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STPERINTENDENT OF PUBLIC INSTRUCTION,
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J. F. Murray

Superintendent Public Instruction.

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NINTH BIENNIAL REPORT

OF THE

SUPERINTENDENT

OF

PUBLIC INSTRUCTION

OF THE

STATE OF COLORADO

DECEMBER, 1894.

TO THE GOVERNOR.



DENVER, COLORADO: THE SMITH-BROOKS PRINTING CO., STATE PRINTERS 1805 1, 2,

Letter of Transmittal.

STATE OF COLORADO,
DEPARTMENT OF PUBLIC INSTRUCTION,
DENVER, NOV. 15, 1894.

TO HIS EXCELLENCY,

DAVIS H. WAITE,

Governor of the State of Colorado.

SIR—I have the honor to submit herewith the Ninth Biennial Report of the Department of Public Instruction for the two years ending June 30, 1894.

Very respectfully, your obedient servant,

J. F. MURRAY, Superintendent of Public Instruction.



DUTIES OF OUR PUBLIC SCHOOLS.

The pupils in our public schools and colleges should be instructed as to the elements that go to make up a good and useful citizen of our country, and the obligations, civil, social and political, due to They should be instructed to others from them. vield respect and obedience to the laws, and to hold on with unflinching firmness to the constitution and the union of states. They should be taught the love of liberty and order; to walk in the path of patriotism, of fidelity to our country, and of duty to God. This is necessary in order that when they become of adult age they may be prepared to exhibit wisdom in the cabinet; the purest of patriotism; the highest integrity, public and private; morals without a stain; and religious feelings without intolerance and without extravagance.-Mann.

Who serves his country best?
Not he who, for a brief and stormy space,
Leads forth her armies to the fierce affray.
Short is the time of turmoil and unrest,
Long years of peace succeed it and replace;
There is a better way.

He serves his country best
Who joins the tide that lifts her nobly on;
For speech has myriad tongues for every day,
And a song but one; and law within the breast
Is stronger than the graven law on stone;
There is a better way.

He serves his country hest
Who lives pure life and doeth righteous deed,
And walks straight paths, however others stray,
And leaves his sons as uttermost bequest
A stainless record which all men may read;
This is the hetter way.

No drop but serves the slowly lifting tide,
No dew but has an errand to some flower,
No smallest star but sends some helpful ray,
And man by man, each giving to the rest,
Makes the firm bulwark of the country's power;
There is no better way.

THE DUTY OF THE SUPERINTENDENT OF PUBLIC INSTRUCTION.

The first legal duty of the state superintendent of public instruction is to ascertain the condition of the public schools of the state, and to keep fully informed concerning their progress. The second is to apprise his excellency, the governor, and the general assembly of the true condition and requirements of the same.

It appears to be the intention of the law to require the state superintendent of public instruction to keep a record of all matters of public interest that pertain to the schools of the state, and to give a true and unbiased report of the same to the governor, the legislature, and through said legislature, to the people. It is not the business of this department to make out a case in behalf of the school system; neither would it be instified in keeping silent regarding such matters as faulty buildings and instruction. If it were announced that everything was prosperous, without a close scrutiny into the facts, it might so deceive our lawmakers that the needed relief would be withheld, and the pupils in the schools of the state would be the sufferers. I shall, therefore, endeavor to state the facts as I find they exist throughout Colorado.

THE TRINITY.

Dedicated to our Mothers, Teachers and Taxpayers.

In my opinion the greatest hindrance to the advancement of the public schools of our land is the

lack of knowledge on the part of those most interested regarding the school work and its results. Too much is intrusted to luck and the teacher. The three elements to which this article is dedicated, must draw closer together, and by combining their efforts secure the most desirable results. Good results should not suffice when better are obtainable.

OUR MOTHERS.

What sweet and sacred memories cluster around that word "mother!" It causes each of us to recall our own dear mother's self-sacrificing spirit; her noble self-forgetfulness in our behalf; the burdens she has borne that our load might be lightened; the steps that she, though weary and foot-sore, has taken that we might rest; her agony of spirit lest her child be led into temptation. Often has she taken upon herself our sins, that we might escape the rod of correction, and in all ways and at all times her constant prayer has been and still is for guidance and protection for her child.

And yet, this little bundle of humanity for which she will suffer and sacrifice so much, and for which she is always ready to give up all earthly pleasures, is too often, at the tender age of six years, sent to associate with scores of others of like age, about whom the mother knows little or nothing, and intrusted to the control of a teacher, concerning whose disposition and character the mother knows abso-Intely naught, except that in order to obtain a certificate to teach, the applicant must be of "good moral character." If you own a valuable horse you hesitate—if not utterly refuse—to intrust it to an unknown driver, lest it be badly handled and perhaps spoiled. You do not prize the animal as you do your child, yet you refuse to let your horse go; but your little one, who may in a single day contract habits that will cling to it through life, is placed in the care of a perfect stranger. Is this consistent? Possibly you think that our public schools are for the education of our children and our school boards and superintendents are paid to see that the best teachers are employed, and we must trust to them, as we cannot spend all our time in the school room watching over our little ones. True enough. But suppose you try the following plan: When the proper time for your child to enter school shall arrive, go with him, or, better still, invite the teacher to your house. Introduce the new pupil. Then, after a few moments of general conversation, dismiss the child from your presence and have a quiet, candid talk with the teacher. Explain your child's individualities, good, bad and indifferent, so that each may be expected and properly met. Be honest and truthful, remembering that you are talking with one who is to guide that precious bit of "bone of your bone, and flesh of your flesh." Deem it not a waste of time to do this. Half an hour with the teacher may save days in the police courts later. If every mother would do this, it would so forearm the teacher that each child would be better understood, and the shy little fellow whose timidity would not allow him to speak would be gently led to forget his bashfulness instead of being punished for his so-called stubbornness, and the lond boy would not be reprimanded before the class, but gradually persuaded to adopt a more moderate tone. It is true that, eventually, the teacher learns all these childish characteristics; but, too frequently, long before that, a sense of injustice has filled the little one's heart with a strong dislike for school and teacher and the term is worse than lost. Nowhere can the old saying that "an ounce of prevention is worth a pound of cure" be more aptly applied than here.

Mothers, consider carefully our public schools. Think of your child's character that is being formed. Study the development of his mind. Investigate the knowledge acquired by him, and watch his associations. Here is our nation's safe-guard. Then see to it that they who have control here are tireless

watchers in the nation's vanguard. Visit the schools; invite the teachers to call upon you socially; have your husband attend the meetings of the school board; attend them yourselves. Then, and not till then, will you know what influences are at work forming your child's character.

OUR TEACHERS.

"To educate a child perfectly requires profounder thought and greater wisdom than to be governor of a state."—Channing.
"If we work upon marble, it will perish; if we work upon brass, time will efface it; if we rear temples, they crumble into dust; but if we work upon the mortal minds, if we imbue them with principles, with a just fear of God, and love for our fellow men, we engrave on those tablets something which will brighten through all eternity."—Daniel Webster.

Teachers, what a noble calling is yours! How the strong words of Channing and Webster should thrill your hearts and strengthen you with a determination to do valiant battle for the cause, without faltering! Greater than governors, shepherds of God and co-laborers with Christ!

As in all occupations, there are a few time servers in the ranks; but the majority of the teachers of Colorado are earnestly striving not merely to honestly earn the money they receive for their services, but to better mankind by their work. To all such I appeal. Remember, many mothers each day give into your care and authority that which they hold dearer than life—their children. A wonderful responsibility rests upon you, and only by the greatest care and attention can you discharge the obliga-It is difficult for the school to be better than the teacher. The little folks observe your every act and note your every word. They do not guage you by your reputation in the world of letters, but by every word that proceedeth out of your mouth. How carefully, indeed, should every word be spoken, and every move be made, since through each little pair of eyes an immortal soul is looking and being led into ways of peace or thorny paths of trouble. You are building, not merely for the nation's good, but for

eternity. Ought you, who are paid to care for these little people, take so much less pains than do the mothers, whose sole reward, besides that of conscience, too often consists of sour looks, rough language and sometimes worse?

THE TRUE SECRET.

O'er wayward children wouldst thou hold firm rule,
And sun thee in the light of happy faces?

Love, Hope and Patience—these must be the graces,
And in thine own heart let them first keep school.

—Coleridge.

The true teacher will conscientiously endeavor to love all the children intrusted to her care; to be just to the dull as well as to the bright-minded; to be tender toward the diffident, and full of pity for the absurd. You must act toward each pupil so that he will as readily obey you outside of the school-room, as when within it and clothed with full authority. Under no consideration permit yourself to lose control of your tongue and speak cross words to any child.

The poet has said:

"Come here!" I sharply said;
And the baby cowered and wept;
"Come here!" I cooed; he looked and smiled,
And straight into my lap he crept.

How readily the child detects the meaning of the heart beneath the mere words of a sentence. Fit yourselves thoroughly for this most important occupation. Learn well the vast difference between teaching and hearing a recitation. Remember that an ass can turn a treadmill as well as can a philosopher, but it takes an artist of rare skill and delicate touch to properly cultivate a child's mind. Keep your own mind stored with bright gems, so the child will delight to draw therefrom, as from a full storehouse. Be as an oasis in the desert of his every-day existence. Are you frequently discouraged and inclined to think the efforts you are making are mappreciated? Remember that the chief corner-stone was at first rejected as unfit, and that

He who in His righteous balance doth each human action weigh, Will each sacrifice remember; will each loving deed repay.

The teacher's life is very much like a man taking a long journey over a rough road. Going down hill is not easy; going up hill is toilsome, indeed, but just as the traveler feels he must stop, that his strength is gone, lo! he reaches the top of the last hill and can see his journey's end.

It is not the few paltry dollars the teacher receives for her labors that should be considered her reward, but the consciousness of work well done.

"Though the morning may be dreary,
Though the day be long and weary,
Though the storm-clouds darkly lower
and the tempest fiercely frown,
We shall quite forget the shadows
That have lingered in the meadows,
If there be one golden hour when the
sun goes down."

OUR TAXPAYERS.

When we consider that the enormous sum of \$146,800,163 (in 1890-91) is expended annually to keep up our public schools, and that 14,669,069 children are deriving the benefit thereof, it becomes evident that the taxpayer is a factor of prime importance in our public school system. And is it not time that this element pauses long enough in its labors to inquire of our school officers and teachers what is done with this vast amount of money? It is not often that a taxpayer complains about his school tax, and few would object to a state tax if the mothers and teachers would explain to them the inequalities now existing.

If our nation is to grow purer, stronger and more worthy of the admiration of the civilized world, honest, intelligent citizenship is the one thing above all others that we must have, and only through the public schools can we attain this goal.

Ask the average Colorado taxpayer the market value of gold, silver or lead and he can usually tell

you. But how many business men are there in this city who can tell you the names of the city superintendents and the members of the various school boards and the prevailing sentiment concerning education? The prices of wool, wheat and potatoes are on nearly every man's tongue, and yet these things are of trifling importance when compared with the education of our children.

Let us have more harmony of action between these three factors—mothers, teachers, taxpayers. Let us counsel together oftener. Do not wait for some large public meeting to announce your opinions, lest you never advance them. It is not at public gatherings that public policies are formed, but at our firesides, where two or three are gathered together.

The salvation of our nation depends upon our public schools; and when we see so much want in the midst of plenty, we are led to believe that the schools have not produced the best men for the times. Let us see to it that the taxpayers' money is not squandered but judiciously expended in securing the best teachers from whom we may expect the best results.

STATE BOARD OF EDUCATION.

Section I., article 9 of the constitution provides that "The general supervision of the public schools of the state shall be vested in a board of education, whose powers and duties shall be prescribed by law; the superintendent of public instruction, the secretary of state and the attorney general shall constitute the board * * *."

I would amend that section to read as follows: The general supervision of the public schools of the state shall be vested in a board of education, consisting of three members, whose powers and duties shall be prescribed by law. The members of the board shall be the superintendent of public instruction, the controller of lands and money and the supervisor of architecture.

The question of proper education is of more importance than all the other state business; so we should have the very best supervision as well as instructors. The people elect an attorney general and a secretary of state to attend to the legal and commercial affairs of the state. They realize they will be judged by the reports from their departments. They are "ex-officio"-ed into a dozen other places and by the very nature of things they cannot, if they would, give the attention thereto that they ought.

The state superintendent, who devotes all his time to the school work, is naturally deferred to, so when a meeting of the board is called, in ninety-nine cases in a hundred, his opinion is accepted. One person is not as capable of rendering as just a decision as three are, if each of the three has time to consider the matter under discussion. Then, too, the state superintendent, being changed every two years, is not at his best until just about the time when his term of office expires. It requires about two years for a man to become acquainted with his co-laborers and the requirements of the various school districts, as well as to become cognizant of the written law. Therefore, the members of this board should be elected for a term of six years, one to be chosen every two years.

Thus the majority would always have four years' experience and could act with a fuller knowledge of the business under their control.

The management of the school lands and money is sufficiently important to justify their being handled in a business-like manner. At present the land board is composed of four state officers, each of whom is as thoroughly interested as any citizen of the state, in bringing about the best possible results from the sale and lease of the school land and the handling of the money so obtained; but the offices to which

they were elected by the people demand their first attention and the management of the land is left, more or less, to a register, deputy register, appraiser, surveyor and their clerks. Consequently, should a wrong be perpetrated upon the school children, all hands go up, and one and all exclaim "Don't blame me. The rest did it."

The responsibility is not sufficiently direct. By doing away with the supposed board as it now exists, electing the register for six years, subject to impeachment, taking a sufficient bond and making him personally responsible for all matters pertaining to the land, the returns would be much more satisfactory; the state officers could better attend to their special official duties, and not one cent or office added to the people's burden.

Regarding the third member of the board, the supervisor of architecture, it would add one more office to the list and the taxpayers would be obliged to pay him. But when we take into consideration the condition of many of our rural school buildings and the unnecessary waste in their erection, we find we could afford to pay a man \$3,000 for saving us about \$25,000 and giving our children better school houses. I hope all will read the article on "School Architecture," further on, before passing judgment on the proposed change. Nothing is too good for the children and this change would result in a saving in the contents of our pocket books as well as in good for the little ones.

THE SCHOOL FUND.

"What shall be done about the school fund?" is a question of no mean importance.

The national government gave to Colorado, for school purposes only, sections 16 and 36 in every township in the state. The grant provided that this should never be reduced—i. e., if an acre of land was disposed of, its equivalent should be in sight. The state determined to protect this splendid gift, and established the state land board, composed of the governor, secretary of state, attorney general and superintendent of public instruction, which should have absolute control of this land. Foreseeing that a part of this land would be sold, the constitution provided as follows for the handling of the money: "The state treasurer shall be the custodian of this fund, and the same shall be securely and profitably invested as may be by law directed. The state shall supply all losses thereof that may in any manner occur."

The constitution having made it obligatory upon the legislators to direct the investment of this fund, they provided as follows: (Page 789, section 24 General Statutes.) "The proceeds arising from the sale of all lands granted to the state for school and university purposes shall be invested first, in the bonds of the state of Colorado; and second, in the bonds of the United States."

Later, the legislature of the Sixth General Assembly changed that section to read as follows:

"* * Second—In the interest-bearing warrants of the state of Colorado."

Under the constitution and by right of precedent, the legislature has the right to determine what securities shall receive the permanent school fund, and I would suggest to that body that at its next meeting it invest the entire amount in Colorado general state credit, perpetual and irreducible. Why?

The permanent school fund is invested as follows:

Capitol building bonds, \$300,000; warrants prior to 1890, \$444,000; warrants since 1890, \$335,000; approximated interest, \$150,000; total, \$1,229,000.

Two questions would naturally arise: Is this change desirable? Is it practicable?

As the school fund now stands, that part invested in state warrants bearing date prior to 1890, has failed to pay interest, because of the general, but erroneous, supposition that they were excess warrants. Mr. Louis B. Schwanbeck, ex-auditor of Colorado, in a paper issued last September, shows that nearly all of these warrants are state officers' salary warrants. No man or court will attempt to say that a state officers' salary warrant is an excess warrant. The legislature knows exactly what will be the amount of the state officers' salaries, and an appropriation is made to meet that amount. There are a number of appropriations, against most of which excess warrants might be drawn, but the only way to get an excess state officers' salary warrant would be to draw duplicate warrants, as the various salaries are fixed. How can there be an excess? The impossibility of that being admitted, it does away with the question of the legality of these school securities and we find the state owing the school fund a trifle over one and a quarter million dollars.

During the past few months we have heard a great deal about the state's honor, repudiation, etc. Let us see if we cannot protect the honor of the state and the taxpayer at the same time. As a whole, the taxpayers of Colorado have to pay about two and a quarter million dollars annually for school purposes, besides paying the interest on our debts. Now, if we turn the debt into the school fund, the interest paid thereon will lessen the direct tax just so much. The state of Ohio does so and, as a consequence, her state debt is kept down and her burden is not increased. In other words, the interest on the state debt is paid to the taxpayers instead of to the Eastern capitalist.

"But," says the lawyer—he who is always asking for precedents—"while Ohio does have a perpetual and irreducible debt, please show us a state where such warrants were ever converted into such a debt."

Go to the records of South Carolina. There you will find that, in 1872, the Agricultural and Mechanical College was established in connection with the Claffin University. It was to be supported by the interest of the proceeds of the land sales. The college getting in debt, in 1879 the legislature authorized the state treasurer to issue to the trustees of the university a block of state stock in the sum of \$191,-800, at 6 per cent. interest. Turn to the history of the university of Georgia. Here we find the trustees attempting to lease its lands and exist on the interest. They gave up this idea and sold, taking bonds and mortgages. These were deposited with the state treasurer and a state warrant issued for the amount. As the state never redeemed this warrant, it was declared a perpetual debt against the state.

Thus you find we have plenty of precedents which we may follow in getting out of our present difficulty, and by following them we not only put the school fund where no one can squander a dollar thereof, but we pay to ourselves the interest on our We surely ought not to object to such an arrangement. Let us look a little farther for bene-By putting this debt into the general credit, to remain, as they say in Vermont, "while wood grows and water runs," it destroys all warrants held by the school fund issued prior to 1890, thereby saving our state honor so much. It turns back to the legislature state capitol bonds to the extent of \$300,000. These can be sold, and \$150,000 will pay the back interest due this fund, and \$150,000 go into the state general Then, with the \$335,000 of state warrants of issuance subsequent to 1890, placed on the market, it would benefit the people as follows: The school fund of \$1,229,000 virtually paid, back interest of \$150,000 paid, with half a million dollars in cash in the state treasury to pay off outstanding state obligations, all without adding one cent of indebtedness to the state.

But this cannot be accomplished by doing nothing. Those who were against the bonds and yet desire to protect the honor of our state, should discuss this matter with their local papers and representatives, and see that some action is brought forth by the legislature this winter. Every individual who pays one cent of school tax should endeavor to have his share of the school debt tax paid to himself.

SCHOOL BOARDS.

It is high time the legislature should appoint a committee to examine into the results of our present district school system, regarding the acts of school boards, and see if some method of control cannot be devised by which existing evils can be remedied. I give you the report of one school board, and the opinion of the deputy county superintendent concerning it. But do not, I beg you, suppose this to be an isolated case. I believe a close scrutiny might reveal some similar cases in most of the counties in the state. Is it for this that we tax ourselves?

Make the office of the county superintendent an appointive one, so that official will not be subject to the caprice of vicious directors. Then give him power to remove district officers for cause.

OFFICE OF C. G. BROWN,

Superintendent of Schools, Huerfano County.

Walsenburg, Colo., July 30, 1894.

HON. J. F. MURRAY, Denver, Colo.:

Dear Sir—I would like a little advice in regard to a district in this county. The directors have been in the habit of getting away with the school funds by letting contracts for work and receiving part of money for same. They send in their report and each one receives \$25.00 for being a director, per year. What is the remedy for same?

It is a Mexican district and board. They want to hire a teacher and also pay for an interpreter. Can they do that unless they hire one who has a certificate?

I will enclose you a statement received from them and am satisfied there is a steal of nearly \$400.00. They did not paint the school house nor varnish the seats. The twelve days' work are supposed to be the meetings in the year. The \$32.68 for merchandise could not be for chalk!

Will you kindly inform me how to proceed with them, and can they hire an interpreter to draw public money without a certificate? I have called a meeting of the school board for next Saturday, and would like you to answer by that time.

Yours truly,

C. G. BROWN,
Per Matthews.

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STATE INSPECTION FOR SCHOOLS.

Every state should pass a law governing the erection of school houses. This law should clearly define how a school house should be built. That is, with reference to lighting, heating, ventilating and a general arrangement of the stairs and entrances.

The state should employ a school architect to make plans for all school buildings in each state. With a law of this kind in force, the architect thus employed would be compelled to plan every school to conform to the law. The architect who makes a specialty of planning schools would soon become an expert in this line of work. If any mistakes were made in one building it could be remedied in the next.

In this way improvements would be made from time to time until an absolutely perfect building would be the result. All school rooms should be built the same. The requirements of one room to accommodate a given number of children is the same in all. The advantage of this method of planning schools is so apparent that it cannot help but recommend itself to every school board in the land.

In the first place the saving in making plans alone would be enormous. As by having the plans made by the state and all under the supervision of a board of commissioners appointed to look after this class of work the same as other state institutions, the cost for making plans would not exceed one-fourth of one per cent. as a perfect building of certain size in one locality would be suitable for every other locality, except, perhaps, different style of elevations.

The cost of building the building would also be reduced to the lowest possible point. The way school houses are now built by local boards is a disgrace to civilization. It is estimated that it costs over forty per cent. to sell an article to a school

board. Take for illustration the small item of black-boards, something that every school room must have. Under the present method of selling to school boards it is necessary to send a traveling man to solicit the order and from the fact that school boards very seldom, if ever, let a contract on the first bidding, the salesman is obliged to go many times before receiving the order. The same thing holds good with reference to the heating and ventilation, in fact, everything that goes to make up a school building.

If the building of schools were under state supervision, the committee appointed by the state in company with the architect could make a thorough investigation of all the different appliances that go to make up a perfect school-room and adopt the ones best suited for their use.

They could then make arrangements with the patentees or owners of the different appliances to use the same in all of the schools in the state for a stipulated time, say one year.

If anything better came up during that time the committee could then change to the better appliances and in this way the work would soon devolve itself into "the survival of the fittest."

Any concern which has appliances to sell for schools would be willing to furnish them at a very small profit in this way, and all of the unnecessary traveling expenses would be cut off. Under the present method of selling to school boards, a large profit must be added to cover incidental expenses.

From the fact that school boards are elected from time to time, they do not remain in office long enough to become experts in building schools. From this fact alone many mistakes are made, and from the fact that schools are built by the public money everyone tries to take advantage of the circumstances, and simply because the board is not thoroughly posted in the building business, they are an

easy mark for designing men who sell school appliances of all kinds, from the architect down. The only remedy is state supervision.

I had intended calling the attention of our law-makers to at least one school building in each county that particularly needed attention, but I will let the matter rest with the following petition:

Silver Plume, Colo., September 11, 1894. TO THE STATE BUILDING INSPECTOR,

Denver, Colo .:

Dear Sir—There is a school building erected in Silver Plume, Colo.; the stone work is settling and cracking; there are to-day six cracks; the brick work started to crack; one window cap is broken in two, and four water tables have broken in two since the erection of the building, last month.

The school house is situated in a very windy part of the town. We, the undersigned, don't have much confidence in the said building and are afraid to send our children to school when the season is open, and pray you to have the said school building inspected.

Phil Poirson, J. H. Rowe, C. H. Dier, E. L. Whitmier, John Allen, Alfred Eyre, H. Czarnowsky. Patrick Sadlier, D. Hepner, C. R. Lantz, T. Nankevell. Thomas May, John Chappel, C. A. Lyon, A. J. Hinnowith, Isaac Tregay, Sophie Tregay, August Hersch, Wm. Robert, A. B. Clark, Walter A. Garreth, Thomas Moses, E. F. Kendall, John Vivian, Phil Dawson,

John Carkeek. Wm. Geo. Williams, Thos A. Cowell, Fred L. Miner, James Sprague, John E. Connelly, Frank Connelly. Jos. Gallagher, Robin Hinds, Lewis Garrett, Elizabeth B. Coughlin, William Coughlin, Henry Poirson, Wm. Watkins. Ed. Cowle, John Lampshire, James Glasson, Edwin Allen, W. P. Jennings, Mrs. Sincock, M. J. Ralph, C. Ralph, John Smith. Leonie Poirson.

SCHOOL OUTHOUSES.

It is strange, but true, that as guardians of the children, in endeavoring to keep them out of the way of the tiger (ignorance), we forget the reptiles and poisonous vipers that lurk in the way, which, while smaller, are fully as deadly.

The state provides for the education of her children and votes liberal sums of money for houses, teachers, books, apparatus, etc. The idea is the proper education of the child for future citizenship. And yet an education which develops the intellect while it weakens the moral nature is as bad as no education as all. Children attend school at an impressible age—at a time of life when all impressions make lasting effects, and it is of vital importance to the betterment of our public schools that the heart, the brain and the body be all educated along proper and wholesome lines.

I am fully convinced that a great portion of the immorality of the day owes its existence to improperly erected or protected school outhouses.

I quote from B. O. Flower, editor of the Arena, a magazine that is doing grand work for humanity. "We are everywhere confronted by that most fatal of all poisons to individuals, nations or civilizations—immorality. It always flourishes where great wealth enervates manhood, leads to criminal ostentation and unhealthy extravagance, as well as at the other social extreme where poverty forces our fellow men to herd in close quarters. Such conditions exist in our land to-day, and the attending impurity is constantly coming to the surface."

The condition of the outhouses in most of our rural districts is almost beyond belief and the evil is so crying that I reproduce a few words from a lecture by Jos. S. Walton, county superintendent of Chester county, Pa.:

"The marked disparity between the average school house and its outhouse accommodations is so striking that if a man has planned and cared for the one, surely Satan must have planned and cared for the other. The school system of this great commonwealth will never merit the praise it receives until this crying evil is removed. The tumble-down, wooden, sin-scratched, hell-sodden sheds that stagger and leer at you from the rear of over fifty per cent. of the school houses in this state, make the heart sick when we think of the injured health and blasted morals of the boys and girls therein educated. Churches that hold their revival or other religious meetings, refusing to recognize this evil and aid in removing it, are building upon false foundations. Christian fathers and mothers who pray for their children and fail to investigate these evils are simply 'beating the air.' The school man who fails to do his duty here, fails in the first principles of a proper education; and the instructor who neglects this matter of supreme importance has failed in the first duty of the true teacher. School directors who neglect to furnish and keep in repair the needed outhouses are responsible for results. They have surely made their little ones 'to offend.'

"The condition of public school outhouses, their structure, location and equipment, ought to be inspected at intervals by a properly authorized commission or officer, and if not up to the full standard required by decency and the best law upon the subject that can be framed, they should be condemned without mercy. If that condemnation caused the district to forfeit its annual state appropriation, the condition of these houses in the state would be radically improved within a single year.

"This subject is far more worthy the attention of the legislature of the state and of the Christian church than many things that are regarded of much greater importance, and of which much is said and written.

"Separate outhouses, one for the boys and one for the girls, substantially built, pebble-dashed and sand-painted, under lock and key if approached from the outside, are a necessity. They should be situated somewhat in the rear of the house, and yet within range of the teacher's vision. Hard, dry walks leading to these are essential. A fuel house and cloak room opening into one of the rear corners of the school room and leading on into well equipped accommodations for the girls can be so arranged as to violate no hygienic requirements, and would certainly be of unspeakable advantage."

Pardon a few quotations.

It must needs be that offense cometh, but woe to the man by whom the offense cometh.—Testament.

Virtue never dwelt long with filth.-Rumford.

In bringing up a child, think of its old age.-Joubert.

Wisdom sits with children round her knees .- Wordsworth,

Children have more need of models than of critics .- Joubert.

Youth is like virgin parchment, capable of any inscription.—Massinger.

Vice is contagious, and there is no trusting the sound and the sick together.—Seneca.

