the bar in Illinois in 1857; enlisting in 1864, he was detailed as assistant superintendent of education of freedmen in Louisiana. Subsequently he was detailed to the Freedmen's Bureau to establish schools among the negroes, and while thus engaged was mobbed in Monroe, La. He came to Boston in 1867, where he was an associate justice of the South Boston court. He prepared several digests and legal works and wrote several theological works; also treatises on chess.
Blirt, Hanvaf, gave to the Presbyterian board of aid for colleges and academies and Presbyterian boards of home and foreign missions the reversion of $\$ 15,000$, in equal parts.
Busir, Prof. George Gary, Ph. D., in Malden, Mass., Oct. 15́; b. in Turin, N. Y., Mar. 19, 1843; fitted for college at Casenovia Seminary and graduated at Wesleyan University in 1866; was either principal or superintendent of schools for eight years; professor of Greek and Latin in the seminary at Montpelier, Vt.; studied abroad; filled the Latin chair at Middlebury for a time; was a frequent contributor to periodicals.
Businell, George, D. D., in New Haren, Conn., Apr. 5; b. in Washington, Conn., Dec. 13, 1818; graduated at Yale University in $18 \pm 2$, and at the Yale Divinity School in 1840; occupied pastorates in Worcester, Mass., Waterbury, Conn., and Beloit, Wis. He taught immediately upon his graduation from college, and from 1888 was a trustee of Yale.
Campbell, James Robinsoy, in Woodstock, Md., May 16; b. in Seharunpoor, North India, Feb. 18, 1840; graduated at Williams College in 1862; studied theology at Princeton, N. J.; was instructor in the New York City Institution for the Deaf and Dumb; was principal of Freehold Institute in Monmouth County, N. J. The larger part of his life was spent in the ministry.
Carpenter, Gov. Cyrus C., in Fort Dodge, Iowa, May 29; b. in Susquehanna County, Pa., in 1829; was left a penniless orphan at 10 years of age; picked up a district school education; apprenticed himself to a tailor; removed to Towa in 1854; engaged in surveying Government lands; taught the first school in Fort Dodge; was elected to the legislature; served through the civil war, and was governor of Iowa 1872-76.
Cartland, Joseph, in Newburyport, Mass., June 1; b. in Lee, N. H., in 1810; for many years was superintendent of Haverford Friends' College, Pennsylvania, and with his wife was joint principal of the Friends' school at Providence, R. I.
Cattell, William Cassidr, D. D., LL. D., in Philadelphia, Pa., Feb. 11; b. in Salem, N. J., Aug. 30, 1827; graduated at College of New Jersey, Princeton, in 1848 and at Princeton Theological Seminary in 1852; took a post-graduate course there; was assistant principal of Edgehill Academy at Princeton, 1853-55; occupied the chair of Latin and Greek in Lafayette College, Easton, Pa., 1855-60; was pastor of Pine Street Church in Harrisburg, Pa., 1860-63; and was president of Lafayette College, 1863-83. Through his eiforts over $\$ 1,000,000$ was contributed to the institution, and the grounds, buildings, and equipment largely increased. During his incumbency of the corresponding secretaryship of the Presbyterian board of relief for disabled ministers and the widows and orphans of deceased ministers of the Presbyterian Church, his efforts increased its endowment by $\$ 1,000,000$ and the annual income from $\$ 105,000$ to $\$ 237,000$.
Chase, Dr. A. F., at Kents Hill, Me., Oct. 22; b. in Woodstock, Me., Oct. 26, 1842; graduated at Wesleyan University in 1869 with the highest honors; taught in Wilbraham, Mass., Academy, 1869-71; occupied the chair of mathematics and English literature in the Maine Wesleyan Seminary and Female College at Kents Hill, 1871-83; was principal of the high school, Millbury, Mass., 1883-84; president of the East Maine Conference Seminary, 1884-96; and from the last date until his death occupied the same position in the seminary and college at Kents Hill.

Christre, Whelin MI., in Ottawa, Canada, Feb. 13; b. in Edinburgh, Scotiand, July 23, 1820; graduated at Union College in 18t5; studied theology under the Flamboro U. P. Presbytery, Canada; he preached in Chippewa, 1849-6t, and in Beachburg until 1874, when he went to Ottawa and did missionary work until his death. He was superintendent of schools at Willoughby and Ottawa for fourteen years.
Clark, Willis Gaylord, in Roanoke, Va., Sept. 10; b. in New York State, Oct. 27, 1827; was educated at Quincy, Ill.; as the editor of the Advertiser he planned a system of common schools which was adopted by Mobile; in 1865 was elected trustee of University of Alabama, and at one time was president pro tempore.
Clarke, George Ellery, in Falmouth, Mass., Dec. 12; b. in Needham, Mass., Oct. 30, 1821; fitted for college at Phillips Andover Academy; graduated at Williams College in 1851; was a teacher in Lamrence Academy at Falmouth, Irass., for eleven years, and was a member of the Falmouth school board three terms (nine years), and did much toward shaping the system. He followed other occupations the remainder of his life.
Clarke, Noah T.; received a common-school education; taught in the Canandaigua Academy forty-one years and was principal for twenty-nine years.
Cole, Herbert Erastus, in Taylor Falls, Minn., Apr. 13; b. in Ohio in 1855; fitted for college at Oberlin, Ohio; graduated at Dartmouth College in 1881; taught in Oberlin, Ohio, Cresco and Limesprings, Iowa; Taylors Falls, Perham, Ashby, and Willow River, Minn.
Concilio, Janvarius De, in Jersey City, N. J., Mar. 23; b. in Naples, Italy, Jan. 7, 1835; was educated at Brignoli Sali College, Rome, and ordained a priest; was at one time a professor of theology in Seton Hall College.
Conrad, Frederick Willeaxe, D. D., LL. D., in Philadelphia, Pa., Apr. 10; b. in Pine Grove, Pa., Jan. 3, 1816; studied at Mount Airy College, Germantown, Pa., and at the Gettysburg Theological Seminary; was at various times professor of modern languages and of homiletics and church history in Wittenberg College, Springfield, Ohio. He occupied pastorates at a number of places, and was editor from 1866 of the Lutheran Observer.
Cooley, Judge Thonis McIntyre, in Ann Arbor, Mich., Sept. 12; b. near Attica, N. Y., Jan. 6, 1824; studied law and practiced for a time at Tecumseh and Adrian, Mich.; was supreme court reporter; justice of the supreme court; professor of law in University of Michigan and dean of that school for a number of years; commissioner of inter-State commerce under President Cleveland; professor of American history and lecturer on Constitutional law, Unirersity of Michigan. He was a frequent contributor to periodicals and the author of a large number of works on law.
Corby, Rev. Willany, in South Bend, Ind.; b. in Detroit, Mich., in Oct. 1833; chaplain of the famous Irish Brigade during the civil war, president of the Notre Dame University for a number of years.
Cramer, Rev. Michael John, D. D., LL.D., S. T. D., in Carlisle, Pa., Jan. 23; b. in Schaffhausen, Switzerland, Feb. 6, 1835; learned the printer's trade; graduated at Ohio Wesleyan University in 1860; was a chaplain during the civil war; consul at Leipzig, minister at Copenhagen and Bern; was professor of systematic theology at Boston University; professor of church history at Drew Theological Seminary and of philosophy at Dickinson College. He bequeathed his valuable library to the Ohio Wesleyan University.
Crofoot, Willial Richmond, in Le Roy, N. Y., Dec. 3; b. there Dec. 10, 18555; fitted for college at Le Roy Academy and under private tutorship; graduated at Amherst College in 1880; practiced law in his native town; was vice-president and trustee of Le Roy Academy at the time of his death.

Crumyell, Alexander, D. D., in Point Pleasant, N. J., Sept. 9; b. in New York City in 1819; his father was a native of Africa and young Crummell encountered great opposition on account of his race in his efforts to secure an education, until he went to England in 1848, and finally graduated at Cambridge in 1853; was a missionary in Liberia twenty years, during which time he acted as principal of Alexandria High School and president of Liberia College; went to Washington, D. C., and founded and was rector of St. Luke's Church until 1895. He founded American Negro Academy of Sciences in 1897. He was the author of several publications.
Cummings, John, in Woburn, Mass., Dec. 11; b. there in 1811; was educated in the district school, Warren Academy, and a private school in Reading, Mass. He was connected with many large business enterprises; was president of the Shawmut National Bank of Boston for thirty years; was trustee of Massachusetts Horticultural Society, Perkins lnstitute for the Blind, and Massachusetts School for the Feeble Minded. He was one of the incorporators of the Massachusetts Institute of Technology, and its treasurer for seventeen years.
Currier, Moody, LL. D., in Manchester, N. H., Aug. 23; b. in Boscawen, N. H., Apr. 22, 1806; fitted for college at Hopkinton (N. H.) Academy; graduated at Dartmouth College in 1834; was principal of the high school, Lowell, Mass., 1836-1841. He occupied many positions of honor and trust; was governor of New Hampshire. He gave $\$ 5,500$ to the Manchester Public Library and $\$ 300,000$ to the founding of a public art gallery.
Curtis, John Hubbard, in Lexington, Mass., Jan. 13; b. June 9, 1865, in Hariford, Conn.; graduated at Yale University in 1887; remained for two years at the university as a graduate student in English literature and philosophy, teaching for one year in the Hopkins Grammar School. In 1890 he became instructor in English and German in the University School at Cleveland, Ohio.
Dabney, Robert Lewis, M. A., in Knoxville, Tenn., Jan. 4; b. in Louiea County, Va., Mar. 6, 1820; went to Hampden Sidney College; graduated at University of Virginia in 1842; entered Union Theological Seminary, Virginia, after teaching two years. In 1853 he became professor of ecclesiastical history in Union Seminary and in 1869 professor of theology; afterwards occupied the chair of moral philosophy in the University of Texas. He was the author of several publications.
Dahlgren, Mrs. Madeline Vinton, in Washington, D. C., May 28; b. in Gallipolis, Ohio, about 1835; married Rear-Admiral Dahlgren in 1865; established schools near her home at South Mountain, Md.; gave a great many young men college educations and taught music and languages to classes of girls. She wrote extensively and was an active opponent of woman suffrage.
Dana, Malcolim McGregor, D. D., in Brooklyn, N. Y., July 25, 1897; b. there June 4, 1838; fitted for college at Columbia Grammar School; graduated at Amherst College in 1859 and at Union Theological Seminary in 1862. He occupied pastorates in Winsted and Norwich, Conn., and St. Paul, Minn., and was a trustee of Carleton College a number of years, and its historian also.
Davenport, Jesse Reed, in Waban, Mass., Sept. 5; b. in Marshfield, Mass., Mar. 9, 1826; fitted for college at Phillips Andover Academy; graduated at Amherst College in 1851; taught in Woodstock, Conn., 1851-53; Amherst Academy, 1853-54; principal of Hopkins Academy, Hadley, Mass., 1854-67; taught in Oxford, Mass., and Woonsocket, R. I., ${ }_{1}^{1867-72 \text {. He then entered commercial life. }}$
Demarest, David D., D. D., LL. D., in New Brunswick, N. J., June 21; b. in Oradell, Bergen County, N. J., July 30, 1819; graduated at Rutgers College in 1837, New Brunswick Theological Seminary in 1840; held pastorates at Catskill, Flatbush, New Brunswick, and Hudson, N. J.; became professor of pastoral theology and sacred rhetoric in the New Brunswick Seminary. He was trustee of Rutgers College, secretary of the seminary faculty for thirty-one years, and an active member of the New Jersey Historical Society; was the author of several publications.

Dmock, Shmuel Robinson, in Denver, Apr. 19; b. in Mansfield, Comn., Miay 28, 1822; graduated at Yale College in 1847; afterwards taught school, principally in Manchester, Conn., and studied theology at the East Windsor Theological Institute. Later, he taught in the West, and the remainder of his life was spent in pastoral duties.
Douglas, Kierland, S. T. D., in St. Francesville, La., Dec. 19; b. May 29, 1829, in New Haven, Conn.; began the study of law, but finally deroted his life to the ministry of the Episcopal Church; accepted in 1860 the presidency of Jefferson College, near Natchez, Niss., and later leecame superintendent of schools there. In 1871, at Dry Grove, in Hinds County, he organized a school for candidates for the ministry.
Dowxs, Morse S., in Brooklyn, N. Y., June 12; b. in Haverhill, Mass., in 1830; was director of the Mozart Conservatory of Music at Memphis, Temn., and gave the first musical festival ever hedd in the South.
Duycan, Shicel White, D. D., in Boston, Mass., Oct. 30; b. in Hayerhill, Mass., Dec. 19, 1833; graduated at Brown University in 1860; served through the war; graduated Rochester Theological Seminary in 1866, and held pastorates at Rochester, Cleveland, and Cincinnati; was secretary of the American Baptist Missionary Union; and was a trustee of Rochester Theological Seminary and a fellow of Brown University.
Duryen, Joseph fethll, in Brooklyn, N. Y., May 17; b. in Jamaica, Long Island, N. Y., Dec. 9, 1832; graduated at Princeton in 1856 and at its theological seminary in1859; occupied pastorates in New York, Brooklyn, Boston, and Omaha; taught the senior class at Wellesley in philosophy during his ten years' pastorate in Boston.
Earle, Charles Selden, Oct. 4; b. in Kents IIill, Me., Mar. 26, 1866; fitted at Wesleyan Seminary, Kents Hill, Mie., and entered Williams College; graduated at Dartmouth in 1890. He was principal of Haverhill Academy, N. H., 1891-92, and the high school at Tuscola, II1., 1892-97; superintendent of schools Tuscola, 1897-98.
Eliot, Sajuel, in Beverly, Mass., Sept. 14; b. in Boston, Mass., Dec. 22, -; graduated at Harrard College in 1839; was professor of history and political science at Trinity College 1856-64, and president of that institution 1860-64; head master of the Girls' High School, Boston, Mass., 1872-76; superintendent of schools, Boston, 1878-80, and was later on the school committee. He wrote extensively.
Elmore, Alfred Frank, in New York City, June 14; b. in Canterbury, England, May 23, 1839; was educated under Randegger and Balfe; achieved a reputation as a barytone singer; was professor of singing in the University of South Carolina and professor in the New York Conservatory of Music.
Exo, Amos Richards, in New York City, Feb. 21; b. in Simsbury, Conn., Nov. 1, 1810; received a common-school education; was engaged in dry goods business and later in real estate; built the Fifth Avenue Hotel in New York City; gate $\$ 50,000$ to Amherst College.
Evans, Joseph, in New York City, Apr. 23; b. there Oct. 29, 1857; was educated in art in the schools of the National Academy of Design and the Art Students' League in New York and at the Ecole des Beaux Arts in Paris; deroted himself to landscape; was president of the Art Students' League three years and secretary of the Society of American Artists for the same length of time. He took deep interest in publiceducation and had served over a term as a school inspector.
Foster, George H., in Eranston, Ill., July 31; b. in England in 1827; was a trustee of Northwestern University 1881 till his death.
Fay, E. H., in Baton Rouge, La., Dec. 27; was a graduate of Yale University and a well-known educator, having been at one time superintendent of pubiic education for Louisiana.

Fernald, Ebenezer Nichols, at Milton Mills, N. H., Jan. 15; b. in Lebaizon, Me.; Mar. 10, 1833; fitted for college at North Hampton Literary and Biblical Institute, New Hampshire; graduated at Amherst Gollege in 1862; taught Latin and Greek in the State Seminary at Lewiston, Me.; instructor in the English department Williston Seminary; principal of Rockford High School, Illinois; had charge of the educational work among the freedmen at Chattanooga, Tenn.; graduated at Andover Theological Seminary in 1869; was secretary and treasurer of the FreeWill Baptist Education Society; trustee of Storer College, Harpers Ferry, W. Va., treasurer and publisher of the Free Baptist printing establishment in Boston, Mass.
Freeman, George Rudolpif, in Meadville, Pa., Apr. 10; b. in Gettysburg, Pa.; graduated at Pennsylvania College in 1876 and at the Yale Divinity School in 1885; was awarded the Hooker Fellowship and studied in New York and Berlin; was a fellow at Harvard. He was assistant professor of Hebrew, of the literature of the Old Testament and the history of religion in the Unitarian Theological Seminary at Meadville, and later full professor in these branches.
Frink, Henry Allix, in Amherst, Mass., Mar. 25; b. there May 23, i844; graduated at Hamilton College in 1870; taught two years at Brooklyn Polytechnic Institute and was professor of English literature and oratory in Hamilton College, 1872-85; from that time until his death he occupied the chair of logic, rhetoric, and public speaking at Amherst College.
Gerrish, Mrs. Harriet Blanchard, in Oberlin, Ohio, Nov. 11; b. in Temple, N. H., Nov. 3, 1820; graduated from the literary course in 1847; taught from 1847 to 1861.

Gile, Joseph, in Franklin, N. H., Aug. 4; b. in Pottsville, Pa., Oct. 14, 1836; fitted for college at New Hampshire Conference Seminary; graduated at Dartmouth in 1857; taught in Clarence and Warsaw, N. Y.; Huntington, L. I., and Brooklyn; became connected with public schools in New Haven, and for fifteen years had charge of a preparatory school for young men. He served for ten years on board of education.
Gilman, Mrs. Emfline Augusta Pareer, in Chelsea, Mass., May 30; b. in Brighton, Mass., Oct. 19, 1824; taught in Salem and Chelsea, Mass., and was on the school committee in the latter place twenty-five years.
Goff, Charles Bradford, in Providence, R. I., Dec. 1; b. in Rehoboth, R. I., Mar. 4, 1834; fitted for college at Middleboro Academy and graduated at Brown University in 1856; was principal of the preparatory department of Union College, 1856-57; took a post-graduate course at Brown; was principal of the high school at Fall River, Mass., 1858-64; was connected with the English and classical school which bears his name from the last date.
Gray, Mercy Marcla, in Oakland, Cal., May 20; b. in Mansfield, Mass., Dec. 26, 1818; from her first husband, J. A. Fay, she received a large fortune, of which she gave to the Pacific Baptist Theological Seminary $\$ 30,000$ and Califormia College $\$ 25,000$.
Gregory, John Milton, LL. D., in Washington, D. C., Oct. 19; b. in Sand Lake, N.' Y., July 6, 1822; graduated at Union College in 1846; studied law two years, but finally became a minister of the Baptist Church; taught at Akron, Ohio; was principal of a classical school in Detroit, Mich.; was founder of the Michigan Journal of Education; filled the office of State superintendent of public instruction, 1858-63; became president of Kalamazoo College in 1863; a member of the State University's board of regents and first president of the University of Illinois. He organized the university squarely on the agricultural grant, giving full effect to the provision for technical and industrial education for men and women. Domestic science was made a distinct subject of instruction with a laboratory and full professorship, Miss Louisa Allen, afterwards Mrs.

Gregory, becoming first professor. He was president of the N. E. A. at Nashville and member or officer of numerous educational, scientific, historical, and philanthropic societies. He was an earnest adrocate of rural mail delivery. His "Political economy" and "Seven laws of teaching" are widely used. He was well known as a writer for newspapers and magazines; a United States commissioner to the Viemna Exposition in 1873; a judge in the educational department of the Centennial Exposition at Philadelphia in 1876; Iliinois commissioner to Paris Exposition in 1878; superintendent of American Baptist Home Mission Schools; United States Civil Service Commissioner 1882-85; president of the Civic Center of Washington, D. C., 1890-98. His remains were laid to rest in the grounds of his beloved university.

Guraey, Join Hopkins, in Dover, S. Dak., Dec. 7; b. Dover, Me., Sept. 21, 1821; graduated at Oljerlin College 1845; tanght in New York for two years, in Andover Theological Seminary two years, and preached the remainder of his life. During thirteen years of his ministry at New Braintree, Mass., he was chairman of the school committee.

Hill, Jaies, A. M., LL. D., in Echo Hill, N. H., Aug. 7; b. in Hingham, Mass., Sept. 12, 1811; graduated at the Rensselaer Polytechnic School in Troy, N. Y., in 1832; remained there as assistant professor of chemistry and natural science until 185t, when he was made professor of geology. He held this chair until 1876, when he was made emeritus professor. In 1837 he became State geologist of New York and held this position until his death. He was appointed director of the New York State Museum in 1866, and when there wrote many raluable papers on geology and paleontology. He was very prominent in all scientific movements in the State and nation.

Halsey, Harlan Page, in New York City, Dec. 16; b. there in 1837; was an author of detective stories; as a member of the New York City school board, 1885-95, he was particularly interested in night schools and drawing classes.

Havilrox, Joun B., MI. D., in Elgin, Ill., Dec. 24; b. in Jersey County, Ill., in 1847; graduated from the Rush Medical College in 1869; was at one time Supervising Surgeon-General of the United States Marine-Hospital Service. He was professor of surgery in two colleges of Chicago and editor of the Journal of the American Medical Association.

Mandy, Trunax Parmelee, in Cleveland, Ohio, Mar. 25; b. in Paris, N. Y., Jan. 17, 1807; was in banking and other financial enterprises most of his life; a trustee of Western Reserve College and of Lane Theological Seminary; and for ten years as a member oi the board of education did much toward shaping the school system of Cleveland.

Harris, Rev. Robert S., in Camden, N. J., MĪar. 22; B. in Philadelphia, Pa., in 1816; was in the ministry of the Methodist Episcopal Church all of his active life. He was the founder of Children's Day, at which time contributions were made for the education of Sunday-school children, and thereby thousands of young people have received their education.

Hastings, Mary, in Pachuca, Mexico, Aug. 15; was educated at Wilbraham Academy, Mass.; taught at Tilton, N. H.; Appleton, Wis., and in the South. She tanght in the mission schools at City of Mexico and Pachuca twenty-fire years.

Hayiland, Laura S., in Grand Rapids, Miich., Apr. 20; b. in Ontario, Canada, in 1811. She was an ardent abolitionist; established an academy in Adrian, Mich., which admitted negroes; led the movement which resulted in the establishment of the State public school at Coldwater for orphans and dependent children; was a famous nurse during the war.

Hazrid, Rowland, in Watkins, N. Y., Aug. 16; b. in Rhode Island in 1829; was interested in large manufacturing enterprises; was a trustee of Brown University, 1885-89, and a fellow in that university from 1889 until his death. He gave Brown University $\$ 100,000$, and was specially influential in reforming the educational system of the State.
Harmane, Charles Wilhela August, in New York City, June 20; b. in Silesia, Germany, July 3, 1801; took a full course at the University of Breslau; was professor of mineralogy in that institution several years. He was well known as a collector of mineral specimens.
Hoagland, Corvelius Nevius, M. D., in Brooklyn, N. Y., Apr. 24; b. in Neshanic, Somerset County, N. J., Nov. 23, 1828; graduated from medical department of Western Reserve University in 1852; was a surgeon during the war of the rebellion; engaged in business pursuits. He gave $\$ 150,000$ for the founding of Hoagland Laboratory, and $\$ 24,000$ later, and to the Brooklyn Free Kindergarten Society $\$ 20,000$. One of the 16 kindergartens established by that society was named for him and wholly maintained by him.
Huld, Avos G., in Brooklyn, May 7; b. in Paris, N. Y., Mar. 7, 1815; graduated at Union College in 1840; taught school in Fulton, N. Y., and became superintendent of the public schools there. He was vice-president of Rutgers Female College. By profession he was a lawyer. He contributed often to the press and was the author of a few publications.
Hunt, Albert Sanford, in Brooklyn, N. Y., Sept. 11; b. in Amenia, N. Y., July 3, 1827; studied at Amenia Seminary and graduated at Wesleyan University in 1851; served there as tutor and adjunct professor of moral science till 1855. The remainder of his life was spent in the service of the Methodist Episcopal Church. He gave Wesleyan University $\$ 30,000$.
Hunter, H. G., in Birdsboro, Pa., Jan. 19. At one time he was principal of the Birdsboro High School, and throughout his life he showed the greatest interest in educational matters.
Hurlbutt, Lewis Riymond, in Stamford, Comn., Eeb. 14; b. in Wilton, Conn., Aug. 13, 1820; graduated at Yale in 1843; was principal of Bacon Academy in Colchester, Comn., for two years, and had charge of Hopkins Grammar School in Hartford; went back to Yale as tutor, and while there in 1850 received his degree of M. D. He was a leading physician of Stamford.
Hurt, Ashley D., in New Orleans, La., Mar. 10; b. in Petersburg, Va., in 1834; graduated at the University of Virginia and at the University of Göttingen, Germany; was principal of the high school at Louisville, Ky.; taught at the Florida Agricultural College, at Lake City, and at Tulane High School, at New Orleans, and was professor of Greek in Tulane University.
Ide, Jacob, in Mansfield, Mass., Mar. 23; b. in West Medway, Mass., Aug. 7, 1823; fitted for college at Leicester Academy and graduated at Amherst College in 1848; taught in Lexington, Leicester, and Boston; studied theology at Andover Theological Seminary; was trustee of the Wheaton Seminary for a number of years.
Jackson, George, in Boston, Mass., Sept. 28, 1897; b. in Cazenovia, N. Y., Sept. 6, 1821; graduated at Union College in 1845; taught at Cazenovia, in the Conference Seminary, till 1863; was principal of Bingham (N. Y.) Academy, 1863-72; superintendent of Broome County schools, 1872-74; principal of the county high school at Harre de Grace, Md., 1874-81.
Jackson, Gen. Henry Rootes, in Savamah, Ga., May 23; b. in Athens, Ga., June 24, 1820; graduated at Yale University in 1839; studied law at the law school at Athens, Ga.; was United States district attorney at Savannah; served as colonel in the Mexican War; was judge of the superior court of Georgia; minister to Austria and Mexico; was elected chancellor of the University of Georgia, but did not accept; a major-general in the Confederate Army; a trustee of the Peabody fund, 1875-88.

Jamison, Blans, in New Orleans, La., Nov. 2; b. there in 1859; studied at Marshall School in New Orleans and graduated at Yale Univergity in 1880; was in business. until 1890 and since that time was secretary of the board of education of his home city.
Johnson, Charies Green, in Momroe, Mich., Oct. 7; b. there June 15, 1822; graduated at Yale University in 1841; was engaged in the banking business at Monroeand acquired a large fortune in the milling business. He was very generous with his means; was for a number of years a trustee of the Michigan School for the Deai and Dumb at Flint.
Jomnson, John Cuthbert, in Weymouth, Mass, Mar. 31; b. in Boston, Mass., Aug. 24, 1874; fitted for college at the Quincy and English high schools and with a private teacher; graduated at Amherst College in 1897; was assistant teacher in. the North High School in Weymouth.
Johnson, John Mackie, in Norwich, Conn., Oct. 24; b. there Dec. 6, 1859; fitted for college at Norwich Free Academy and graduated at Amherst in 1883; at his. father's death he assumed large business responsibilities; became in 1888 a trustee and fellow of Norwich Free Academy and later secretary and treasurer of the board of tustees.
Johnson, John Wesley, in Eugene, Oreg., Sept. 1k; b. near Kansas City, Mo., Mar. 22, 1836; attended Pacific University at Forest Grove and finally graduated from Yale in 1882. He taught in the Agricultural College in Corvailis, Oreg.; in 1864 he took charge of the McMimnville Baptist College and in 1858. resigned this position and became principal of the grammar schools in Portland, Oreg.; a high school was organized there and for over seven years he was in. charge of it. In 1876 he became president of the University of Oregon and held that position until 1893, when he took the chair of Latin. This position he held till 1898.
Johnston, Richard Malcolai, in Baltimore, Md., Sept. 23; b. in Powelton, Ga., March 8, 1822; he graduated at Mercer University, Georgia, in 1841, and in two years was admitted to the bar, and twelve years later was offered the judgeshipof the northern circuit of Georgia, but refused this offer; was professor of literature in the University of Georgia four years; resigned and opened a boys' boarding school, which was afterwards removed to Baltimore. In 1867 he began his literary work and contributed to several magazines. He was author of many publications, including Dukesborough Tales, Old Mark Langston, Georgia Sketches, etc.; was for a number of years employed in the United States Bureau of Education.
Jones, Mirs. Susan George, in Rochester, N. Y., in Sept.; attended the Woman's College in Baltinore; preceptress of Lasalle Seminary, Auburndale, Mass.
Joy, John D. W., in Boston, Mass., in 1828; educated in common schools, and was a business man. He was president of the board of trustees of Tufts College, and donated $\$ 20,000$ to the library.
King, Nathan Sherwood, in Yonkers, N. Y., Dec. 11; b. in Fishkill, M. Y., Dec. 19, 182 $\pm$; fitted for college at Lima Seminary, and graduated at Wiilians College in 1849; studied medicine at the Afbany Medical College; was president of the board of education at Mott Haven nine years.
Kinve, Willdar, in Plainfield, Conn., Mar. 11; b. there Mar. 26, 1819; graduated at Yale University in 1848; was principal of Bacon Academy in Colchester, Conn., $18 \pm 5-50$; accepted a tutorship at Yale, which he held two years, and then resumed the charge of Bacon Academy; in 1856 took a position in the Boston Latin School; became principal of the Eaton School in New Haven in 1857; taught in public high school 1859-68. From New Haven he went to West Brattleboro, Yt., and became principal of Grenwood Ladies' Seminary; went to Ithaca, N. Y., and kept a preparatory school for Corneil University twelve years; was clerk for the trustees of the Academy of Plainfield 1893-98.

Knopp, Arther Mason, in Boston, Mass., Dec. 28; b. in St. Johnsbury, Vt., Aug. 3, 1839; graduated at Marvard in 1863; taught in Phillips Andover Academy, Boston Latin School, and Brooklyn High School; entered the service of the public library, Boston, in 1875, and was custodian of Bates Hall from 1878 until his death.
Kohler, Jons, in New Holland, Pa., Apr. 11; b. in Juniata County, Pa., May 27, 1820; graduated at Pennsylvania College, Gettysburg, in 1842; studied theology there and was ordained in 1844; was pastor at Williamsport, New Holland, Stroudsburg; was principal of the academic department of Muhlenberg College, Allentown, 1882-84; held pastorates at Mechanicsburg 1884-85, Seacock 1880̆-93; was director of the Theological Seminary at Philadelphia, and trustee of Muhlenberg College, Allentown.
Labberton, Robert Yan Minderloper, in New York City, Oct. 12; b. in Mareeilles, France, April 6, 1813; graduated at the University of Groningen, Holland; became a tutor in Philadelphia and prepared many youths for college; gave occasional lectures on historical and literary subjects throughout New England during that time; about 1850 became professor of Greek in the University of Pennsylrania, and for twenty years devoted his time to the university; was at one time offered the office of United States consul-general to Japan, but became a professor in the Columbia University instead. Among his publications is Labberton's Historical Atlas, which is a standard work of reference.
Lirabee, Joha Albert, Mi. D., in Louisville, Ky., June 12; b. in Gorham, Me., May 17, 1810; studied at Gorham and at Gould's Academy, Bethel, Me., and graduated at the Medical School of Maine; served through the war of the rebellion as surgeon; became a member of the faculty of the medical department of the Central University of Kentucky; held in succession the chairs of materia medica and therapeutics, of diseases of women and children, and was for six years president of the joint faculties of medicine and dentistry in the same institution. He was prominent in many public movements.
Lee, Henry, in Brookline, Mass., Nov. 25; b. in Boston, Mass., Sept. 2, 1817; studied in the Boston schools and graduated at Harvard University in 1835; was a member of a prominent banking house. He was an overseer of Harvard College 1867-79 and from 1880.
Lemis, Fred., in Lake Massabesic, Sept. 9; was for many years pianoforte instructor at the New England Conservatory of Music; was principal of Woburn (Mass.) Conservatory of Music.
Libbs, Ablal, M. D., in Richmond, Me., Jan. 3; b. in Gardiner, Me., Oct. 1, 1822; aitended the public schools and Lyceum of Gardiner and Monmouth Academy and graduated at the Medical School of Maine. He took an active interest in the educational affairs of his town and was a member of the school board.
Lincoly, Frederick Walker, A. M., in Boston, Mass., Sept. 13; b. there Feb. 17, 1817; was educated in the public schools; served in the legislature of Massachusetts several terms; was a banker and a trustee of the Massachusetts Institute of Technology.
Lincoln, Nathan Shith, M. D., LL. D., in Washington, D. C., Oct. 14; b. in Gardner, Mass., Apr. 3, 1828; graduated at Dartmouth College in 1850 and the University of Maryland in 1852; practiced the profession of medicine nearly all his liie in Washington. He was at different times professor of chemistry, theory and practice of medicine, anatomy, physiology, and surgery in the Columbian University; very eminent in his profession; physician to Deaf-Mute College.
Locke, Harmon John, Nov. 16; b. in Corinth, Vt., June 12, 1855; fitted for college at Bradford and Barre, Vt.; graduated at Dartmouth College in 1881; taught in Chelsea, Yt., Illinois, Wisconsin, Kansas City, Jaffrey, N. H., and Wells River.