Bring up a child in the way he should go, and when he is old he will not depart from it.—Proverbs.

A child's eyes, those clear wells of undefiled thought; what on earth can be more beautiful?—Mrs. Norton.

The least and most imperceptible impressions received in our childhood may have consequences very important and of a long duration.—John Locke.

But whose shall offend one of these little ones, it were better for him that a millstone were hanged about his neck, and that he were drowned in the depths of the sea.—Matthew, xviii., 6.

Know ye not that ye are the temple of God, and that the spirit of God dwelleth in you? If any man defile the temple of God, him shall God destroy; for the temple of God is holy, which temple ye are.—I Corinthians, iii., 16-17.

Mr. Legislator, the offense may come through you if you fail to give us the needed legislation. The New York law, slightly modified, is as follows:

The directors having supervision over any school district of this state, shall provide suitable and convenient water-closets or privies for each of the schools under their charge, at least two in number, which shall be entirely separated each from the other and have separate means of access, and the approaches thereto shall be separated by a substantial close fence not less that seven feet in height. It shall be the duty of the officers aforesaid to keep the same in a clean and wholesome condition, and a failure to comply with the provisions of this act on the part of the directors shall be sufficient grounds for removal from office, and for witholding from the district any share of the public moneys of the state.

TAXATION.

I strongly advocate a state tax of four mills for school purposes. Before we can convince ourselves that this proposition is right, we must admit that the educated individual is superior to the ignorant person. We must admit that the statesman is a state blessing, whether he comes from the mine, the farm or the city. We must admit that brains, strong or weak, are a blessing or a curse, not only to the school district, but to the state. We must admit that our superiority and advancement, as a nation, over the cannibal is owing to our education. When we have admitted the above, we must confess that so far as the state is concerned, the child of the poor man is of as much importance as the child of the wealthy. This being admitted, it becomes the duty of the state to see that every child is given an opportunity to acquire an education.

The history of the state shows that six years ago thousands of children were located in the eastern part of the state, who to-day are scattered throughout the mountains. Thousands of families are annually drifting from one mining camp to another, so the state must use the utmost diligence to see that good schools are provided for every section. We might compare our nation to a chain of fortyfour links. Should one link break, the chain is useless. Should the ighorant of one state predominate, threats, rebellion and perhaps secession follow —as night follows day—and the whole nation is thrown into turmoil and expense. While the results could not be as grave in a state, yet if a sufficient number of counties should elect ignorant or venal legislators, laws would be put upon the statute books that would be detrimental to the public welfare. Education and liberty go hand in hand. Education is the bulwark of our freedom.

The following table discloses some of the iniquities of our present tax system. By it we find in Arapahoe county seven districts that do not need a special tax, while thirty-three are compelled to raise fifteen mills by such a tax. This is wrong, especially when we find that it is the poor districts that have to bear the heavy burden, and even then their income is so inadequate that they have poor equipments and pay low wages, and generally have short terms. I

speak of Arapahoe county, because it represents onethird of the state's wealth. But we find about the same condition of affairs existing in each of the other counties. We appropriate money from the state fund for bridges, roads, reservoirs, militia, etc., and yet when we ask for a state tax for educational purposes, in the common branches, it is refused. Are bridges, or roads, of more importance than an educated people?

1893 and 1894.

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33	Baca	H	0	0	۰	0	Ŋ	0	63	-	0	9	٥	4	0	2	4
4	Bent	0	0	0	0	н	60	4		4		9	0	3	0	0	2
5	Boulder	ы	0	7	4	S	9	4	60	S	н	н	0	r,	0	0	12
9	Chaffee	0	0	0	0	-	ы	4	-	4	H +	9	٥	6	0	0	2
7	Cheyenne	0	н	. 2	ı	0	0	0	0	٥	0	0	0	ı	0	0	0
œ	Clear Creek	0	0	0	0	0	0	0	0	0	0	т	2	64	0	-	4
6	Conejos	0	0	2	-	2	4	-	0	н	0	4	н	2	0	0	4
10	Costilla	0	0	м	-	0	S	0	4	н	0	4	0	0	64	0	- %
11	Custer	м	0	0	0	0	2	-	0	H	0	4	0	ı	0	0	0
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1893 and 1894—Concluded.

3 0								MILLS	MILLS - SPECIAL TAX	SIAL T	AX						
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00 00	COUNTY					NUM	NUMBER OF SCHOOL DISTRICTS ASSESSING	F SCII	OOL D	ISTRIC	TS AS	SESSIN	9				
37	Morgan	0	0	н	0	4	0	4	0	н	0	2	0	0	0	0	0
38	Mineral	0	0	0	0	0	0	0	0	0	0	CI	0	0	0	0	-
39	Otero	0	н	2	7	2	4	-	-	-	-	4	0	0	0	0	7
40	Ouray .	0	0	0	0	0	3	0	0	8	0	н	0		0	0	4
41	Park	I	0	2	н	-	4	2	0	2	н	н	0	-	0	0	7
42	Phillips	0	0	0	н	н	2	0		3	0	6	0	8	0	0	18
43	Pitkin	0	0	0	н	0	8	0	0	73	С	3	0	2	0	0	7
4	Prowers	0	2	П	0	2	-	7	3	3	н	-	-	2	0	0	3
45	Pueblo	0	S	7	7	ß	8	_	~,	0	0	7	1	0	ы	0	9
46	Rio Blanco	0	-	H	0	4	н	0	0	0	0	0	0	0	0	0	0
47	Rio Grande	0	0	0	2	7	7	4	8	2	-	4	0	0	↔	0	0
48	Routt	9	-	4	4	-	1-	0	0	н	2	1	0	0	0	0	0
49	Saguache	0	S	н	8	S	2	3	Н	I	0	0	0	0	0	0	0
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	San Miguel	Sedgwick	Summit	Washington	Weld	Yuma
	51	52	53	54	55	56

According to the report of the United States commissioner of education, those states where a fair state tax for educational purposes is imposed have pushed far in advance, comparatively, of those where the district is left to take care of itself.

The state cannot afford to say that because people are poor, and are compelled to locate out on the plains, or up in the mountains, they must pay six times as much for a poorer quality of school as their more fortunate neighbors. As a rule, one expects to pay for accommodations, but under our system of school taxation this is reversed. Example: A taxpaver lives in East Denver school district. children walk two or three blocks to school. attend school nine and one-half months in the year. The school buildings are most perfect in appointment as to heating, lighting, ventilation, etc., wellequipped teachers, and free text books. He pays \$3.50 a ton for coal. Mail is delivered twice a day at his home. If his wife wants to do a little shopping, she is taken to the store door for five cents. Fresh milk, butter, eggs, meat, etc., are delivered at the kitchen door daily without extra expense. He pays a special school tax of 3.5 mills. This same taxpaver moves into the eastern part of the same county. His children walk from one to six miles to school; they have from four to seven months' term (this by the help of Denver); poor buildings, equipments, and poorly paid teachers. Coal costs \$7.00, and it takes all day to haul a ton home. If he wants to mail or receive a letter, he puts a boy on a horse and sends him on a five hours' ride. If his wife wants a calico dress, or they conclude to go to church, it takes all day to go and return. And for these inconveniences he is compelled to pay a special school tax of fifteen mills. Is it any wonder that the people are leaving the farms and crowding into the cities, thereby lessening our productive capacity and congesting the labor market? Let the state handle the educational question as it should, giving good schools, with proper

accommodations, to every child in the state, regardless of location, and soon the hungry hordes of our cities would push onto the farms; rural society would become congenial; farm life would have some attractions for the young people, and the surplus labor of our financial centers would be no more. A proper solution of the educational question will go a long way toward remedying the existing financial and labor troubles. We, in the West and South, cry aloud and say the East is taking advantage of us. The state of Vermont has a state tax of five per cent. Vermont finds that it pays to educate the masses. New York contributes nearly \$10,000,000 for school purposes; Pennsylvania about \$7,000,000, without which ignorance in these states would soon predominate, and anarchy and lawlessness run riot. firmly believe that every dollar spent for education means a saving of ten dollars on the police account.

If the rich hope for equity they must grant equity. The state requires much of each citizen. It makes him a voter, a judge, a law-maker, and expects him to be a useful citizen. It must, therefore, see to it that he has the opportunity to fit himself for such citizenship. Our commerce, railroads, cities, indeed, most property is the product of edu-

cation.

The following letter shows one of the weaknesses of our district system:

Central City, Gilpin County, Colorado,

December 20, 1894.

HON. J. F. MURRAY,

State Superiutendent of Public Instruction, Denver, Colo.:

My Dear Sir—Would you kindly instruct me in in this case. My residence is outside of the limits of Central City School District. My business is in Central City and I pay taxes on a valuation of \$10,000, all of which goes to support Central City school. The school board charges me \$2.50 a month

for each scholar tuition, on refusal to pay this they expelled my children from the school. Have they a right to do this under existing school law? Is my taxes rightfully appropriated to the tuition of other children, while mine is refused that privilege? Any information you will give me on this case will be thankfully received.

I am, my dear sir,

Very respectfully yours,
JNO. M. ROSS.

TEACHING A PROFESSION.

One of the principal benefits to be derived from a state tax would be the professionalizing of teaching. At present but few teachers enter the work for life. It is generally followed as a temporary expedient to get a few dollars, or a stepping stone to something better. Far too many of our teachers are children, who, instead of attempting to train other children, should be under their mother's care. idea is prevalent that she is a successful teacher who can keep the children quiet and hear them re-It is this idea that is destroying the usefulness of our schools. The real teacher is one whose every look, word and act leaves impressions for good upon the minds of the children with whom she asso-She should be so situated that she could treat with scorn the detestable actions of the director as well as those of the private citizen, instead of as at present, smile upon his villainy to keep her poorlypaid position. The teacher, to be a success, must subscribe for a number of school periodicals; get the latest works of the leading thinkers; attend county and state educational meetings, and ought to be able to lay away enough to keep herself in old age. How many of our teachers have a bank account? It too frequently happens that the dollar spent for the state educational paper is missed, and as for attending to the state, or even district educational meetings, the expense puts it out of the question.

How can we hope to keep the brightest minds in the work? Suppose the state would see to it that a teacher was put in every school district in the state and paid by the year. Immediately the work becomes a profession, and capable women turn their attention thereto; they surround themselves with a choice library of books connected with their work; they study as never before, because they feel secure in their positions, and do not spend half their time in worrying about another place. Under such conditions our brightest minds seek the school room, and their example for good electrifies the whole nation; and unconsciously our acts, and words, and deeds become purer and nobler, and our nation would take on the righteousness that belongs to it.

Our teachers should be the most independent and honest of action of all public citizens, and yet they are under the thumb of the ward politician, who is the most dangerous of all citizens; and too many have not the strength to be wholly independent. The children soon feel the unnatural atmosphere and, like the tender plant, are chilled into torpidity. Teaching must be made a profession, and the teacher must be taken out of the politicians' power.

Allow me to call your attention to one of the many cases that have come under my observation:

HON, J. F. MURRAY,

State Superintendent of Public Instruction, Denver, Colo.: Sir—Your petitioner respectfully represents that he is secretary of the school board, District No. 10, of Huerfano county, Colorado; that he is now serving his second term as an officer of said board; that he has always endeavored to perform his duties as the law prescribes and for the best interests of his district and its public school; that said district has a school census of over one hundred and thirty, and, under favorable circumstances, a correspondingly large daily attendance; that the means of the district are sufficient to allow a school term of eight or ten months; that the teacher of said school should hold a first grade

certificate, and that a majority of the patrons of the same are opposed to having the school placed in charge of any teacher below that grade. Yet, for reasons hereinafter given, the school, for the past two terms, including the present, has been in charge of a certain Juan Bautiste Nebumesendo Valdez, a person who holds a very low third grade certificate; who is unable to speak or pronounce correctly when reading, the English language; who is otherwise incompetent to teach a public school; in fact, so incompetent that without assistance, he cannot make out his daily register as required by the printed instructions therein; that his moral character heretofore has been notoriously bad and that even now, many heads of families of his own race (Mexican) will not send their daughters of mature years to him, but have sent them away from home to another district; that the aforesaid nameful Valdez holds his position solely by reason of being a local politician and an uncle of one of the other two directors, both of whom are very illiterate Mexicans, entirely ignorant of the English language. One of these is so illiterate that he can neither read nor write. at the last regular school election, the said Valdez, although a resident of another precinct, attended said election as an active and offensive worker in the interests of his said nephew; that he had his own private team conveying male and female voters to the polls, many of said voters being relatives of his, and nearly all persons who take no other interest in said school; that this work on the part of Valdez was the means of his nephew's reelection as director and was part of a preconcerted scheme to place him (Valdez) in the position of teacher. That last year he was employed as teacher by the said two Mexican directors against the protests of your petitioner and many of the parents of school children of said district, before he had obtained any license whatever to teach a public school; that the said Valdez, although a permanent resident for years of the county seat of this county, had failed to pass regular examinations as required by law, yet had, for a number of consecutive years, been given temporary certificates and other illegal permits to teach, to the number of twelve, at least; that though these facts were known to School Superintendent Rhodes of this county, and to his deputy, Mr. Bissell, yet the latter, in spite of protests made at the time by many persons of the district as aforesaid, gave the said Valdez another temporary certificate, so as to enable him to fill his contract made as aforesaid; that under this temporary certificate the school was opened last fall (1892) and continued until the ensuing November examination.

Although many complaints as to the incompetency of said Valdez were made meanwhile to the said superintendent and his deputy, yet the latter gave him a low third grade certificate, thereby enabling Valdez to continue in charge of said school for a period of six months, at a monthly salary of sixty dollars, more than is paid to a majority of the first grade teachers of this county. Your petitioner refused and did not sign any contract nor any order for the payment of said Valdez, yet he was paid in full out of the general school fund. That Superintendent Rhodes, who resides and does business in Las Animas county, and his aforesaid deputy, Mr. Bissell, both admitted, before and after the employment of the said Valdez, that he was not competent

to teach a public school, Mr. Bissell even admitting that he had helped him in his examination to get the third grade certificate he was given.

To your petitioner and other complainants, both Mr. Rhodes and Mr. Bissell repeatedly promised to aid us in securing a competent teacher, yet, on September 4, of this year, Valdez was again employed by the said two Mexican directors and is now in charge of said school, with an attendance of not over a dozen pupils out of our large census list. Before the day of his last employment, September 4, 1893, a petition had been sent to Superintendent Rhodes and his deputy, Mr. Bissell, bearing the names of twenty-five respectable, tax-paying patrons of said school, protesting against the re-employment of Valdez, but, as the result shows, it was again unheeded.

At the time of the meeting of the board for the purpose of employing a teacher, September 4, 1893, said board was handed two other applications for the school, accompanied by certificates, one of first grade and one of second. These documents were cast aside by said board (the two Mexican directors), with the declaration that all were of equal importance to them; that they did not understand them nor distinguish any difference in the certificates. The successful candidate, Valdez, was then called upon to translate and explain said documents, but could not do so. Another applicant had to be called to make the translation and give an explanation to the said directors as to the import of the different grades.

It is needless to say that the school is shamefully neglected and mismanaged; the school fund is squandered to maintain in position a man utterly unfit for it. We have no hope of redress here, situated as we are.

To you, who, no doubt, have always been accusomed to good American schools, these facts may seem impossible, but if you could make a visit and observe for yourself, some of our county schools in this part of Colorado, you would not only be surprised but disgusted with their management and the class of teachers in charge of many of the Mexican schools. The pupils are children and grand children of native born American citizens, yet not one in ten can speak English or translate the simplest sentence from one language into the other. This is not due to the natural stupidity of these children, but to the defective and vicious methods permitted here—methods which allow the sacred interests of the public schools to be made subservient to the local whims of party politics.

The school fund in many places is virtually used for political purposes, and the children for whose benefit it is provided, are kept in the same deplorable condition from generation to generation.

Here is another most flagrant instance: In School District No. 5 (Crestones), of this county, Deputy Superintendent Bissell, a few weeks ago, without any examination of the applicant, gave a certificate to teach to one Thomas Maes, a man so ignorant that he cannot even ask for his certificate in English, and who will never pretend to pass an examination. This man is employed as a teacher in said District No. 5, and paid out of the

general fund. When asked why he had done such an illegal act, Deputy Superintendent Bissell replied, "Montes made me do it." Montes is a county commissioner and a leading politician among the Mexicans, and Tomas Maes is known as a "precinct worker." These facts can all be substantiated by the sworn evidence of a number of people.

Your petitioner now prays that such action may be taken as to you may seem proper in the premises, to rectify to some extent, at least, the evils from which we suffer.

As the said Valdez will be required to go through the formality of an examination at the next regular examination of teachers, November, 1893, it may not be deemed best to interfere with him for these few weeks, but immediately after his examination, proper measures should be taken to place his correct standing before the state board of education. It is to be feared however, that if only a written demand be made for his examination papers, or any request that will admit of delay, that such papers may be "doctored" to make them pass; while it is safe to say that if Valdez were in the presence of said board of education or any member thereof, for the space of fifteen minutes, he would confirm all that is alleged in this statement touching his qualifications as a teacher of public schools.

H. D. GILLESPIE, P. O., Walsenburg, Colo.

North Veta, Colo., November 12, 1893.

The above is not the only instance that has come to the notice of the department where the county superintendent has issued licenses without examination.

SCHOOL LIBRARIES.

A man's character is to a great extent shaped by his friends and companions, and since books, magazines and papers are silent friends and exercise a most sensible influence it is the duty of teachers to inculcate in their pupils a love for good reading. One of the most lasting things a teacher can do for a school district is to establish a school library, stocked with good books.

Many teachers admit that children should be taught to read good books, but that this work belongs to the parents; that "we do not contract to teach literature. Let the mother look after this

matter. We deal out hard facts and in return get our money, and that is the end of our interest as a teacher."

If there is anyone who should have our sympathy, it is the American mother of the great middle and lower classes. These mothers do not have the time to give intelligent direction to the reading of their children. Many of them are not qualified to do the work, besides the majority of the homes do not possess a half dozen books worth reading. If the teachers do not attend to this work it will go by default. Does it not look hard, nay, even cruel, to shut in the faces of the eager young seekers after knowledge, the doors that hide their treasures?

But how shall we cultivate a taste for reading? We must teach what to read and how to read. tivate a taste for reading.

Every room from the second grade to the high school should have its own library, composed of books especially adapted to the capacity of the pupils of that room.

Every school library should be a real work shop for the school and teacher. The library is to the teacher what the laboratory is to the chemist.

If the teacher puts the right spirit into her work, the library will be provided. Encourage the people to have library days and bring the price of a good book; have school entertainments and charge a small admission fee.

If the children are to assist, the parents will come out to hear them, for they desire the children to make a good appearance. Talk up the subject of a school library in season and out of season.

If the proper enthusiasm is manifested on the part of the teacher the school board will come to the rescue with the necessary appropriation. If the teacher can do nothing more than establish the nucleus of a library it will be the one thing that will finally leaven the whole lump.

The advantages of a library for each room over the general library are manifold. The books are always in sight. The children will learn to know their faces, as it were, and will be more apt to read; the subject matter will be suited to them; the teacher will take a greater interest in the matter; the subject matter will become the theme of conversation among the pupils; the vocabularies and themes of conversation of the pupils will be broadened and enriched. To the person who does not read and come in contact with the best thoughts of the ages, it is a positive injury to leave him alone, the victim of his own thoughts.

There are two ways to introduce the work—general reading. In the reading class instead of using the text books, read and study Longfellow's Evangeline and Hiawatha; take extracts from the masterpieces of literature, but let them be literary wholes as far as possible; vary the exercises, and have pupils commit memory gems. Read quotations and have pupils find ont the name of the author; read poems set to music; have special poems for each class; stir up an interest; create a friendly rivalry.

The second method is, to read at the morning exercises some good story; have the pupils reproduce as much of it as they can the next morning. Read a part of a selection to stir up an interest, then tell the pupils where they can find the remainder. They will read it without much urging.

What is known as the Friday afternoon exercises is a good place to stir up an interest in good reading.

If there is one and only one thing a teacher can do, let it be to cultivate in the pupil's mind a taste for good reading. It is through this medium most knowledge is gained, most happiness secured.

The place to create a desire and taste for good reading is in the lower grades. If it is not created there it probably never will be created.

Teachers will notice that pupils lose interest in their school readers in a very short time. The reason for this is that they lose interest in the same old, threadbare stories. We all like a nice, new, fresh story, and the stories in the readers are not well adapted. The profound writings of Milton will be found beside the poems of Longfellow and Whittier. Again, all the stories in the reader are fragmentary; they are extracts from some book. How much better it would be to put the book into his hands; excite his interest to read it; he then has the whole thing. It is something that is definite; something that has impressed him; something that will go with him through life. The study of an author requires more than the reading of his biography. Read his works. Learn his thoughts and style.

Teachers can benefit their pupils very much by using half an hour each week in general reading. Read some good books. Suggest articles and books for the pupils to read. Most people are led to read books by hearing others talk about them. The teacher can change the reading of a community by persistent suggestions of good works to read.

The subjoined was prepared by the committee on the revision of the state course of study.

It is thought that the list of libraries published by the Colorado School Journal will be of interest.

Every school should have a library, if but a small one. It aids the regular school work and develops a love for reading good books of much value to boys and girls in after life.

Below is given a list of books suitable for school libraries. To aid in selecting books adapted to age and ability of pupils, this list is classified. Those marked "c" are easiest and can be read by pupils in third and fourth grades; those marked "b" are for fifth and sixth grades and those marked "a" are for seventh and eighth grades.

The first fifty books on the list make an excellent collection for a library of that size. The first ten or first twenty-five are recommended for beginnings of small libraries. It will be noticed that the list is especially rich in easy and interesting books for young pupils and in books valuable as aids in history and geography. A mistake is often made is selecting books, faultless in a literary sense, but difficult and unattractive to young readers.

Uncle Tom's Cabin, Harriet B. Stowe.

Little Women, Louisa M. Alcott. b

- 3
- Little Lord Fauntleroy, Mrs. F. H. Burnett. Silver Skates, or Hans Brinker, Mary Mapes Dodge. 4 C

С Nellie's Silver Mine, H. H. Jackson.

6 b Whittier's Poems.

7 С King of the Golden River, John Ruskin.

8 Ben Hur, Lew Wallace.

9 Young Nimrods, vol I., Thos. W. Knox.

10 Fairy Tales, Hans Andersen. c

Longfellow's Poems. 11 a

12 Ivanhoe, Walter Scott. a

Tale of Two Cities, Charles Dickens. 13

14 Ramona, Helen Hunt Jackson.

15 Selections from Sketch Book, Washington Irving.

Wonder Book, Nathaniel Hawthorne. 16 17 U. S. History in One Syllable, Pierson. С

Young Folk's Robinson Crusoe, Mrs. Eliza Farrar. 18 c

19 Stories of American History.

- 20 Little Men, Louisa M. Alcott. 21 Story of a Bad Boy, T. B. Aldrich.
- 22 С Seven Little Sisters, Jane Andrews.

23 Black Beauty, A. Sewall. c

24 Cat Stories, H. H. Jackson. С

- 25 a Arthur Bonnicastle, Dr. J. G. Holland. 26 Zig-Zag Journeys in India, Butterworth. b
- 27 Old Times in the Colonies, C. C. Coffin.

28 a Alexander the Great, Abbott.

29 Cudjo's Cave, Trowbridge. a

30 Life of Washington, Wm. M. Thayer. 31

b Life of Lincoln, Wm. M. Thayer.

32 b Tom Brown at Rugby, Thomas Hughes. 33 Twelve Fairy Tales, Henry C. Lodge. С

34 Rasselas, Samuel Johnson. a

35 Rose in Bloom, Alcott.

36 Queer Little People, H. B. Stowe. c

37 Swiss Family Robinson, De Montolieu.

Stories Mother Nature Told Her Children, Jane Andrews. 38

39 b Fairy Tales, Grimm.

40 Little Folks in Feathers and Fur, Jas. Johonnot. С 41

b Stories Told at Twilight, Moulton.

42 Aunt Martha's Corner Cupboard, Miss Kirby. 43

Prince and Pauper, Mark Twain.

44 b Lion of the North, Henty.

45 Madam How and Lady Why, Charles Kingsley. 46

a Talisman, Walter Scott.

47 b Tales from Shakespeare, Charles and Mary Lamb.

48 b

Being a Boy, Charles Dudley Warner. Pictures and Stories of Quadrupeds, Mrs. Tenney. 49 С 50 С Neighbors with Wings and Fins, Johonnot.

52 a Queen Victoria, Grace Greenwood.

53 b Donald and Dorothy, Mary Mapes Dodge.

54 Those Dreadful Mouse Boys.

Noble Deeds of Our Fathers. 51 С

55 Ethics for Young People, Stowe.

56 b Boys' Heroes, Edward Everett Hale.

57 b Tales of a Grandfather, Walter Scott.

58 Pilgrim's Progress, John Bunyan.

59 Child's History of England, Chas. Dickens.

60 Ten Times One is Ten, E. E. Hale.

61 Peter the Great, Jacob Abbott. а

62 Last Days of Pompeii, Bulwer-Lytton.

Building a Nation, Coffin. Boys of '61, Coffin. 63 b

64 b

Aesop's Fables. 65 b

66 Peasant and Prince.

67 Autobiography of Benjamin Franklin.

68 Lady of the Lake, Walter Scott. a

69 Hoosier Schoolmaster, Eggleston. а

70 Hoosier Schoolboy, Eggleston. b 71

a Tom Brown at Oxford, Hughes.

72 b Eight Cousins, Alcott.

73 b Under the Lilacs, Alcott.

74 Juan Juanita, Baylor. С 75 b

Greek Heroes, Kingsley. 76 b Tanglewood Tales, Hawthorne.

77 Sara Crewe, Burnett. c

78 Scottish Chiefs, Jane Eyre. a

79 With Wolfe in Canada, Henty .. a

Views Afoot, Bayard Taylor. 80 b

81 a Romola, George Elliot.

82 a John Halifax, Gentleman, Miss Mulock.

83 Alice and Phoebe Cary's Poems. a

84 a We Girls, Mrs. Whitney.

85 The End of the World, Eggleston. a

86 Last of the Mohicans, Cooper. а

87 b Boy Travellers in China and Japan, Knox.

88 b Boy Travellers in South America, Knox.

89 b Vassar Girls in England.

David Copperfield, Dickens. 90 a 91 a. Nicholas Nickleby, Dickens.

Lessons on Manners, Wiggins. Conquest of Mexico, Prescott. 92 b

93 a

94 First Steps in Scientific Knowledge, Bert.

95 h

Adventures of Ulysses, Lamb. Stories of the Old World, Church. 96 b

97 Seven Oaks, Holland. a

98 Kathrina, Holland. a

99 ล Lucile, Owen Meredith.

100 c My Pets, Grace Greenwood.

101 b Our Boys in China, H. W. French.

102 b Knockabout Club in the Antilles, Ober.

103 b A Family Flight Through Mexico, Hale,

104 b Forest Glen, Elijah Kellogg.

105 b Wolf Run, Elijah Kellogg.

105 1-2 Henry Clay, Statesman Series.

Camping Out Series, 6 vols., Stevens. 106 b

107 c Dottie Dimple Series, 6 vols., Sophie May,

108 ъ Story of a Short Life, Mrs. Ewing.

109 b Ten Boys, Jane Andrews. 110 Each and All, Jane Andrews.

111 b Boys of Other Countries, Bayard Taylor.

Leonard and Gertrude, Pestalozzi. Dred, Harriet Beecher Stowe. 112 113

- 114 Four Girls at Chautauqua, Pansy.
- 115 Pictures and Stories of Animals, 6 vols., Mrs. Tenney. c

116 Stories of Mother Nature.

117 Pilgrims and Puritans, Moore.

118 Ten Nights in a Bar-room, T. S. Arthur.

- 119 Poor Boys Who Became Famous, Sarah Bolton,
- 120 Boy Travellers in Great Britain, Knox.
- Birds Through an Opera Glass, Merriam. 121

122 Lessons in Right Doing, Ballon.

123 b Up and Down the Brooks, Mary Bamford.