Loombourbow, Mary Wrighr, in Grand Rapids, Mich., Nov. 12, 1897; b. in West Bergen, N. Y., Feb. 1, 1838; graduated at Oberlin College in 1865; taught in Liberty College, Indiana, 1865-88; Union City, Ind., 1868-69; Louisville, Kans., 1871-72; Westmoreland, 1872-75, and in California two years.
Lord, Prof. Williny G., in Biddeford, Me., Aug. 29; b. in Hiram, Me., in 1828; attended Limerick and Norway academies and graduated at Colby University in 1851; was principal of Limerick Academy 1851-94.
MeCraiken, Clari L., in Henderson, N. C., June 29; b. at Kortright, N. Y.., Jan. 23, 1848; studied theology at the U. P. Seminary in Newburgh, N. Y., and at Princeton; taught classics at Stamford, N. Y., in 1872; became pastor at Thompsonville, Conn., and examiner of public schools in 1873; in 1884 was pastor at Rock Valley, Iowa; occupied the presidency of the Normal Institute at Henderson, N. C., from 1893 till his death.
McDonald, Whliam N., A. M., in Berryville, Vá, Jan. 4; b. in 1834 in Romney, Ya.; graduated at the University of Virginia; in 1857 he became professor of belles-lettres, Louisville, Ky.; in 1858 was made president of the university there; in 1885 he established the Coal Spring School in Clarke County, Ya.; was principal of the Louisrille Rugby School from 1872 to 1887; his contributions to literature were numerous and valuable. At the time of his death he was principal of the Shenandoah University School at Berryville.
McKenz, Thonas, in Philadelphia, Mar. 16; b. there Nor. 28, 1842; graduated at the University of Pennsylvania in 1862; was trustee of that university and gave to education about $\$ 3,000,000$.
Mansfield, Edirard, in Wakefield, Mass., Noy. 16; b. in Lymnfield, Mass., in 1813; was educated in Wrakefield and at Rockingham Academy, Hampton Falls, N. H.; taught in Lexington, Malden, South Lynnfield, and Barnstable, Mass.; later engaged in business; was a member of the Wakefield school board.
Manson, Frank George, M. D., Billerica, Mass., Oct. 19; b. in Limington, Me., Aug. 13, 1862; fitted for college at Limington High School, and graduated at Dartmouth College in 1887; was principal of the high school, Huntington, Pa., and Limerick, Me.; Anson Academy, North Anson, Me.; and of the high school in Greenville, Me.; graduated at Dartmouth Medical School, 1892, and later practiced his profession.
Marcou, Prof. Jules, in Cambridge, Mass., April 19; B. in Salins, France, April 20, 1921; stadied at the College of Besançon and in Paris; was a traveling geologist for the Jardin des Plates, and was sent to this country; worked on the geological map of the United States published in 1853; became professor of geology in polytechuic school of Zurich. He returned to the United States in $1 S 61$ and was connected with Professor Agassiz in the foundation of the Agassiz Minseum at Harrard.
Mast, P. P., in Springfield, Ohio. He gave \$375,000 to Ohio Wesleyan University and $\$ 105,000$ to other institutions.
Mimarry, Rev. Shmer, in Lafayette, Ind., Nar. 30; b. in Adams County, Ohio, Dee, 7, 1810; with his brothers he founded the Meharry Medical Institute at Nashville, Tenn., for negroes, which institution was also the recipient of an endowment.
Mileer, Simeon, D. D., in Springfield, Mass., Mar. 29; b. in Ludlow, Mass., Mar. 20, 1815; fitted for the college at Hopkins Academy, Hadley, Mass. ; graduated at Amherst College in $18 \pm 0$ and at Andorer Theological Seminary in 184. He was pastor in Holyoke, Mass., 1846-70, and at South Deerfield, Ludlow Mills, Mass., Andover, Conn., and Agawam, Mass., for shorter periods. He was a member of the school committee of Holyoke during his entire pastorate there, and for much of the time its chairman.

Mitchell, Joseph Sidver, M. D., in Chicago, Ill., Nov. 4; b. in Nantucket, Mass., Dec. 9, 1839; was fitted for college in Boston Latin School, and graduated at Williams College in 1863; studied medicine at Bellevue Medical College; was lecturer on surgical and pathological anatomy in Hahnemann Medical College and in 1870 accepted the clair of the theory and practice of medicine in the same institution. In 1876 he was a prime mover in the reorganization of the Chicago Homeopathic Medical College and was elected president and also filled the chair of theory and practice of medicine until his death.
Mitchell, Mrs. Zerviah Gould, an Indian, in North Abington, Mass., Mar. 6; b. in Boston, Mass., in 1807; was educated in Abington and Boston. She taught a private school in Boston for many years.
Monroe, James, A. M., LL. D., in Oberlin, Ohio, July 6; b. July 18, 1821; graduated at Oberlin College in 1846, and from the Theological Seminary in 1849; taught in Windham County, Conn., in 1839; was professor of belles-lettres at Oberlin; was in both houses of the Ohio legislature, four years in the house and three years in the senate-two years its president; was special promoter of the charities of that State; United States consul-general at Rio de Janeiro 1863-69, a part of the time chargé d'affaires; member of the National House of Representatives four Congresses, serving on the Committees on Library and on Banking, and was also chairman of that on Education and Labor, and was special friend of the Bureau of Education. He afterwards occupied the chair of political science and modern history in Oberlin, which was established and endowed by his special friends in 1883-96.
Morrill, Justin Smiti, A. M., LL. D., in Washington, D. C., Dec. 28; b. in Strafford, Yt., April 14, 18i0; was educated in the public schools; was a merchant; was in Congress from 1855; was the atthor of the bill establishing agricultural colleges and the tariff of 1861, and was special promoter of improvements of the capital.
Morse, Elijah Adams, in Kenton, Mass., June 5; b. in Southbent May 25, 1841; was educated in the public schools of Massachusetts and at Onondaga Academy, New York; was engaged in manuiacturing; served in the Army during the war for the Union; was a member of both houses of the Massachusetts legislature. He was an carnest adrocate of free schools and left bequests to several educational institutions.
Munger, Albert A., Mackinac, Mich., Aug. 27; b. in Chicago, Ill., in 1845; was a large manufacturer. He gave his art collections, valued at $\$ 3,000,000$, to the Chicago Art Institute.
Nash, Stephen Pays, in Bernardsville, N. J., June 4; b. in Albany, N. Y., Aug. 26, 1821; was educated at the Aibany Academy and the French College at Chambly, Canada; studied law at Saratoga, N. Y.; practiced his profession from 1845 in New York City; was a trustee of Columbia University and of the General Theological Seminary of the Protestant Episcopal Church; a former president of the New York Law Institute and of the association of the bar of New York City.
Norchoss, Amasa, A. M., in Paris, Apr. 1; 1. in Rindge, N. H., Jan. 26, 1824; studied law and practiced in Fitchburg, Mass., the rest of his life; served in both houses of the Massachusetts legislature and in the National Congress, besides holding permanent positions in a number of commercial enterprises; was a trustee of Lawrence Academy thirty-four years, and of Cushing Academy a number of years.
Noyes, Frank B., in Indianapolis, Ind., Jan. 19, aged 31 years; was a native of Boston, Mass.; was instructor in art at Cornell University several years, and the professor of art in the Indianapolis Training School at the time of his death.
Northrop, Birdsey Grant, LL. D., in Clinton, Conn., Apr. 27; b. in Kent, Conn., July 18, 1817; graduated at Yale University in 1840, and at the Yale Divinity School in 1844; was pastor at Framingham, Mass., 1846-57; agent of Massachu-
setts board of education, 1857-66; was secretary for the board of education of Connecticat, 1866-82; was the promoter of "Arbor Day and of Village Improvements;" was president of the N. E. A., and was a frequent lecturer on educational subjects. He gave special attention to the Chinese and Japanese youth sent to the country to be educated, and visited Japan diring the last years of his life.
O'Briex, Teronica (Mother Heironymo), in Rochester, N. Y., Jan. 30; b. in Washington, D. C., April 19, 1819; was a sister of charity; a devoted philanthropist; nurse during the civil war; estabished an industrial school for giris in Rochester.
Olustead, Edward, in Wilton, Comn., Dec. 2; b. there Nov. 22, 1824; graduated at Yale Unirersity in 1845; was assistant and rector (succeeding his father) of Hopkins Grammar School in New Haven in 1849; reopened in 1855 Wilton Acadeny, which was established by his father in 1817, and conducted it the rest of his life.
Osborye, Geo. L., in Kansas City, Mo., Nov. 17, aged 68 years; was president of the State Normal School at Warrensburg, Mo., for twenty-four years, and was first vice-president of the N. E. A.
Osgood, Rev. Jos., D. D., in Cohasset, Mass., Aug. 2; b. in Kensington, N. H., Sept. 23, 1815; was educated at Phillips Exeter, N. H., and Harvard Divinity School; was settled at Cohasset, 1842-95; taught school early in life at Peabody, Mass.; was chaiman of the school committee of his town many years, and superintendent of schools there for twelve years.
Pacrard, Silas Sadler, in New York, Oct. 27; b. in Cummington, Mass., April 28, 1826; had common-school adrantages and went two terms to Granville Academy; in 1845 he tanght in Kentucky; in 1819 he taught pemmanship in Cincinnati, and in 1851 writing, bookkeeping, and drawing in Lockport, N. Y.; in 1856 he became associated with Bryant \& Stratton in the management of their Buffalo college; in 1858 established his business college in New York City; in 1859-60 wrote text-books on bookkeeping.
Parvin, Theophilus, in Philadelphia, Pa., Jan. 29; b. in Buenos Ayres, Argentine Repubiic, Jan. 9, 1829; graduated at the University of Indiana in 1847, and medical department of the University of Pennsylvania in 1852; held a professorship in Ohio Nerlical College, 1864-69; in medical department of the University oi Louisville, 1869-72; in Indiana Medical College, 1872-83; from 1883 till his death in Jefferson Medical College, in Philadelphia, Pa.; was president of the Indiana State Medical Society in 1881, and of the American Medical Association in 1879; wrote several medical works.
Parsox, A. Moodr, in Malden, Mass., Apr. 6; b. in Brentwood, N. H., June 27, 1809; fitted at Phillips Academy, Andorer, Mass.; graduated at Dartmouth in 1840; was master of Berwick Academy, Maine, 184-53; was principal of Boys' High School, Portsmouth, 1853-63, afterwards of the Girls' School; also was superintendent of the public schools at Wakefield, ITass. Ie compiled a volume of poetry.
Peck, James Ingramam, Ph. D., in Williamstown, Mass; b. in Seneca Castle, N. Y., Aug. 10, 1863; fitted for college in the academies of New York; graduated from Williams College in 1887, continued his favorite study of biology at Johns Hopkins; in 1892 became assistant in biology at Williams College, and in 1894 was made an assistant professor, and in 1895 was appointed assistant director of the marine biologicai laboratory at Woods Holl, Mass.; he also served on the United States Fish Commission, and published several biological reports.
Peet, Istiac Lemts, I.L. D., in New York City, Dec. 27; 1). in Hartford, Conn., Dec. 4, 1824; graduated at Yale University in 1845; entered at once upon his life work as an instructor of the deaf and dumb in the Institute of New York, of which his father was principal twenty-six years; graduated at Union Theological Seminary in 1849; was made rice-principal in 1854, and upon the retirement of his father became principal of the institute in 1867 , and was made emeritus principal in 1892. He was a prolific writer upon his specialty.

Pepper, Wm., M. D., LL. D., in Pleasanton, Cal., July 28; b. in Philadelphia, Pa., Aug. 21, 1843; graduated at the Universily of Pennsylvania in 1882, and from the medical department in 1864; was lecturer there on morbid anatomy, 1869-70, and on clinical medicine, 1870-76; was professor of the latter subject, 1876-87, when he became professor of the theory and practice of medicine; was provost of the university, 1881-9t. During his administration the acquisitions in land and money were valued at $\$ 2,500,000$, the attendance and corps of instruction were more than doubled, and several departments added. He himself gave $\$ 00,000$ to the university. He filled many public commissions of trust and honor, and was the author of a large number of publications. He was especially active in organizing the Philadelphia Commercial Museum and was a member of the executive committee, and an earnest friend of the establishment of the University of the United States.
Perry, Rev. William Stevens, D. D., in Dubuque, Iowa, May 13; b. in Providence, R. I., Jan. 22, 1832; graduated at Harvard University in 1854; went into the ministry of the Protestant Episcopal Church; was professor and president of Hobart College for a time; was ordained bishop of Iowa in 1876. He was a prolific writer on religious subjects.

Phelps, Thothy G., in San Francisco, Cal., June 10; was chairman of the board of regents of the University of California; had been collector of customs of San Francisco.

Pickett, Calyin, in New York City, Apr. 29; b. in 1825; was trustee of Central Tennessee College; secured large funds for Braden Chapel and Meharry College, Nashville, Tenn.

Pike, Aros W., in Salmon Falls, N. H., Dec. 30; b. 1819; was one of the oldest teachers in New Hampshire.

Plebce, John Greely, M. D., in Yarmouth, Mar. 9; b. in Foxcroft, Me., Oct. 28, 1843; educated at public schools and at Yarmouth Academy; attended lecture course at Harvard Medical School of Maine, where he graduated; practiced his profession; was supervisor of schools for ten years.

Pillsbury, Geo. Alfred, in Minneapolis, Minn., July 17; b. in Sutton, N. H., Dec. 22, 1824; was in business in Warner and Concord, N. H., for many years and later in the flouring and milling business in Minneapolis. He was actively connected with the various educational, religious, and philanthropic institutions, and his benefactions in his native State and Minnesota amount to several hundred thousand dollars. Pillsbury Academy at Owatonna, Minn., was the principal beneficiary. He left large bequests; was trustee in several institutions, was president of the Baptist Missionary Union; was twice mayor of Concord and later mayor of Minneapolis. He built the soldiers' monument in Sutton; he buil the beautiful library in Warner and filled it with books. He built the Margaret Pillsbury Hospital in Concord.
Poor, Walter Willis, at Camp Chickamauga, Ga., Aug. 5; b. at Sebago, Me., Mar. 20, 1867; graduated from Bridgeton Academy in 1887; took charge of Pembroke High School while an undergraduate at Bowdoin; graduated at Bowdoin in 1891; was principal of Hampden Academy, 1891-94, and studied Latiin and Greek there; was principal of the Anson Academy for four years.
Quintard, Charles Todd, in Meridian, Ga., Feb. 15; b. in Stainford, Conn., Dec. 22, 1824; graduated from University of City of New York in 1847; was for several years professor in a medical college in Memphis, Tenn.; became a deacon in the Episcopal Church and a bishop in 1856; in 1866 began the restoration of the University of the South, at Sewanee, Tenn.