124 The Throne of David, Ingram.

- 125 Zig-Zag Journeys in the South, Butterworth.
- 126 New Bed-time Stories, Moulton. 127 а Girls' Book of Famous Queens.
- 128 Jam of the Windmill, Mrs. Ewing.

129 Kit Carson, Abbott.

- 130 Little Biographies, Amanda Harris. Little Miss Weezy, Penn Shirley. 131
- Sea Shore Chats, Fannie A. Dean, 132
- 133 Little Tales About Plants, Fannie A. Dean.

Education, Spencer. 134

- 135 Life of Columbus, Irving.
- 136

Zig-Zag Journey in the Occident, Butterworth. Seaside and Wayside Series, Wright. 137

- 138 Geological Excursions, Winchell. 139 b Grandfather's Chair, Hawthorne.
- 140 1 and 2 Grades Nature Stories for Young Readers, M. Florence Bass.

141 Leaves and Flowers, Mary A. Spear.

My Saturday Bird Class, Margaret Miller. Old South Leaflets, D. C. Heath & Co. 142

143

Dole's The American Citizen, Chas. F. Dole. 144

The Child's Book of Stops, Leinstein. 145

- 146 Fifteen Decisive Battles, Creasy.
- Literature for Beginners, Swineford. Andrews' Manual of the Constitution. 147 148
- Farm and Workshop (mathematics), Hall. 149

Initiative and Referendum, J. W. Sullivan. 150

S. T. HAMILTON, J. P. JACKSON,

E. T. FISHER,

Committee.

TEXT BOOKS.

The following sections from the School Law of Colorado are quoted:

"Every school board, unless otherwise especially provided by law, shall have power, and it shall be

* * * to fix the course of study, their duty the exercise and the kind of text books to be used; Provided. That but one kind of text book of the same grade or branch of study shall be used in the same department of a school, and that after the adoption of any book, it shall not be changed in less than four years, unless the price thereof shall be unwarrantably advanced or the mechanical quality lowered or the supply stopped. To provide books for indigent children, on the writen statement of the teachers that the parents of such children are not able to purchase them, and to furnish free text books for the use of all pupils, when authorized to do so by a majority vote of the district as expressed at any regular or special meeting."

"To require all pupils to be furnished with the proper and suitable books as a condition of membership in school." (Section 51, Colorado school law.)

"Neither the General Assembly nor the State Board of Education shall have power to prescribe text books to be used in the public schools." (Section 16, article IX., Constitution of the State of Colorado.)

It was a wise provision of the makers of the constitution of the state of Colorado that made it impossible for either the general assembly or the state board of education to select and establish a uniform system of text books for the schools.

Most movements in the direction of uniformity in education narrow our present educational efforts. There should be the widest possible range and diversity of investigation along any and all lines of thought and study.

Adopt a uniformity of text books in a township, extend it to the county and from that to the state and the nation and we'll have a nation with one set of "cut and dried ideas."

There will be no possible chance for an interchange of ideas, for all have the same idea. The policy is not natural. No two forms in nature are alike; no two faces have the same lineaments; no two animals of the same family approach exactly the same standard; no two leaves have the same venation; no two snow flakes, diamonds or rain drops are precisely similar.

There has been a strong demand in many states for a uniform series of text books but wherever it has been tried the results have not been satisfactory. We should have the widest possible differentiation in education, then we will secure the most intelligent activity along all lines, the most helpful interchange of opinions and the greatest possible real growth.

The arguments brought forth in favor of a state uniformity of text books have been that families moving from one district to another would be able to take their books and find schools in which these same books are used. Full authority is given each district to vote for and furnish free, to all pupils attending school, the necessary school books. The statute is very explicit on this subject. Every argument in favor of state uniformity is fully answered by the adoption of the free text book plan.

Many districts in this state are now enjoying the benefits of free text books. The plan where tried, has given unqualified satisfaction.

By means of it the district furnishes free, all the books used. Where pupils are expected to furnish their own books it usually takes about a month to organize, classify and completely grade the school. Objections are often raised against a pupil pursuing the studies of a certain grade, when the real reason is that the parents do not feel financially able to furnish the necessary text books. This question does not affect wealthy citizens; but the purchasing of text books is a great burden to poor people. One reason so many pupils in the high schools and upper grammar grades leave school, is that they are not financially able to purchase from fifteen to thirty dollars worth of books each year, hence we lose them at the time we could do them much good.

The adoption of free text books would prove a partial panacea.

Where the free text book system is in vogue, the teacher is enabled to grade and classify her school during the first days of the term; there is no hesitancy on her part in either promoting or demoting a pupil; the original purchase price of the books is reduced about forty per cent. This will very materially aid transient people. This thought has more force from the fact that such people are usually poor. There is as strong argument that a pupil should furnish his own desk and chair as that he should furnish his own text books.

PAY OUR TEACHERS CASH.

If "the laborer is worthy of his hire," why do we not apply business methods in the handling of the district school funds, and arrange matters so our teachers and others engaged in school work can get cash for their labors? Too many school districts handle their money matters so their warrants are not paid within less than from three to six months after date of issuance. As a consequence, the teachers are compelled to discount their pay 10 per cent.; some more, some less; those who are least able to do so, generally more. If it is paid in six months, and draws 8 per cent. interest, it means 30 per cent. per annum, against the teacher in favor of the money lender, and no benefit to the district. This ought not to be so.

BLANKS AND RECORDS.

At the organization of the state government in 1876 a large supply of blank forms and record books was furnished to the department of public instruc-

tion. In some instances the supply was sufficient to last for twenty years.

The blanks have needed revising for the past ten years, but for the sake of economy it was not done.

However, my predecessor, the Hon. N. B. Coy, commenced this work by issuing a new and very much improved district treasurer's order book; also, a very excellent daily register.

During the present biennial term, every blank and record book used in the office and by the school officers of the state has been thoroughly and carefully revised by a committee consisting of County Superintendents Hamilton, Jackson and Miller.

The completeness of the biennial report of this department depends in a large measure upon the reports made by subordinate officers. Such should be as simple and plain as possible. The chief idea in a report should be absolute correctness, especially in the financial statements.

STATE TEACHERS' READING CIRCLE.

The Colorado Teachers' Reading Circle is on the third year of its existence and the interest continues to increase. The course this year is very popular and many city teachers are enrolled in it, notably those of Aspen, Greeley and Leadville of the larger cities. Many of the smaller cities and towns also have circles. White's School Management and Skinner's Readings in Folk-Lore constitute the present year's work.

The movement originated in the State Teachers' Association in December, 1890. The organization provides for a manager and secretary, who conducts the correspondence and directs the work. He is assisted by an Advisory Board, consisting of three members, who assist in selecting books for the course and in other ways. Prof. W. T. Eddingfield, for-

merly superintendent of Aspen schools, was first manager and secretary. Upon his removal from the state Mr. J. P. Jackson, superintendent of Leadville City schools, formerly superintendent of El Paso county, was elected as his successor. He still holds the office. J. F. Murray, State Superintendent of Public Instruction, N. B. Cov, ex-state superintendent and editor School Journal, and Prof. J. H. Hays, assistant principal of State Normal school, compose the Advisory Board. In preparing the course the policy has been to select but two books, one in a professional line, and the other for general culture. The first year "Lights of Two Centuries," by Hale, and Page's "Theory and Practice" were the books. The second year, White's "Pedagogy," and "The Schoolmaster in Literature" were selected. County superintendents are made managers for their respective counties. There is no expense to teachers in joining except for the books. They simply sign an enrollment card. Some counties have done excellent work. Among them may be mentioned Phillips, Summit, Saguache, El Paso, Jefferson, Weld, Boulder, San Miguel and Fremont. Plans vary. In some counties, as Saguache, Phillips and Summit, the teachers meet monthly, or oftener, at the superintendent's office and recite and discuss the subjects read. In some counties, as in El Paso, local circles are formed, which meet bi-monthly or oftener in villages with a half dozen or more members. Many teachers get the books and read individually, where the privileges of a circle cannot be had conveniently. Some circles have additional literary and musical programmes in connection with the reading. Much good is being done through the reading circle in lifting teachers up and in inspiring them with a knowledge and a desire to do better work. It will doubtless prove a stimulus in bringing the teachers' vocation to a higher professional standard.

CHILD SLAVERY.

He who has seen the misery of man only, has seen nothing; he must see the misery of woman. He who has seen the misery of woman only, has seen nothing; he must see the misery of childhood.—Hugo.

In Colorado the employment of children is at a minimum—possibly, because of the absence of large manufacturing establishments. But these will eventually come and then it will be much more difficult to get laws passed regulating the employment of children. Now is the time to push this matter to a just conclusion. There are now a number of large mercantile houses in Denver where children are employed, contrary to law, and 'some one should be given power to reach out and close such establishments if they insist in defying our laws.

I wish to call your attention to the following figures and you can form your own conclusions. Arapahoe county has 32,100 children of school age, and an average attendance of 16,196. This indicates that it is high time that the state should look into the situation and determine what is producing this result. This is not the result of carelessness on the part of our school officials, for I know whereof I speak when I say that Sup'ts Gove, Greenlee and Van Sickle are actively and earnestly endeavoring to get every child into school and give it the best advantages when there.

But there are always stumbling blocks in the way, which state legislation alone can remove. I would give the compulsory school law teeth, so that when it took hold it might be felt. There should be a penalty for non-attendance, and the parent or guardian should not be given a clear receipt for his taxes until such penalty be paid. I would do away with the twelve weeks' attendance law. Just so long as that law stands, inhuman guardians and employers will say to those who are trying to get the child

into school: "He is going to start to school next week," or "next month," thus putting the honest official in a position where he cannot act.

Full terms, and every child in school, should be Colorado's motto. Occasionally an apparently successful business man will say: "Education is not an essential. I attended school but a few years, and I am making a success of life." Financially, yes. But who knows but this self-lauded individual may, by his grinding disposition, have damned his own soul, and started some of his employes on the road to perdition? We cannot gauge a man's success by his dollars. Judging from the dollar standpoint, no one will attempt to say that this same business man would have been less fortunate had he been properly educated.

Does some one say: "The child owes a duty to its parents, and if they are poor it should help earn a living for the family?" To all such I would put this question: Where rests the greater obligation—upon the child, or upon the parent? One is responsible for the very existence of the other in this world of ours. Which?

Our mail-carriers and policemen are on duty, in the fresh air, only about two-thirds as many hours as the children who are employed in close, crowded stores. The little one receives a few cents a day, and the men a few dollars.

We like to boast of our love of liberty; but the most of us are hunting for an opportunity to oppress the weak and helpless.

To our philanthropists, let me say it is false benevolence to take the child from school and secure it a position where it can earn forty or fifty cents a day, while the father is unemployed. Keep the men at work and the children in school. There are enough idle able-bodied men to take the place of every employed child, and with our men all employed there would be no need of child labor. And the curse of the average night school! For a parent to say to a child who has been at work all day till it is weary in body and mind: "Go to school for three hours; and as I am so tired, I want you to stop at the grocery and get me a piece of tobacco!" Oh, the mockery of a grown man compelling his child to work the same number of hours that he does, and then go into a crowded room for several hours while the father rests! What a comment on our civilazation! The state must guarantee an education to every one of her children for the sake of society and the common good, to say nothing of the child's right.

The following, from the Denver Road, is worthy of serious consideration:

What is the republic to expect from a rising generation that will march 1,000 strong behind a band to a charity dinner 'mid the blare of trumpets and roll' of drums, advertising their hungry stomachs and their willingness to fill them at charity's table?

Think of these urchins as the voters and law-makers of the future!

KINDERGARTENS.

The law which authorizes the introduction of the kindergarten into the public schools of the state gave an important and sadly neglected department of education the encouragement of legislation. The best argument for the kindergarten schools is that they aim at the improvement of our educational system where improvement is most needed, viz., at the foundation.

It is too late to argue for the kindergarten. Every one agrees that it ought to be, and yet there is much ignorance regarding why and what it should be. Wrong work therein is much worse than no work. It is in no sense a school, nor is it a kind-of-school. It is not like a school; it is not even a prelude to a school, but rather a getting ready for the prelude.

The kindergarten years are distinctively the social years, and whatever else is or is not done, the child should learn the courtesies and etiquette of life so far as they come within his range; but more than this, he should be so trained as to eliminate from his disposition, so far as possible, envy, jealousy, covetousness, tendency to anger, etc.

The kindergarten years are the plastic years of the disposition, and at that time the disposition can be perfected by the eradication of many undesirable traits and the establishment of correct and pleasing tendencies of thought, sentiment and action. The play must be genuine, and not a mere mockery. Children are to do many things by themselves and of themselves as they would do them if unobserved. They are not to play merely by direction as to the time and manner.

Many a child is permanently maimed in disposition and crippled in intellect by being made to walk on crutches by misnamed kindergartens. How many parents can testify that as a direct result of sending a child to such a kindergarten he wanted somebody to "amuse" him all the time. A child is better off out of such a kindergarten with his imagination weaving engines out of pebbles, houses of marbles, villages, cities, rivers, railroads, etc., out of the figures of the carpet, thereby delighting himself in self-entertainment.

The real kindergarten is bright, animated, entertaining, but finds a way to have some of the play genuine, hearty, self-entertaining. The gifts and occupations are mere incidents—the mission is largely with those intellectual, emotional, and volitional activities which right the wrong and strengthen the right in the disposition of the child.

AN ACT

TO EMPOWER THE SCHOOL BOARD OF ANY DISTRICT TO ESTABLISH AND MAINTAIN FREE KINDERGARTENS FOR THE INSTRUCTION OF CHILDREN BETWEEN THREE AND SIX YEARS OF AGE.

Be it enacted by the General Assembly of the State of Colorado:

Section 1. The school board of any school district in the state shall have power to establish and maintain free kindergartens in connection with the public schools of said district, for the instruction of children between three and six years of age, residing in said district, and shall establish such courses of training, study and discipline and such rules and regulations governing such preparatory or kindergarten schools as said board may deem best: Provided. That nothing in this act shall be construed to change the law relating to the taking of the census of the school population, or the apportionment of state and county school funds among the several counties and districts in this state; Provided, further, That the cost of establishing and maintaining such kindergartens shall be paid from the special school fund of said districts, and the said kindergartens shall be a part of the public school system, and governed as far as practicable in the same manner and by the same officers as is now, or hereafter may be provided by law for the government of the other public schools of this state; Provided, further, That the teachers of kindergarten schools shall have a diploma from some reputable kindergarten teachers' institute, or pass such examination on kindergarten work as the kindergarten department of the State Normal School may direct.

The above is the law which authorizes the kindergarten as a part of our public schools. The amendment I would offer would be for the protection of our kindergarten teachers. In Colorado a young lady who aspires to be a kindergarten teacher

is required to take a two years' course in kindergarten training, while several other states have schools of higher education, where, after passing the general studies, one may receive a kindergarten diploma by taking an eight weeks' course in kindergarten training. This works a great injustice to our home teachers unless the state board of education holds that all teachers pass an examination. This the present board did, believing it best for the schools as well as protecting the teachers who spent two years fitting themselves for the work. In the last proviso, after the words "reputable kindergarten teachers' institute," I would add, "having a two vears' kindergarten curriculum." We cannot be too careful in the selection of our teachers for our children at any time and especially at this tender age.

Value of kindergarten furniture and apparatus, \$734.48.

TEACHERS.

NAME OF EACH TEACHER, MONTHLY SALARY AND THE TIME OF EACH IN MONTHS.

If the same teacher has been employed at different rates, the name should be entered anew, the same as for another person.

NAMES	Months taught	Salary per month
Kate G. Clark	9½	\$ 75 00
Helen Cole	9½	50 00
Margaret Grabill	9½	50 00
Helene Thompson	9½	60 00
Sara Silverstein	9½	50 00
Bertha Hicks	9½	15 00
Ada Newell	9½	15 00
Jessie Hastings	9½	15 00
Catherine Whitehead	9½	15 00
Della Webb	91/2	15 00
Mary Huff	91/2	15 00
Miss A. L. Johnson	9½	65 00
Mabel Pa Delford	10	70 00
Carrie G. West	10	35 00
Lizzie G. McNulty	9½	36 84
Luan B. Hannah	10	50 00
Jennie Gravitt	8	20 00
Hattie Sanley	10	15 00
Mary Thompson	10	15 00
Fannie Cyphers	9½	10 00
Clara Townsend	9½	No salary paid
Agnes Marquis	9	
Jessie Chapin	2	44
Hattie Coon	ı	44
Edith Vickers	7	41
Lillian Jackson	7	4.4
Ruth Reed	3	44
Miss Hickok	3	41

A. D. SHEPARD,

County Superinteudent.

Superintendent Hamilton, of Larimer county, shows Fort Collins taking an advanced position. Seven teachers; 101 pupils; 90 average attendance; 171 days taught; cost for pupil, \$1.88; value of property, \$3,000; value of apparatus, \$200.

To get the best possible results out of this work, a committee of five, composed of the state superintendent of public instruction, the president of the normal school, the city superintendent of kindergartens in Denver, Mrs. N. P. Hill and Mrs. Anna Steele, should be given an appropriation of \$1,000, so that the next biennial report from this department may contain some practical suggestions and observations.

It may be of interest to note the advanced position taken by the state normal school in the questions issued therefrom.

KINDERGARTEN HISTORY.

The following questions were used in the examination of 1893:

Thirty minutes.

- 1. When and where was the first kindergarten established?
- 2. When and where was the first kindergarten in America?
- 3. Name some of the prominent kindergartuers in Germany, England, America.
- 4. Name the best known books and authors on the kindergarten.
- 5. What cities have kindergartens in their public schools?
- 6. Name some of the prominent kindergarten associations.
- 7. Does the kindergarten work in this country vary from that of Europe, and in what direction?

STORIES.

Sixty minutes.

- 1. How was the instinctive love of stories satisfied in the early race?
 - 2. What is the value of stories for children?
 - 3. What stories shall we choose?
- 4. What points should a story teller keep in mind?
 - 5. How may one become a good story teller?
- 6. Do you believe in fairy stories for children, and why?
- 7. Recommend some stories for children under seven years of age.

PERSONAL QUESTIONS.

Twenty minutes.

- 1. Name?
- 2. Age?
- 3. Where born?
- 4. In what schools were you educated?
- 5. What educational papers do you read?
- 6. To whom can you refer as to your ability as a teacher?
 - 7. Do you hold a kindergarten diploma?
 - 8. Where did you study kindergarten?
 - 9. How long have you taught kindergarten?
 - 10. Did you ever do any other teaching?
 - 11. Are you a musician?
 - 12. Do you sing?

MANAGEMENT.

- 1. What are the duties of a director?
- 2. What are the duties of an assistant?

- 3. What would you do the first day in kindergarten?
- 4. Give an outline of a year's work in kindergarten?
 - 5. What is the value of a program?
 - 6. What is the danger of a program?
- 7. What does it cost to furnish a kindergarten for twenty-five children?
- 8. What pictures would you wish to hang in a kindergarten?

MUTTER AND KOSE LIEDER.

Forty-five minutes.

- 1. Describe the Mutter and Kose Lieder.
- 2. With whom did you study it?
- 3. Tell why Froebel wrote the book?
- 4. What did he say of it?
- 5. What is said of the book poetically, musically and as to drawing?
 - 6. Give physiological basis for the book.
 - 7. Give psychological basis for the book.
- 8. Give central thought of six songs and make practical application.

CHILDHOOD.

- 1. What sense is first developed in an infant?
- 2. In what locality is the sense of touch keenest?
- 3. Why does an infant stretch out its hands to grasp an object?
- 4. What is the value of the early training of the senses?
- 5. What can you say of the imitative instinct of children?

- 6. What is the value of imaginative power?
- 7. How may it be developed and strengthened?
- 8. What is the natural method of discipline?
- 9. How carried out in the kindergarten?

GAMES.

Sixty minutes.

- 1. Show comparison between the physical education of the race and the plays of childhood.
- 2. What instinct is prominent in plays of child-hood?
- 3. What is the principle in the selection of games?
 - 4. What do the games do for the child?
- 5. Why are kindergarten games better than ordinary street games?
 - 6. Give two original games.
- 7. What relation should the games bear to the other kindergarten work—i. e., the daily science work, the gifts and occupation?

KINDERGARTEN AND PRIMARY.

- 1. What is the Colorado kindergarten law?
- 2. What is claimed for the kindergarten?—(state briefly).
- 3. What is there in the kindergarten especially that fits a child for primary work?
- 4. What are the best means of connecting the kindergarten and primary work?
- 5. Give a brief outline of a year's work for children between six and seven years of age in the transition or connecting class.
 - 6. Have you studied primary methods?

FROEBEL.

Forty minutes.

- 1. Give a brief outline of Froebel's life.
- 2. What are the chief characteristics of Froebel's method?
 - 3. What are his chief writings?
 - 4. Who are his biographers?
- 5. Who were the educators before Froebel, who believed in infant education?
 - 6. Compare Froebel and Pestalozzi.
- 7. What was the spirit of the times during Froebel's life?
- 8. What influence did the prevailing mode of thought (philosophy) have upon his writings?

GIFTS.

Ninety minutes.

- 1. In general what are the kindergarten gifts?
- 2. Why were these forms chosen?
- 3. What is the object of the gifts?
- 4. What is the difference between gift work and occupation work?
 - 5. What is the value of playthings?
- 6. Why was the ball chosen for the first plaything?
- 7. Show correspondence between the second gift and the child's need.
 - 8. Why are types given to children?
 - 9. Explain the law of opposites.
 - 10. Briefly describe the building gifts.
 - 11. What instinct do they foster?
- 12. What should be the principle in selecting toys for children?

- 13. What is meant by life forms, beauty forms, knowledge forms? State value of each.
- 14. What is the value of the second group of gifts, i. e., from surface to point?

SONGS AND PHYSICAL CULTURE.

Forty-five minutes.

- 1. Name the best writers of songs for children.
- 2. What does singing do for children?
- 3. Have you had instruction in tonic sol fa?
- 4. What is the value of the march?
- 5. Name some good march music.
- 6. What are the physiological reasons for care of a child's body?
 - 7. The psychological reasons?
- 8. Have you had instruction in Ling system of gymnastics or Delsarte?
- 9. State some of the principles of the Delsarte system of expression expressly applicable to kindergarten work.
- 10. Give some practical instances of the necessity of physical control and grace of movement in the songs and games.

GARDEN WORK.

- 1. What does Froebel say of garden work for children?
- 2. What place should garden work occupy in the daily program?
- 3. How may it be made the basis of science work with the children?
- 4. Give an outline of a lesson in plant life for a two years' course for the children from five to seven years of age.

- 5. Give an outline of studies in animal life for the same period.
- 6. How may the science work be closely connected with the gifts and occupations, the songs and games in the daily kindergarten work?

The questions for 1894 were as follows:

GAMES.

- I. To what degree and in what manner ought the dramatic instinct to be awakened and developed through the games?
- II. Show the parallelism in the development of this instinct in the individual and that of the race.
- III. Select some trade game and tell how you would present it to the children?

MUTTER AND KOSE LIEDER.

- I. What can you say of the inner connection between family life and nature as illustrated in this book?
- II. Write an abstract of Froebel's principles on child training as illustrated in the Mutter and Kose Lieder.

KINDERGARTEN MANAGEMENT.

- I. Make an ideal program for a morning's work of three hours, subdividing the time as you would actually do in the kindergarten and outlining the work of each period.
- II. Taking as a basis for science work the study of some animal, show how in practice the gifts and occupations serve as a means of expression of the new ideas and knowledge gained by the children.

CONNECTING CLASS.

I. What would you do in number work in this class with six-year old children (give methods).

- II. What other subjects of study belong to this year and how would you treat them?
- III. With what mental equipment should the child enter the primary school from the connecting class?

FROEBEL.

- I. Write a thesis on Froebel observing the following points:
- a. The times in which he lived considered as influencing his work and ideas.
- b. Great writers, philosophers and educators whose influence on Froebel is particularly marked.
- c. The period of his educational activity and its results.
- II. Give an outline of the contents of his best known pedagogical writings.

STORIES.

- I. What constitutes a good child's story as regards form and contents?
- II. Write an original science story of plant life for children of five years of age.
- III. What is the relation between children's stories and the study of literature in later years?

SCIENCE WORK.

- I. To what extent should the study of botany, zoology and physics play a part in the kindergarten work?
- II. Which makes the better basis for the kindergarten work, history or science?

Give reasons.

- III. Make out a series of ten science lessons on the frog, for five-year old children.
- IV. Make out a series of eight science lessons on some plant.

GIFTS AND OCCUPATIONS.

- I. Give an outline of work with the gifts to be done by children from three to four years of age.
- II. Give a series of twenty lessons in moulding, showing the development of the subject.

PHYSICAL CULTURE.

- I. Explain in detail the work in physical culture you would give the children in the kindergarten.
- II. What work in voice culture and expression would you give the children and in what manner?

KINDERGARTEN HISTORY.

- I. Give an account of the development of child culture in France and England.
- II. What is the course of study as exemplified in some of the best training schools in this country?
- III. Give an account of some kindergartners who were students with Froebel and are now actively engaged in the work. What is the nature of such work?

CHILDHOOD.

- I. Write a thesis on the reflex action of body, mind and soul during the early years of child-hood.
- II. In what manner should the kindergarten be a "family" in the wider sense of the word?
- III. What have you to say concerning the religious training of children during the first five years?

PHILOSOPHY OF EDUCATION.

- 1. What results from all good teaching?
- 2. What do you understand by the limits of education? Classify them.
 - 3. Explain Rosenkranz's self-estrangement.
- 4. Give the natural order of the development of the moral nature.
- 5. What three natures should receive attention in the education of a child?
 - 6. Give a definition of education.

COMMON SCHOOL GRADUATION.

When our elementary and secondary schools are made stronger, then and not until then will there be harmony from the kindergarten up to and through the university.

Each department of the public school system should be somewhat complete in itself, should give that training which will prepare for society and the duties of citizenship. Higher education can never become popular until elementary and secondary education are strengthened.

When our forefathers established the first schools the prominent idea was the establishment of colleges and universities, as was evinced by the founding of Harvard and Yale.

This tendency led to educating the aristocracy. From that idea we are now swinging to the other extreme, and most attention is being given to elementary education. This is surely the correct position for elementary and secondary education are intended to specially benefit the masses. In our large manufacturing centers the boys and girls leave school at about the age of twelve years.

The elementary school should be made as strong as possible, for it is the greatest leveler in our society. There is no democracy like that of the common school. Here friendships cross all social lines and make new combinations. The greatest equalizing force which is to-day at work in American society is the common school.

In line with this thought the State Course of Study has been prepared with special references to the needs of the common school. The department of public instruction is now prepared to furnish a diploma of graduation to each pupil who furnishes the prescribed course of study and passes a creditable examination on all the subjects.

DIPLOMA.

Colorado Public Schools	"Tearn to Think"	School District No. s completed the course of study prescribed for the Public School Colorado.	In testimony whereof, this Diploma is given under our hands, this day of A. D. 189
		Sc. Sc.	 Clas

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TEACHER.

COUNTY SUPERINTENDENT.

The following circular was issued by this office:

DEPARTMENT OF EDUCATION.

Denver, February 23, 1894.

TO COUNTY SUPERINTENDENTS:

The diploma of graduation from the Colorado public schools is sent out with the hope that it will be the means of strengthening all schools that are using the state course of study. It will have a tendency to abolish aimless work in education; it will place a new incentive before the children of our rural schools; it will bring about a more enlarged use of the State Course of Study; it will cause more real teaching to be done; in a word, it will have a tendency to harmonize and develop more of the educational forces of a community by enlisting the hearty co-operation of county superintendents, teachers, parents and pupils.

Prepare fair, searching questions in all the subjects as outlined in the state course of the study, or the department of education will furnish questions on application. Have teachers conduct the examination in their respective districts and forward the examination manuscripts to you for grading.

If a sufficient number of pupils successfully pass the examination it will add zest to the work to have commencement exercises at some convenient locality in the county, or better still, arrange for several such exercises in various parts of the county. Exercises should consist of recitations and original essays by the graduates, music by the school, and short talks by the teacher, patrons and county superintendent.