Rains, Gen. George Whamingtos, in Newburgh, N. Y., Mar. 21; b. in Craven County, N. C., in 1817; graduated at the United States Rilitary Academy in 1812; in 184-46 was oal duty at Military Acadeny as assistant professor of chemistry, mineralogy, and geology; served in the Mexical war and civil war; was professor of chemistry and pharmacy in the medical department of the University of Georgia, and was dean of the faculty.
Rasmusem, Peder A., in Lanesboro, Minn., Aug. 15́; b. in Stavanger, Norway, Jan. 9, 1829; in 1850 emigrated to America; studied theology in the seminary at Fort il ayne, Ind.; ordained as a minister of the Lutheran Church in 1854; was pastor at Liskon, I11., for forty-fon years, and was one of the founders of the Norwegian Theological Seminary, at Northfield, Minn.
Richards, Dexter, in Newport, N. M., Aug. 7; 1. there Sept. 5, 1818; received a common-school education; acquired a large fortune in manufacturing flannel; held nearly all the offices in the gitt of his town and in the State legislature. IIe gave a public library and high-school building to Newport.
Rififise, Matthas Henty, D. D., in Allentown, Pa., Dec. 12; b. in Germantown, Pa., June 17, 1841; graduated at Pemsylvania College at Gettysburg in 1860, and became a teacher and student of theology; was professor of English and Latin at Muhlenberg College at Allentown, with the exception of three years, from 1868 until his death; was also connected with the schools of Allentown from 1879 as director, member of the board of control, and secretary of the board. He did much other educational work.
Rickoff, Rebecca Davis, in Netw York, Jan. 4; 1. in Kentucky, 1837; was a wellknown author of school books; shared in the work of preparing the Appleton series of readers and charts; was active in contributing to educational journals and also at the State and national associations of teachers.
Ried, Lewis Fuller, M. A., Ph. D., in Hartford, Comn., Nov. 9; b. in Fayetteville, N. Y., Nov. 16, 1853; graduated at Yale in 1875; taught the classics in a school in Cornwall-on-the-Hudson, N. Y.; taught for two years in Poughkeepsie, N. Y.; he with his father established a preparatory school in Salisbury, Conn.; in 1888 opened the Collins Street Classical School in Hartford, Conn.; assisted in the English department of Trinity College.
Robinson, Beaj. Franklin, in Melrose, Mass., June 16; b. in Giliord, N. H., Jan. 14, 1852; fitted for college at Manchester, and graduated at Dartmouth College in 1877; principal of the Littleton (N.H.) High School; superintendent of schools at Holden and Leicester, Mass., 1892-93; and of Melrose until his death; was an editor in Littleton, and in the printing business in Worcester, Mass.; a member of the board of education of Littleton, 1878-83, and of that same board in Worcester, 1892-93.
Rogers, Prof. Willian Augustus, A. M., Ph. D., LL. D., in Waterford, Conn., Nov. 13, 1832; graduated at Brown University in 1857; became immediately assistant professor of mathematics in Alfred University and full proiessor in 1859; did post-graduate work at Yale Scientific School; was jrofessor of industrial mechanics at Altred University, 1867-71; assistant in the observatory at Harvard, 1871-75; assistant professor of astronomy in that university, 1875-86; professor of physics and astronomy at Colby University until his death; he contributed much to science by his untiring research.
Rood, Wilber Yernox, in Akron, Ohio, June 21; 1. in Elyria, Ohio, July 28, 1848; graduated at Oberin College in 1873; principal of schools, Granville, 111., 187680; of the high school, Akron, Ohio, 1880. He was a member of the board of examiners of Akron, 1892, and also of the Summit County board.
Ross, Gen. Lambevce Sulhyax, in College Station, Tex., Jan. 4; b. in Beatonsport, Iowa, Sept. 27, 1838; graduated at the University of Northern Alabama in 1858; served in the Army; engaged in farming; was twice governor of Texas; was president of the Texas Agricultural and Mechanical College.

Salpointe, Jeane Baptiste, in Tuccon, Ariz., July 18; b. in St. Maurice, Puy de Dome, France, Feb. 21, 1825; studied in the College of Clermont, and at the Seminary of Clermont-Ferrand; was a teacher eight years; was a priest in the Catholic Church; came to this country; became a bishop; established schools in Arizona and New Mexico.
Sanders, Ouren Strong, in Boston, Nov. 20; b. in Epsom, N. H., Sept. 24, 1819; was educated at Pembroke, Gilmanton, and Effingham (N. H.) academies; graduated from Castleton Medical School, Vermont, in 1843; for two years was member of the Boston school board; was one of the founders of the Little Wanderers' Home and donated to it $\$ 5,000$; made Dartmouth College his residuary legatee.
Schafferr, Charles A., in Iowa City, Iowa, Sept. 25; b. in Pennsylvania in 1843; was professor of chemistry and mineralogy at Cornell University, 1869-87; dean of Cornell faculty, 1866-67; was made president of the University of Iowa in 1887.
Scithener, Euwin Albert, in Boonton, N. J., May 22; b. in Topsham, Me., April 18, 1856; prepared for college at Brunswick High School; graduated at Bowdoin College in 1877; was professor of natural science and chemistry at Ripon College, 1880-87.
Schmle de Vere, Matimiliax, Ph. D., in Washington, D. C., May 12; b. in Siweden; held the chair of modern languages in the University of Virginia, 1843-95; he was author of a number of historical romances, of which The Great Empress is the best known. His published studies on philology, and his translations from the French and German are most valuable.
Sgquin, Edward Constant, M. D., in New York City, Feb. 19; b. in Paris, France, in 1843; graduated at the College of Physicians and Surgeons, New York, in 186d; made a specialty of nervous diseases; becane a member of the faculty of the College of Physicians and Surgeons in 1871 and was a lecturer there on the diseases of the spinal cord and incanity, 1871-85. He left all his valuable collections and instruments to various medical institutions.
Seillen, Prof. M., for many years instructor in the Indiana State Normal School.
Sherrill, Hevry J., in Belvidere, Ill., on Aug. 17; was principal of schools at Eaton, Kingston, Forestrille, and Hamiton, N. Y.; St. Louis, Mo.; Belvidere, Ill.; superintendent of Boone County, Ill.
Sikes, Lucretia C. Smith, at Leonardville, Kans., Feb. 17; b. in Pottsdam, N. Y., Sept. 28, 1818; graduated from Oberlin College in 18t6; in 1871 she became engaged in work under the Congregational Home Missionary Society, and during the twenty-eight years in this work she taught a portion of the time.
Smith, E. C., in Dixon, Ill., Aug. 17; was a New Yorker; in 1855 took charge of the institute at Dixon, Ill.; in 1861, of the South Side High School, and filled that position for twenty-five years; had charge of the North Dixon High School for twelve years, teaching in one vicinity for more than forty years.
Smith, Isaac Williay, LL. D., in Manchester, Nov. 28; b. in Hamstead, N. H., May 18, 1825; fitted at Phillips Academy, Andover, Mass.; graduated at Dartmouth in 1846; practiced law in Manchester, N. H., and held many positions of public trust, among others was mayor of Manchester, member of the legislature, member of the school board, justice of the supreme court of the State, and trustee of Dartmouth College, 1885, until his death.
Snow, A. P., in Winthrop, Me., Oct. 25; b. in Brunswick, Me., March 14, 1826; graduated from Dartmouth Medical School in 1854; in 1871 was a member of the legislature; was demonstrator of anatomy in Maine Medical School and also at Dartmouth.
Silevcler, Rev. Jesse Ayes, in Passaic, N. J., Sept. 2; b. in Hyde Park, N. Y., June 17, 1813; graduated from Columbia College in 1837, and at the General Theological Seminary in 1840; did not fill any pastorate; was professor of Greek in the College of the City of New York, 1869-79, and was emeritus professor; was the author of a large number of historical and religious publications.

Stanton, Rey. Robert Palieer, in Norwich, Comn., Sept. 11; b. in Belcherton, Mass., Jan. 20, 1818; fitted for the college at Munson (Mass.) Academy, and graduated at Yale in 1843, and at Yale Divinity School in 1847; preached the largest part of his life; was a principal of Southington (Conn.) Academy; was visitor for thirty-three years of the Norwich schools.
Starr, Rev. War. A., at College Hill, Mass., in March; b. in Cambridge, Mass., March 1, 1837; graduated at Tuits College in 1862; was prominent in the Unitarian ministry; was bursar of the Tufts, 1895, until his death.
Stmpson, Thos. Mormill, in Peabody, Mass., Sept. 30; b. there Jan. 21, 1827; fitted for college at Andover (Mass.) Academy, and graduated at Amherst Coliege in 1850; practiced law all his life; was chairman of the school board of Peabody several years; a trustee of Peabody Institute, a member of its library and lyceum committee twenty-nine years, and chairman of the committee seventeen years; a member of Essex Institute, Salem, 1854, until his death.
Stranafan, James Samuel Thomas, in Saratoga, N. Y., Sept. 3; b. in Peterboro, N. Y., April 25,1808; was a promoter and politician; was a member of the board of directors of the Polytechnic Instiente, Academy of Music, and Brooklyn Institute.
Sutro, Adolph Herwrich Joseph, in San Francisco, Cal., Aug. 8; b. in Aix la Chapelle, Prussia, April 29, 1830; accumulated a large fortune in the mines of Nevada and owned large real estate in San Francisco; did much to beautify San Francisco, giving parks, statues, and fountains; was mayor in 1894 . He gave $\$ 10,000$ to Vassar and left a large part of his estate to be finally given to educational and scientific institutions.
Taylor, Allen, in Yonkers, N. Y., Oct. 13; b. in Bangor, N. Y., July 22, 1833; he attended Union College; in 1870 practiced law in Yonkers, N. Y., and was viceprincipal of a public school.
Taylor, Professor, in Brooklyn, N. Y., Dec. 27; was superintendent of Polytechnic Institute.
Taylor, Horace Willard, in Kenosha, Wis., Aug. 29; b. in Granby, Mass., Feb. 1, 1823; fitted for college at Amherst Academy; graduated at Amherst in 1848; taught in Killingly, Conn., in Williston Seminary, and in Baltimore; practiced law the rest of his life.
Todd, Alwin Ethalstan, in Kentucky, Jan. 30; b. in Blanford, Mass., Aug. 14, 1846; graduated at Yale in 1871; in 1875 graduated from Yale Divinity School; held pastorate in various places; in 1891 was made professor of natural sciences in Berea College, Kentucky.
Tonie, Jacob, in Port Deposit, Md., Mar. 18; b. in York County, Pa., Aug. 13, 1810; accumulated an immense fortune in dealing in grain and lumber and in banking and railway enterprises; many public offices were declined by him; in 1884 gare a handsome building for scientiic uses to Dickinson College; gave to Jacob Tome Institute at Port Deposit, Md., $\$ 3,500,000$.
Tucker, Wildian Packard, D. D., in Pawtucket, R. I., DIay 4; b. in Biddeford, Me., July 24, 1834; received his early education in the public schools of Salem, Mass.; graduated at Bowdoin College in 185 $\frac{1}{4}$; in 1857 became tutor in Latin and mathematics at Bowdoin College; was instructor in mathematics and natural philosophy 1859-62; was librarian there 1857-63; settled in several parishes; in 1893 was elected archdeacon of the diocese of Rhode Island.
Tuttle, Eugene Albert, in Philadeiphia, Pa., July 30; b. in Elyria, Ohio, Nov. 21, 1851; graduated at Oberlin College in 1878; taught in North Amherst, Ohio, 1878-82; studied law; was engaged in teaching and farming at North Amberst 1883-80; was engaged in editorial work later.
Van Lngen, Prof. Henry, in Poughkeepsie, N. Y., Nov. 17; b. in Holland Noy. 12, 1833; was educated at the Academy of Design at The IIague, and came to the United States in 1851; taught in Rochester until the opening of Vassar in 1855, and was at the head of the art department there from that date until his death.

Veazey, Judge Wheefock Gpares, LL. D., in Washington, Mar. 22; b. in Brentwood, N. H., Dec. 5, 1835; graduated at Dartmouth College in 1859, and at the Albany (N. Y.) Law School in 1860; served in the Army during the war and rose to the rank of colonel, and was general by brevet; was reporter of Vermont supreme court, 1864-52; judge of the supreme court, 1879-89; also of Interstate Commerce Commission, 1889-96; he was a trustee of Dartmouth College a number of years, and was an active friend of education; was national commander of the Grand Army of the Republic.
Verbecr, Guido F., in Tokyo, Japau, Mar. 9; b. in Zeist, Holland, in 1830; studied at the Moravian Seminary in Zeist, and came to the United States and graduated at Auburn Theological Seminary in 1859; was a missionary at Nagasaki, Japan, 1859-68; was engaged in educational work for the Japanese Government for eleven years, and received the decoration of the Rising Sun from that Government; taught in the theological department of the Meija Gakuin.
Walcutt, Charles Carroll, in Omaha, Nebr.; graduated at the Kentucky Military Institute in 1858; served with distinction during the civil war; was mayor of Columbus; member of the Columbus school board a number of years, and its president for seven years.
Watson, Harret Almira, Feb. 16; b. at Hannibal, Mo., Sept. 2, 1867; graduated from the philosopincal course in Oberlin College in 1892; taught in Maunola Seminary, Maui, Hawaiian Islands, until her death.
Wayland, Hemon Lincoln, D. D., in Wernersville, Pa., Nov. 7; b. in Providence, R. I., April 23, 1830; graduated at Brown University, Providence, R. I.; studied at Newton Theological Institution; taught in academy at Townshend, Vt.; was tutor in University of Rochester; was chaplain of the Seventh Regiment, Connecticut; in 1865 was professor of rhetoric and logic in Kalamazoo College, Michigan; became president of Franklin College, Indiana, in 1870; was author and editor a long time of the National Baptist; was one of the founders of Wayland Seminary, District of Columbia:
Weeks, Robert Dodd, in East Orange, N. J., Feb. 23; b. in Clinton, N. Y., April 4, 1819; acquired a liberal education; taught school in Newark, N. J., 1846-51; was professor of English literature and farm economy in the Michigan State Agricultural College.
Welle, Davis Ames, LL. D., D. C. L., M. D., Norwich, Conn., Nov. 5; b. in Springfield, Mass., June 17, 1827; graduated at Williams College in 1847 and at the scientific school at Harvard in 1851; was an assistant there, and lectured at Grotoin Academy on physics and chemistry; began the publication of the Annual of Scientific Discovery in 1849, which was continued for many years; was first chief of the Bureau of Statistics of the United States Treasury; was a prolific writer.
Weston, Byron, A. M., in Dalton, Mass., Nov. 8; b. there April 9, 1831; acquired large wealth in manufacturing paper. He was a generous benefactor of Williams College, and was lieutenant-governor of Massachusetts.
Weston, William Gove, in Tarrytown, N. Y., Aug. 14; b. in Pittsfield, Mass., Nov. 21, 1811; graduated at Williams College in 1832; was tutor in a private family in Mississippi; returned to Pittsfield and continued teaching; conducted the Paulding Institute in Tarrytown for twenty years; was school commissioner for three years, and was for several years a member of the Tarrytown school board. He was occupied prominently in commercial enterprises later.
Weyler, Rev. Sumuel, A. M., B. D., at Saratoga, Cal., Feb. 4; b. in Riga, Russia, in 1863; graduated at Knox College in 1887 and at Yale in 1891; founded and became principal of Benicia Academy in 1896.

White, Andrew Judson, A. M., M. D., London, England, Sept. 28; D. in Canterbury, Conn., May 19, 1824; graduated at Yale Medical School in 1846; practicel a short time; went into business and accumulated a large property; gave White Domitory to Yale.
Whining, Carolinas F., in Brooklyn, N. Y., in Dec., in her cighty-first year. She was the oldest woman teacher in Manhattan, having only retired in 1893.
Willard, Frances Elizabeth, LL. D., in New York Cíyy, Feb. 18; b. in Churchville, N. Y., Sept. 28, 1839; graduated at the Northwestern College (female), Eranston, I11., in 1859; taught in a district school near Janesrille, Wis.; in public schools in Evanston and Harlem; Kankakee (Ill.) Academy; was professor in her alma mater; taught in the Pittsburg (Pa.) Female Seminary; Grove School, Evanston; principal at Genesee Wesleyan Seminary, Lima, N. Y.; professor of resthetics in Northwestern University, and dean of the Woman's College. She led in a number of reforms, as president of the Woman's Christian Temperance Union, White Cross.
Williams, Hexpietta Blodget, May 30; b. in Kalgan, China, Sept. 25, 1867; graduated from the Oberlin College in 1889; taught at the Santee Agency; in 1893 taught in the Girls' Boarding School at Kalgan, China.
Wingfield, John Henry Ducachet, D. D., LL. D., in Benicia, Cal., July 27; b. in Portsmouth, Va., Sept. 24, 1833; graduated at St. Timothy's College in 1850 and taught there two years; graduated at William and Mary in 1853 and taught there; took a course in the Protestant Episcopal Theological Seminary of Tirginia; became head of the institution; founded St. Paul's School for Girls in 1871; in 1874 was made president of Missionary College of St. Augustine at Benicia, Cal.; established and became head of St. Mary's Seminary of the Pacific Coast at Benicia, Cal.; author of several notable works.
Witherspoon, Thonas Difight, M. A., D. D., LL. D., in Louisyille, Ky., Nov. 5; b. at Greensboro, Ala., Jan. 17, 1836; graduated from University of Mississippi in 1856; took a course at Columbia Theological Seminary; served as chaplain in the civil war; held various pastorates; held a professorship in Central University, Richmond, Ky.; taught homiletics in the Louisville Presbyterian Theological Seminary.
Woodworth, Rev. Charles Louis, D. D., in East Amherst, Mass., May 23, 1820; fitted for college at Monson Academy; graduated at Amherst College in 1845 and at Hartford Theological Seminary in 1848; was pastor at East Amherst, 1849-61; chaplain during the civil war; was connected with the American Nissionary Association of Massachusetts as field agent, 1865-88; trustee of Atlanta University, Georgia, from 1886 until his death, and its financial agent, 1888-89.
Wright, Charles Barstow, in Philadelphia, Pa., Mar. 24; b. in Wysox, Pa., Jai. 8, 1822; was a banker and railway promoter. He endowed Annie Wright Seminary for Girls and the Washington College for Girls.
IVyman, Jonathas, in Concord, N. H., June 22; 1. in Cornish, N. H., Feb. 25, 1817; fitted for college at Kimball Union Academy and graduated at Dartmonth College in 1842; taught in Tirginia, Georgia, and Alabama five years and five years in New York City until 1855, when he engaged in business.
Yandell, David Weldell, M. D., in Louisville, Ky., May 2; b. near Murfreesboro, Tenn., Sept. 12, 1826; graduated at University of Louisville in 1846 and studied two years in Europe; professor in his alma mater, 1859; medical director Confederate Army, 1861-66; established the American Practitioner in 1870; president of American Medical Association, 1871; and was appointed professor of surgery in Indiana University in 1874.

Zhichos, Johi C., in New York City, Mar. 20; b. of Greek parents in Constantinople, Turke: in 1820; studied at Amherst College and graduated at Kenyon College in 1810; studied medicine, but did not practice it; was professor of English in Antioch College, Ohio, 1853-62; surgeon in the Army, 1862-64; preached two years; professor of rhetoric Meadville (Pa.) Theological Seminary, 1866-71; curator Cooper Union, New York City, 1871, until his death.
Ziegler, Rev. Hienry, in Selinsgrove, Pa., Nov. 25; b. in Center County, Pa., Aug. 19, 1816; graduated at Pemsylvania College, Gettysburg, in 1841; studied theology there; occupied a number of pastorates; was professor of theology at Susquehanna University, 1858-81, and wrote several text-books

## ENGIISII.

Aveling, Edfard Bibbias, in London, England, Aug. 4; b. in Stoke-Newington, Nov. 29, 1851; was educated at University College, London; studied medicine and went to Cambridge as assistant in philosophy; later was professor of chemistry and physiology at New College and of comparative anatomy at London Hospital; was a member of the London school board in 1882; advocate of socialism; editor, writer, and lecturer.
Cairn, Rev. John, in Greenocks, Scotland, July 30; b. there in Dec., 1820; studied at Glasgow University and was ordained a minister of the Scottish Kirk; was well known as a preacher; professor of divinity in Glasgow University, 1862, and principal and vice-chancellor of the university in 1873; Gifford lecturer on matural theology at Glasgow in 1892 and again in 1895. He was the author of a number of publications.
Cochrane, Rev. War., D. D., in Brantford, Ontario, Canada, Oct. 17; b. in Paisley, Scotland, in 1831; studied at University of Glasgow, but graduated at Hanover College, Indiana, in 1857; was ordained to the ministry in 1859; was pastor at Brantford from 1582 and for many years president of the Young Ladies' College there.
Dayidson, Rev. Sanuel, Apr. 1; b. in Ballymena, Ireland, in 1807; was educated at Glasgow University and at the Presbyterian Theological Seminary at Beliast, Irelanit; was professor of biblical criticism in the latter institution, 1835-42; professor of liblical literature in the Lancashire Independent College, Manchester, 1845 to 1857 ; was a prolific writer.
Dodgson, Charles Iutwidge, in Guilford, Surrey, Jan. 14; b. in Daresbury, Cheshire, January 27, 1832; was educated at Richmond, Rugby, and Oxford; was a mathematical lecturer at Christ Church, 1854-81, and a fellow at the same institution, 1861, till his death; the author of Alice in Wonderland, and other juvenile books, under the pen name "Lewis Carroll," also of mathematical treatises.
Jenver, Sir William, M. D., in Bishops Waltham, Dec. 11; b. in Chatham in 1815; studied at University College, London; graduated from medical department of University of London in 1844; became a member of the Royal College of Physicians in 1848; professor of pathological anatomy in University College and assistant physician to the College Hospital; fellow of the Royal College of Physicians and Gulstonian professor in 1852; professor of clinical medicine, 1857; physician to the Queen, and professor of the practice of medicine in University College in 1861; president of the Royal College of Physicians, 1881-89.
Kanthack, Alfredo Antunes, in Cambridge, England, Dec. 22; b. in Brazil, March 4, 1863; was educated in Germany and Cambridge, becoming professor of pathology at Cambridge in 1897.
Lemis, Thomas Hayter, in London, Dec. 10; b. there July 9, 1818; studied architecture under Parkinson and Tite; was professor of architecture at University College, London, in 1865 and dean of the faculty of arts in 1871; emeritus professor in 1881.

Liddell, Rev. Dr. Henry George, in Ascot, Jan. 18; b. in Durham in 1811; was educated at Charterhouse School and Christ Church, Oxford; was ordained a priest in 1838; was tutor, and, later, professor of moral philosophy in the university thirteen years; head master of Westminster Training School, London, 18 $46-55$; dean of Christ Church; later, vice-chancellor of the university. He was a nember of a commission which made large reforms in university education in England.
Moulfon, Williay Fiddian, D. D., Feb. 5; was heal master of Seys School, Cambridge, since 1874.
Muller, George, in London, Mar. 10; b. near Halberstadt, Prussia, Sept. 27, 1805; was founder of the orphan homes, Ashleydown, Bristol, England, where many children were housed and educated.
Monk, William, M. D., in London, Dec. 20; b.in 1815; educated at University College, London, and at the University of Leyden, in 1837; became a member of the Royal College of Physicians in 1844 and a fellow in 1854; held several professorships during lis life.
Playfirn, Prof. Lyon, LL. D., in London, May 29; b. in Meerut, British India, May 21, 1819; educated at St. Andrews, New Brunswick; took a course in chemistry at the Andersonian University, Glasgow; studied organic chemistry in Germany under Liebig; was professor of chemistry in the Royal Institute at Manchester, England, in 1843; occupied many high and important positions in England, among them inspector-general of the Government museums and schools of science in 1856; in 1857 was elected president of the Chemical Society of London; in 1858 became professor of chemistry at the Edinburgh University; was a member of Parliament. He was the author of numerous scientific memoirs.
Price, Bartholomen, Dec. 30; b. in Coln St. Demnis, Gloucestershire, May 14, 1818; was educated at Pembroke College, Oxford, and graduated in 1840; a fellow of Pembroke in 1844; professor of natural philosophy at Oxiord, 1853; secretary for many years of the Clarendon Press; master of Pembroke College, 1892 till his death; author of several mathematical treatises.
Quan, Sir Richard, in London, Mar. 13; b. in Mallow, near Corls, Oct. 30, 1816; graduated from medical department of University of London in 1842; attained a large practice; became a fellow of the Royal College of Physicians in 1851; a member of the senate of London University and chairman of the Brown Institution.

## OTHER FOREIGN.

Abraisost, August, at Nä̈is, Aug. 6; founder of the manual training school at Nääs, Sweden.
Ahmad Kliax; Sir Salyid, in Allahabad, Mar. -; b. in Deihi in 1817; was an Indian statesman; founded an Anglo-Oriental college at Aligahe in 1873.
Pecker, A., at Cologne, Germany, Sept. 6; was school councilor; principal of blind asylum.
Bevser, Dr. Albert, Apr. 14; was principal of commercial high school in Dresden, Saxony, Germany.
Böhnie, Franz M., in Dresden, Saxony, Germany, Oct. 18; was professor of music. Braver, Karl F., at Naumburg, Germany, July 29; noted composer of church and school music.
Büttner, Franz August, at Dresden, Saxony, Germany, Sept. 14; was court councilor, principal of blind asylum.
Ceneri, Giuseppe, Italian politician, at Bologna, in June; b. there in 1827; in 1859 became secretary of public instruction in provisional government; his course on Roman law in the University of Bologna was the most esteemed in Italy.

Delianoff, Count Ivan Dayidorich, a Russian statesman, in St. Petersburg, Jan. 10; b. in Moscow in 1818; studied at Moscow University; in 1882 was appointed minister of public instruction.
Dronke, D. A. F. W., in Koblenz, Germany, June 10; principal of the modern high and technical school; writer of a number of German text-books.
Eberhard, H., in Eisenach, Germany, Oct. 3; school councilor, author of Poetry in School.
Ebers, Georg, in Tutzing, Bavaria, Germany, Aug. 7; b. in Berlin, March 1, 1837; received education at gymnasiuns of Kottbus and Quedlinburg and University of Göttingen and Berlin; was lecturer at University of Jena and professor of Egyptian Archæology at University of Leipzig; was a novelist and an author of many publications.
Erlselenz, Dr. Hernany, in Cologne, Germany, Apr. 9; principal of the girls' high school there.
Erast, Georg, Jan. 9; one of the founders of the Austrian teachers' association in Tienna, Austria.
Eybesfeld, Conrad von, Austrian statesman, in Grïtz, Austria, in July; b. in 1831; was minister of public instruction in 1888.
Fischer, Oskar, Jan. 3, principal of girls' high school in Hildesheim, Germany.
Forster, Dr. Theodore, at Halle, Germany, Aug. 27; royal school inspector.
Funk, Valentin, in Wiesbaden, Germany, Aug. 18; promoter of teachers' associations.
Goetze, Dr. Julus Woldemar, at Leipzig, Germany, Nov. 14; director of manualtraining normal school.
Gede, Karl, at Wasserode, Germany, Nov. 30; teacher and author of popular school readers.
Günther, Eduard, at Cologne, Germany, Aug. 11; principal deaf-mute institute at Neuwied.
Harder, Rev. Karl, in Elbing, Germany, Mar. 4; editor of religious and educational journal.
D'Harques, Mar. 27; school councilor in Berlin, Germany.
Hexchel, Julius, at Hanover, Germany, Sept. 29; rector of the city school; author of text-books on language.
Hexning, in Otweiler, Westphalia, Germany, Aug. 8, privy school councilor in Münster.
Herzog, H., Jan. 7; teacher in Aarau, Switzerland; well-known author of jurenile. books.
Hielscher, Dr. G., in Heidelberg, Baden, Germany, Nov. 23; royal school councilor.
Hochstetter, I., Apr. 19; was school councilor in Fürth, Bavaria, Germany.
Hofmann, Th., at Gera, Germany, Feb. 21; was a popular publisher of text-books and other educational works.
Homel, August, Jan. 19; was a normal school teacher in Halle, Germany; author of geographical text-books and numerous historical works for children.
Kannegiesser, K. Erwin, in Cassel, Germany, Mar. 8; was privy councilor of state schools; was author of articles on supplementary education.
Kramer, in Germany, Bingen on the Rhine, Mar. 25; was district school inspector.
Lange, Rudolf, Feb. 4; was a normal-school teacher in Weissenfels, Germany, and a composer of church and school music.
Lange, Dr. Theodor, Feb. 21; was school principal in Clendon, near Berlin, Germany.
Laterdorf, Dr. J. Fr. Th., May 1; was head master in gymnasium at Schwerin, Germany; specialist in history of literature.
Latrainn, Dr. Julius, at Göttingen, Germany, Aug. 19; was school councilor; author of Latin and Greek text-books.

Liefex-Mayer, Alextnder von, a German painter; in Mímich, Feb. 19; b. in Raai, Hungary, Jan., 1839; in 1880 was director in the School of Art; a professor in the Munich Academy in 1883; a member of Vienna Academy in 1887.
Madrazo, Eederigo, a Spanish painter; in Madrid, Aug.; b. in Rome in 1815; was appointed court painter at Madrid; was director of Madrid Academy of Fine Aris.
Merco, Ferdivasd, at Branchstein, Germany, Alig. 31; was inspector of gymmastics.
Mascuer, Dr. H. A., at Hörde, Westphalia, Germany, Aug. 2t; mayor of city of Hamm; author of pedagogical books and compiler of laws.
Nelbachurexder, Shyuef, at Thun, Switzerland, July 2; music: teacher and popular composer.
Retter, Dr. Wr., Jan. 9; was normal-school teacher in Boppard, Germany; author of a history of literature.
Ribeack, Dŕ. Otto, at Erfurt, Germany, July 18; was professor of philosophy in Berne, Basel, Kiel, Heidelberg, and Leipzig.
Ruvier, Alphonse Pierre Octate, a Belgian legal writer, in Brussels, Belgium, July 21; b. in Lausamne, Switzerland, Nov. 9; studied law at University of Lausanne and in Berlin; was professor in University of Berne 1863-67; was professor at University of Brussels; was the author of several publications.
Ruhsan, Julius, in Annaberg, Saxony, Germany, Nor. 17; was teacher in secondary schools; noted as reformer in methods of teaching natural history.
Scheebert, Dr. Karl, in Breslau, Feb. 18; was privy councilor and school superintendent in Pomerania, Germany; author of educational works.
Schilling, Dr. Max, at Züllichan, July 29; was head teacher in normal school at Züllichan, Germany.
Schmelzer, Dr. Karl, in Berlin, Germany, Oct. 6; twas principal of classical high school in Berlin; author of popular educational works.
Schmidt, P., April 26 ; taught in normal school at Pyritz, Germany.
Schulucher, Karl, at Berlin, Germany, May 11; was rector of̉ city school.
Schwalbe, Dr. J., in Posen, Germany, Dec. 3; was school inspector.
Somier, Dr. Otto, Ajpr. 18; was principal of girls' high school in Brunswick, Germany.
Steeg, Jules, in Paris, May 4; Protestant teacher in Paris; since 1896 director of normal school.
Steudener, Dr. Heinrich, in Quedlinburg, Germany, May 13; was professor in the famous cloister school at Rossleben; author of historical works.
Stockiardt, E. Th., Mar. 27; was professor in Chemnitz, Saxony, Germany.
Tasciereav, Elziar Alexindre, D. C. L., in Quebec, Canada, Apr. 12; 1). in Sainte-Marie-de-la-Beauce Feb. 17, 1820; educated in Quebec and Rome; professor of moral philosophy in the Seminary of Quebec, 1842-54; director of the minor seminary in 1856 and of the great seminary in 1859; superior in 1860 and rector of Laval University; papal delegate, archbishop, and cardinal.
Teuber, Karl, at Patschkau, Germany, Sept. 5; was teacher and author of juvenile literature.
Topelits, Zachris, in Helsingiors, Finland, Mar. 12; 1. in Kudrnas, Finland, Jan. 14, 1818; was educated at Helsingfors University; editor, 1840-61; professor extraordinary of Finnish history at his alma mater, 1853; professor of the history of Finland and northern regions, 1863; professor of general history, 1876-78; author of several books of poems and novels.
Uellyer, Dr. Julius, at Düsseldori, Germany, Oct. 24; was director of secondary schools for girls.
Voebrodr, Dr. F., at Erfurt, Germany, Sept. 27; was city school councilor.
Vries, J.F. De, at Emden, Germany, Oct. 11; was rector of city school; became famous through his advocacy of home geography.

Wolf-Delirz, B., at Magdeburg, Germany, Oct. 2S; was head teacher and president of provincial teachers' association.
Walmer, F, at Berlin, Germany, June 18; was rector of city schools and contributor to educational press.
TVolf, K., at Steglita, Germany, Jan. 1; was school councilor.
Z.abel, R., at Zerbst, Germany, Feb. 22; was founder of deaf-mute school.

Zaeprecht, Mennicif, in Kössel, Germany, Jan. 1; was a teacher and a member of executive committee of the national teachers' association.
Zmmernana, Dr. Robert, in Vienna, Sept. 1; was professor of philosophy in University of Viemna.