Very truly yours,

JOHN F. MURRAY, State Superintendent.

With but one or two exceptions every county in the state had graduating exercises for the common schools. The department sent suggestive questions for the examination; in most counties these questions were used.

In this way the rural schools have been given a new stimulus. If the rural schools can be strengthened, there will not be that marked tendency of people drifting into the great centers of population. The two great questions before the American people to-day are: "How to increase the efficiency of the rural and elementary schools?" and "The solution of the question of municipal government in large cities." Real wisdom and statecraft will have to be brought to their solution, instead of makeshift policy and politics!

SUGGESTIVE QUESTIONS FOR THE EXAMINATION OF APPLICANTS FOR THE DIPLOMA OF GRADUATION FROM THE COLORADO PUBLIC SCHOOLS.

PREPARED BY THE SUPERINTENDENT OF PUBLIC INSTRUCTION, DENVER, COLORADO, MARCH 22, 1894.

ARITHMETIC.

- 1. Define unit, divisor, fraction, interest, commission. Illustrate each.
- 2. If a pole is one-sixth in the mud, two-fifths in the water and 13 feet out of the water, what is its length?
- 3. Draw a digram which shall locate the S. W. quarter of the S. E. quarter of a section of land, and indicate the amount of land it contains.

4. Reduce

$$\frac{4\frac{1}{5}-2\frac{1}{3}}{\frac{1}{5} \text{ of } 2\frac{5}{6}} \times \frac{9\frac{1}{7}}{28\frac{3}{2}}$$

to its simplest form.

- 5. What is the cost of digging a cellar 40 feet long, 25 feet wide and 8 feet 6 inches deep at 51 cents a cubic yard?
- 6. Sold two horses for \$150 each, gaining 20 per cent. on one and losing 20 per cent. on the other. Did I gain or lose, and how much?
- 7. What sum must I lend for 2 years, 6 months, at 8 per cent. to receive on settlement \$240? Give solution in full.
- 8. Find the difference between the true and bank discount of a thirty-day note for \$200, money being worth 8 per cent.
- 9. The difference of time between London and Washington is 5 hours, 8 minutes, 4 seconds. What is the difference of longitude?
- . 10. A castle 30 yards high is surrounded by a ditch 60 feet wide. What length of rope will reach from the outside of the ditch to the top of the castle?

PHYSIOLOGY.

- 1. What is the nature of tobacco?
- 2. What may be the effects of tobacco on a person who uses it?
- 3. What great organs of the body are affected by alcohol, and in what manner are they affected?
- 4. Name two kinds of blood corpuscles. Which kind is more numerous?
- 5. Give the structure of the skin. Explain the physiological necessity for bathing.
 - 6. Describe the sense of taste.
- 7. Describe, very briefly, the process of digestion.

- 8. What is the structure of a muscle?
- 9. How are bones tied together?
- 10. Describe the brain.

READING.

- 1. What are the uses of silent reading? Of oral reading?
 - 2. What is elocution?
 - 3. How should poetry be read?
 - 4. Give the different kinds of emphasis.
 - 5. Define force and inflection.
 - 6. Define circumflex, modulation, cadence.
 - 7. Apply diacritical marks to the following:

For what are men better than sheep or goats,
That nourish a blind life within the brain,
If, knowing God, they lift not hands of prayer,
Both for themselves and those who call them friend?
—Alfred Tennyson.

8. (30.) Read a selection for your examiner.

GEOGRAPHY.

- 1. Give some proofs of the spherical form of the earth.
- 2. How many counties has Colorado? Name and bound the one in which you live.
 - 3. Name a number of the resources of this state.
 - 4. Locate the state institutions of Colorado.
- 5. Through what waters would a vessel pass in going from Chicago to London?
- 6. Name the states on the east bank of the Mississippi river.
- 7. Give the principal products of the states above mentioned.
- 8. Name five articles of commerce obtained from China. Write something of the people.

- 9. Draw from memory an outline map of South America, locating and naming the principal cities, rivers and mountain chains.
- 10. Define waves and tides, and state, briefly, the cause of each.

UNITED STATES HISTORY.

- 1. State a few facts in connection with the Mound Builders.
 - 2. Write of the Indians.
- 3. Name some of the prominent discoverers and explorers from each of the following nations: England, Spain, France. Tell what each discovered or explored.
 - 4. Relate the story of Captain John Smith.
- 5. Give the causes and result of the inter-colonial wars.
- 6. What was the chief cause of the Reveolutionary war? Name five American generals; five British generals.
- 7. Briefly write of the public services of Alexander Hamilton and Aaron Burr.
- 8. Write of the rise and fall of the African slave trade.
- 9. Name two important events in each of the following administrations: Jefferson's, Madison's, Polk's, Grant's.
- 10. Name some events of historical importance that have occurred during the past four years.

CIVIL GOVERNMENT.

- 1. Name the three branches of our national government.
- 2. Give some arguments in favor of having two branches of a congress.
- 3. What are the constitutional qualifications of a president; senator; representative?

- 4. What does the United States guarantee to every state in the Union?
- 5. What powers are possessed by less than a quorum in either house?
- 6. How are representatives apportioned among the several states?
- 7. Give the constitutional provisions in regard to impeachment.
- 8. Name and define the departments of the state government of Colorado.

ENGLISH GRAMMAR.

- 1. Define etymology, syntax, orthography and prosody.
- 2. What are the chief objects sought in the study of grammar?
- 3. Give the principal parts of lie (to rectine), sit, burst, buy and flee.
- 4. Give the plurals of phenomenon, looker-on, spoonful, 5.
- 5. (20.) Analyze and parse: "Things are not what they seem."
- 6. What is mode? Give an example of each kind.
- 7. What is a sentence, and what must every sentence contain?
- 8. What is comparison? Name the parts of speech that can be compared.
- 9. Write a compound sentence and change it into a complex sentence.

Spelling and writing will be marked from the manuscripts submitted.

COMMON SCHOOL LIFE CERTIFICATE.

A very broad policy has been adopted by the state board of examiners with respect to the state certificate. Heretofore the board has required the applicant to write upon some twenty-five subjects. The state diploma was thus placed almost beyond the reach of all teachers except the best specialists.

By referring to the circular of the board it will be seen that the first grade county certificate has been taken as the basis upon which to build. By so doing, the teacher is given credit for his county certificate. Another advantage obtained is the hearty co-operation of the county superintendent. It will have a tendency to make county superintendents more careful in the matter of issuing the first grade certificate. A good regulation would be to require the county superintendent to forward to the department of public instruction the manuscripts of all persons to whom first grade certificates had been issued, that the state board might have them for inspection. One defect in the present system of issuing the county certificates and in employing teachers for high schools in districts other than first class, is that the first grade county certificate is not a sufficient guarantee of scholarship. The branches enumerated for the first grade county certificate do not extend high enough in most high schools throughout the state. The common school life certificate is designed to remedy this defect by supplying an intermediate certificate between the first grade county certificate and the state diploma.

Another feature of the new policy is that the applicant is given a graduated plan for working up to the state diploma by adding to the common school life certificate, six additional branches.

CIRCULAR OF INFORMATION ISSUED BY THE STATE BOARD OF EXAMINERS.

For the information of those interested, as much of the School Law of Colorado as relates to the granting of state diplomas to teachers is herewith given:

Section 3. The State Board of Education is hereby authorized to grant state diplomas to such teachers as may be found to possess the requisite scholarship and culture, and who may also exhibit satisfactory evidence of an unexceptional moral character, and whose eminent professional ability has been established by not less than two years' successful teaching in the public schools of this state. Such diplomas shall supercede the necessity of any and all other examinations of persons holding the same, by county, city or local examiners, and shall be valid in any county, city, town or district in the state, unless revoked by the State Board of Education.

Section 4. But state diplomas shall only be granted upon public examination, of which due notice shall be given, in such branches and upon such terms, and by such examiners as the State Superintendent of Public Instruction, the president of the State University, the president of the State Agricultural College and the president of the State School of Mines may prescribe; Provided, That the State Board of Education may, upon recommendation of the State Board of Examiners, grant state diplomas, without examination, to persons who, in addition to good moral character and scholarly attainments, have rendered eminent services in the educational work of the state for a period of not less than five years.

The State Board of Examiners, under the authority above quoted, makes the following aunouncements:

The board will meet in the office of the State Superintendent of Instruction, Denver, Colorado, on the second Saturday of June and the second Saturday of December, of each year. Other meetings will be held when, in the judgment of the board, they are necessary.

The next annual examination of candidates for certificates will be held in Denver, and such other places as may be deemed necessary, June 27, 28 and 29, 1894.

All applications and accompanying papers must be filed in the office of the State Superintendent of Public Instruction not later than June 1, 1894.

Hereafter the board will issue two grades of certificates, to be designated and known as "The Common-School Life Certificate," and "The State Diploma."

Applicants for the common-school life certificate shall present, as evidence of qualification in what are known as the common-school branches, a first-class, unexpired county or city certificate, and shall pass a satisfactory examination in each of the following named branches of study; Algebra, physiology, botany, general history, civil government, including the constitution of Colorado, English literature and rhetoric, and psychology and pedagogy.

The Common-School Life Certificate will authorize the holder to teach all the branches named therein, but no others. Other branches than those named may be added to this certificate.

Applicants for the state diploma shall have all the qualifications required of candidates for the common-school life certificate, and, in addition to the examination required of the latter, shall pass, with a creditable standing, examination in the following subjects:

- 1. Geometry and physics.
- 2. Latin, or French, or German.
- 3. Any selected three subjects from the following: trigonometry, astronomy, physical geography, geology, and mineralogy, zoology, chemistry, logic and political economy.

Branches of study will not be named in the state diploma.

The holder of a common-school life certificate shall be granted a state diploma upon passing a satisfactory examination in the required additional branches.

The board of examiners will not recommend the issuing of a complimentary common-school life certificate.

No one will be recommended to receive the state diploma, without examination, who has not given satisfactory evidence of educational and other qualifications at least equivalent to the highest of those hereinbefore named.

In considering an applicant's claims to a state diploma, either honorary or based upon the examination tests, the board will give due weight to evidence showing high attainments in special lines of educational work.

Eminent success in filling the positions of principal of high school, superintendent of schools, or professor in some higher institution of learning, will receive due recognition in considering any one's fitness to receive a complimentary state diploma.

All inquiries should be addressed to John F. Murray, State Superintendent of Public Instruction, Denver, Colorado.

JOHN F. MURRAY, State Superintendent of Public Instruction.

JAMES H. BAKER, President of the State University.

ALSTON ELLIS, President of the State Agricultural College.

REGIS CHAUVENET, President of the State School of Mines.

State Board of Examiners.

At the last state examination, twenty-nine applicants appeared. Fourteen of the number were successful in passing the examination, which for the first year under this plan, was very gratifying.

QUESTIONS FOR THE EXAMINATION OF AP-PLICANTS FOR THE STATE CERTIFICATE, 1893.

FIRST DAY, A. M.

PHYSIOLOGY. Answer any ten.

- 1. Why does food need to be digested? What becomes of the digested food?
- 2. What is the blood made up of? Explain the use of each part.
- 3. Name three secretions and state the use of each. How do they differ from excretions?
- 4. How is heat produced in our bodies? How are they kept from getting too warm? Can you describe any experiments to illustrate this?
- 5. Explain how we breathe and why we breathe. Why is ventilation important?
- 6. Give the cause and explain the process of "taking a cold."

- 7. What are reflex actions? Explain with an example. Why are they so called?
- 8. How do muscles produce motion? What are tendons, the larvax, the kidneys?
- 9. Name those organs which are injured by alcoholic drinks and explain how.
- 10. Write a short comparison of the body to a steam-engine.
- 11. Draw diagram of the eye and give uses of the different parts. What causes near-sightedness?
- 12. Explain how the bones are nourished and how they change in composition.

BOTANY.

- 1. Distinguish between phanerogams and cryptogams. What is an embryo?
- 2. Name and describe the parts of a flower. What substance forms the bulk of a grain of wheat?
- 3. Give an example of a monocotyledonous plant. Explain the manner in which branches are arranged on stems.
 - 4. What are epiphytes? Name a biennial root.
- 5. Name the parts of a leaf. What office is performed by leaves? Define venation.
- 6. Define inflorescence, morphology, perianth, pollination and flora.
- 7. Classify fruits in respect to texture; as regards their manner of disseminating seed. In plant life, what is meant by protoplasm? Name its chemical elements.
- 8. Describe a plant cell. Into what solid matter is elaborated sap converted?
- 9. Distinguish between endogenous and exogenous stems. What is mould?
- 10. In botanical nomenclature, how is a plant classified? What is meant by classification in botany? To what extent have you taught botany? How much analytic work have you done?

FIRST DAY, P. M.

LITERATURE AND RHETORIC.

- 1. Define, and give examples of, allegory, alliteration, antithesis, apostrophe and hyperbole.
- 2. Define, and give examples of, metonymy, personification, redundancy, simile and tautology.
 - 3. Give the leading rules for punctuation.
- 4. Name and define the different kinds of poetry.
- 5. Give complete instructions for writing letters.
- 6. Give brief history of novel writing; time of its origin; names of great novelists; varieties of the novels.
- 7. When was the great period of religious discussion?
- 8. Who is our greatest English epic poet? Satirist? Humorist? Dramatist? Writer of Allegory?
- 9. Name the chief writers of Queen Anne's period.
- 10. Mention, as far as possible, the works of each of the following authors: Chaucer, Gower, Langland, Sidney, Bacon, Spenser, Marlowe, Ben Johnson, Milton, Bunyan, Butler, Dryden, Newton, Swift, Pope, Fielding, Hume, Burns, Macaulay and Dickens.

CIVIL GOVERNMENT.

- 1. Discuss the Bill of Rights as to the following: Content; authority in our nation and states; inheritance from England.
- 2. Give two dates (years) in English history and two in United States history which you regard most important in the history of civil government, giving a brief discussion of each.

- 3. Discuss the following in their relation to constitutional history: Union of New England Colonies; French and Indian War; Period of Confederation.
- 4. Briefly write of three compromises shown in our Federal Constitution, between advocates of State Supremacy and National Supremacy.
- 5. Describe the local government of one state (name it) with a typical township system, another with a typical county system and another with the township-county system.
- 6. Discuss Civil Service Reform as to the following points: The intention of the constitution; origin of the spoils system; duties and responsibilities of the President; the present Civil Service Commission Law and its workings.
- 7. What is the Supreme Law in the United States; in England; in Russia; in Germany; in Mexico; in Colorado? Distinguish between constitutional and statutory law.
- 8. Write a brief thesis on the influence of municipal politics in National affairs.
 - 9. What is an "Enabling Act?"
 - 10. What principles regulate trade?

SECOND DAY, A. M.

GENERAL HISTORY.

- 1. Name five decisive battles of the world, and state your reasons for considering them decisive.
 - 2. Describe Rome at the close of the Punic war.
 - 3. Describe Athens in the age of Pericles.
- 4. In what way has Greece influenced modern civilization?
- 5. What was the influence of Charlemagne upon Europe?
- 6. What were the causes and results of the Crusades?

- 7. Mention, with dates, ten important epochs in English history.
- 8. Name, in order, the sovereigns of England since the Norman Conquest?
- 9. Mention five important wars that have occurred in this century.
- 10. What great questions are agitating the civilized world to-day?

PSYCHOLOGY.

- 1. Apart from the five special senses, what general or indefinite senses are recognized in physiological psychology? Describe them.
- 2. In an act of perception, either by the ear or by the eye, trace the physiological steps from the first external impression to its emergence in consciousness.
- 3. What ascertained correlations, if any, exist between physical and mental states?
- 4. Assuming the division of our mental states in thinking, feeling and willing to be correct and exhaustive, how are feelings classified and what feelings are enumerated under each class?
- 5. What relation or relations do you affirm between thinking and feeling? Prove your answer.
- 6. What relation or relations do you affirm between feeling and willing? Prove your answer.
- 7. What are the elements contributory to the ethical sentiment? Discuss the Free Will question.
- 8. What is your analysis of the sentiment of the ludicrous? What is the psychological difference between the sentiment of the beautiful and the sublime?
- 9. How do concepts arise from precepts, judgments from concepts, and reasonings from judgments?

10. Give by chart or otherwise a synopsis of the psychological development from the fifth to the fifteenth year.

PEDAGOGY.

- 1. What part of pedagogy is based on psychology? Whence are the other elements contributed?
- 2. To what extent are kindergarten work and its methods available in the common school?
 - 3. Discuss the Grube method in arithmetic.
- 4. Compare the practical merits of the methods proposed for teaching reading.
- 5. To what extent and in what way can geography and history be correlated?
- 6. In what respect is the teacher responsible for his pupils' health, and what hygienic measures can he adopt?
- 7. What moral instruction, whether direct or indirect, is possible in the common school?
- 8. What pedagogical principles guide you in selecting a school library?
- 9. What aesthetic education can be incidentally given?
- 10. Legally, to what extent does the teacher stand in the place of the parent?

SECOND DAY, P. M.

ALGEBRA.

- 1. Find three consecutive numbers whose sum is 90.
- 2. A's money \pm 1 time the sum of B's and C's = p; B's money + m times the sum of B's and C's = g; C's money + n times the sum of A's and B's = r. They together have s. What has each?
- 3. Prove: In an equation of which each member is the sum of a rational quantity and a quadratic surd, the rational quantities of the two members are equal, and also the quadratic surds.

- 4. Extract the root of a $\pm \sqrt{b}$.
- 5. Find the value of x in the following:

$$\frac{\sqrt{x} \div \sqrt{x-a}}{\sqrt{x} - \sqrt{x-a}} = a.$$

6. Given:

(1)
$$x^3y+xy^3 = 820$$
. (2) $x^2 - y^2 = 9$. (3)

Required x and y.

- 7. Distinguish between signs for operation and signs for relations, setting down all the signs you know of each sort with the significance of each.
 - 8. Find the difference of $\frac{4}{6\sqrt{a^2}}$ and $3\sqrt{a^3}$

Given:

$$\begin{cases} 2x + 3y - 4z = 10, \\ 3x - 4y + 5z = 14, \\ 4x - 5y + 6z = 18. \end{cases}$$

10. Factor

$$4a^{4} + a^{2}b^{2} + 9b^{4}$$
.

THIRD DAY, A. M.

GEOMETRY.

- 1. If two parallel straight lines are cut by a third straight line, the alternate-interior angles are equal. Prove.
- 2. The diagonals of a parallelogram bisect each other. Prove.
- 3. An angle formed by two chords intersecting within the circumference, is measured by one-half the sum of the intercepted arcs. Prove.
 - 4. Circumscribe a circle about a given triangle.
- 5. Prove that the bisector of an angle of a triangle divides the opposite side into segments proportional to the other two sides.
- 6. The sum of the squares of the two legs of a right triangle is equal to the square of the hypotenuse. Prove.

- 7. Two dihedral angles are equal if their plane angles are equal. Prove.
- 8. The sum of any two face angles of a trihedral angle is greater than the third face. Prove.
- 9. Enunciate and demonstrate all the properties that arise in an equilateral triangle.
 - 10. Inscribe a regular 10-gon in a circle.

PHYSICS.

- 1. Give the law of the pendulum.
- 2. Describe three methods of finding the specific gravity of a body.
- 3. State the law for the velocity of a falling body. Find the distance a body would fall in ten and a half seconds.
- 4. How does temperature affect the velocity of sound in air?
 - 5. Explain the interference of sound.
- 6. Define latent and specific heat. How may the specific heat of a body be determined?
- 7. Give the laws of the reflection of light; of the refraction of light?
- 8. What is a virtual image? Show how to find the image of an object formed by a concave mirror.
- 9. Define "Ampere," "Volt," "Ohm," "Coulomb," "Farad," "Watt." What is a unit magnet pole?
- 10. Upon what discovery of Faraday and Henry does the modern dynamo depend?

THIRD DAY, P. M.

The applicant is required to elect one of the languages and three other subjects for examination on the afternoon of the third day.

GERMAN.

- 1. Decline one relative pronoun, singular and plural.
- 2. Write the present and perfect tense of werden, sein and haben.

- 3. What is the place of the adverb in a German sentence?
- 4. Give the principal parts of the verbs meaning to go, to run, to succeed, to draw, to do.
- 5. Translate into German: This man has found the money. We like to drink milk.
- 6. He is younger than his friend. We have no good German dictionary.
 - 7. I beg your pardon. I made a mistake.
- He has received and read your letter. Please close the door.
 - 9. Quote eight lines of German.
- 10. Principal parts of the verbs in your quotation.

LATIN.

Caesar—Omit either of the six.

- Translate B. G. I. caput XXVIII.
- Quod ubi Caesar resciit, quorum per fines ierant,
 his uti conquarent, et reducerent, si sibi purgati esse
- 3. vellent, imperavit; reductos in hostium numero habuit;
- 4 reloquos onnes, obsididus, armis, perfugis traditis inde-
- ditionem accepit. Helvetios, Tulingos, Latobrigos in
 fines suos, unde erant profecti, reverti jussit; et, quod,
- 7. omnibus fructibus amissis, domi nihil erat, quo famen
- 8. tolerarent, Allobrogibus imperavit, ut his frumenti co-
- 9. piam facerent; ipsos oppida vicosque, quos incenderant, 10.
- restituere jussit. Id ea maxime ratione fecit, quod noliut eum locum, unde Helvetii dicesserant, vacare; ne 11.
- 12. propter bonitatem agrorum Germani, qui trans Rhenum
- incolunt, e suis finibus in Helvetiorum fines transirent, 13.
- et finitimi Galiae provinciae Allobrogibusque essent. 14.
- 15. Boios, petenibus Aeduis, quod egregia virtute erant cogniti, ut in finibus suis collocarent, concessit; quibus 16.
- illi agros dederunt, quosque postea in parem juris liber-17.
- 18. tatisque conditionem, atque ipsi erant, receperunt.
- Syntax. In this chapter what kind of a clause is introduced by ubi (line 1), quorum (line 1), uti (line 2), si (line 2), unde (line 6), quod (line 6), quo (line 7), ut (line 8), ne (line 11), (parem) atque (lines 17) and 18)

Give the construction of his (line 2), obsidibus (line 4), domi (line 6), quo (line 7), ratione (line 9), provinciae (line 14), virtute (line 15).

Give illustrations in this chapter of indirect discourse and sequence of tenses.

III. Grammar. Give the principal parts of resciit, ierant, conquirerent, reducerent, vellent, accepit, erant profecti, reverti, jussit and amissis.

State what kind of pronouns and give the inflection of quorum, his, sibi, iis and illi.

State to what conjugation the following verbs belong and give mode, tense, person and number of each form: ierant, vellent, erant profecti, reverti, tolerarent.

State to what declension the following nouns belong and give the genitive and ablative singular and nominative and genitive plural: obsidibus, fructibus, domi nihil, oppida.

Virgil.

- IV. Translate Aeneidos, lib. II., 438-453.
 - Hic vero ingentum pugnam, ceu caetera nusquam
 - 2. Bella, forent, nulli tota morerentur in urbe:
 - 3. Sic Martem indomitum, Danaosque ad tecta ruentes 4. Cernimus, obsessumque acta testudine limen.
 - 5. Haerent parietibus scalae, postesque subipsos.
 - 6. Ninunter gradibus; clypeosque ad tela sinistris

 - Procecti abjiciunt; prensant fastigia dextris.
 Dardanidal contra turres ac tecta domorum

 - Culmina convellunt; his se, quando ultima cernunt,
 - 10. Extrema jam in morte parant defendere telis:
 - 11. Auratasque trabes, veterum decora alta parentum, 12. Devolvunt: alii strictis mucronibus imas
 - 13. Obsedere fores; has servant agmine denso.
 - 14. Instaurati animi, regis succurrere tectis,
 - 15. Auxilioque levare viros, vimque addire victis.
- Why is forent (2) in the impassive sub-V. 1. iunctive?
 - What does more rentur (2) come from?
 - What is a testudo (4), and why so called? 3.
 - What is the construction of gradibus 4. (6), dextris (7), tela (6), agmine (13), tectis (14)?
 - Mark the scansion of lines 10 and 13. ŏ. Prose Composition.

VI. Translate into Latin:

When Caesar found out that about five thousand men had left the camp, he ordered them to return to the place they had started from, and said that he would grant them permission to rebuild the houses they had burned.

FRENCH.

- 1. Give future ind., present sub., of aimer, punir, savoir, vendre, s'en aller.
- 2. Give principal parts of voir, dire, venir vouloir.
- 3. Give meaning and gender of each of the following nouns: Travail, soir, matin, vin, main.
- 4. Translate: Are you not hungry? No, but I am thirsty; give me some water. I will give you some soon; do not go away.
- 6. Translate: The woman I have loved. My dress and my sister's are white. He who is not good is certainly not happy. The flowers I brought were not at all pretty.
- 7. Give rules for the agreement of the past participle.
- 8. Translate: Have your friends gone to Europe? Mine have gone only to New York. Let us go, you and I. I have a headache; I must stay at home.
- 9. Translate: Savez vous chanter? Je ne saurais vous le dire. Il faut que ces gants-ci soient les miens on les votres. Pas que je sache. Mon frere est ici depuis deux semaines.
- 10. Translate: Sans savoir qui il etait je lui demandai. "Combien de temps y a-t-il de cela?" Il aurait du me le dire, mais il ne l'a pas voulu.

What do le and l' stand for in this sentence.

TRIGONOMETRY.

- 1. Describe and illustrate the different trigonometric functions.
- 2. Trace the change in sign and magnitude of the cotangent of an angle as the angle increases from 0 degree to 360 degrees.
- 3. Given sin, 38 deg. 25 min. equal 0.6213, sin. 38 deg. 26 min. equal 0.6216, find the angle whose sin. is 0.6215.
- 4. Explain how to use the ordinary logarithmic tables to find the logarithms, of (a) 563,728; (b) sin. 65 degrees, 28 minutes, 13 seconds.
 - 5. Prove:

(a) Sin.
$$A = \sqrt{1 - \cos^2 A}$$
.
(b) Cos. $A = \frac{1}{\sqrt{1 + \tan^2 A}}$.

6. Explain by diagram how to find the distance between two inaccessible points.

ASTRONOMY.

1. Explain what is meant by the terms "Siderial day," "Solar day," "Mean solar day," "Tropical year" and "Siderial year."

Describe in full the method of dividing time into days and years as used in the formation of the common calendar.

2. Describe the reason for the inequality in the length of days and nights; at what times in the year are they of equal length?

How does the variation in length change with the latitude?

3. Describe the principle of the spectroscope and general method of using it to determine the chemical constitution of the sun.

What are the relative sizes and positions of the planets in the solar system?

4. What is meant by the diurnal and annual motion of the stars?

How is each explained and observed?

To a person at the North pole, what would be the apparent diurnal motion of the pole star "Polaris?"

5. What is meant by the terms "total" and "partial" eclipse of the sun; also of the moon?

PHYSICAL GEOGRAPHY.

- 1. Place the Earth in the Solar system; also give some idea of its relative size, also of its shape and dimensions in miles.
- 2. Sketch the distribution of land and water. Divide the Earth's surface into a Continental and an Oceanic hemisphere, giving an idea of the oceans and lands which would appear in each.
- 3. Describe five great continental versants (watersheds).
- 4. Give some account of the Gulf Stream, its causes and influence.
 - 5. What are Isothermal lines?
- 6. What are river deltas; how formed? Name an important one.
- 7. Under what circumstances will an inland lake be salt? State the reasons for this.
- 8. What causes the aridity of the climate of Colorado, or of any similarly situated region?
- 9. What forces are at work to change the contour of seaboards, either destroying or increasing the land area?
 - 10. What are Trade Winds and Doldrums?

GEOLOGY AND MINERALOGY.

- 1. Name five common rock-forming materials.
- 2. How do you distinguish between quartz and calcite?