## CHAPTER L.

## PORTABLE SCHOOL BUILDINGS.

[From the Ammal Report of the Superintendent of Instruction of St. Louis, Mo. (Hon. F. Louis Soldan), for 1898-99, p. 51.]
It seems advisable to provide a remedy for the trouble which the board have experienced in regard to this matter [of double daily sessions] in the past. It can not be the policy of the board to provide school room in advance before the necessity of it is felt in any part of the city. After a school, however, has become overcrowded and a new building has been decided upon, a year must necessarily pass before it can be completed and occupied. During this year temporary provision must be made for the surplus of children. In the city of Milwaukee the plan of portable school buildings for temporary purposes has been tried with satisfaction for many years. The idea of portable school buildings seems to have originated in Paris, when, after the Franco-Prussian War, a compulsory education law was passed, and the sudden influx of children into the public schools of that metropolis was so large that existing schoothouses could not take care of the number. Under these circumstances the plan of temporary school buildings was tried and was found to meet the emergency. Several other large European cities, such as Munich, have tried this plan with good success. At a cost hardly greater than the rental of an adequate room for two years, such buildings, large enough to accommodate 50 children, well ventiated and heated and protected from cold by double walls, can be erected, and I believe they would present better sanitary conditions for the temporary accommodation of children than the ordinary rented rooms and would be much better economy than double-time sessions. They could be put into the rards of the school buildings that need relief and make use of the outhouses and of the janitor service provided for the main building.
[From the Annual Report of the Commissioner of School Puildings of St. Lonis, Mo. (Mr. William B. Ittner), for 1898-99.]

## PORTABLE SCEOOLROOMS.

I am pleased to report a successful trial of the portable schoolroom. Beginning with the present board (in June, 1897), a large number of rented rooms were maintained in various parts of the city. The addition of new school buildings has enabled the board to reduce the number of rented rooms at this time to 19. These rented rooms, though the best that can be procured in the neighborhood of the school needing relief, are at best ill adapted to the requirements, are expensive to fit up for school purposes and to restore to their original condition when given up. The building devised to relieve temporarily the overcrowded condition at any school will enable the board to properly provide for such overflow and, with the proper number of portable rooms on hand, to dispense with rented rooms entirely.

The buildings are constructed in such manner as will enable them to be readily taken apart where no longer required at one school and moved to another. They
are 24 by 30 feet, inside measurement, with a clear story height of 12 feet. The floor is constructed in 8 sections, the sides in 6 sections, the ends in 4 sections, and the pitched roof in 16 sections. Each section is built upon frames which are readily bolted together in such manner as to make a perfectly tight and secure room. All joints between the sections are covered both inside and out by movable pieces secured with screws. They are heated and ventilated by an indirect furnace with double casing. The fresh air is taken directly from the outside, which supply can not be cut off by the teacher. The vent is erected at the opposite end of the room from the furnace, and the draft of the vent is induced by carrying the smoke pipe from the furnace through the upper part of the vent flue. This not only makes a perfect method of ventilation, but effectually prevents any possibility of fire from the furnace smoke pipe. A test of the ventilation of the first room, set up at the Walnut Park school, shows that the air of the room is being changed every 9.74 minutes, thus supplying each of the pupils with 16 cubic feet of fresh warm air per minute.

The buildings thus far completed have been erected by our own carpenters, the cost being as fullows:
Lumber ..... $\$ 372.00$
Millwork ..... 78.56
Hardware and iron work ..... 69.50
Labor ..... 123. 20
Roofing ..... 38.50
Painting and glazing. ..... 85.00
Heating and ventilating ..... 86.40
Total ..... 853.16

The rooms can readily be taken apart, moved, and reerected. They are fitted with 60 adjustable desks, and in all respects make a satisfactory and comfortable school room.
[From letter of Mr. William B. Ittner, commissioner of school buildings, June 14, 1900.]
I will add this description of the heating and rentilating apparatus, which is not explicitily covered in my report:

The furnace is known to the trade as a "room heater" and weighs 450 pounds. It has an outer casing (for appearance) of Russia iron; the exposed chimney in the class room being also of Russia iron. The inner casing surrounding the furnace is of heavy stovepipe iron; the same being corrugated and set with about a $1 \frac{1}{2}$-inch air space between the inner and outer casing.

There is a row of 1 -inch holes 3 inches apart through the outer casing just above the floor. This permits of a good circulation of air through the space between the casings and assists materially in keeping the outer casing cool.

We place a door about 6 by 12 inches on each side of the casing near the floor, so that when the room is not occupied, these doors can be opened up and the room quickly warmed before the fresh-air inlets are opened. We cover the top of the furnace with a No. 8 wire screen, to prevent mischievous youngsters from throwing papers, etc., over the casings. This has been found convenient also in suburban schools to warm coffee and the children's lunch.

The fresh air is brought in through a wood duct under the floor. The duct extends to both sides of the building, permitting the air to enter from both sides. Doors can be arranged to be opened and closed from the room by means of chain and pulley, giving the teacher easy control of the quantity of fresh air to be admitted.

The outer openngs should, of course, be covered with heavy wire screens. The space in the floor under the heater is cut out for the admission of fresh air around the casing of the furnace and inside of the inner casing. The floor joists under the
heater are protected by wrapping them with several layers of asbestup paper and then covering them with stovepipe iron.

The rent outlet is placed at the opposite end of the room alongside of the book closet. While this location may not seem the correct position for the rent onening, yet tests of this apparatus have proved a thorough circulation of air throughout the entire room. By passing the smokepipe over the farnace through the rent flue, the air in that part of the flue is heated, thereby inducing and maintaining a constant flow of air through the room at all times.

Tests of the heater have shown that the air of the room can be changed every seven minutes; that the temperature varies only two degrees from maxinum to minimum, using six thermometers, one of which was placed on the teacher's desk, the other fire distributed about the room.

plan of portable schoolroom.

PORTABLE SCHOOLROON.

## CHAPTER LI.

## STATISTICS OF ELEMENTARY EDUCATION IN FOREIGN COUNTRIES.

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \& \multirow[b]{2}{*}{Countries.} \& \multirow[b]{2}{*}{Date of report.} \& \multicolumn{4}{|l|}{Enroliment in elementary schools.} \& \multicolumn{2}{|l|}{Average attendance.} \& \multicolumn{3}{|l|}{Number of teachers.} \\
\hline \& \& \& Boys. \& Girls. \& Total. \&  \& Total. \&  \& Men. \& \[
\begin{aligned}
\& \text { Wo- } \\
\& \text { men. }
\end{aligned}
\] \& Total. \\
\hline \& 1 \& 2 \& 3 \& 4 \& 5 \& 6 \& 7 \& 8 \& 9 \& 19 \& 11 \\
\hline \& I.-EUROPE. \& \& \& \& \& \& \& \& \& \& \\
\hline 1 \& Austria-Hungary .. \& 3897 \& 3, 166, 715 \& 2,991, 088 \& 6, 157, 803 \& 15.0 \& \& 87.5 \& 90, 559 \& 27,500 \& 118, 059 \\
\hline 2 \& Austria......... \& 1897 \& 1, 817, 800 \& 1, 809, 345 \& 3, 627, 145 \& 15.2 \& \& 90 \& 66,704 \& 20, 473 \& 87:177 \\
\hline 3 \& Hungar \& 1897 \& 1,348,915 \& 1,181, 743 \& 2,530,658 \& 14.5 \& \& 85 \& 23, 855 \& 7,027 \& 30,882 \\
\hline 4 \& Belgium \& 1896 \& 392, 838 \& 359, 224. \& 752, 062 \& 11.73 \& \& \& 7,695 \& 7,352 \& 15,027 \\
\hline 5 \& Bulgaria \& 1898 \& 239,500 \& 109, 216 \& 348,716 \& 10.53 \& \& \& 6,421 \& 1,544 \& 7,965 \\
\hline 6 \& Denmark \& \& \& \& 307,633 \& 14.08 \& \& \& \& \& \\
\hline 7 \& France \(a\) \& 1896-97 \& 2, 782, 547 \& 2, 748, 871 \& 5, 531,418 \& 14.38 \& \& \& 67,339 \& 84,938 \& 152, 277 \\
\hline 8 \& Germany .......... \& 1895-96 \& \& \& \& 18.0 \& \& 99 \& \& \& \\
\hline 9 \& Alsace-Lorraine (imperial possession). \& 1891 \& \& \& 229,628 \& 14.0 \& \& 90 \& 2,703 \& 2,303 \& 5,006 \\
\hline 10 \& Anhalt (duchy) \& 1891 \& 22,673 \& 22,549 \& 45, 222 \& 16.0 \& \& 90 \& 897 \& 93 \& 980 \\
\hline 11 \& Baden (grand duchy). \& 189.f \& 160,222 \& 160, 422 \& 320,644 \& 19.2 \& \& 90 \& \& \& 5,503 \\
\hline 12 \& Bavaria (king- \& 1895 \& 541,732 \& 516, 010 \& 1,087, 792 \& 20.0 \& \& 90 \& 17, 953 \& 6,299 \& 24, 252 \\
\hline 13 \& Bremen (free city). \& 1897 \& 12,636 \& 12,991 \& 25, 627 \& 13.0 \& \& 90 \& 484 \& 135 \& 619 \\
\hline 14 \& Brunswick (duchy). \& 1891 \& 31,671 \& 34, 329 \& 69,000 \& 17.0 \& \& 90 \& 1,049 \& \& 1,0.49 \\
\hline 15 \& Hamburg (free city). \& 1898 \& 44, 761. \& 50,977 \& 95, 788 \& 14.0 \& \& 90 \& 1,720 \& 1,368 \& 3,088 \\
\hline 16 \& Hessia (grand duchy). \& 1891. \& 94,572 \& 98,240 \& 192,812 \& 19.4 \& \& 90 \& 2,467 \& 324 \& 2, 791 \\
\hline 17 \& Lippe (principality). \& 1891 \& 12, 061 \& 11, 474 \& 23,595 \& 18.3 \& \& 90 \& \& - .-.... \& 473 \\
\hline 18 \& Lübeck) (free city). \& 1896 \& 7,603 \& 7,024 \& 14,627 \& 17.5 \& \& 90 \& 236 \& 136 \& 372 \\
\hline 19
20 \& \begin{tabular}{l}
MecklenburgSchwerin (grandduchy) \\
Mecklenburg-
\end{tabular} \& 1891
1891 \& 43,692
7,726 \& 41,142
7,583 \& 84,834
15,309 \& 14.6
16.0 \& \& 90
90 \& 1,912

355 \& 145 \& 2,057
355 <br>
\hline 20 \& MecklenburgStrelitz (grandduchy) \& 1891 \& 7,726 \& 7,583 \& 15,309 \& 16.0 \& \& 90 \& 355 \& \& 355 <br>
\hline 21 \& Oldenburg (grandduchy) \& 1891 \& 30,556 \& 29,851 \& 60,407 \& 17.0 \& \& 90 \& 960 \& \& 900 <br>
\hline 22 \& Prussia (kingdom). \& 1896 \& 3, 160, 737 \& 3, 180, 530 \& 6,341,267 \& 20.0 \& \& 90 \& 81,762 \& 10,299 \& 92,061 <br>
\hline 23 \& Reuss, jr. line (principality) \& 1891 \& 9,702 \& -9,801 \& 19,503 \& 17.0 \& \& 90 \& 290 \& 18 \& 308 <br>
\hline
\end{tabular}

## CHAPTER LI.

## STATISTICS OF ELEMENTARY EDUCATION IN FOREIGN COUNTRIES.



6 Public schools only, which enroll $4,190,320$ pupils, or three-fourths the total in elementary sehools. c From State only.
d Including tuition fees.

Statistics of elementary education

|  | Comntries. | Date of report. | Eurollment in elementary schools. |  |  |  | Arerage attendance. |  | Number of teachers. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Boys. | Girls. | Total. |  | Total. |  | Men. | $\begin{aligned} & \text { Wo- } \\ & \text { men. } \end{aligned}$ | Total. |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
|  | I.-EUROPE-cont'd. |  |  |  |  |  |  |  |  |  |  |
| 24 | Reuss, sen. line (principality | 1891 | 5,417 | 5,571 | 10,988 | 17.5 |  | 90 | 215 | 7 | 220 |
| 25 | Saxe-Altenburg (duchy). | 1891 | 14,439 | 15,186 | 29,625 | 17.3 |  | 90 | 500 | $\therefore$ | 500 |
| 26 | Saxe-Coburg- <br> Gotha (duchy) | 1891 | 16,581 | 16,922 | 33, 503 | 16.2 |  | 90 |  |  | 580 |
| 27 | Saxe-Mciningen (duchy). | 1891 |  |  | 39,592 | 17.7 |  | 90 | 589 |  | 589 |
| 28 | Saxe-Weimar (grandduchy) | 1891 | 29, 464 | '29,463 | 53, 927 | $18.4$ |  | 90 | 863 | 9 | 872 |
| 29 | Saxony (kingdom). | 1896 | 397, 841 | 331, 267 | 729, 108 |  |  | 90 | 9,409 | 3, 060 | 12, 496 |
| 30 | SchaumburgLippe (principality). | 1891 | 3,389 | 3, 369 | 6,758 | 17.3 |  | 90 |  |  | 126 |
| 31 | SchwarzburgRudolstadt (principality) | 1891 | 7,380 | 7,187 | 14,579 | 17.0 |  | 90 |  |  | 263 |
| 32 | Schwarsburg- <br> Sondersha u- <br> sen (princi- <br> pality. | 1891 | 6,479 | 6, 484 | 12, 963 | 17.1 |  | 90 |  |  | 264 |
| 33 | Waldeck (principality). | 1891 | 5,625 | 4,815 | 10,440 |  |  | 90 |  |  | 247 |
| 34 | Württemberg <br> (kingdom). <br> Great Britain and Ireland: | 1897 | 185,090 | 208, 538 | 393, 628 |  |  | 90 |  |  | 5, 030 |
| 35 | England and | 1897 |  |  | 5,507, 039 | 17.73 | 4, 488, 543 | 81.5 |  |  | 130, 773 |
| 36 | Wales. Scotland | 1897 |  |  | 719,934 | 17.04 | 605, 389 | S4.09 |  |  | 16,096 |
| 37 | Ireland | 1897 |  |  | bSi6, 001 | 17.92 | 521, 141 | 63.9 |  |  | 13, 007 |
| 38 | Greece | 1889 | 78,815 | 18,986 | 97, 801 | 4.02 |  |  |  |  | 1,641 |
| 39 | Italy | 1895-96 | 1,296,461 | 1,082, 888 | 2,379,349 | 7.47 |  |  | 19,958 | 32, 544 | 52,512 |
| 40 | Netherlands | 1897-98 | 374,578 | 34, 837 | 719,415 | 14.18 |  | - | 12, 936 | 5,855 | 1S, S41 |
| 41 | Norway | 1895 |  |  | 319,860 | 15.99 |  |  | 4,402 | 2,116 | 6,518 |
| 42 | Portugal............ | 1890 |  |  | 237, 791 | 4. 71 |  |  |  |  |  |
| 43 | Roumania | 1896-97 |  |  | 298, 233 | 5.14 |  |  |  |  | 5,411 |
| 44 | Russia | 1896 | 2, 9.48, 274 | 831, 544 | 3,779,818 | 2.99 |  |  | 91, 105 | 22,879 | 113, 981 |
| 45 | Finland. | 1899 | 47,517 | 41, 045 | $\left\{\begin{array}{r} d 177,886 \\ 88,562 \end{array}\right\}$ | 10.57 |  |  | 1,016 | 1,291 | 2,297 |
| 46 | Servia. | 1893-94 | 65,846 | 11,329 | 77, 175 | 3.34 |  |  | 929 | 576 | 1,505 |
| 47 | Spain .............. | 189.5 |  |  | 1,356,136 | 7.72 |  |  |  |  |  |
| 48 | Sweden | 1897 |  |  | 738, 836 | 14.49 |  |  |  |  | 15, 471 |
| 49 | Switzerland........ | 1898 | 359, 121 | 287, 995 | 647,116 | 20.7 |  | 85.2 | 8,138 | 6,297 | 14,435 |

$a$ From State only. $b$ Average enrollment.
$c$ Total contribution for clementary education from the various ministers in 1899. In 1894 this amount was stated to be $\$ 3,105,860$.
in foreign countries-Continued.

d In ambulatory scinools.
c For elementary and normal schocls.

* December $: 1$.

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a Feudatory state under native administration.
$b$ Also in private elementary schools, 23,981 .
c Also in private elementary sehools, 40,230.
d Also in private elementary sehools, 42,493.
$e$ Also 99,395 in model sehools and academies.
in foreign countries-Continued.

$f$ The statistics, which include pay and free sehools, are taken from "Census of Cuba," 1899, pp. 585, 618-619. It is stated (on p. 615), however, that there were in June, 1900, about 3,000 publie sehools 3,500 teachers, and 130,000 pupils under instruction, and that the estimated expenditures for all school purposes were upwards of $\$ 1,000,000$. The above estimates from the Tables arc more conservative, and form a more complete estimate for the eomputations made.

* December 31.