- 3. How do you distinguish between gold and pyrite?
- 4. Name a type of animal or plant life characteristic of each of the following periods: Devonian, Carboniferous, Tertiary.
 - 5. Where is anthracite coal found?
 - 6. Where is salt found?
- 7. What are the proofs that the climate of North America was formerly warmer than at present?
 - 8. Describe a geyser.
- 9. How may we tell whether rocks found in different parts of the world belong to the same geological period or not?
 - 10. Discuss the formation of mountains.

ZOOLOGY.

- 1. Define organized and unorganized bodies. Tell how they differ in their manner of growth and give examples of each.
- 2. What are some of the most important characteristics of animals as distinguished from plants? (Give the most important first.)
- 3. Describe briefly the early development of the ova, naming the different stages and parts.
- 4. What methods of reproduction are found in the animal kingdom? Describe each and state in what branches it is most common.
- 5. Define parthenogenesis, hermaphroditism and alternation of generations. Give an example of the last in the animal kingdom.
- 6. What is the Darwinian theory as to the origin of species? What are some of the strongest proofs in support of the theory?
- 7. Define analogy, homology, embryology and biology.

- 8. Name the branches of the animal kingdom in order, beginning with the lowest.
 - (a) What are the chief characteristics of each?
 - (b) Give at least one example in each.
- 9. Make a drawing of an amoeba or a hydra; label fully all the parts; state to what branch, class and order the animal belongs.
- 10. Put Sitting Bull in his proper branch, class, order, family, genus, species and variety of the animal kingdom.

CHEMISTRY.

- 1. What ideas are involved in the terms "atom" and "molecule."
- 2. Suppose two volumes of ammonia gas, NH3, to be decomposed into the elements N and H, how many volumes of the elementary gases will be generated?
 - 3. Discuss the formula of water.
- 4. Write the symbols of the following substances: Caustic potash, ferric oxide, calcium nitrate, ortho-phosphoric acid, sodium sulphate.
- 5. Describe one of the following equations (making your own choice), naming each substance and explaining the reactions:
 - (a) $BaCl_2 + Na_2 SO_4 = BaSO_4 + 2 NaCl.$
 - (b) $3 \operatorname{SiF}_{4} + 4 \operatorname{H}_{9} O = 2 \operatorname{H}_{9} \operatorname{SiF}_{6} + \operatorname{H}_{4} \operatorname{SiO}_{4}$.
 - (c) $3 \text{ Cu} + 8 \text{ HNO}_3 = 3 \text{ Cu} (\text{NO}_3)_2 + 2 \text{ NO} + 4 \text{ H}_2 \text{ O}$.
- 6. What elements are most important for fertility in a soil?
- 7. Explain the function of carbon dioxide in nature.
- 8. Name five of the most common elements and state where each occurs most abundantly in nature and in what condition.
- 9. What are the effects produced upon the volume of a gas by changes in temperature and pressure?

10. Select for yourself an element not named in answer No. 8 and describe some of its properties.

LOGIC.

- 1. Give an example of each: Singular term, general term, collective term, concrete term, abstract term.
- 2. State and analyze logically a categorical proposition.
- 3. State and explain distribution of terms in "E."
- 4. Show the relation between inductive and deductive reasoning.
- 5. State and explain the law of distributed middle. Show a fallacy under this law.
 - 6. Give an example of hypothetical syllogism.
- 7. Give an example of fallacia accidentis; of petitio principii; of argument from consequences.
 - 8. Give an example of reasoning by analogy.
- 9. State and illustrate one of the canons of induction.
- 10. (a) What is the fallacy of non-observation? (b) Point out the fallacy in each of the following examples:

Books are a source both of instruction and amusement; a table of logarithms is a book; therefore, it is a source both of instruction and amusement.

All the works of Shakespeare cannot be read in a day; therefore, the play of Hamlet, being one of the works of Shakespeare, cannot be read in a day.

Italy is a Catholic country and abounds in beggars; France also is a Catholic country and therefore abounds in beggars.

POLITICAL ECONOMY.

- 1. What is the aim of political economy? State the "mercantile theory."
- 2. Define wealth, capital, value, money and wages.
- 3. Name the requisites of production. What kinds of labor are usually called unproductive by writers on economics?
- 4. Whence is capital derived? Name the chief causes affecting the efficiency of production.
- 5. Explain the "Malthusian doctrine." What is meant by the "law of diminishing returns?"
- 6. What arguments are advanced by those who deny the right to individual ownership of property? What are the strongest objections to communism?
- 7. What causes determine the wages of labor? To what extent are strikes justifiable? Distinguish between real wages and money wages.
- 8. State Ricardo's theory of rent. How does rent paid for the use of land differ from interest paid for the use of money?
- 9. What is meant by a double standard in money? Give, briefly, arguments for and against the double standard.
- 10. The need of taxation being admitted, upon what principles should taxes be levied? What are the objections, if any, to an income tax?

STATE NORMAL INSTITUTES.

One great need in our common schools is that of more professionally trained teachers. The state has been singularly fortunate in securing many strong educators from Eastern states. Many of these enjoy the advantage of either college or university training; others have had special training in normal schools. Our own state normal school has sent into the ranks of the profession many well-prepared teachers, although the school is only four years old.

The graduates from our state normal school have already been very instrumental in directing and inspiring others in their respective communities to a fuller investigation of pedagogical principles.

Although we have many exceptionally well qualified teachers, the fact still remains that a very considerable part of the teaching force of the state is made up of inexperienced persons, many of whom have no higher training that that furnished by some high school, while still others have never passed anything higher than the common schools.

The state normal institutes have been organized especially for the last-mentioned class of teachers. The state has been divided into thirteen districts, and each institute, prior to this biennial term, has been granted \$50 by the state legislature for each summer institute of two weeks. This fund, together with a \$1 registration fee, and \$2 appropriated by the county commissioners for each teacher in attendance, has heretofore maintained the institutes in a fairly creditable manner.

The lack of the \$50 appropriation by the last state legislature has very seriously impaired the efficiency of the institutes. The small enrollment of the institutes during the summer of 1893 is accounted for by the fact that the teachers attended the World's Fair at Chicago. The attendance during the summer of 1894 was very gratifying.

It would certainly be a wise act for the Tenth General Assembly to amend the school law so that all applicants for a teacher's certificate be charged a fee of \$1, and the fund resulting therefrom be turned into the state normal institute fund. The state should also appropriate \$100 instead of \$50; then the institutes will become more efficient.

The instructors in these two weeks' summer institutes should be the strongest in the state. The institute should not develop into a school for preparing individuals for examinations. There should only be enough matter presented to illustrate the latest and best pedagogical principles. The ultimate aim should not be knowledge and matter, but method and inspiration.

SUGGESTIVE SYLLABUS OF WORK FOR THE STATE NORMAL INSTITUTES.

This suggestive syllabus of work for state normal institutes is not sent out to supplant any work that has been prepared by the different executive committees or conductors, but to supplement and reenforce it, and to be used in the absence of a better one.

Select only such work as the teachers can do and do well. Many conductors allow teachers to attempt more work than can be done in a creditable manner.

If the institute is large and there are many teachers representing different grades of work, it would be well to divide the institute into two classes, one in which the academic work should receive special attention, and the other the professional work.

The work of the reading circle should be explained, and the teachers urged to pursue the full course the coming year. It would be well to devote some time to the new "State Course of Study for the Public Schools of Colorado."

Many teachers attend the institute as a matter of duty, desiring to set the proper example before the younger teachers. But all should attend, because they will be very much benefited. This is the first step towards professionalizing our work.

Instructors, as well as teachers, should make special preparation for the work of each day.

The instructor should have his work well outlined. "He should be able to see the end from the beginning." He cannot carry out any systematic course of instruction if his program is made out only from day to day.

Let no institute become a course preparatory for examinations.

Not so much time should be given to subject matter, only a sufficient amount to fully illustrate the latest and best natural methods.

We should have more knowledge of the principles of teaching, more skill in class work, more tact in school management, more liberal views of education, more knowledge of how to organize and conduct a school.

The interest manifested by the county superintendents is a true index to the interest of the teachers in the institute work.

GRAMMAR.

- 1. Scheme for sentence.
 - 1. Elements.
 - 1. Subject, (noun or its equivalent).
 - 1. Modifier.
 - 1. Adjective.
 - 1. Form—word, phrase, clause.
 - 2. Predicate, (a verb or its equivalent.)
 - 1. Modifier.
 - 1. Form—Word, phrase, clause.
 - 2. Object.
 - 1. Form—Word, phrase, clause. Any parsing or analysis that is done mechanically or from memorized lists does violence to the reason and defeats the most important object of the study.

- II. With the study of technical grammar should be connected regular, systematic practice in composition. Illustrate fully.
- III. Definitions, how and when to teach them; are verbatim definitions advisable? Does learner use his own definitions or those of the book?
- IV. Diagrams: Their proper use; how to teach children to diagram; lesson material.
- V. The text: Why it was written; uses to be made of it.
- VI. The verb.
 - 1. Classes with respect to form.
 - 2. Classes with respect to use.
 - 3. Voice; its use.
 - 4. Mode; methods of distinguishing.
 - 5. Tense; the division of time.
 - 6. Person and number; why applied to verbs.
 - 7. Conjugation of irregular verbs.
- VII. Careful study of infinites and participles.
- VIII. Course of study in language lessons.

ORTHOGRAPHY AND READING.

- I. The organs of speech.
 - 1. Names, location and use of each.
- II. Divide the letters into vowels and consonants. Give the sounds and diacritical markings of a; of e.
- III. Drill on i, o, u, giving sounds and diacritical markings.
- IV. First steps in reading should be by means of interesting conversations about objects and pictures. Make free use of blackboard.

- V. Full discussion of the different methods of teaching beginning to read, viz: the word method, the phonic method, the sentence method, the a b c method, the synthetic method, the object method, the picture method and the electric method. A modification of the word method is used with excellent results. The child learns the word as a whole by sound, and it seems reasonable that the written word should be learned in the same way.
 - VI. Teach one word well before taking another new word.
- VII. Do not make a fad of "so-called elocution."
 The test of oral reading should be: Does he read as he speaks?
- VIII. The primary object in reading should be to acquire thought. The understanding of the paragraph is the basis for the expression of it.
- IX. The word is the basis of our language and the unit of the sentence. The sentence is the unit of discourse.
- X. The psychology of reading.
- XI. Teach reading from the literary standpoint. Pupils should be led to appreciate the beauties of good literature and to acquire a taste for good reading.
- XII. Each teacher should prepare and discuss a list of good books suitable for supplementary reading.
- XIII. The dictionary, and how to use it.

ARITHMETIC.

- I. Addition and subtraction.
 - 1. Careful attention to form and grouping.
- II. Multiplication and division.
 - 1. Show relation to addition and subtraction.
 - 2. Associate multiplication and division.

III. Factoring.

- 1. Principles of numbers.
- 2. Prime—odd.
- 3. Composite—even.
- 4. Methods—
 - 1. By inspection.
 - 2. Drill with small numbers.
 - 3. Divide into largest factors first.
 - 4. First steps in involution should be developed here in a primary way.
- IV. Greatest common divisor and least common multiple.
 - 1. Give thorough drill, making application of the principles developed in the first steps of factoring.

V. Common fractions.

- 1. Terms.
- 2. Value of.
- 3. Classes as to.
 - 1. Kinds.
 - 2. Value.
 - 3. Form.
 - 4. Reduction.
 - 1. Lowest terms.
 - 1. Applying factoring.

$$\frac{75}{120} = \frac{5 \times 5 \times 3}{5 \times 3 \times 8} = \frac{5}{8}$$

Always employ cancellation.

2. Mixed numbers to improper fractions.

1.
$$3\frac{2}{3}=?$$
1=3-3.
3=9-3.
9-3+2-3=11-3.

- 3. Common denominator.
 - 1. Reduce to least common denominator.

$$\frac{1}{2}$$
, $\frac{1}{2}$, $\frac{5}{6}$, $\frac{5}{6}$, $\frac{6}{7}$, $\frac{12}{12}$.
L. C. M. of 2, 3, 6, $\frac{12}{12}$.
 $\frac{1}{2}$ =6-12.
 $\frac{1}{3}$ =4-12.
 $\frac{5}{6}$ =10-12.
 $\frac{7}{12}$ =7-12.

- 4. Applications.
 - 1. Addition and subtraction.
 - Close attention to the form of the work.
 - 2. Multiplication.

2-5+
$$\frac{3}{4}$$
=6-20=3-10.
1-1× $\frac{1}{4}$ = $\frac{1}{4}$
1×2 $\frac{1}{4}$ =2-4.
 $\frac{1\times2}{1}$ × $\frac{1}{4}$ =2-4.

$$\frac{1 \times 2}{1 \times 5} \times \frac{1 \times 3}{4} = \frac{6}{20} = \frac{3}{10}$$
3/8 of 40=15.

3% of a number equals three times oneeighth of the number, or one-eighth of three times the number.

Give many problems involving cancellation.

- 3. Division.
 - 1. Common denominator.

7-9÷
$$\frac{3}{8}$$
=?
L. C. M. of 9, 8=72.
1=72-72.
 $\frac{3}{8}$ =27-72.
7-9=56-72. 56-72÷27-72=2 2-27.

2. By inversion.

7-9÷
$$\frac{3}{8}$$
=?
7-9×8-3=56-27=2 2-27.
1÷1=1.
1÷ $\frac{1}{8}$ =8.
1-9÷ $\frac{1}{8}$ =8-9.
7-9÷ $\frac{1}{8}$ = $\frac{1}{9}$.
7-9÷ $\frac{1}{8}$ = $\frac{1}{9}$.
7×8 56 9×3 27=2-27.

Do not lose sight of the analysis.

In division of fractions, the divisor is inverted to determine how many times it is contained in one.

This work in common fractions should all be developed by means of objects.

VI. Denominate numbers.

- 1. By use of objects.
- 2. Discourage mechanical work.
- 3. Have a reason for all work.
- 4. Do not commit tables—develop them.

VII. Percentage.

- 1. Terms.
 - 1. Percentage.
 - 2. Sign of per cent.
 - 3. Base.
 - 4. Rate.
 - 5. Amount or difference.
- 2. Ignore the formulas.
- 3. Cases.
 - Find 2% of 45.
 100%=45.
 1%=-45.
 2%=-9.

2. 9 is what per cent of 45?

45=100%.

I=100-45%.

9=900-45=20%.

3. 15 is 5 per cent of what number?

100%=base.

5%=15.

1%=3.

100%=300.

4. 120 is 20% more than what number?

100%=base.

100%+20%=120%=120.

15=1.

100%=100.

So is 20% less than what number?

100%=base.

100%-20%=80%=80.

1%= I.

100%= 100.

Pay close attention to the analysis and form of work. Give some attention to mental arithmetic.

UNITED STATES HISTORY.

- I. Subdivision of subject.
 - a Era of preparation—1492—1775.
 - 1. Period of exploration—1492—1607.
 - 2. Period of colonization—1607—1689.
 - B. Period of unification—1689—1775.
 - b Era of formation—1775—1829.
 - Period of separation—1775—1783.
 - 2. Period of organization—1783—1789.
 - 3. Period of nationalization—1789—1829.
 - c Era of reformation—1829—1893.
 - 1. Period of agitation—1829—1861.
 - 2. Period of emancipation—1861—1865.
 - 3. Period of re-nationalization—1865— 1893.

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- II. Discuss other sub-divisions prepared by the teachers.
- III. Pictorial history and aids.
- IV. Territorial development of the United States.
- V. Why the United States came to be an English speaking nation.
- VI. Political and financial movements traced in their development and effect upon the national life.

VII. Principles.

- 1. First steps—narrative.
- 2. Oral instruction.
- 3. Biographical at first.
- 4. Facts and philosophy.
- 5. Induction.

VIII. Essentials.

- 1. General reading.
- 2. Associate with literature.
- 3. Biography.
- 4. Leading events.
- 5. Historical centers.
- 6. Peace.
- 7. Cause and effect.

IX. Methods.

- 1. Topic.
- 2. Question.
- 3. Essays.
- 4. Discussion.
- 5. Geography combined.
- 6. News of the day once a week.

CIVIL GOVERNMENT.

- I. The preamble.
- II. Legislative branch.
 - 1. Senate.
 - 1. Qualifications.
 - 2. Classes.
 - 3. Presiding officers.
 - 4. General provisions.
 - 2. House of Representatives.
 - 1. Number of members.
 - 2. Qualifications.
 - 3. Apportionment.
 - 4. Vacancies.
 - 5. Officers.
 - 3. Powers of Congress.
 - 4. Powers denied the United States.
 - 1. Habeas Corpus.
 - 2. Bill of attainder.
 - 3. Direct taxes.
 - 4. Commerce.
 - 5. Money drawn.
 - 6. Nobility.
 - 5. Powers denied the states.
 - 1. Treaties.
 - 2. General.

III. Executive branch.

- 1. President.
 - 1. Qualifications.
 - 2. Powers.
 - 3. Term.
 - 4. Manner of choosing.
 - 5. Oath.

- 6. Duties.
- 7. Message.
- 8. Impeachment.
- 2. Presidential electors.
 - 1. Number.
 - 2. Nomination.
 - 3. Election.
 - 4. Meeting.
 - 5. Signing lists.
 - 6. Action in Congress.
 - 7. House of Representatives.
 - 8. Joint-high Commission.
 - 9. President's cabinet.
 - 1. How chosen.
 - 2. Organization.
 - 3. Presidential succession.
 - 3. Vice-President.

IV. Judicial branch.

- 1. Supreme Court.
 - 1. Organization.
 - 2. Jurisdiction.
- 2. Inferior courts.
- 3. Circuit Court.
- 4. District Court.
- 5. Territorial court.
- 6. Supreme Court of D. C.
- 7. Court of claims.
- 8. Consular courts.

GEOGRAPHY.

I. Methods.

- a Synthetic.
 - 1. Familiar objects.
 - 2. Knowledge of home surroundings.
 - 3. Go from facts to cause.

- b Analytic.
 - 1. Globe used first.
 - 2. Comparative size.
 - 3. Causes of day and night.
 - 4. Whole to parts.
- c Stages of progress.
 - 1. Perceptive.
 - 1. Oral instruction.
 - 2. Modeling board.
 - 2. Constructive.
 - 1. Idea gained beyond that known.
 - 2. Land, desert, plain.
 - 3. Animals.
 - 3. Faculties.
 - 1. Perceptive.
 - 2. Conceptive.
 - 3. Memory.
 - 4. Imagination.
 - 5. Judgment and reason.
- II. United States.
 - 1. Surface and divisions.
 - 2. Climate and agriculture.
 - 3. Cities and what have made them.
 - 4. People.
 - 5. Commercial routes.
 - 6. Government.
 - 7. Points of special interest.
- III. When the study of geography should begin.
- IV. Our purpose in teaching it.
- V. Course of study in geography.
- VI. The part supplementary reading should sustain in the study of geography.

SCHOOL LAW.

- I. School officers mentioned in the state constitution.
- II. Duties of Superintendent of Public Instruction.
- III. Duties of County Superintendent of Schools.
- IV. Duties of School Directors.
- V. Duties of Teachers.
- VI. Arbor Day.
- VII. Kindergarten.

·MANAGEMENT.

- I. Teacher's qualifications.
 - 1. Common sense.
 - 2. Realize difficulty of the work.
 - 3. Realize position as one of highest dignity.
 - 4. Labor for higher standard.
 - 5. Adapt one's self to circumstances.
 - 6. Not to overtask pupils.
 - 7. Not to refer to personal defects.
 - 8. The teacher should cultivate cheerfulness, select proper companions, form good habits, have no hobby and avoid sectarianism.
 - 9. Knowledge of subjects taught.
 - 10. General knowledge.
 - 11. Teaching power.
 - 1. Securing attention.
 - 2. Power in analysis and synthesis.
 - 3. Facility of expression.
 - 1. Well-chosen words.
 - 2. Ready use of best words.
 - 4. Facility of illustration.
 - 1. Artistic.
 - 2. Practical.
 - 3. Scientific.

II. Whispering.

- 1. Secure co-operation of pupils.
- 2. Be cheerful.
- 3. Intelligent work is the best preventive.
- 4. Treat as a disease.
- 5. In extreme cases, have no work until all is quiet.
- 6. Coaxing or rewards will not do.
- 7. Silence is golden—cultivate a spirit for right doing.

III. Tardiness.

- 1. Attractive exercises early in the day.
- 2. Special reports on interesting subjects from those who have the habit.
- 3. Have lesson they think most of early.
- 4. Teach by example.
- 5. Apply to recitations.
- 6. Read short lessons illustrating the effect of tardiness.

IV. Carelessness.

- 1. See that seats and books are in good condition.
- 2. Be careful in all your work.
 - 1. Walking.
 - 2. Talking.
 - 3. Class work.
- 3. Divide your work.
- 4. Give pupils drill in walking, talking and handling books and slates.
- 5. Cultivate the taste for quiet, simple ways.

V. Difficulties.

- 1. Bad predecessors.
- 2. Good predecessors.
 - 1. Commend good points.
 - 2. Never disparage his work.
 - 3. Present your methods.

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- 3. General prejudices.
 - 1. Gossip.
 - 2. Critics.
 - 3. Against new ideas or methods.
- 4. Bad habits.
 - 1. Whispering, tardiness and carelessness.
- 5. Indifference of parents.
- 6. Amount of labor.
 - 1. Study.
 - 2 Recitation.
- 7. Self-difficulties.
 - 1. Lack of preparation; special, general.
 - 2. Dislike.
 - 3. Love for certain branch.

VI. Object teaching.

- 1. Uses.
 - 1. Object lessons afford first efforts of gaining an empirical knowledge of things.
 - 2. They train the mind to habits of connected thought.
 - 3. They stimulate curiosity, the motive power of the mind.
- 2. Exercises.
 - 1. Numbers.
 - 2. Reading.
- 2. Composition.
 - 1. Flower.
 - 1. Where found.
 - 2. Name.
 - 3. Kind.
 - 4. Shape.
 - 5. Color.
 - 6. Parts.
 - 7. Use.

- 2. Apple tree.
 - 1. Class.
 - 2. Where found.
 - 3. Soil best adapted to growth.
 - 4. Uses.
- 3 Cat.
 - 1. Class of animal.
 - 2. Parts of body.
 - 3. Structure or body.
 - 1. Bones.
 - 2. Muscles.
 - 3. Blood vessels.
 - 4. Nerves.
 - 5. Blood.
 - 6. Brain.
- 4. Sciences.
 - 1. Botany.
 - 2. Physiology.
 - 3. Geology.
 - 4. Philosophy.

VII. Recitations.

- 1. Objects.
 - a To test pupil's preparation.
 - b To connect past lessons with the present.
 - c To see resemblances and contrasts.
 - d To reward the faithful and arouse the dull.
 - e To incite to a love of painstaking work.
- 2. Length of time.
 - a In primary classes.
 - b In advanced classes.
- 3. Division of time.
 - a Review.
 - b Advanced lesson.
 - c Criticisms.
 - d General information.

- 4. Assignment of next lesson—subjects and pages: How to prepare as well as what to prepare; what should be written and what should be oral. A first-class teacher works the class to the full measure of pupils' ability, but does not over-tax them. (Ogden, Greenwood and Baldwin.)
- 5. The recitation. The unprepared. Why should the pupil never be discouraged? Why should the cause of failure be ascertained? Of what use is it to have pupils know you expect good lessons? How can you impress the importance of close application? How can you make the pupil, in the case of chronic failure, feel the loss?

VIII. Art of questioning.

- 1. Principles.
 - 1. Questions must be adapted to capacity of pupil.
 - a What is it? For small children.
 - b How is it? For boys and girls.
 - c Why is it? For youth.
 - d Whence is it? For manhood.
 - 2. Questions are better than telling.
 - a Learner is led to discover for himself.
 - b Learner is trained to independent work.
 - c Learner is incited to greater mental effort.
 - 3. Questioning a great mental force.
 - a It directs effort.
 - b It awakens thought.
 - c It leads to close observation.
 - d It trains pupils to analyze and synthesize.

- 4. Questions should follow in natural order.
 - a Must have a well-defined object in view.
- 5. Questions carried too far are injurious.
 - a They confuse.
 - b Cause dependence on question.

2. General statements.

- 1. Teacher should be master of questions.
 - a Should construct his own questions.
 - b Should adapt question to subject and learner.
 - c As to subject matter.
 - 1. What is this or that?
 - 2. How is this or that?
 - 3. Why is this or that?
 - 4. Whence is this or that?
 - d Teacher must remember pupil gains knowledge.
 - 1. Of objects—by sense perception.
 - 2. Of subjects—by consciousness.
 - 3. Of relation—by thought and imagination.
 - 4. All knowledge is reproduced by a well trained memory.
 - e Learners may ask for aid when unable to advance.

3. Objects of questioning.

- 1. To direct effort properly.
- 2. To incite pupil to think for himself.
- 3. To arouse the dull and startle the inattentive.
- 4. To bring out the important details of a subject.
- 5. To test correctness and correct errors.

- 4. Questions in class.
 - 1. Question the whole class.
 - 2. Let each one who can answer raise the hand.
 - 3. Each member held responsible for his answer.
 - 4. Teacher listens to each answer.
 - 5. Discussion.
- 5. Objectionable questions.
 - 1. The world is round, is it not? Yes.
 - 2. Questions that indicate the answer. a Did Columbus discover America?
 - 3. Questions of alternate form.
 - a Is the world round or square?
 - 4. Questions that quote the answer.
 - 5. Questions that suggest the answer.
 - a By language.
 - b By emphasis.
 - e By inflection.
 - d By expression.
- 6. Questions to be avoided.
 - 1. Include too much.
 - 2. Pointless or silly.
 - 3. Kill time.
 - 4. Pert.
 - 5. Pedantic.
 - 6. Hap-hazard.
- 7. Answers.
 - 1. To point.
 - 2. Clear.
 - 3. Direct.
 - 4. Concise.
 - 5. Definite.
 - 6. Complete.
 - 7. Original.

KINDERGARTEN.

Prepared by Laura E. Tefft.

Work for ten lessons.

Subjects: Paper folding, paper cutting, parquetry work, modeling, science work.

Paper folding—three lessons.

Material—Paper squares 4x4.

First lesson: Twenty-four life forms to second fundamental.

Second lesson: Forms of beauty from second fundamental and table cloth ground form.

Third lesson: Geometrical folding to illustrate plane figures.

Paper cutting—three lessons.

Material—folding paper, white and colored. Scissors, paste, pencil, mounting sheets, rule.

Series of designs from triangular ground.

Cuts to be perpendicular, horizontal, slanting, half slanting, circular.

Combination of cuts.

Original designs.

Parquetry work—two lessons.

Material—gummed paper, squares, triangles, circles, mounting sheets ruled.

Series of designs with circles, squares, right angled triangles, obtuse and right angled scalene triangles.

Lessons in colors.

Pure tones, shades, tints.

Combinations of colors.

Modeling—two lessons.

Material—clay. Modeling boards. Models.

Objects to be modeled—sphere, cylinder, cube.

Typical life forms based on these three solids.

Primary science—one lesson.

Typical lessons in plant and animal life.

The relation between the science work and busy work.

REPORT OF COMMITTEE ON COLLEGE PREPARATORY COURSES OF STUDY.

Presented to State Teachers' Association, December 30, 1891. In December, 1889, the college and high school section of the Colorado State Teachers' Association appointed a committee to prepare courses of study that, in essentials, would make uniform the high school courses of the state and recognize the same as adequate preparation for admission to Colorado colleges. Report of progress was made at the meeting one year ago, the work approved, and the committee enlarged and continued for further consideration.

A careful investigation of the educational opinion of the country reveals the following principles recognized as essentially determinative in the formation of the courses of study:

- 1. The course of study that best prepares for higher education should also be, in the essentials, the best preparation for intelligent citizenship and the active duties of life.
- 2. There should be no point in the primary or secondary courses of study where the student may not go on to higher education; i. e., the primary school, the grammar school, the high school, the college and the university should all be in line, as integral parts of one common system; so that the student desiring to advance may do so, with economy of work and time, whenever opportunity presents itself.
- 3. As regards secondary education, the high school represents a distinctive idea. Work that belongs essentially to the grammar grades should not be carried into the high school, excepting as applied study.
- 4. The university and college courses of study should be adapted so as to continue, without interruption, the work of the aproved high schools.

Recognizing the determining value of the preceding principles, the committee is unanimous in recommending the adoption of the following courses of study:

CLASSICAL COURSE.

Mathematics—Algebra, through quadratics; plane geometry. Latin—Latin Lessons with Grammar; Caesar's Commentaries, 4 books; Virgil's Aeneid, 6 books; Cicero, 7 orations; prose composition.

Greek—Greek Lessons with Grammar; Xenophon's Anabasis, 4 books; Homer's Illiad, 3 books; prose composition.

Modern Languages-German or French, one year.

Science-Physics, one year.

History-Ancient history.

English—Equivalent of the requirements of the New England Association of Colleges.

LATIN SCIENTIFIC COURSE.

Mathematics—Algebra, through quadratics; plane geometry. Latin—Latin Lessons with Grammar; Caesar's Commentaries, 4 books; Virgil's Aeneid, 6 books; Cicero, 7 orations; prose composition.

Modern Languages-German or French, one year.

Science—Physics, one year; chemistry, one year; biology, botany and geology, alternative with astronomy.

History-General history.

English—Equivalent of the requirements recommended by the New England Association of Colleges.

Drawing-Free hand mechanical.

SCIENTIFIC COURSE.

Mathematics—Algebra, through quadratics; plane geometry; plane trigonometry or solid geometry.

Foreign Languages—Three years of either Latin or German or division of the three years between the two languages, as schools may prefer.

Science—Physics, one year; chemistry, one year; biology, one year; (or biology one-half year and botany, one-half year; or physiography, one-half year and geology, one-half year, alternative with one full year of biology).

History-General history.

English—Rhetoric; and also the equivalent of the requirements of the New England Association of Colleges.

Drawing-Free hand and mechanical.

Science work, as recommended in these courses of study, needs definition. Mere knowledge of scientific facts is not the desired end, and will not answer the requirements of scientific study. The pupil should be led to investigate and thus arrive at conclusions as a result of his own, but properly guided, efforts. For that purpose he should be given opportunity for laboratory practice, not necessarily involving expensive equipment. The work in each of the sciences, physics, chemistry and biology, should cover one year, by daily lessons, for such study and investigation; and in the alternative studies, biology, physiography, botany and geology, half of one year.

The following text books, implying a thorough experimental course, will illustrate the plan of work recommended:

Physics—Worthington's Physical Laboratory Practice; or the Harvard Course of Preparatory Experiments; or Chute's Physics. Reference books: Deschanel, Ganot or Stewart and Gee. Chemistry—Smith & Keller's Experiments; or Shepard's Chemistry; or Reynold's Experimental Chemistry. References: Richter's Inorganic Chemistry; Barker's Chemistry; Mixter's Chemistry; Remsen's Advanced Chemistry.

Biology—Huxley and Martin, for full year's course; or, for half year, Sedgwick & Wilson, or MacGinley.

Physiography—Thornton's Physiography, or Guyot's Physical Geography, or Young's Elements of Astronomy, or the equivalent of any of these.

Botany-Gray or Campbell, with analysis of fifty specimens.

Geology—Shaler's First Book, or LeConte's, with actual field work.

It should be distinctly borne in mind that the science work as outlined is not required in detail. The remarks on methods and text books are intended as suggestive merely, in order that the various schools may understand the character of work that will be the more acceptable to the higher institutions. That which is asked is high standard of work, in which equivalents as to details will be equitably considered.

Equally important, but perhaps better understood, is the character of the preparation required in Greek, Latin, Mathematics and other specified studies. Quantity of work, without attendant high quality, cannot constitute adequate preparation.

The committee recommend the adoption of one, at least, and all, if possible, of these courses of study by the individual high schools of the state, and the addition of such teaching force and equipment as will enable all communities to have the advantage of superior recognition; and, also, the adoption of some plan similar, perhaps, to that used by the University of Michigan, whereby graduates of approved high schools may be admitted to the higher institutions on diploma, without examination.

It is also suggested that a standing committee be appointed to continue the work of the present committee as far as may be hereafter needed; provided, no change in requirements adopted shall be made without a year's notice, in advance, to the high schools and colleges of the state.

Signed for, and with the unanimous endorsement of the committee by $\dot{}$

P. W. SEARCH, Secretary.

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Committee:

JAS. H. BAKER, Denver High School, President-elect of University of Colorado.

ISAAC C. DENNETT, University of Colorado.

H. A. HOWE, University of Denver.

CHAS, S. PALMER, University of Colorado.

WILLIAM F. SLOCUM, JR., Colorado College.

P. W. SEARCH, Public Schools of Pueblo.

RESOLUTIONS.

Passed by the faculty, University of Colorado, December 17, 1891:

Resolved, That the president and faculty of the University of Colorado, subject to the endorsement of the board of regents, pledge themselves to adopt these courses of study for the preparatory school, if they are adopted by the college and high school section of the State Teachers' Association.

Resolved further, That the University will give one year's notice to the high schools of the state, before making any material change in the requirements for entrance to college.

The board of trustees and faculty of Colorado College have voted to adopt, for Cutler Academy, the courses of study recommended by the committee on college preparatory courses of study, if they are accepted at the next meeting of the State Teachers' Association.

WILLIAM F. SLOCUM, JR.,
President of Colorado College.

AUGUSTUS T. MURRAY.
Principal of Cutler Academy.

Colorado College, December 23, 1891.

The faculty of the University of Denver will accept these courses of study as a preparation for college, if they are adopted by the State Teachers' Association.

WM. F. McDOWELL, Chancellor.

December 29.

STATE LIBRARY.

HON. J. F. MURRAY,

Superintendent of Public instruction and State Librarian ex-Officio:

Dear Sir—I have the honor to report to you upon the condition of the state library as follows:

Upon assuming charge of the library in January, 1893, I found upon the shelves 7,472 volumes, besides a great number of pamphlets, magazines, etc. I was afterwards informed that there were 2,269 volumes that belonged to the library, in the store room

of the secretary of state, making a total of 9,741 bound volumes. I have received from all sources, up to date, 1,419 books and several hundred pamphlets.

I have handed to the Supreme Court library 216 volumes and sent out on exchange 40, leaving a total of 10,904 books now in the library, exclusive of

pamphlets and papers.

The room now occupied by the library is light and very pleasant, but altogether too small and crowded for convenience. While I think there have been some improvements made, I realize it is not what a state library should be, and I also realize it is not the fault of the librarian.

Perhaps it will not be out of place for me to mention the great necessity of an appropriation from the state for this department. It seems to me that now, when we are so soon to have a permanent place for it, it is time Colorado should awake to the fact that her library has too long been neglected and that she should now come forward and make an annual appropriation, sufficiently large to place it on an equal footing with other state libraries. I also think a board of library commissioners or a committee should be appointed to see that the money appropriated is judiciously expended.

I see by the reports of nearly all of the librarians for the last ten or fifteen years that they have been recommending an appropriation for keeping up the library, yet in all that time their recommendations have been unheeded, while there has been an outstanding debt of \$137.50 since 1885, for books that we have had to use, and that are now on our shelves, unpaid for.

While every other state in the Union appropriates from \$500 to \$3,000 annually for the purchase of books and periodicals, alone, the great state of Colorado appropriates nothing. We are obliged to depend upon exchanges and donations for addi-

tions to our library. We are under obligations to our United States Senators and Representatives for many books, pamphlets, speeches, etc.

I agree with many who consider it a very grave mistake that there was not some way provided whereby a goodly portion of the exhibit sent from Colorado to the World's Fair might have been permanently placed in this library.

It has also been suggested by many that the state historical society should be consolidated with the state library. As soon as we are permanently located, there certainly would be no more suitable place for keeping the many rare and valuable specimens and curiosities which are now in possession of the above mentioned society.

Prof. T. J. Staunton, of Cheyenne, Wyoming, informs me he has in his possession documents and papers on the early history of Colorado that might be of great value to our state in the future and that he would relinquish the same to us for a small recompense.

I would suggest that there be some way provided whereby the several state officers of Colorado should be required to place in the library one or more of their regular reports for future reference. But a small portion of the past reports can be found on our shelves to-day.

Respectfully submitted,

S. I. GOODSPEED, Librarian in charge.

I do not consider the state library as fulfilling the purpose for which it was established, and without going into any lengthy arguments I offer the folowing bill for the consideration of our law-makers. The department is under obligations to Hon. J. Warner Mills for assistance in preparing the bill.

A BILL

For an act to create "The State Library and Historical Society of Colorado," and make an appropriation therefor.

Be it enacted by the General Assembly of the State of Colorado:

Section 1. That there is hereby created what shall be known as "The State Library and Historical Society of Colorado," and the same shall be attached to and under the direct charge of the educational department of government, and the state superintendent of public instruction shall be the head officer thereof, under the official name of state librarian and curator. The board of education, consisting of the attorney general, secretary of state and superintendent of public instruction shall constitute the official board of the said society, and shall have the entire control of the property, service, affairs and functions of the said society, except they shall have no power to make anyone but the superintendent of public instruction state librarian. The secretary of state shall provide suitable and ample apartments for the accommodation of "The State Library and Historical Society of Colorado" at the seat of government, in which shall be kept the state library and all books, maps, charts and papers of any kind and other material illustrative of the history and progress of Colorado in particular and the west in general, and all exhibits, matters and things mentioned in the next section as especially committed to the care and duty of the said society. The said secretary of state shall also furnish the said society with all necessary furniture, shelving, stands, mounts, cabinets, stationery, etc., which the said board of the said society shall require.

Sec. 2. It shall be the duty of the said society to collect books, newspapers, magazines, charts and papers of every kind, and other material illustrative of the history and progress of Colorado in particular and the west in general; to procure from the early pioneers narratives of their exploits, perils and hardy

adventures; to secure facts and statements relative to the history, genius, progress and decay of our Indian tribes and cliff dwellers; to exhibit faithfully the antiquities and the past and present resources and condition of Colorado; and to represent the flora and fauna of the state and the rocks, minerals and enriosities as far as possible by collections in cabinets or otherwise. All the aforesaid books and collections and everything mentioned in this section, when secured by said society, shall belong to and be owned by the state of Colorado, but shall be under the charge and management as aforesaid, of the said All donations or bequests to the state of mineral, industrial or other displays, or of anything pertaining to the subjects mentioned in this section, shall be placed under the control and care of this society, likewise also the Colorado exhibit at the World's Columbian Exposition and all other exhibits by the state at any other other or future exposition or fair, when not otherwise expressly provided by la w.

Sec. 3. In addition to the state librarian and curator, there shall be an assistant librarian and curator and a secretary, to be appointed by the said board immediately after this act going into effect. It shall be the duty of the former to always be in attendance during business hours and to keep the library and rooms of this society open to the general public for free use and instruction each day of the week, from nine o'clock a, m, until five o'clock p. m., and at such other hours, if any, as the said board shall direct; also, to arrange the books, maps, papers, paper files, magazines, cabinets and all other effects and exhibits of the said society, so that the same shall be conveniently accessible to the public, and to keep himself or herself thoroughly acquainted with the same and everything belonging to the said society and where the same may be had or found and without cost or charge; cheerfully render all assistance to any person or persons requesting or desiring the same, in finding or examining any books,

works, papers, maps, etc., and all other things or exhibits in possession of the said society; and said assistant librarian and curator shall also make or have made from time to time, under the directions of the said board, and prepare catalogues of all books, papers, maps, exhibits, etc., and all other effects and exhibits belonging to the state and in the posession of the said society, and properly label both by the common, technical and scientific name. all the flora, fauna, curiosities, antiquities, rocks, minerals and ores, and all other exhibits and collections of the said society and perform such other duties as the said board may prescribe. The secretary shall be the custodian of the seal of the said society, which the said board are hereby authorized to design, have and use to authenticate any papers or acts of the said board; and said society shall keep a faithful record of all the meetings of said board, books therefor to be provided by the secretary of state, and shall also keep full and accurate minutes of all the transactions of the said society at the meetings of the honorary members thereof hereinafter provided for; also conduct all correspondence with other like societies throughout the states and territories and in foreign countries and attend personally to the exchange of publications and exhibits, when the society has duplicates, upon such terms as the said board may provide; also, to collect all books, maps, exhibits of flora, fauna, minerals, papers and products, historical narratives, magazines, etc., as far as possible, and properly arrange, place and bind the same, and in general perform such other duties as the said board may prescribe. No salaries shall be paid any members of the said board, but any member thereof shall be allowed his actual expenses for any trip or service previously ordered or directed by the said board, but before the auditor shall draw his warrants therefor the said board must audit the said expense and so notify the state auditor, who shall then issue his warrant therefor.

The assistant librarian and the curator shall receive an annual salary of \$1,000, and the said secretary shall receive an annual salary of \$1,200, and they shall each take their office as soon as appointed by the said board and remain in office until removed by the joint action of the said board and honorary members hereinafter mentioned, assembled in joint session.

Sec. 4. There shall be an "honorary roll of membership" kept by the secretary, open to public inspection during business hours, in a well-bound book for such purpose provided by the secretary of state.

Every retiring member of the said board shall be an honorary member of the said society, and all present, future and retired presidents of the State University, State Normal School, State School of Mines, State Agricultural School and Mute and Blind Asylum are hereby also made honorary members. The said board and honorary members above provided for shall hold a joint meeting on the first Saturday of the month following the day when this act takes place and shall have the power and be charged with the duty of then electing to honorary membership, without regard to creed, politics, race or sex, such citizens of this state of good moral character as shall, by their special learning or qualifications along the lines of work marked out in this act, or by their special interest therein, commend themselves to a majority of those present of the aforesaid board and honorary members above provided for. And thereafter, any such citizen, without regard to creed, politics, race or sex, may be elected at any regular or joint meeting of said board and honorary members to honorary membership in said society by a majority vote of those present who are at the time entitled to vote by reason of being either members of the said board or of the said honorary roll of membership.

The joint meeting of the said board and honorary members, after the first meeting herein provided for, shall be held at the state capital at least once a year, at such time as the said board shall fix, due notice of which shall be given to all members. At such joint meeting, ten members shall constitute a quorum for the transaction of any business, except to adjourn. When a quorum is present, besides the transaction of such business as the said board or secretary may bring before it, such papers shall be read or such addresses be delivered or discussions had, as shall have been provided by the said board in a suitable program previously arranged.

No salary, traveling or other expenses shall be allowed to any honorary member except upon written contract with the said board, when some special service is performed for which it is provided in advance. The joint meetings mentioned above shall be public; as shall also be all meetings held by the said board, of which a majority shall be a quorum for the transaction of all business. The regular meetings of the said board shall be at such times as the board shall fix; and upon personal notice by the secretary to each member, special meetings may be held at any time.

- Sec. 5. The said society shall not sell or in any manner transfer any of its books, papers, maps, collections or other property, without the consent of the general assembly.
- Sec. 6. Thirty bound copies each, of the several publications of this state, shall be and the same are hereby annually donated to the State Library and Historical Society of Colorado with which to augment its library by effecting exchanges with other societies and literary institutions; and that the same shall be delivered to the said society by the secretary of state.
- Sec. 7. There is hereby appropriated to the State Library and Historical Society of Colorado, out

of any funds in the state treasury, the sum of \$5,000, to be expended only by direction of the said board upon orders signed by the state librarian and curator and countersigned by the secretary, to enable the said society to supply needful book deficiencies in the several departments and to pay express, freight, postage and all other salaries herein provided for, and all necessary expenses and clerk hire duly authorized in advance by the said board and incidental expense.

Sec. 8. All acts and parts of acts in conflict with this act are hereby repealed.

Sec. 9. Inasmuch as the work enjoined by this act should begin without delay, in the opinion of the general assembly an emergency exists; wherefore, this act shall take effect and be in force from and after its passage.

GOOD TEACHERS.

"Survival of the fittest" should be applied to workers in our schools, but the present method results in the survival of the least fit. The hiring of favorites, regardless of experience or ability, and the fight to save a few dollars each month on teachers' wages is, in many instances, sending our best instructors into other avocations of life and their places in the schools are being supplied by inexperienced and inefficient individuals. When we consider the lasting influence of the teacher we should not inquire, "What must we pay to secure the services of Miss Successful Experience?" but "Can we get her at any price?"

THE EFFECT OF EDUCATION.

The world cannot get along without education any more than it can without labor and capital. It is the trinity of intelligence, labor

and capital that really rules the world. Take the railroads and telegraphs, for example; they need intelligent men; the accidents that occur come very largely from ignorance. But the effect of intelligence is noticeable everywhere, and also the effect of the want of intelligence. Asking an orange merchant in Tampa, Florida, if it paid to raise oranges, he replied: "That depends on the man; I know of two men who bought land side by side; both are strong and healthy; one is now at the end of twelve years worth about \$40,000; the other is worth about \$4,000; one is intelligent; the other doesn't think ahead."

An intelligent or rightly educated man can make money by farming in Kansas. A graduate of the Albany Normal School went to Kansas and taught; he left teaching and began to farm it; he is worth a good deal of money. In a conversation lately, he said: "The great bulk of those who come out with us are ignorant men; they have worked on a farm, but have no head for business; they don't succeed and lay it to the capitalists; they themselves are to blame."

An investigation into the production by labor now with that of fifty years ago (1840) has been published; it appears that the same number of men then that produced a thousand millions of dollars now can produce double that. In Great Britain it appears that the work of 225,000 men produced \$600,000,000 in 1800; now their labor produces \$1,600,000,000. This is the result of education; from improved methods, inventions, knowledge of means of applying capital to produce results.

It is apparent that the school is at the bottom of the world's progress. The best way to increase wealth and happiness is to increase education.

STATISTICS.

The department had, at great trouble and considerable expense, prepared a set of tables of original character, and deemed completeness and value. There were one hundred and twenty odd items taken from the county superintendent's report of each county, giving the amount of money collected for each fund; when and for what expended, giving the salary of each teacher in each county and the length of school term in each district. The number of mills tax, special and general, in each district; the condition of the school buildings, benches, books, etc. The statistics of each county were given by themselves, so that all might see the difference in our school conditions in each part of the state. After the tables were all prepared and ready for the printer, some one stole them. The department immediately set to work to re-copy the figures from the reports sent to this office by the county superintendents. When this work was well under headway, the reports of 1894 from the county superintendents were stolen. Thus the department was under the necessity of putting out the report with the present meagre statistics or not issue the report at all.

THANKS FOR ASSISTANCE RENDERED.

The department desires to return its thanks to the entire school force of the state for kindly aid, counsel and support given during this administration. The various county superintendents placed themselves with their experience at our disposal, and valuable indeed was the assistance rendered. Those who give character to our schools, Professors Baker, Snyder, Ellis, Chauvenet, Gove, Greenlee, Van Sickle, Pattison, McClung, Matthews and others, have stood close to the administration, and while not giving

countenance to every act of the department, have always given true counsel. All newspapers have treated the office fairly and given valued assistance. I would speak more particularly of the Rocky Mountain News, but every one knows that while Colonel Meredith was at the head of its editorial management, that paper was the champion of the school system in Colorado. May it so continue. If this administration has been of any special benefit to the school system of the state, it is to a great extent due to the above friendly influences.

THE DEPARTMENT.

If education is as valuable to our children as money, why not place the educational department on an equal plane with the other state departments? There should be an assistant with a salary of \$1,800; an appropriation of \$1,000 for a stenographer and extra clerical help, and \$1,000 for library purposes. If the railroads furnish transportation to the department, the present appropriation for traveling expenses (\$500) is sufficient, but if the railroads should not extend that courtesy to the superintendent, the above amount would fall far short of being enough. The law requires the state superintendent to visit each county at least once a year. To do this and attend the educational meetings requires an expenditure for traveling expenses of fully \$1,500 annually. Thus it is easily seen that if the superintendent does the amount of traveling he ought, the raliroads have to provide what the state should.

Over half the traveling done by this department during the past two years was by courtesy of the D. & R. G. road, whose officers only asked to know that it was in the interest of education to extend a helping hand.

All other roads sent us transportation, excepting the Gulf division of the U. P., the Cripple Creek

branches and the Rock Island. I give these facts that all may see that the law requires the head of this department to do more traveling than all the other state officers, and yet the appropriations are so exceedingly meagre that he must disobey the law or accept courtesies at the hands of the railroads.

SCHOOL ATTENDANCE.

The school workers of the state have reason to congratulate themselves on the increase in daily attendance, but there are yet too many children out of school.

YEAR.	Pop.	Attend.
1889	85,824	35.054
1890	95.137	38,714
1891	103,020	43,706
1892	106,112	47.946
1893	116,119	46,187
1894	113,384	58,330

All money paid for schools in 1894, \$2,213,723.57. All money paid teachers in 1894, \$1,216,324.20.

THE COMMITTEE OF TWENTY-ONE.

Believing in agitation and counsel, the department asked for a committee of twenty-one to discuss the school question in all its bearings and offer suggestions as to needed legislation. The committee has had four sittings and much information has been gleaned which will take practical shape in legislation.

The special committee of twenty-one consists of the following educators:

First-County superintendents-

- E. T. Fisher, Grand Junction.
- A. D. Shepard, Denver.
- C. B. Timberlake, Holyoke.
- C. W. Bowman, Pueblo.
- S. T. Hamilton, Fort Collins.

Second—State schools—

Alston Ellis, Agricultural College, Fort Collins.

- J. H. Baker, State University, Boulder.
- Z. X. Snyder, State Normal, Greeley.

Regis Chanvenet, School of Mines, Golden.

John Ray, Mute and Blind Institute, Colorado Springs.

Third—From State Teachers' Association—

Aaron Gove, Denver.

- O. S. Moles, Logan school, Denver.
- J. H. Matthews, Castle Rock.
- P. K. Pattison, Colorado Springs.
- J. S. McClnng, Pueblo.

Fourth—City superintendents—

- J. H. Van Sickle, 336 Gallup avenue, Denver.
- A. B. Copeland, Greeley.
- J. S. McClung, Pueblo.
- T. O. Baker, Durango.
- Ed. H. Hermanns, West Denver High School, Denver.
- J. F. Mnrray, chairman, Denver.

A BILL.

For an act to amend sections 15 and 16 of chapter XCV11., entitled "Schools," of the General Statutes of Colorado (the same being general sections 3,010 and 3,011 thereof), and acts amendatory thereto.

Be it enacted by the General Assembly of the State of Colorado:

Section 1. That section 15 of chapter XCVII., entitled "Schools," of the General Statutes of Colorado (the same being general section 3010 thereof) and acts amendatory thereto, be and the same is hereby amended so as to read as follows:

Section 15. On the third Friday in August, December and March in each year he shall meet all persons of not less than 18 years of age desirous of passing an examination as teachers, in some suitable room at the county seat, notice of which shall be given in some newspaper in the county, or in case there is no paper published in the county, he shall give such notice as may be deemed necessary; at which time he shall examine all such applicants in orthography, reading, writing, arithmetic, English grammar, geography, history and constitution of the United States, civil government, physiology, sciences, theory and practice of teaching, and the school law of the state. If the applicant is to teach in a school of high grade, the examination shall extend to such additional branches of study as are to be pursued in such school. If satisfied of the competency to teach and of the good moral character of the applicant, he shall give such applicant a certificate as provided in the following section, but he shall not issue a certificate, except one of like grade, unless the applicant be examined at the regular stated examinations. He may, however, in case of an emergency, recognize county teachers' certificates issued in this or other states by endorsing thereon the words, "Good until the next regular county examina-

tion;" Provided, That the certificate so endorsed shall be in full force at the date of such endorsement, and shall not be renewed, extended, nor show a previous endorsement thereon. If the attendance upon the examination at the county seat shall work a great hardship to one or more teachers in the county, the county superintendent may provide for such teacher or teachers to take the examination at some convenient place under the direction of a deputy, who shall transmit to the county superintendent the written answers of each applicant as soon as the examination is completed. Such deputy shall receive the sum of five dollars (\$5) per day for conducting such examination, when such services are certified to the county commissioners by the county superintendent. It is hereby made the duty of the county superintendent, his deputy, or other person conducting an examination, to charge and collect a fee of one dollar (\$1) from each applicant at an examination, and for each certificate he may renew or endorse. Said fee shall be deposited with the custodian of the fund of the normal institute district in which the examination was held: and when so deposited shall be by him credited to the "Normal Institute Fund," as provided in section 81 of this chapter.

Sec. 2. That section 16 of said chapter (the same being general section 3011 of the General Statutes of Colorado), and acts amendatory thereto, be and the same is hereby amended so as to read as follows:

Sec. 16. The certificates issued by the county superintendents shall be of three grades, distinguished as first, second and third. The first grade certificate shall be valid for three years; and may be renewed by the county superintendent of the county in which it was issued; the second grade certificate shall be valid for eighteen months; the third grade certificate for nine months; Provided, however, that not more than two third grade certificates shall be issued to the same person. A county superinten-

dent may, upon the application of a teacher holding a first grade certificate received at a regular examination in another county in the state, and in full force at the time, issue to said teacher a certificate of like grade; Provided, That such certificate shall not show the standing in each branch, nor be subject to renewal, but shall show the conditions upon which it is issued. And he may revoke certificates of any grade at any time, for immorality, incompetency or other just cause. It shall be deemed a violation of law to grant certificates of any of the above grades, except one of like grade, without requiring the applicant to pass a thorough and satisfactory examination in such branches, and at such times as are specified in section 15 of this act; and in all such examinations the questions prepared by the superintendent of public instruction shall be used. In case a certificate is revoked or refused by the county superintendent, the right of appeal to the State Board of Education shall not be denied the teacher or applicant, if said appeal be taken within thirty days from date of notice of such revocation or refusal. county superintendent shall keep an official record, in a suitable book, of the persons so examined, containing the name, age, nativity, date of examination, and grade of certificate issued; he shall also retain for three months the written answers of all applicants at the regular examination, and hold the same subject to the order of the State Board of Education; Provided, Further, that in a school district of the first class, the examination may be conducted by the school board of such district in such manner and at such times as the board may determine, who shall have power to issue district certificates of the same grades and under the same conditions as are specified in sections 15 and 16 of this chapter. Said certificates, however, shall be reported to the county superintendent, who shall keep a record of the same and shall be valid only in the district where issued. boards, may, however, if they see fit, issue certificates

without examination to high school teachers who held satisfactory evidence of adequate training for the work they are to do.

A BILL

For an act to amend sections 52 and 73 of chapter XCVII., entitled "Schools," of the general statutes of Colorado (the same being general sections 3047 and 3068 thereof), and acts amendatory thereto. Be it enacted by the General Assembly of the State of Colorado:

Section 1. That section 52 of chapter XCVII., entitled "Schools," of the general statutes of Colorado (the same being general section 3047 thereof), and acts amendatory thereto, be and the same is hereby amended so as to read as follows:

Sec. 52. The school boards of districts of the first and second classes that do not maintain a high school, shall have power to transfer and to pay the tuition of a pupil or pupils who are qualified to enter the high school, to another district where a high school is maintained; or they may establish a separate high school whenever they shall deem it expedient or necessary, and shall have power to determine the qualifications for admission to such schools, and shall exercise all the powers with reference to such high school which are accorded to them in relation to the schools of lower grade. The school boards of districts of the third class shall have power to provide for a high school education under the same terms and conditions as are given to districts of the first and second classes, when authorized to do so by a vote of the district, as provided for in section 62 (63) of this act.

Sec. 2. That section 73 of chapter XCVII., entitled "Schools," of the general statutes of Colorado (the same being general section 3068 thereof), and acts amendatory thereto, be and the same is hereby amended so as to read as follows:

Sec. 73. The county superintendent shall apportion the funds aforesaid among the districts entitled to the same, according to the number of persons of school age, as shown by the census lists and reports of the several districts for the school year immediately preceding, as provided in section 72; Provided, That in all cases where pupils of one district are attending high school in another district, he shall apportion the per capita share of such pupils to the district in which the school is located, and such amount shall be credited on the tuition fee of such pupils.

AN ACT

To provide a state tax and to distribute the funds arising therefrom, the better to maintain a uniform system of free public schools, and to repeal all acts inconsistent therewith.