Statistics of elementary education

a Includes pupils in private schools.
$b$ Expenditures by the higher council "for cducational purposcs."
$c$ Annexed to the United States by joint resolution of Congress July 6, 1898.
in foreign countric:-Continued.


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Yates, Thompson, equipmeritiof leboratories, University College, Liverpool, El:
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# FALVEY MEMORIAL LIBRARY 

 VILLANOVA UNIVERSITY

U.S. Bureau of Exucation fixuel report, 1893-99


[^0]:    ${ }^{1}$ From the Eleventh Annual Report (1847) of Horace Mann to the Massachusetts State Board of Education, pp. 39-135.

[^1]:    ${ }^{1}$ See letters of eminent physicians, in my Sixth Annual Report; also, Common School Journal, vol. 5.

[^2]:    ${ }^{1}$ See Fifth Annual Report, pp. 86-100; also, Commen School Journal, vol. 4, p. 361.
    ${ }^{2}$ It has been well said, "No eye has ever witncssed the speetaele of a total eelipse of the sun, even when announced with every characteristie of aecuraey, without a shudder of awe, a sensation of deep terror, which reason in vain essays to subduc. The chilling and somber darkness which sprcadsover nature; the manifest terror of birds and animals; their instinctive retreat to the abodes of man, as if some awful danger was impending; the horror of the idea of the destruction of the great souree of light and life, and the possible dissolution of nature-all eonspire to render this one of the most terrific scenes that the eye of man has ever witnessed. What, then, must have been the horror which seized every speetator of this awful scene in those ages of the world when profound ignorance of its physical eauses existed, and this terrible phenomenon burst suddenly upon the world, unanticipated and unannounced?
    "The great Roman historian and annalist has, in a few graphic sentences, depicted the effect of an eclipse of the moon on the devoted legions of Pannonia. These hardy veterans, these iron men, born and bred to battle and to war, cowercd before the awful spectacle, marched in agony to their contemned eommanders and implored their forgiveness and deprecated the wrath of the avenging gods for their disobedience and insubordination."-Sidereal Messenger.

[^3]:    ${ }^{1}$ Even Marcus Aurelius declared himself satisficd if he could only improve a few persons; and he denied the possibility of establishing Plato's republic.

[^4]:    ${ }^{1}$ This general remark must be taken with the exception of a few of the very worst men which any age cver produces. These bccome members of the clerical profession because, under the mask of its sanctity, they hope to practice their iniquities with impunity.

[^5]:    ${ }^{1}$ From the Report for 1872 of the United States Commissioner of Education, pp. 586-595.

[^6]:    ${ }^{1}$ Mir. Walton's report is before me, and I am able to bear unqualified testimony to the unexaggerated truthfulness of this summary setting forth of the case which he presents in great detail. I have quoted this passage less for convenience' sale than that the reader might see how widely a judgment against the efficieney of our publie sehools is beginning to be diffused. Mr. Charles Francis Adams, jr., in his paper on "The new departure in the common schools of Quiner," says of an examination of those schools by competent and impartial gentlemen in 1873: "The result was deplorable. The schools went to picees. * * * In other words, it appeared, as the result of cight years' schoolteaching, that the children, as a whole, could neither write with facility nor read fluently."

[^7]:    ${ }^{1}$ The well-known faet that homieide is more eommon in the Southern States than in the Northern is of no importance in the consideration of these statisties. It merely shows that to the mass of crime in the one ease homieide bears a large proportion, and to the mass of crime in the other a very small one. And it is to be remarked that of the homieides in the Southern States a very large proportion, springing as they do from an antiquated perversion of the sense of honor, semisavage as they often are, are generally less base and vieions in motive than the eomparatively few murders in the Northern.

[^8]:    ${ }^{1}$ A paper read before the Massachusetts Teachers' Association, December, 1880, by B. F. Tweed.

[^9]:    ${ }^{1}$ Delivered before the Twelfth Anmual Conference of Charities and Correction, Washington, D. C., 1885.

[^10]:    ${ }^{1}$ It is but fair to state that this enormous increase of insanity has led the compiler to question the accuracy of the returns of insane persons made in 1870, yet it is admitted that, after making every allowance, the ratio of increase is out of all proportion to that of population. (See page 1660, Compendium of the Tenth Census.)

    2 Proceedings of the National Prison Congress, 1886, p. 134.

[^11]:    ${ }^{1}$ The report for Clinton prison simply classified the prisoners received during the year, and it could not be included with Auburn and Sing Sing, which classify all inmates.

    2 "It is worthy of remark that these simple islanders, without hope of reward or fear of future punishment after death, live in such peace and brotherly love with one another, and that they recognize the right of property in the fullest sense of the word, without there being any authority among them other than the decision of their clders, according to the customs of their forcfathers, which are held in the highest regard." (Earl Kolff's Voyages of the Dogma, p. 161.)
    3 "The Rock Veddahs are divided into small clans, or families, associated for rclationship, who agree, partitioning the forests among themselves for hunting grounds, the limits of cach family's possession being marked by streams, hills, rocks, or some well-tnown trees, and these conventional allotments are always honorably recognized and mutually prescred from violation. Each party has a headman, the most cnergetic senior of the tribe, but who exercises no authority cxcept distributing at a particular scason the honey captured by the members of the clan." (Tennant, II, p. 440.)
    4"The Dyaks' minds are as healthy as their bodies; theft, brawling, and adultery are unknown to them." (Boyle's Bornco, p. 335.)
    "The Dyaks are manly, hospitable, honest, kindly, and humanc to a degree which might well shame ourselves." (Ibid, p. 215.)

    5 "Nothing like a chief could be made out of the Fuegians of Blunder Cove, nor did they scem to require one for the peace of thcir socicty, for their behavior one to another was most affectionate, and all property seemed to be possessed in common." (Weddell's Voyages toward the South Pole, p. 168.)

[^12]:    ${ }^{1}$ Reprint irom Proceedings of the National Educational Association of paper read before the Department of Superintendence at Boston, February 21, 1893.

[^13]:    a The classical colleges in Quebee are a combination of school and eollege, attended by both boys and young men. They confer certain degrees, and are mostly afiliated with Laval University. $b$ Goverıment expenaiture.
    $c$ Government grant.

[^14]:    1 Mr. Millar suggests that the Ontario universities, following precedents in the United States, admit pupils on the certifieates of high-sehool prineipals in lieu of examination.

[^15]:    ${ }^{1}$ Speaking of his three weeks' stay in Toronto, making inquiries into our system of education in Upper Canada, Dr. Fraser, in another part of his report of 1865, said: * * * "My best thanks are due to Dr. Ryerson, the chief superintendent, and to Mr. Hodgins, the deputy superintendent, for the abundant facilities they afforded me for malking myself acquainted with the system of which they are the efficient administrators." Report, page 205. The other remarks, quoted abore, will be found on page 279 of the same report.

[^16]:    ${ }^{1}$ The first of the Lapps to resign and go to the mines was Jafeth Lindeberg, who, in connection with John Brınterson and E. O. Linblom, discovered the Cape Nome Mining District. It is reported that Mr . Lindeberg, during the ninety working days of last summer, took out from the mine as his share $\$ 200,000$ in gold; and it was one of Mr. Lopp's Eskimo herders at Cape Prince of Wales that discovered gold on Anacovak Creek, which was the commencement of the new mining district of Konowgoks, a iew miles from Cape York, on the Bering Sea coast.

[^17]:    a One hundred and eiglity deer killed at Point Barrow for food; 66 lost or tilled en route.

[^18]:    ${ }^{1}$ Libraries such as Consul Ridgely describes are found in all cities of Germany. They vary in details, but the essential features are the same as those of a circulating library of books.-Compiler.

[^19]:    ${ }^{1}$ These limits are taken because the twenty-fifth year of age is usually the year in which German teachers get their definite appointment, and the sixtieth year the one in which they may be retired on a pension.

[^20]:    ${ }^{1}$ Fortieth Annual Report of the School Board of Pilwaukee, 1893-99, p. 2t.
    ${ }^{2}$ The board of examiners consists of the city superintendent and four examiners nominated by him and appointed by the board of education.
    ${ }^{3}$ Report of the Commissioner of Education for 1897-98, vol. 2, p. 2342.

[^21]:    ${ }^{1}$ Forty-fifth Annual Report of the Board of Education of St. Louis, Mo., 1898-99, p. 42.
    ${ }^{2}$ Annual Report of the Board of Education of Omaha, Nebr., 1898-99, p. 34.
    ${ }^{3}$ Peport of tho Board of Trustees of Public Schools of the District of Columbia, 1895-99, p. 239.
    ${ }^{4}$ Forty-first Annual Report of the Board of School Inspectors of St. Paul, Minn., 1808-99, p. 18.

[^22]:    ${ }^{1}$ In Philadelphia the census of 1899 was taken during the summer months，and Superintendent Brooks thinks the decreaso may have been due to that fact．
    ${ }^{2}$ See page 1475 for discussion of average salary of teachers．

[^23]:    * Statistics of 189\%-98.

[^24]:    * Statistics of 1897-98.

[^25]:    * Statistics of 1897-98
    a Includes balances brought forward,
    receipts from loans, ete.

[^26]:    * Statistics of 1597-93.

[^27]:    *Statistics of 129\%-93.

[^28]:    * Statistics of 189\%゙-03.

[^29]:    * Statistics of 189\%-98.

[^30]:    * Statistics of 189i-98. $\quad a$ The accounts of evening schools are not reported separately.

[^31]:    * Statistics of 1897-98.
    $a$ Consolidated with Willamette University, Salem, Oreg.

[^32]:    * Statistics oî 1897~-98.

[^33]:    * Statistics of 1897-08.

[^34]:    * Statistics of 189\%-98.

[^35]:    ${ }^{1}$ Boston Med. and Surg. Jour., July 6, 1899.

[^36]:    « S'O Lal as reported.

[^37]:    a Approximately.

[^38]:    * In 1897-98. a Approximately. b Four years heleafter.

[^39]:    * In 189\%-98.

    Approzimately.

[^40]:    * In 1897-98.

[^41]:    

[^42]:    *Statistics of 1897~-98.

[^43]:    *Statisties of 1897-93.

[^44]:    * Statistics of 1897-98.

[^45]:    * Statistics of 189i-98.

[^46]:    -* Statistics of 1897-98.

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[^51]:    *Statistics of 1897-98.

[^52]:    *Statistics of 1897-95.

[^53]:    * Statistics of 1897-98.

[^54]:    *Statistics of 1897-98.

[^55]:    *Statistics of 1897-98.

[^56]:    * Statistic's of 1897-98.

[^57]:    *Statistics of 1597-98.

[^58]:    * From 189\%-sis.

[^59]:    * From 189\%'-98.

[^60]:    ${ }^{1}$ Memorial of James G. Carter to the legislature of Massachusetts, with report of committee, 1827.

[^61]:    ${ }^{1}$ Two lectures, I. History of the Introduction of State Normal Schools into America, by Charles Brooks, of Mediord, Mass. Boston, 1864.

[^62]:    ${ }^{1}$ Mrs. Electa N. Lincoln Walton, in the Forty-third Report of the Board of Edueation, Massachusetts.

[^63]:    ${ }^{1}$ Proceedings of the semicentennial celebration of the State Normal School, Framingham, July 2, 1889.

[^64]:    ${ }^{1}$ Semicentennial of the State Normal School, Westfield, Mass., June 25, 1889.
    2 Barnard's Normal Schools and Other Institutions, Means, and Agencies designed for the Professional Education of Teachers. Hartford, Comn., 1851.

[^65]:    Astronomy. - Methods of describing position of heavenly bodies; refraction, parallax, and precession; classificaticn of heavenly bodies; particular study of earth, sun, and moon; tides; eclipses; geography of celestial sphere.

    Reading.-Vocal culture; sight reading; study of pieces; methods.
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[^66]:    ${ }^{1}$ History of Bridgewater State Normal School, 1876; Report of Board of Education, Massachusetts, 1889; Catalogue of Bridgewater State Normal School, 1890.
    ${ }^{2}$ Catalogue of the teachers and pupils of the Salem State Normal School, 1851-1887. Annual catalogue, 1890.

[^67]:    ${ }^{1}$ Some years before this a student of a new normal school, not in Massachusetts, said to her instructor in methods, "Professor, are we to teach this way when we go home?" "Certainly, that is expected," replied the professor. "Well, if I do," was the answer, "I shall be hissed out of the district." But she did; and though she was not exactly "hissed out," she was made so uncomfortable that she sought and found another and better school.

[^68]:    writing.
    SECOND STUDY PERIOD.
    NOONING.
    PLATFORM EXERCISES.

[^69]:    ${ }^{1}$ While this statement is correct in the main, the writer feels it due to truth to say that it is too broad. He has met with many exceptional cases where a good reader could not be taught to sing. Color blindness is not uncoramon; tone blindness is probably just as common. There is this difference, that the inability to recognize a color (in school cducation) hurts only the obscrver; the inability to produce the proper sound is an annoyance to all who are compclled to listen. With regard to drawing, the sentiments of the present writer are expressed in the following anecdote: At a meeting of the International Confcrence on Education, held in London, August, 1884, James Russcll Lowell, in the course of some extempore remarks, said that he "oxce knew a teacher of drawing of whom he asked the question: How many can you teach to draw? 'Anybody.' It is to me you speak; how many can you teach in a hundred? 'Wcll, fifty.' Puthow many can youteach well? 'Perbaps twenty.' But how many to draw what you would call well? 'Well, periaps, in two or threc years, one.'"

[^70]:    ${ }^{1}$ Art and Industry. Edueation in the Industrial and Fine Arts in the United States, by Isaae Edwards Clarke, A. M., Part I. Drawing in Public Sehoois. Washington, Government Printing Offiee, 1885. A most interesting and valuable work, to whieh the present writer is indebted for a great part of the eontents of this chapter.
    ${ }^{2}$ Art and Industry, p. 30.

[^71]:    ${ }^{1}$ Art and Induatry, Part I, Drawing in Public Schools, p. 62.
    2 Circular of the Massachusetts Normal Art School, 1890-91.

[^72]:    ${ }^{1}$ Catalogue of the Comnecticut Normal Training School, New Britain, Conn. Fortieth jear, 1891-92.

[^73]:    ${ }^{1}$ The Dedication of the State Normal School Building, Providence, R. I. Printed by order of the general assembly.

[^74]:    ${ }^{1}$ Annual Report of the Superintendent of Public Instruction, being the Forty-fifth Annual Report upon the Public Schools of New Hampsnire. Concord, 1891.

[^75]:    ${ }^{1}$ The Normal Register; a History of the First Vermont State Normal School. Montpelier, V't., 1885.
    ${ }^{2}$ History and alumni record of the State normal school, Johnson, Vt., 1887. Catalogue, June, 1890.

[^76]:    ${ }^{1}$ History of the State Normal School, Farmington, Me., by George C. Purington, A. M., Farmington, Me., 1889.

[^77]:    Grenville T. Fletcher 1867-1879
    Roliston Woodbury 1879-1889
    Albert F. Richardson 1889

[^78]:    1"David P. Page, though he labored but four years, filled those four years with such a conseerated purpose and professional skill that he left an impress upon the normal sehools of this eountry that will live for centuries. This school, more than any other in the eountry, became a center of normal infuenee, whieh has pervaded every part of the United States; and I believe that if the true history of the establishment of normal sehools in this country could be written, it would be seen that the infuenee of the school at Albany during its first four years has had more to do, direetly and indirectly, with the organization and methods of instruction of other similar institutions than all other sehools combined; and this I believe to be due to the rare genius and inspirational power of David P. Page, the ablest normal-sehool prineipal that this country has produeed-a man whose consecrated spiiit, high moral endowments, magnetie presence and manners, rare genius for organization and management, intuitive knowledge of human motive and eharacter, and strength of personal influenee, make him stand out peerless and alone among the many excellent and eminent men who have adorned similar positions in our comntry." (Dr. Edward Brooks, superintendent of sehools in Philadelphia, in "Proceedings of the National Educational Association, 1876.")

[^79]:    ${ }^{1}$ History of Education in Pennsylvania, by James Pyle Wickersham, LL. D. Pp.377-381.

[^80]:    1 The amount of special and direct State appropriations to the normal sehools of Pennsylyania from the organization of eaeh till June 1, 1891, was $\$ 1,520,000$.