Be it enacted by the General Assembly of the State of Colorado:

Section 1. There shall be assessed and levied annually upon all the taxable property of the state a tax for the support of the free public schools in amount sufficient to make up the deficiency, if any, in the general school funds available for apportionment.

- Sec. 2. The amount necessary to be raised shall be calculated upon the school enrollment of preceding year. For every school district having a school enrollment of ten and not more than twenty-five, there shall be allowed the sum of two hundred and forty dollars (\$240); for every district having a school enrollment of twenty-five and not over seventy, there shall be allowed the sum of three hundred dollars (\$300); and for every seventy or fraction thereof above ten in any district, there shall be allowed the sum of three hundred dollars (\$300).
- Sec. 3. The funds arising from the levy provided for in this act shall be collected by the county treasurer in each county the same as other taxes, pre-

served in a separate account, and transmitted by him to the state treasurer monthly for the exclusive use and benefit of the free public schools of the state, and said fund shall be designated and known as the "Public School Tax Fund."

- Sec. 4. It shall be the duty of the state auditor to notify the superintendent of public instruction on the 30th days of March, June, September and December in each year of the amount of the public school income fund and of the public school tax fund in the state treasury subject to apportionment. Within ten days after receiving such notification the superintendent of public instruction shall apportion said fund among the several counties of the state according to the basis indicated in sections 2 and 5 of this act, as shown by the report of each county for the year next preceding.
- Sec. 5. The county superintendent shall apportion the general school fund on the basis prescribed in section 2 of this act; that is to say, upon the school enrollment of the preceding year as certified to him by the secretaries of the several school districts in each county. Districts having an enrollment of ten and not exceeding twenty-five shall be apportioned upon the basis of twenty-four persons; districts having an enrollment of over twenty-five and not exceeding seventy shall be apportioned for each seventy or fraction there of above ten, the same as for the first seventy; Provided, That to be entitled to a portion of the public school tax fund herein provided, districts must maintain at least sx months of school in each year.
- Sec. 6. Should the amount of the general fund in the county treasury after the last quarterly apportionment exceed the allowance for each school district as specified in section 2 of this act, then the remainder shall be distributed to the several districts upon their average daily attendance for the year next preceding.

Sec. 7. The apportionments of general school fund shall be made by the county superintendent on the first Monday of January, April, July and October, or as soon thereafter as the state apportionment shall have been received and certified to him by the county treasurer.

Sec. 8. All acts and parts of acts inconsistent with the provisions of this act are hereby repealed.

COURSE OF STUDY.

FIRST GRADE—FIRST YEAR.

Text Books—First reader, several kinds. Apparatus—Slate, pencil, sponge, rule.

Reading—Teacher should familiarize herself with all methods of teaching reading. Sentence, word, phonic and synthetic methods are commended for study. Use the method or methods with which you are most successful. Do not be a slave to any method. Use two or more first readers and suitable supplementary reading. Associate name words with the objects. Make free use of objects and pictures. Teach groups, using as early as possible such groups as, a boy, the big rat, the boy and his dog ran. Pronounce the articles a and the in connection with the word that follows and not separately. Use the blackboard and chart freely. Remove embarrassment of young pupils by frequent and familiar conversations. Insist on distinct articulation. Take words from the readers used by the pupils. When the class shall have become familiar with one hundred new words then take the text book. First reader completed. Pupils should be able to read at sight any selections from the first reader before they are promoted to the second reader.

Penmanship—Rule slate on half of one side. Use long pencils and teach correct methods of holding. Write all words learned. The pupil should be taught to write his name and residence.

Seat Work—Write words in reading lessons. Build words and sentences with letters on small blocks or pieces of pasteboard. Put objects into combinations for number work; make tables, using proper signs. Make free use of kindergarten material. The teacher should vary seat work to prevent its becoming tiresome, but should always avoid aimless employment.

Spelling—Teach spelling in connection with reading as soon as readers are used. Use both oral and written exercises. Pupils should be taught to spell by sound and to indicate by diacritical marks.

Numbers—Teach all possible combinations and separations of numbers from 1 to 10. The fractions 1-2, 1-3 and 1-4 should be developed. Teach the simple facts in denominate numbers, as foot, yard, pint, quart and gallon. Teach circle, square, triangle and other simple geometrical forms. Teach pupils to make neatly all figures used, and teach words representing numbers. Use in the work such objects as beans, pebbles, buttons and shoe pegs. Have pupils give original problems. Teach the use of signs +, -, \times , \div , =.

Counting from 1 to 100. Insist upon written work being neat. Teach such Roman numerals as are found in the reading lessons. Consult Wentworth's, Baldwin's and Appleton's arithmetics, Ginn's Number Lessons and the Grube method.

Language—Lead pupils to talk freely in recitations. Ask questions requiring more than "yes" and "no" for an answer. Read short stories and have the pupils reproduce them orally. Lead pupils to tell what they see on their way to school, or to describe a plaything or pet. Correct all errors of speech whenever made, without embarrasing pupils.

General lessons (Hygiene)—Oral lessons once a week. Talk to the children on everyday matters of health and of the pernicions effects of tobacco and alcohol on the system, giving special attention to cigarettes.

Physical Exercises—Calisthenic exercises or motion songs should be given at least twice a day.

Music and Drawing—Teachers should give such instructions in these subjects as time and ability will permit.

Sciences—Teachers should give general lessons on plants, animals, minerals and other subjects from elementary sciences. Let these lessons be prepared with care and given with a purpose and in logical order. Teach color and form. Such topics can be used as a basis for language lessons.

SECOND GRADE—SECOND YEAR.

Text Books—Second reader, several kinds. Apparatus—Slate, pencil, sponge, rule.

Reading (Second Reader)—Teach correct pronunciation of all words before attempting to read. Have pupils define words by using them in original sentences. Insist upon distinct articulation and natural expression. Have lessons reproduced both orally and in writing. Be sure that pupils get the thought in reading. Teacher should read to pupils from suitable books. Have pupils commit short selections. Pupils should be able to read at sight any selection in in the second reader before they are promoted to the third. Second reader completed. Use more than one reader if possible. Supplementary reading, Seaside and Wayside No. 1, Wood's Natural History Reader No. 1 and Nature Stories for Young Readers.

Seat Work—Make tables in number work. Reproduce reading lessons. Copy words in spelling from the blackboard. Study of reading lessons. Write original stories.

Penmanship—Analyze the letters, taking one at a time, following groupings Call attention to proper forms and point out common errors. Have some write on the board and let the class point out errors in formation, shading, slant and curve. Give a short time each day to theory, but remember that writing depends upon practice mainly. Give constant attention to position; to the manner of holding the pen and to free and easy movements. Before taking copy books, give about one-half the time of each lesson to practice on paper. Give much attention to forearm and muscular movement. Use pen and ink. Foolscap or legal-cap paper required in all grades for practice work. Require neat writing in all work of the grade and notice the movement and manner of holding the pen or pencil. Habits formed in other classes are hard to break up in the short time given to the writing class. Aim at legibility, neatness and rapidity.

Numbers—Review first grade work rapidly. Develop numbers from 10 to 30. Continue work in fractions, denominate numbers and simple geometrical forms. Omit the use of objects except in problems. Do mental work as much as possible. Continue work in original problems, but use small numbers. Count by twos and threes to 50, and by fives and tens to 100. Do not allow counting on the fingers. Aim at accuracy and rapidity in adding and subtracting numbers. Give daily drill in such work. Write and read numbers to 1,000. See reference books given in first grade.

Language—Combine language with other subjects. Insist on pupils speaking in complete statements. Teach use of capitals at the beginning of sentences, in proper names and in the words I and O. Write short letters. Fill eliptical expressions. Read short stories for reproduction work. Write stories from pictures. In preparing oral work for the first three grades of this course, consult such books as

Reed's Introductory Language Work, Metcalf & Bright's Language Course, Hyde's Lessons and Powell's Language Series.

General Lessons (Hygiene)—Once a week. These lessons should be simple and practical. Do not give them at hap-hazard, but as in all oral lessons, prepare them beforehand, developing a logical and systematic course. Impress them upon the children in such a way that they will observe and obey the teaching. Care of the teeth, diet, exercise, bathing, ventilation, tobacco, eigarettes and alcohol are the character of topics. Consult Pathfinders and other works on this subject. Use chart. Do not require definitions and technical terms. See instructions given in first grade.

THIRD GRADE—THIRD YEAR.

Text Books—Third reader, copy book and arithmetic.

Reading (Third Reader)—Require the pupils to give the substance of every reading lesson in their own language. Explain meaning of all new words. Supplemetary reading, juvenile history and geography, Seaside and Wayside No. 2, Fables and Folk Lore and King's Geographical Reader No. 1.

Penmanship—The copy book is introduced in this grade. Continue the work by the aid of principles. Have copies reproduced on the blackboard. Secure good position and accuracy. See second grade.

Spelling—Increase the work of written spelling. Have all proper names spelled as they occur in the reading lessons. Give spelling of words in classified groups, as the names of different articles used in the school room, the names of common animals, the names of different fruits, etc. Continue the work with diacritical marks.

Arithmetic—Use elementary arithmetic. Numbers from 30 up. Teach combinations, separations and comparisons of fractions. Give drill constantly for rapid work. Give practical examples, such as are met with in business life. Illustrate these with toy money, weights and measures. Make all analyses simple. Count by twos, threes and sixes to 100. Give special attention to learning multiplication tables.

Language—Continue the work from the second grade. Give attention to the use of singular and plural forms in writing. Teach the use of "be" in its different forms, also "have" and the possessive form of the noun. Teach the correct use of words having the same sound but different spelling, as right, write; there, their. Give special attention to the use of capitals in writing, and also to the proper ending of sentences, by teaching different forms of sentences. Have pupils write frequently original sentences of these four forms. Teach use of the comma in a series and in a direct address. Teach the use of the period in abbreviations, such as Mr., Dr., Colo., and with initials. Give the use of the comma in contractions, as "I'm" stands for "I am," "don't" for "do not." Teach the use of quotation marks. Give letter writing considerable attention. Teach the proper forms before the pupils write a letter. Much attention should be given to writing short stories, whether by the aid of pictures or as reproductions. From the first insist on such work being done in the proper form; subject at the top margin, indentation for paragraph, use of hyphen, when necessary at the end of a line, capitals, terminal marks and pupil's name below.

Geography--Do not use text books for this year, but geographical readers. Read to pupils from books of travel. Bayard Taylor's Views Afoot, Seven Little Sisters, King's Geographical Readers, Hall's World Readers, are excellent books for this purpose. Tell them of places you have visited. Teach directions:

east, west, north and south. Use these terms in describing position in the school room and on the play ground. Teach the distance of near places and the probable distance of those more remote, using the terms inch, foot, rod, yard and mile. Develop the idea of maps by representing the school room on the black board. Draw map of the school grounds and surrounding country. Develop the idea of hill, mountain, streams of water, etc. A globe should be had if possible. Aim in these lessons to give a clear outline of the image of the earth's surface, continents and oceans.

General Lessons—Continue as indicated in previous course.

FOURTH GRADE-FOURTH YEAR.

Text Books—Third reader, copy book, speller, arithmetics, language and geography.

Reading—Supplement with Hooker's Child Book of Nature No. 1, Seaside and Wayside No. 3, Stories of Our Country, or similar books. Teach use of the dictionary and require pupils to use it. Keep up the practice of phonetic spelling and diacritical marks through this and following grades. Supplementary reading, Our World Reader No. 1.

Penmanship—Continue as in previous grades.

Spelling—Begin with the book and complete about forty pages; use spelling blanks and insist on neat work. Give words from geography and other studies. Use words in sentences to illustrate their meaning.

Arithmetic—Elementary arithmetic completed. Review the fundamental rules. For the first four years in arithmetic, endeavor to secure accuracy and rapidity in addition, subtraction, multiplication and division of numbers rather than analysis and solution of problems. The reasoning faculties develop late.

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Language—Begin with the language book. Reproduction of stories and lessons, oral and written. Letter writing. Punctuation marks as used in lessons. Give work in abbreviations and contractions.

Geography—Finish primary work. Read from books of travel. Use wall maps and globes. In map drawing use free hand method. In this grade do not require minute knowledge of the subject, but require a thorough knowledge of the general and most important subjects. Make free use of modeling board and clay modeling. Give special attention to local geography. Teacher should consult King's Geographical Aids and Parker's How to Teach Geography.

General Lessons—Continue the work of hygiene, physical exercises, music, drawing and sciences, as indicated in first grade. Give lessons on topics of the day, morals, manners, government and history. Read selections from good books and endeavor to create a taste for good reading. Call attention to suitable books found in the school library.

FIFTH GRADE—FIFTH YEAR.

Text Books—Fourth reader, copy book, speller, arithmetic, geography, language, hygiene.

Reading—Complete first half of fourth reader. Give attention to arithmetic, pronunciation, emphasis, inflection and pauses, but make the thought in the lesson of the most importance. To enable the pupils to become possessed of the thought, a system of questioning is often necessary. Call for the meaning of all new words, and then have them used in original sentences. Encourage pupils to look up biographical allusions, and make free use of the dictionary. Historical readers should be used for supplementary reading. Stories of Our Country, Boston Tea Party and Eggleston's First Book in American History are good; also Montgomery's Beginners' American History and Information Reader No. 1.

Penmanship-See fourth grade.

Spelling—Continue in the speller to page eighty. Pay attention to homonyms.

Arithmetic—Practical arithmetic begun. pils should be able to apply practically the knowledge acquired in this grade, hence, give them much suplementary work in business problems, both mental and written. Lead pupils not only to state what they do, but why they do it. The pupil will have had much drill in mechanical operations, and he should now be able to apply principles. Make factoring impertant, teach greatest common divisor and least common multiple thoroughly. Use short rules for determining when a number is exactly divisable by 2, 3, 4, 5, 6, and 9. See that pupils make a practical use of these rules. Give close attention to analysis. Give frequent drills in the practice of solution of problems by inspection. Construct original problems in G. C. D. and L. C. M.

Language—Continue with the language book. Supplement the book with oral work. Give drill on the proper use of verbs often used incorrectly, such as lie, lay, teach, learn. Continue the work in letter writing and reproduction stories. Pay strict attention to the use of capital letters and the simple rules of punctuation, sentencing and paragraphing.

Geography—Begin with complete book. Make a thorough study of North America, United States and Colorado. Lead the pupil to observe closely as regards relief, life and home. From this, by the inductive process, have him build up the world as the dwelling place of men and the lower animals, productive of various kinds of vegetation and minerals. In studying the human family, animal life and resources, give philosophical reasons for their particular natural location. Omit the thousands of villages and small streams, but place considerable stress on physical features, agricultural products, etc. Study each continent briefly and include outline of maps,

showing relief, drainage and relative position. Give elementary instruction in mathematical geography. Study elevation, drainage systems and mineral locations as a basis for the study of climate, productions and industries. Teach topically. Give attention to the spirit of the subject, creating an interest. Do not waste time on unimportant map questions. In map drawing aim at fixing the outlines and general features rather than to produce a work of art.

Hygiene—Use Pathfinder No. 2 or some similar book. Study and recite; complete the book. Make use of charts. Make use of experiments when convenient. If preferred, this book may be used in connection with the reader and alternating with it.

General Lessons—Lessons under this head continued as in previous course.

SIXTH GRADE—SIXTH YEAR.

Text Books—Fourth reader, copy book, speller, arithmetic, grammar, geography.

Reading—Complete fourth reader. Supplement with historical and other reading. Continue work indicated in fifth grade. Study the authors of selections used, and endeavor to instill a love for good reading.

Supplementary Reading—Same as fifth grade, with the addition of Grandfather's Chair, by Hawthorne.

Penmanship—As in previous grades.

Spelling—Continue with the speller, complete about forty pages more. Use dictation exercises. Follow instructions of previous grades.

Arithmetic—Complete decimals and denominate numbers. Give much drill in the use of the decimal point and in writing decimals. Give practical work in bills and accounts. Give practical examples relating to the measurement of plastering, papering, carpeting, land, bins, boards, walls, cellars,

areas and solids of all kinds. Construct and solve original problems, continuing until pupils are familiar with such work. Pay strict attention to mental problems and analysis in denominate numbers.

Language—Complete elementary grammar. Study parts of speech. Analyze sentences. Use some good form of diagramming, but do not depend on diagrams alone; use thorough analysis in connection. Make lessons practical and inductive. Lead pupils to see the benefit of the study. Show with illustrations, for example, that past participle instead of past indicative, is always used after an auxiliary, hence the necessity of learning principal parts of irregular verbs. Continue language work by compositions, reproductions and stories, paragraphing, committing memory gems and punctuating.

Geography—Complete the book. Use instructions given in previous grades.

General Lessons—The same as in previous grades.

SEVENTH GRADE—SEVENTH YEAR.

Text Books—Selections for reading, copy book, speller, arithmetic, grammar, geography, United States history.

Reading—Reading from Sketch Book, Snow Bound, Evangeline and such other masterpieces of literature as there may be time for. Use selections from fifth reader if other books cannot be secured. These books are to be used primarily for reading, but incidentally, they should be made a study in literature. Study authors, point out the beauties of style and figures in speech. Inculcate a love for good literature. Pupils should be lead to appreciate the beautiful passages of these selections. Most reading is silent and mental. Pupils should be trained to think while reading, to recognize the thought while recog-

nizing and calling words. Make thought govern expression. "A mistake in emphasis is the mind's mistake."

Penmanship—Continue as in previous grades.

Arithmetic—Before beginning percentage give review lessons in decimal and common fractions. Solution of problems in percentage should be based upon analyses familiar to the pupils, in operations in common and decimal fractions. Give special attention to the "hundred per cent. method." Insist on the work being accurately and neatly arranged, each step being indicated. Apply the principles of percentage to profit and loss, commission, taxes, stocks, insurance, interest and discount. Make the writing of business forms prominent. Drill pupils on the different forms of notes, receipts, bank drafts and checks. Have many practical problems bearing directly upon these subjects.

Grammar—Complete one-half of the book. Develop originality of thought. Accept only good letter writing and good composition work.

Geography—Make a complete general review of geography by topics during the first four months of this year. Associate geography and history.

History—Begin the history of the United States as soon as geography is completed. Associate history and geography. Use many books for reference, and endeavor to have pupils investigate subjects and get information from other sources than the text books. Recite mostly by topics. Constant reviewing is necessary to fix these facts firmly in the memory. Make topical outlines to be put on the board by the class. Select a few dates. These should be the most important, and focal dates upon which other events may be grouped. These dates and the events which they mark should be fixed in the mind by repetition until they will cling through a lifetime. Do not waste much time on unimportant battles. Study causes and results. Better get the chief things well,

than to undertake much and have nothing retained. Review by subjects, such as the slavery question, acquisition of territory, exploration of the Spanish, etc. Study the origin and views of the different political parties. Teach constitution and government incidentally. Endeavor to create an interest and get pupils to consult other authors and read biography. Occasionally have compositions on historical subjects. Explain allusions to the contemporaneous history of the particular period under consideration.

General Lessons (Rhetoricals)—Each should recite a good selection at least once a month, and oftener if the teacher so desires. Require the selection to be committed one or more weeks before it is given. Essays or compositions may occasionally be read instead. If the teacher desires, the time from last recess of each Friday, or alternate Friday afternoons may be devoted to general rhetorical exercises, consisting of songs, readings, recitations, compositions, debates, and an occasional dialogue, if simple and it does not require a great deal of time and attention to prepare it. If preferred, the pupils may form literary societies and conduct these exercises under supervision of the teacher. Instead of taking this special time, the rhetoricals may be made a part of the morning exercises, having two or more give exercises each day in turn as their names come on the roll. This method is thought better for the higher grades at least. Quotations should be taught in connection with rhetorical exercises. This applies to all grades prepared to do the work.

EIGHTH GRADE-EIGHTH YEAR.

Text Books—Selections from literature, copy book, speller, arithmetic, grammar, history, civil government and physiology.

Reading—Read selections from English literature, Lady of the Lake, Miles Standish, Hawthorne's Wonder Book and Lamb's Tales from Shakespeare

are recommended. "Master Pieces of American Literature," which includes selections from a dozen of the best American prose and poetic writers is an excellent book to use in this grade. Continue the subject of authors and literature as indicated in the seventh grade.

Penmanship—Continue as before, also use business forms.

Spelling—Complete the subject. Teach primitive, derivative and compound words. Give special attention to the analysis of words, first having tanght the meaning of most common prefixes and suffixes. Every teacher should have some good work on word analysis. References—Kennedy's What Words Say and Swinton's Word Analysis.

Arithmetic—Complete the subject. Omit alligation, progressions and equation of payments. Give special drill in practical problems to supplement the book. Review the entire course.

Grammar—Complete the course and review the book. Require close analysis both oral and written, and by means of diagram. Pupils should be able to recognize and explain simple figures of speech. Selections from literature may be used for additional study in grammar.

History—Continue work as outlined in seventh grade. Complete and review the book.

Civil Government—Use elementary text book. Take sufficient time to ground the pupils thoroughly in the elements of the subject. Let the subject follow history or physiology, depending upon which may be completed first. If preferred, the teacher may alternate civil government with history. Supplement with much work on local government. Study the school districts, city, county and state governments. Develop patriotism.

Physiology—Complete the subject. Give special attention to that particular part of physiology including hygiene.

RULES AND REGULATIONS.

First—Each teacher will be required to have a copy of the course of study, at all times, in the school room.

Second—Teachers are expected to conform to the rules and regulations, and the plan of this course of study, and to see that the provisions therein set forth are properly carried out.

Third—Examinations. At the close of each month of the school term, or at convenient times during the month, teachers shall require the pupils of the fourth and following grades, to take written examinations or reviews, in which they shall be graded on a scale of 100 per cent. The monthly report cards, showing standing of pupils, shall be sent to the parents for their examination and signature, and returned to the teacher. The teacher shall be required to forward monthly statements of curollment, average daily attendance, and such other information as may be required, to the County Superintendent and Secretary of the District, upon blanks furnished by the County Superintendent.

Fourth—At the close of the school term, or year, the record in each branch studied, the number of days present, as shown by the daily register and by report cards, shall be recorded in the annual register by the teacher and filed with the Secretary of the District.

Fifth—Examinations for promotion. The County Superintendent of each county will prepare a uniform list of questions for the fifth, sixth and seventh grades. No pupil should be promoted to a higher grade unless he make an average of seventy-five, nothing below sixty; Provided, That a teacher may promote a pupil with his class after passing a part of the examination, on condition that he make up the studies he failed in and pass an examination at some

future time. The Superintendent will provide certificates of promotion to be given by the teacher to all who have completed the work of the grade.

Sixth—Final examinations. The County Superintendent of each county shall prepare a uniform list of questions for pupils preparing to complete the course. These examinations shall be conducted by the teacher and the papers forwarded to the County Superintendent. Pupils completing the course are required to make an average of eighty, no branch below seventy. Those who pass will receive a certificate that they have completed the course, signed by the County Superintendent, teacher and president of the board. No pupil shall receive a certificate who has not finished the complete course.

Seventh--Arrangements will be made whereby pupils who have completed the course of study may be admitted to the high schools of their counties without examination.

SUGGESTIONS TO TEACHERS.

- 1. In this revision you will notice that the number of grades is raised from five to eight to correspond to the "eight years'" work in the original course. The course now harmonizes with the eight grades in the city schools. The arrangement of classes will depend upon the conditions in your school. Combine grades wherever possible so as to reduce the number of recitations to the minimum.
- 2. It is expected that all work outlined in the course of study will be done as outlined, but teachers are expected to leave their mark in the result. Teachers are not expected to surrender their individuality. The course of study is simply intended to help—to guide—and your success will, as heretofore, depend upon the ingenuity and energy that you display.

- 3. Read the course of study with particular reference to what is required of each grade, and with reference to the amount of thought and activity on your part that is necessary to complete the work required. There is no "royal road" to learning. Teach by example that "work wins."
- 4. If any of the work outlined in the course of study is not thoroughly understood by you, do not hesitate to ask for information. The County Superintendent will gladly write to you or visit your school, if necessary, in order to render you assistance. "How to Organize and Classify a Country School," by W. M. Welch, should be consulted.
- 5. Ascertain in which grade of the course each pupil has most of his work and classify him in that grade. If he has not all his studies in this grade, mark the number of the grade in which such other studies are found under the headings for these respective studies. For example, if a pupil is classified in the fourth grade, but has arithmetic in the fifth grade, mark 5 above the figures indicating the pupil's standing, and in ink of a different color, in arithmetic column opposite his name in the register.
- 6. The first classification of any school is most difficult, and should be made with much care. Succeeding teachers will not change the classification left by their predecessors without good reasons.
- 7. The classification as left by each teacher in the register should show the status of each pupil at the close of the term, each being classified in the grade which he has just finished.
- 8. A pupil changing from one school to another in this state should receive from his teacher a certificate of his standing, which will enable the teacher whose school he enters to classify him without examination.
- 9. In case a pupil wishes to be excused from the performance of the work outlined in the course of study, talk the matter over with the parents, and, if

possible, convince them of their mistake in permitting the child to omit any portion of the work. If the parent presents a reason which seems to you valid, refer him to the School Board, as they alone have power to excuse. The work in physiology with special reference to the effects of narcotics and stimulants on the human system cannot be omitted, even by the School Board.

- 10. Parents should visit the schools, but if they do not, their negligence in no manner excuses teachers from visiting parents. Prove to them that you are really interested in the progress of their children and you will have their sympathy and support. Many misunderstandings may be avoided by visits to parents.
- 11. In all your labors with pupils and parent, be kind, courteous and just. "System, self-possession, energy and kindness on the part of the teacher are the best disciplinary agents."
- 12. It is a teacher's duty to care for the property, apparatus and supplies of the school. The fences and outbuildings should bear no marks that children should not see. Shield the innocent and virtuous from the vicious as far as possible. Do not fail to give due attention to character building, the primary object of education. Cultivate a love for home and country. Teach respect for the flag. Teach its history and have it floating from the school house whenever possible.

Aim at thoroughness; it is easier to promote a pupil than it is to put him back. A serious criticism on many of our schools is that children are in classes too high for them. This is a serious detriment to the children.

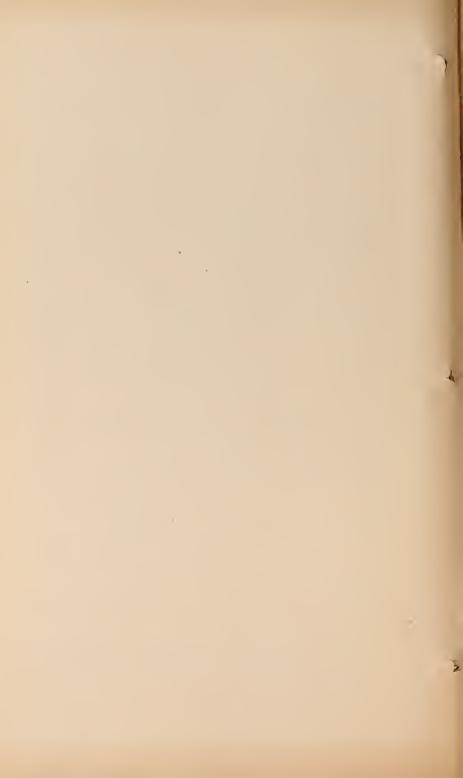
13. Discourage high school studies unless the pupil is well grounded in the lower studies and has passed the common school examination given by the County Superintendent. It is unfair to the primary

pupils to spend a large part of your time with one or two advanced pupils, even if you do like to teach the higher classes.