    2 The West Chester State Normal School was founded in the year 1871 by joint efforts of the tustecs of the West Chester Academy and the citizens of West Chester and vicinity. The main building is new, built of greenstone and marble, 256 by 231 feet, four storics high with basement. It is one of the finest and handsomest school buildings in the country. A first-class gymnasium, 104 by 64 feet, is just being finished. It is of stone, two stories high, and is fitted up with every modern improvement, including a full supply of the best apparatus, running track, bathrooms, large swimming pool, bowling alleys, ball cage, ete. With the single exception of Marvard's, it is the largest gymnasium in America, and is believed to be, without any exception, the best and most complete gymnasium connected with any sehool or college in the United States. The sehool property has now cost upward of a third of a million of dollars. The number of (lifferent students during the year (1889-30) was 709, of whom 395 were ladies and 314 gentlemen. (Nineteenth Annual Catalogue of the West Chester State Normal Sehool, 1890).

[^81]:    IThe normal school buildings are large, the east front being 352 feet and the south front 160 fect, and conreniently arranged in every respect. There are boarding accommodations for 400 , and schocl accommodations for soo stadents. The buildings are surrounded with grounds to the extent of ten acres, which have been tastcfully laid out and are used for play and pleasure grounds. The value of the buildings, grounds, furniture, etc., is more than $\$ 250,000$. The institution is well supplied with philosohical apparatus, and possesses also a good cabinet of mincralogical, geological, and ornithological specimens. The total number of students irom the opening of the school to the close of the sehool year in 1888 was 22,184 , and the number of graduates 905 . The number of volumes in library, 5, 5 . 0 . (Thirty-sixth Annual Catalogue of the Pennsylvania State Normal School at Millersville, Laneaster Cotinty.)

    2 There is a striking resemblance betwcen the origin of the Kutztown Normal School and that of the nommal school at Millersrille. Both owed their beginning to the efforts of the respective county superintcndents, Johis. Ermentrout and James P. Wickersham. Both commenced as summer normal scinocl. Both were developments of neighborhood academies. Before the organization of the Kutztown chool there existed in Kutztown and the neighborhood mere academies or seminaries under the control of a limited number of stockholders-the Franklin Academy, the Fairview Academy, and Maxatawny Seminary. But the people demanded better cducation, and were willing to embark in any enterprise that promised to improve their schools. As the county superintendent was traveling frone frons to Kutztown, he saw in the distance the building known as Maxatawny Scminary. It oecmred to him that, if the pcople of this section had taken sufficient interest in the cause of education to erect that bulding, they might be induced to assist him in carrying out his project of establiwhing a regular state normal sehool for the Third normal district. In 1865 the teachers were invited to attend a county normal school in Maxatawny Seminary. Students focked thither from cyery part of the connty and from adjacent districts, and the seminary was found to be too small for their accommodation. This inspired the people with a determination to erect such buildings as the chool law requires and to establish a regular normal school for the Third normal district. (Historical Sketch of Kutztown and Maxatawny, by John S. Ermentrout, 1876.)
    ${ }^{3}$ The school property attracts much attention. It is at an elevation of over 150 feet above the Susquehanna. The view from this clevation is almost unrivaled. Fourtecn acres of campus afford ample space for lawns and athletic ground, and include a beautiful oak grove of $3 \frac{1}{2}$ acres. The three main buildings are of brick-one is the dormitory, two are devoted to school work. Institute hall contains an auditorium capable of seating 900 persons. The dining room is 103 by 40 feet, and will accommodate over 300 guests. The manual-traiming room is 40 fect square, and contains benches and tools for the accommodation of 30 pupils at a time. About 250 pupils, at different periods of the day, pass for instruction to this department. They are taught here the structure and uses of difierent

[^82]:    ${ }^{1}$ This sehool is the outgrowth of the Carricr Seminary, and was recognized as a State normal school in February, 1887. It was opened on the 12 th of April following with 150 pupils in attcndance. The eatalogue of 1888 eontains the names of $36 t$ normal students. The seminary hall contains the chapel, auditorium, principal's office, recitation rooms, library, and gymnasium. The school gives a four years' eourse in music, instrumental and vocal. Lessons are given in oil painting, china painting, crayoning, and peneil drawing; and also in stenography and telegraphy. (Second Annual Catalogue of the Pennsylyania State Normal School, at Clarion, Pa., 1888.)

[^83]:    ${ }^{1}$ Report of the United States Commissioner of Education, 1868.

[^84]:    ${ }^{1}$ As chairman of a committee of our [Massachusetts] housc of representatives I drew and defended the resolves of March 3, 1842, which placed normal schools on a permanent footing and established school libraries. I did more for others' good that day than in all the rest of my life put together. (Report on normal schools to the convention of the friends of cducation, Burlington, N. J., 1847.)
    ${ }^{2}$ It is now nearly nine years since I have becn connected with the common-school system of New York. It was during the six preceding years, under my official superintendence, and it was among the first objects of my execution to improve the education of teachers; for without competent instructors schools are of very little use. * * * You will infer that I am very decidedly in favor of normal schools for the education of teachers. (Ib.)
    ${ }^{3}$ In our State there is no doubt in the public mind but that teachers should be specially educated. The question now started is, Ought they to be educated by the State? * * * It seems to me it must be done by the State or not be done at all. The pay of teachers is not generally high enough yet to warrant much outlay of time and capital by the teachers themselves in their preparations, and they must be encouraged to do it by having a portion of the expense paid for them. Schools for tcachers started without public aid have failed, I believe, in every instance. At any rate, thcy have degenerated into mere acadcmies, in which the pupils have, as elsewhere, been allowed to choose their own studies, and, of course, to choose to neglect the elcmentary branches most necessary for them to learn. (Ib.)

[^85]:    ${ }^{1}$ Report of the State superintendent of public instruction to the general assembly of Maryland, together with a bill entitled "A uniform system of public instruction for the State of Maryland," Annapolis, 1865.

[^86]:    ${ }^{1}$ Report concerning the State Normal School at Farmville. House Doc. No. 2, 1885.

[^87]:    ${ }^{1}$ Report and Catalogue of the State Female Normal School of Virginia, 1888, 1889-1890.
    ${ }^{2}$ Catalogue of Marshali College, the State Normal School, Huntington, W. Va., 1889-1890.

[^88]:    ${ }^{1}$ Catalogue of the Twenty-first Annual Session of the Fairmont Branch of the West Virginia State Normal School at Fairmont, Marion County. Charleston, 1890.

[^89]:    ${ }^{1}$ Sixteenth Annual Catalogue of Shepherd College, branch of the State Normal School, Shepherdstown, W. Va. Charleston, 1889.
    ${ }^{2}$ Catalogue of the West Virginia State Normal School at Glenville, Gilmer County, W. Va., for the year 1889-90.

[^90]:    ${ }^{1}$ Prospectus of the Normal and Industrial School of North Carolina, 1892.

[^91]:    ${ }^{1}$ Reports of the Winthrop Training School, Columbia, S. C., 1886, 1890.
    ${ }^{2}$ Twentieth Annual Report of the Superintendent of Public Instruction of the State of South Carolina. Columbia, 1888.

[^92]:    ${ }^{1}$ Sixth Annual Catalogue of the State Normal College at De Funiak Springs, 1892.
    ${ }^{2}$ Report of the United States Commissioner of Education [Dr. Henry Barnard] to the Senate and House of Representatives. Government Printing Office, 1868.

[^93]:    ${ }^{1}$ Catalogues of the National Normel School, Lebanon, Ohio, 1876-1890.
    ${ }^{2}$ Catalogue of the Ohio University for 1891. Athens, Ohio.

[^94]:    ${ }^{1}$ Methods of Inducing Introspective Power: One aspect of the Pcdagogics of Psychology. W. F. Peirce, Athens, Ohio, 1892.
    ${ }^{2}$ An open letter to young teachers by J. P. Gordy, Ph. D., principal of the normal department and professor of pedagogy in Ohio University, Athens, Ohio.

[^95]:    ${ }^{1}$ Twenty-second Annual Catalogue of the Indiana State Normal School, Terre Haute. 1891.

[^96]:    ${ }^{1}$ History of the Illinois State Normal University, by John W. Cook and James Y. McHugh, Normal, Ill., 1882.

[^97]:    ${ }^{1}$ Thirty-fourth Annual Catalogue of the Illinois State Normal University, for the academic year ending June 23, 1892. "N. B. The statements made in this catalogue are to be interpreted literally." Page 70.

[^98]:    ${ }^{1}$ John Hull, president elect of Southern Illinois Normal University, in report to the superintendent of public instruction, 1884.

[^99]:    ${ }^{1}$ Principal J. M. B. Sill in "History of higher education in Michigan," by Andrew C. McLaughlin, Circular of Information No. 4, 1891, United States Bureau of Education.

[^100]:    ${ }^{1}$ Prof. John M. B. Sill, ubi supra.
    ${ }^{2}$ Register of the Michigan State Normal School 1859-90.

[^101]:    ${ }^{1}$ This is a mistake. A kindergarten was opened in Baltimore and "officially and directly connected" with the State Normal School of Maryland in the fall of 1876, and was maintained until closed for want of room, caused by large increase of numbers in other departments.

[^102]:    ${ }^{1}$ Biennial Reports of the Board of Regents of the Normal Schools of Wisconsin. Madison, 1880 and 1890.

    First Annual Catalogue of the State Normal School, Whitewater, Wis. 1869.
    Twenty-second Annual Catalogue of the same. 1890.
    Fifth Annual Catalogue of the State Normal School at Oshkosh. 1872.
    Annual Catalogues of the same, 1888, 1889, 1890.
    Annual Catalogues of the State Normal School at Milwaukee, Wis. 1890,1891.

[^103]:    ${ }^{1}$ Alumni Association Condensed History, 1870-1890. Twenty-first Annual Catalogue oi State Normal School, Mankato, Minn.

[^104]:    ${ }^{1}$ Reports and catalogues of the State Normal School of Iowa from 186 to 1891, inclusive.
    2 Annual catalogue of the Missouri State Normal School, first normal district, for the school year 1889-90.

[^105]:    ${ }^{1}$ Twenty-third Annual Catalogue of the Missouri State Normal School, first normal district, for the

[^106]:    Spelling，word analysis，rhetoricals，and calisthenic exercises throughout the course

[^107]:    ${ }^{1}$ History of the State Normal School of Kansas for the first twenty-five years, Emporia, Kans., 1889; Seventh Biennial Report of Regents and Faeulty of the State Normal School, Emporia, Kans., 1889-90; Annual Catalogue of the State Normal School, Emporia, Kans., 1889-90.

[^108]:    ${ }^{1}$ Proceedings at the inauguration of William H. Payne as chancellor of the University of Nashville and president of the Normal College, Nashville, Tenn., 1887.

[^109]:    1 Proceedings at the inauguration of William M. Payne as chancelior of the University of Nashville and as president of the Normal College, Nashville, Tenn., October 5, 1887.

[^110]:    1 Baccalaureata address by William H. Payne, Ph. D., IL. D., Jay, 1890.
    ${ }^{2}$ Catalogue of the Peabody Normal College, May, 1890.

[^111]:    ${ }^{1}$ Eighteenth Amual Catalogue of the State Normal College and Model Training School, Florence,

[^112]:    ${ }^{1}$ Report of joint committee on normal schools to the gencral assembly of Alabama, February 6, 1891. ${ }^{2}$ Catalogues of the State Normal School, Troy, Ala., 1888, 1889, 1890.

[^113]:    ${ }^{1}$ Catalogue of Alabama Normal College for Girls for the year 1891-92. Miss Julia Strudwick Tutwiler, principal, Livingston, Ala.

[^114]:    ${ }^{1}$ Reports of the Louisiana State Normal School, Natchitoches, La., to the general assembly, 1890 and 1892.
    ${ }^{2}$ Catalogue and Circular of the Louisiana State Normal School, 1890-91.

[^115]:    ${ }^{1}$ Ninth Biennial Report of the Superintendent of Public Instruction of the State of Oregon, Salem, 1891.

[^116]:    ${ }^{1}$ Circular-Normal School for Colored Girls, Washington, D. C., 1856.
    ${ }^{2}$ Report of the Public Schools of the District of Columbia, I887-83.

[^117]:    ${ }^{1}$ Catalogues of Howard University, Washington, D. C., 1867, 1874, 1886, 1887, 1888, 1890, 1891.
    2 Minutes of the Association for the Moral and Educational improvement of the Colored People. MS.

[^118]:    ${ }^{1}$ First Annual Report of the Baltimore Association for the Moral and Educational Improvement of the Colored People, November, 1865.

[^119]:    ${ }^{1}$ A pet name given to a seleet coterie of the exceutive committee, noted both in council and in the field, where, as vile propagandists, they were met with unsavory epithets and still more unsavory missiles-not to speak of threats of lynehing, fortunately not exceuted.
    2 First, second, and thind ammal reports of the Baltimore Association for the Improvement of the Colored People.

[^120]:    ${ }^{1}$ Our Work at Harpers Ferry; Its History and Promise, by Miss Kate J. Anthony, of Providence, R. I. ${ }^{2}$ Biennial catalogues of Storer College.

[^121]:    ${ }^{1}$ A Brief Statement of the History and Present Condition of St. Augustine's Normal School and Collegiate Institute. Raleigh, 1883. Catalogue of the same, 1890.

[^122]:    ${ }^{1}$ Catalogues of the school for the years 1889-90 and 1890-91.
    ${ }^{2}$ Catalogues of the Avery Normal Institute, 1876-1891.

[^123]:    ${ }^{1}$ Catalogues and Reports of the Schofield Normal and Industrial School, 18S4, 1886, 1887, 1889, 1890.

[^124]:    ${ }^{1}$ Catalogues of the Atlanta Unirersity, 1809-1891, inclusive.
    ${ }^{2}$ Annual catalogues of the Florida State Normal School for colored teachers, 1880, 1890.

[^125]:    ${ }^{1}$ Sccond Annual Catalogue of State Normal School for Colored Persons, Frankfort, Ky.

[^126]:    ${ }^{1}$ History and Services of Dedication of Fisk University at Nashyille, Tenn., January, 1876.

[^127]:    1 Twenty-fifth Annual Catalogue of the Central Tennessee College, Nashville, 1891.

[^128]:    ${ }^{1}$ Catalogues of the Freedmen's Normal Institute, Maryville, Tenn., 1876, 1870-1859.

[^129]:    ${ }^{1}$ Annual catalogues of the State Normal and Industrial School, Huntsville, Ala., 1883, 1881, 1885, 1886, 1890. President's Report, 1891.

[^130]:    ${ }^{1}$ Catalogues of the Tuskegee State Normal School, 1882, 1890. Report of the principal to the State commissioners, 1890.
    ${ }^{2}$ Catalogues of Emerson Institute, 1876-1890.

[^131]:    ${ }^{1}$ Catalogues of Natchez Seminary and Jackson College from 1880 to 1891.
    ${ }^{2}$ Catalogues of Straight University, New Orleans, La., 1870, 1877, 1886, 1890, 1891.

[^132]:    ${ }^{1}$ Catalogues of the New Orleans University, 1881, 1884, 1885, 1888, 1889, 1890, 1891.
    ${ }^{2}$ Catalogue and circular of the Branch Normal College of the Arkansas Industrial University, 1890.
    ${ }^{3}$ Catalogue and circular of the Branch Normal College of the Arkansas Industrial University, 1879.

[^133]:    ${ }^{1}$ Catalogue of Southland College and Normal Institute, Helena, Ark., 1890.
    ${ }^{2}$ Catalogues of Tillotson Normal and Collegiate Institute, Austin, Tex., 1882-1891.

[^134]:    ${ }^{1}$ Annual Catalogue of the Prairie View State Normal School, Hempstead, Tex., 1890.

[^135]:    ${ }^{1}$ Catalogues of Lincoln Institute, Jefferson City, Mo., 1879, 1880, 1881, 1882, 1884, 1886, 1887, 1891.

[^136]:    ${ }^{1}$ Address delivered upon the oceasion of the dedication of the Philadelphia Normal Schooi for Girls, Philadelphia, 1876.

[^137]:    ${ }^{1}$ Reports of the Cook County Board of Education and the Principal of Cook County Normal School for 1890 .

[^138]:    ${ }^{1}$ New York College for the Training of Teachers, Circular of Information, 1892-93. Personal observation.
    ${ }^{2}$ New York Tribune, April 17, 1892.

[^139]:    ${ }^{1}$ Catalogue of the Cathoiic Normal School of the Holy Family and Pio Nono College, St. Francis, Milwaukee County, Wis:, 1889-90.