- 14. Be accurate and critical. Mistakes made in pronuciation and the use of language will be followed by pupils. It takes much more time to correct these errors afterward than to teach correctly at first. If you do not know a thing, say so frankly, and then take pains to find out. Refer pupils to the dictionary and consult it often yourself. Do not allow pupils to "guess." Good results are not obtained by urging pupils to tell what they are positive they do not know.
- 15. At all times furnish plenty of work for your pupils. Do not mistake innocent amusement for work. Profitable and constant occupation is the true preventive of disorderly conduct.
- 16. Ornament your school room with pictures and flowers and make it as attractive to pupils as possible.
- 17. Every teacher should own and read two or more good works on teaching. No teacher has any right to learn methods at the expense of the pupil.
- 18. In dismissing your school or in calling classes, use a signal and thus avoid confusion and save time.
- 19. Never allow your pupils to use forms for work that you would not use yourself. Your ideas of how work should be done are shown to parents and to others by your pupil's work.
- 20. Do not teach a single branch at a time, but teach all the branches at all times—i. e., never lose sight of language, history, orthography, etc., in any recitation.
- 21. Ask your questions in such a way that the pupils cannot mistake your meaning, and require a complete statement for an answer.

- 22. Tell little and develop much. Teach your pupils to think. It is what a pupil does for himself that benefits him.
- 23. Too much attention cannot be paid to articulation; a word mispronounced is almost certain to be misspelled.
- 24. If any grade has not completed the work for the year, state in your "remarks" how much has been completed. By making a record of the standing of the different grades, succeeding teachers can, by examining the daily register, go to work without the usual review or examination consequent upon a change of teachers.
- 25. In order that the record, as shown by the register, may have any value, we insist that all work passed over be done thoroughly. No true teacher will try to mislead parents, or her successor, by hastening over the work. It is hoped that this course of study and record of the standing of pupils will do away with this constant beginning at the "first of the book" at the beginning of each term, thereby discouraging both pupils and parents. If the subjects are properly presented, and the pupils are given sufficient time on each subject, there will be no necessity for this annual experiment. Do not be in a hurry in the beginning. Lead the pupil to know when he knows a subject and when he does not know it.

S. T. HAMILTON, J. P. JACKSON, E. T. FISHER, Committee on Revision.



Annual Reports of Counties.



ARAPAHOE COUNTY.

Personal Statistics—	MALE	FEMALE	TOTAL
School population between 6 and 21	17,024	17,206	34,230
Average daily attendance			15,289
Average monthly salary in graded schools	\$105 23	\$ 67 88	
Average monthly salary in rural schools	45 50	40 35	
Teachers employed in graded schools	56	359	412
Teachers employed in rural schools	24	109	133
Average number of days of school during the year in rural schools			126
Average cost per month for each pupil, based on average attendance			\$4 20
SCHOOL BONDS AND WARRANTS-			
Bouds now outstanding, or present bonded indebtedness.			\$666,100 00
District warrants now outstanding			7,967 61
TAX LEVY—			
Number of mills levied by the county for school purposes			218
Highest number of mills levied for special school fund by any district in the county			15
School Houses—			
			154
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$62,870 00
Schools having course of study			25
Schools owning text books			4
Received from fines, sales of estrays			\$2,732 00
County Superintendent's salary			3,000 00
PINANCIAL SUMM	IARY.		
RECEIVED-			
Total receipts			\$1,038,150 35
Paid-			
Total paid out during year			911,970 76

ARCHULETA COUNTY.

PERSONAL SUMMARY—	MALE	FEMALE	TOTAL
School population between 6 and 21	125	89	214
Average daily attendance			69
Average monthly salary in rural schools	\$62 25	\$50 10	
Teachers employed in rural schools	2	7	9
Average number of days of school during the year in rural schools		******	609
Average cost per month for each pupil, based on average attendance			\$5 07
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$ 3,000 00
District warrants now outstanding			425 95
TAX LEVY-			
Number of mills levied by the county for school purposes			5
Highest number of mills levied for special school fund by any district in the county			7
SCHOOL HOUSES-			
			6
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$1,097 80
Schools having course of study			3
Schools owning text books			3
County Superintendent's salary			\$416 09
FINANCIAL SUMM	ARY.		
RECEIVED-			
Total receipts			\$3,147 54
PAID-			
Total paid out during year			2,478 61

BACA COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21			495
Average daily attendance			309
Average monthly salary in rural schools			\$38 43
Teachers employed in rural schools			34
Days of school during year in rural schools			96
Cost per month for each pupil, based on average attendance	••••		\$5 26
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded			
indebtedness			\$5,000 00
District warrants now outstanding			4,104 49
TAX LEVY-			
Number of mills levied by the county for school purposes			3
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES—			
			24
MISCELLANEOUS—			
Estimated value of school apparatus, including maps, charts, globes, etc.			\$5 00
Schools owning text books			15
Received from fines, sales of estrays, etc			\$225 00
County Superintendent's salary			\$953 35
FINANCIAL SUMM	ARY,		
RECEIVED—			
Total receipts			\$ 11,300 50
PAID-			
Total paid out during year			8,922 94

BENT COUNTY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL
School population between 6 and 21	266	270	536
Average daily attendance	116	120	236
Average monthly salary in graded schools	\$80 00	\$60 o o	
Average monthly salary in rural schools	45 00	\$42 92	
Teachers employed in graded schools	2	3	5
Teachers employed in rural schools	4	10	14
Days of school during year in rural schools			102
Cost per month for each pupil based on average attendance			\$6 62
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding or present bonded indebtedness.			\$12,150 00
District warrants now outstanding.			1,696 12
TAX LEVY-			
Number of nulls levied by the county for school purposes			3
Highest number of mills levied for the special school fund by any district in the county			10
School Houses-			
			12
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$5,000 00
Schools having course of study			2
Received from fines, sales of estrays, etc			\$10 00
County Superintendent's salary			\$1,364 40
RECEIVED-			
Total receipts			\$12,412 84
PAID-			
Total paid out during year			10,101 75

SUPERINTENDENT OF PUBLIC INSTRUCTION. 167

BOULDER COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	2.425	2,381	4,806
Average daily attendance			2,416
Average monthly salary in graded schools	\$81 59	\$54 39	
Average monthly salary in rural schools	50 35	47 21	
Teachers employed in graded schools	10	40	50
Teachers employed in rural schools	16	46	62
Average number of days of school during the year in rural schools			126
Average cost per month for each pupil, based on average attendance			\$4 40
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness.			\$55,600 00
District warrants now outstanding			24,922 24
TAX LEVY—			
Number of mills levied by the county for school purposes			3
Highest number of mills levied for special school fund by any district in the county			18
School Houses—			
			57
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc	******		\$7,600 oc
Schools having course of study			33
Schools owning text books			2
Received from fines, sale of estrays, etc			\$283 00
County Superintendent's salary			\$1,797 00
FINANCIAL SUMM	IARY.		
			£65 003 :-
Total receipts			\$65,933 47
PAID-			
Total paid out during year			64.305 68

CHAFFEE COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL	
School population between 6 and 21	762	778	1,540	
Average daily attendance			819	
Average monthly salary in graded schools	\$104 44	\$65 26		
Average monthly salary in rural schools	58 00	53 27		
Teachers employed in graded schools	4	17		
Teachers employed in rural schools	s	25		
Average number of days of school during the year in rural schools			. 117	
Average cost per month for each pupil, based on average attendance			\$10 8 6	
SCHOOL BONDS AND WARRANTS-				
Bonds now outstanding, or present bonded indebtedness			\$48,000 00	
District warrants now outstanding			7,951 45	
TAX LEVY-				
Number of mills levied by the county for school purposes			2	
Highest number of mills levied for special school fund by any district in the county			15	
SCHOOL HOUSES-				
			29	
Miscellaneous—				
Estimated value of school apparatus, including maps, charts, globes, etc			\$6,254 95	
Schools having course of study			16	
Schools owning text books			5	
Received from fines, sales of estrays, etc			\$54 00	
County Superintendent's salary			\$1,328 00	
FINANCIAL SUMMARY.				
RECEIVED-				
Total receipts			\$43,727 01	
PAID—				
Total paid out during year			30,076 08	

SUPERINTENDENT OF PUBLIC INSTRUCTION. 169

CONEJOS COUNTY.

PERSONAL STATISTICS—	MALE	FEMA! E	TOTAL	
School population between 6 and 21	1,509	1,536	3.045	
Average daily attendance			1,285	
Average monthly salary in graded schools .	\$65 00	\$61 25		
Average monthly salary in rural schools	53 57	45 68		
Teachers employed in graded schools	6	4	10	
Teachers employed in rural schools	. 17	19	36	
Average number of days of school during the year in rural schools	******		98	
School Bonds and Warrants-				
Bonds uow outstanding, or present bonded indebtness			\$21,870 00	
District warrants now outstanding			5,694 60	
TAX LEVY-				
Number of mills levied by the county for school purposes			2	
Highest number of mills levied for special school fund by any district in the county			15	
School Houses-				
			28	
Miscellaneous-				
Schools having course of study			27	
Received from fines, sales of estrays, etc			\$32 50	
FINANCIAI, SUMMARY.				
RECEIVED-				
Total receipts			\$24,699 18	
PAID-				
Total paid out during year			19,305 88	

CLEAR CREEK COUNTY.

Personal Statistics—	MALE	FEMALE	TOTAL
School population between 6 and 21	896	938	1,834
Average daily attendance			948
Average monthly salary in graded schools	\$120 00	\$70 00	
Average monthly salary in rural schools	72 50	52 50	
Teachers employed in graded schools	4	16	20
Teachers employed in rural schools	2	II	13
Average number of days of school during year in rural schools			149
Average cost per month for each pupil, based on average attendance			\$5 66
SCHOOL BONDS AND WARRANTS-			
Bonds uow outstanding, or present bonded indebtedness.			\$21,720 00
District warrants now outstanding			1,380 25
TAX LEVY-			
Number of mills levied by the county for school purposes			2
Highest number of mills levied for special school fund by any district in the county			15
School Houses-			
			14
Miscellaneous-			
Estimated value of school appararus, including maps, charts, globes, etc.			\$3,238 00
Schools having course of study			3
Schools owning text books			I
County Superintendent's salary			\$1,097 00
FINANCIAL SUMMA	ARY.		
RECEIVED-			
Total receipts			\$38,092 58
Total paid out during year			29,275 26

SUPERINTENDENT OF PUBLIC INSTRUCTION. 171

CHEYENNE COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	67	55	122
Average daily attendance			100
Average monthly salary in graded schools	\$75 00	\$50 00	
Average monthly salary in rural schools		\$40 00	
Teachers employed in graded schools	1	I	2
Teachers employed in rural schools		5	5
Average number of days of school during the year in rural schools		*****	109
Average cost per month for each pupil, based on average attendance			\$ 8 40
SCHOOL BONDS AND WARRANTS-			
District warrants now outstanding			\$3,834 72
TAX LEVY-			
Number of mills levied by the county for school purposes			3
Highest number of mills levied for special school fund by any district in the county			15
School Houses-			
			6
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$1,419 00
Schools having course of study			4
Schools owning text books			4
County Superintendent's salary			\$900 00
RECEIVED-			
Total receipts			\$8,775 81
PAID—			
Total paid out during year			8,113 50

CUSTER COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	119	117	236
Average daily attendance			376
Average monthly salary in rural schools,	\$50 57	\$45 41	
Teachers employed in rural schools	II	16	27
Average number of days of school during the year in rural schools			97
Average cost per month for each pupil, based on average attendance			\$ 5 3 8
School Bonds and Warrants—			
Bonds now outstanding, or present bonded indebtedness			\$7,625 00
District warrants now outstanding			6,289 71
SCHOOL HOUSES—			
	• • • • • • • • • • • • • • • • • • • •		19
Miscellaneous-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$1,283 00
Schools having course of study			5
Schools owning text books			3
County Superintendent's salary			\$540 30
FINANCIAL SUMM	ARY.		
RECEIVED-			
Total receipts			\$11,838 30
PAID-			
Total paid out during year			10,109 01

COSTILLA COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	798	721	1,519
Average daily attendance			545
Average monthly salary in rural schools	\$43 50	\$43 04	
Average number of days of school during the year in rural schools			100
Average cost per month for each pupil, based on average attendance			\$2 87
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$7,605 0 0
District warrants now outstanding			3,889 17
TAX LEVY-			
Number of mills levied by the county for school purposes			2
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES—			
		*	20
Miscellaneous-			
Schools owning text books			9
Volumes in district library, exclusive of text books			4
County Superintendent's salary			\$575 00
FINANCIAL SUMM	IARY.		
RECEIVED—			
Total receipts			\$12,571 60
PAID-			
Total paid out during year			10,027 80

DELTA COUNTY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL
School population between 6 and 21	533	494	1,027
Average daily attendance			410
Average monthly salary in graded schools	\$100 00	\$61 66%	
Average monthly salary in rural schools	57 00	55 00	
Teachers employed in graded schools	I	6	7
Teachers employed in rural schools	12	6	18
Average number of days of school during year in rural schools			IoS
Average cost per month for each pupil, based on average attendance			\$4 90
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$19,050 00
District warrants now outstanding			6.752 75
TAX LEVY-			
Highest number of mills levied for special school fund by any district in the county			15
School Houses—			
			22
MISCELLANEOUS-			
Estimated value of school apparatus, including, maps, charts, globes, etc			\$620 00
Schools owning text books			16
Volumes in district library, exclusive of text books			2
County Superintendent's salary			\$1,070 79
FINANCIAL SUMMA	ARY.		
RECEIVED-			
Total receipts			\$18,988 S1
Paid—			
Total paid out during year			15,900 50

DOUGLAS COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	386	362	748
Average daily attendance			381
Average monthly salary in rural schools	\$100 00	\$70 00	
Average monthly salary in rural schools	50 0 0	43 30	
Teachers employed in graded schools	I	2	3
Teachers employed in rural schools	7	32	39
Average number of days of school during year in rural schools			120
Average cost per month for each pupil based on average attendance	••••		\$4 78
SCHOOL BONDS AND WARRANTS-			
District warrants now outstanding			\$621 90
TAX LEVY-			
Number of mills levied by the county for school purposes			3
Highest number of mills levied for special school fund by any district in the county.			10
School Houses—			
			27
Miscellaneous—			
Estimated value of school apparatus, including maps, charts, globes, etc			\$1,000 00
Schools having course of study			28
Schools owning text books			1
County Superintendent's salary			\$1,011 80
FINANCIAL SUMM	ARY.		
Total receipts			\$15,727 60
PAID—			
Total paid out during year			11,961 51

DOLORES COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL	
School population between 6 and 21	163	137	301	
School population between 8 and 14	73	64	137	
Average daily attendance			105½	
Average monthly salary in graded schools	\$1115	\$75 00	\$261 11	
Average monthly salary in rural schools		45 00	45 00	
Teachers employed in graded schools	I	2	3	
Average number of days of school during the year in rural schools			120	
Average cost per month for each pupil, based on average attendance			\$ 7 54	
SCHOOL BONDS AND WARRANTS-				
Bonds now outstanding, or present bonded indebtedness		*	\$1,000 00	
District warrants now outstanding			3,381 50	
TAX LEVY-				
Number of mills levied by the county for school purposes			8	
Highest number of mills levied for special school fund by any district in the county			5	
School Houses-				
Frame 1, brick or stone 1			2	
Miscellaneous—				
Estimated value of school apparatus, including maps, charts, globes, etc		\$	1,179,100 00	
Schools having course of study			I	
Schools owning text books			I	
Received from fines, sales of estrays, etc			\$1,189 81	
County Superintendent's salary			130 00	
FINANCIAL SUMMARY. RECEIVED—				
Total receipts			\$11,297 37	
PAID—				
Total paid out during year			11,107 18	

ELBERT COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 aud 21	344	309	653
Average daily attendance			$252\frac{3}{10}$
Average monthly salary in graded schools	\$75 oo	\$50 00	\$62 50
Average monthly salary in rural schools	46 00	42 42	44 21
Teachers employed in graded schools	2	2	4
Teachers employed in rural schools	5	20	25
Average number of days of school during the year in rural schools			133
Average cost per month for each pupil, based on average attendance			\$6 29
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$7,500 00
District warrants now outstanding			500 00
TAX LEVY—			
Number of mills levied by the county for school purposes			3½
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES—			
Number of sod, adobe or log, 3; frame, 17; brick or stone, 2			22
Miscellaneous—			
Estimated value of school apparatus, including maps, charts, globes, etc			\$2,000 00
Schools having course of study			5
County Superintendent's salary, \$870 00; amount mileage charged, \$100 00			\$970 00
FINANCIAI, SUMM	IARY.		
RECEIVED-			
Total receipts			\$20,241 14
PAID			
Total paid out during year			12,738 93

EAGLE COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	309	281	590
Average daily attendance			2521/3
Average monthly salary in graded schools			\$70 00
Average monthly salary in rural schools			61 00
Teachers employed in graded schools		4	4
Teachers employed in rural schools	2	27	29
Average number of days of school during year in rural schools			1205/8
Average cost per mouth for each pupil, based on average attendance			\$8 73
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness.			\$11,000 00
District warrants now outstanding			298 00
TAX LEVY-			
Number of mills levied by the county for school purposes			3
Highest number of mills levied for special fund by any district in the county			10
School Houses—			
Sod, adobe or log, 5; frame, 9; brick or stone, 2			16
MISCELLANEOUS-			
Schools owning text books			I
County Superiutendent's salary, \$1,125 94; amount of mileage charged, \$310 40			\$1,436 34
FINANCIAL SUMM	ARY.		
RECEIVED-			
Total receipts			\$16,808 23
PAID—			
Total paid out during year			12,068 33

EL PASO COUNTY.

SUMMARY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL
School population between 6 and 21	2,922	2,988	5,910
Average daily attendance			3,040
Average monthly salary in graded schools	\$130 35	\$74 00	
Average monthly salary in rural schools	64 00	44 15	
Teachers employed in graded schools	13	60	73
Teachers employed in rural schools	21	78	99
Average number of days of school during the year in rural schools			134
Average cost per month for each pupil, based on average attendance.		:	\$6 00
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$191,600 00
District warrants now outstanding			76,307 86
TAX LEVY-			
Number of mills levied by the county for school purposes			2
Highest number of mills levied for special school fund by any district in the county			15
School Houses—			
· · · · · · · · · · · · · · · · · · ·			66
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$11,492 00
Schools having course of study			70
Schools owning text books			40
Received from fines, sales of estrays, etc			\$1,150 95
County Superintendent's salary			2,500 00
FINANCIAL SUMM	ARY.		
RECEIVED-			
Total receipts			\$163,223 50
PAID-			
Total paid out during year			146,923 07

FREMONT COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	1,429	1,371	2,800
Average daily attendance			1,136
Average monthly salary in graded schools	\$76 25	\$62 50	\$70 00
Average monthly salary in rural schools	\$54 50	\$46 00	50 00
Teachers employed in graded schools	16	27	43
Teachers employed in rural schools	13	21	34
Average number of days of school during the year in rural schools			130
Average cost per mouth for each pupil, based average attendance			\$4 54
School Bonds and Warrants-			
Bonds now outstanding, or present bonded indebtedness			\$41,300 00
District warrants now outstanding			\$,5,271 57
Number of mills levied by the county for school purposes			4
Hignest number of mills levied for special school fund by any district in the county.			15
School Houses—			
			32
MISCELLANEOUS-	•		
Estimated value of school apparatus, including maps, charts, globes, etc			\$1,500 00
Schools having course of study			26
Schools owning text books			13
Received from fines, sales of estrays, etc			\$21 00
County Superintendent's salary			\$1,598 00
FINANCIAL SUMMA	ARY.		
RECEIVED—			
Total receipts			\$66,878 45
PAID—			
Total paid out during year			52,259 74

SUPERINTENDENT OF PUBLIC INSTRUCTION. 181

GUNNISON COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	535	572	1,107
Average daily attendance			602
Average monthly salary in graded schools	\$100 00	\$65 50	
Average monthly salary in rural schools	\$63 00	\$49 74	
Teachers employed in graded schools	2	8	10
Teachers employed in rural schools	3	35	38
Average number of days of school during the year in rural schools.			108
Average cost per month for each pupil, based on average attendance			\$6 24
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding or present bonded indebtedness			\$398 50
TAX LEVY-			
Number of mills levied by the county for school purposes			2
Highest number of mills levied for special school fund by any district in the county			14
School Houses—			
			20
MISCELLAN EOUS-			
Schools having course of study			3
Received from fines, sales of estrays, etc			\$58 oo
County Superintendent's salary			\$1,211 80
FINANCIAL SUMM	IARY.		
RECEIVED-			
Total receipts			\$27,298 27
PAID-			
Total paid out during year			20,189 61

GILPIN COUNTY.

Personal Statistics—	MALE	FEMALE	TOTAL
School population between 6 and 21	771	799	1,570
Average daily attendance		•	790
Average monthly salary in graded schools.	\$105 00	\$64 06	
Average monthly salary in rural school	26 00	35 14	
Teachers employed in graded schools	6	13	19
Teachers employed in rural schools	I	12	13
Average number of days of school during the year in rural schools		,	8417
Average cost per month for each pupil, based on average attendance			\$4 79
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$300 00
District warrants now outstanding			240 78
Tax Levy-			
Number of mills levied by the county for school purposes			5
Highest number of mills levied for special school fund by any district in the county			12
SCHOOL HOUSES-			
			12
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$1,054 50
Schools having course of study			5
Received from fines, sales of estrays, etc			\$97 00
County Superintendent's salary			\$667 90
FINANCIAL SUMM	IARY.		
RECEIVED—			
Total receipts			\$29,330 18
PAID-			
Total paid out during year			21,272 55

MALE FEMALE TOTAL

GARFIELD COUNTY.

SUMMARY.

PERSONAL STATISTICS-

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	640	580	1,220
Average daily attendance			609
Average mouthly salary in graded schools	\$125 00	\$75 00	
Average monthly salary in rural schools	60 00	60 00	
Teachers employed in graded schools	I	10	11
Teachers employed in rural schools	3	29	32
Average number of days of school during year in rural schools			3,479
Average cost per month for each pupil, based on average attendance			\$5 38
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$56,679 00
District warrants now outstanding			6,438 36
TAX LEVY-			
Number of mills levied by the county for school purposes.			2
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES—			
••••			30
Miscellaneous-			
Estimated value of school apparatus, including maps, charts, globes, etc.			\$2,000
Schools having course of study			4
Schools owning text books.			I
County Superintendent's salary	*		\$1,400
FINANCIAI, SUMM	ARY.		
RECEIVED-			
Total receipts			\$47,540 61
PAID-			
Total paid out during year			41,413 49

GRAND COUNTY.

Personal Statistics—	MALE	FEMALE	TOTAL
School population between 6 and 21	77	67	144
Average monthly salary in rural schools			\$40 00
Average number of days of school during the year in rural schools			80
TAX LEVY-			
Number of mills levied by the county for school purposes			4
Highest number of mills levied for special school fund by any district in the county			3
SCHOOL HOUSES			
			5
MISCELLANEOUS-			
County Superintendent's salary			\$101 29
FINANCIAL SUMM	IARY.		
RECEIVED-			
Total receipts	•••		\$3,519 82
PAID-			
Total paid out during year			2,103 34

HINSDALE COUNTY.

SUMMARY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	118	103	221
Average daily attendance			1076
Average monthly salary in graded schools	\$100 00	\$50 00	\$75 00
Average monthly salary in rural schools		47 50	47 50
Teachers employed in graded schools	I	3	4
Teachers employed in rural schools		2	2
Average number of days of school during the year in rural schools.			74
Average cost per month for each pupil, based on average attendance.			\$9 3 5
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$1,200 oo
District warrants now outstanding.			8,666 97
TAX LEVY-			
Number of mills levied by the county for school purposes			2
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES-			
Sod, adobe or log, 2; brick or stone, 1			3
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$150 00
Schools having course of study			I
County Superintendent's salary, \$165.20; amount of mileage charged, 80 cents			\$166 IO
FINANCIAL SUMM	IARV		
RECEIVED—			
Total receipts			\$6,495 11
PAID-			
Total paid out during year			5,288 91
The above statement applies only to Distri	ict No. r	The other t	mo districts

The above statement applies only to District No. 1. The other two districts are small and made no report of finance; in fact, are sustained principally by subscription.

HUERFANO COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	1.435	1,313	2,748
Average daily attendance			1,005
Average monthly salary in rural schools.	\$60 54	\$41 98	
Teachers employed in graded schools	3	8	II
Average number of days of school during the year in rural schools			98
Average cost per month for each pupil, based on average attendance		-· -	\$3 00
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding or present bonded indebtedness			\$14,069 00
District warrants now outstanding			11,980 86
TAX LEVY-			
Number of mills levied by the county for school purposes.			2
Highest number of mills levied for special school fund by any district in the county			15
School Houses—			
			28
Miscellaneous-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$3,350 00
Schools having course of study			10
Schools owning text books			6
FINANCIAL SUMM	ARY.		
RECEIVED-			
Total receipts			\$26,090 00
PAID-			
Total paid out during year			20,405 68

MALE FEMALE TOTAL

JEFFERSON COUNTY.

SUMMARY.

PERSONAL STATISTICS-

School population between 6 and 21	1,327	1,149	2,476
Average daily attendance			1,167
Average monthly salary in graded schools	\$85 83	\$55 00	
Average monthly salary in rural schools	50 55	43 26	
Teachers employed in graded schools	7	16	· 23
Teachers employed in rural schools	9	40	49
Average number of days of school during the year in rural schools			135
Average cost per month for each pupil, based on average attendance			\$4 77
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding or present bonded indebteduess			\$57,000
District warrants now outstanding			3,405
TAX LEVY-			
Number of mills levied by the county for school purposes			5
Highest number of mills levied for special school fund by any district in the county			10
School Houses-			
			48
Miscellaneous—			
Estimated value of school apparatus, including maps, charts, globes, etc			\$3,225 00
Schools having course of study			43
Schools owning text books			5
County Superintendent's salary			\$,890 20
FINANCIAI, SUMM	ARY.		
RECEIVED—			
Total receipts			\$67,003 94
PAID—			
Total paid out during year			58,577 67

KIOWA COUNTY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL
School population between 6 and 21	īSo	171	351
Average daily attendance			156
Average monthly salary in rural schools	\$43 41	\$39 65	
Teachers employed in rural schools	12	20	32
Average number of days of school during the year in rural schools			154
Average cost per month for each pupil, based on average attendance			\$9 11
SCHOOL BONDS AND WARRANTS-			
District warrants now outstanding			\$1,205 71
TAX LEVY-			
Number of mills levied by the county for school purposes			2
Higbest number of mills levied for special school fund by any district in the county	**		15
SCHOOL HOUSES-			
Frame, 18; brick or stone, 2			20
Miscellaneous-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$1,500 00
Schools owning text books			22
County Superintendent's salary			\$1,700 00
FINANCIAL SUMM	ARY.		
RECEIVED-			
Total receipts			\$13,260 68
PAID-			
Total paid out during year		***********	10,252 38

SUPERINTENDENT OF PUBLIC INSTRUCTION. 189

LAKE COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	1,485	1,407	2,886
Average daily attendance			909
Average monthly salary in graded schools			\$80 50
Average mouthly salary in rural schools			62 00
Teachers employed in graded schools			25
Teachers employed in rural schools			11
Average number of days of school during year in rural schools			1262/3
Average cost per month for each pupil, based on average attendance.			\$2 06
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded			
indebtedness			
District warrauts now outstanding			47,000 00
TAX LEVY-			
Number of mills levied by the county for school purposes.			2
Highest number of mills levied for special school fund by any district in the county			21
School Houses-			
			14
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$1,600 00
Schools having course of study		**********	3
Received from fines, sales of estrays, etc			\$34 00
County Superintendent's salary			\$1,300
ELVA VOLAY CUMA	4 73 77		
FINANCIAL SUMM. RECEIVED—	AKY.		
Total receipts			\$47.286.49
PAID—	•••••		#41,300 40
Total paid out during year			22 772 87
s			32,772 37

LOGAN COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL	
School population between 6 and 21	516	473	989	
Average daily attendance			560	
Average monthly salary in graded schools	\$71 50	\$6o oo		
Average monthly salary in rural schools	40 36	34 22		
Teachers employed in graded schools	4	4	8	
Teachers employed in rural schools	18	28	46	
Average number of days of school during the year in rural schools			126	
Average cost per month for each pupil, based on average attendance			\$7 04	
SCHOOL BONDS AND WARRANTS-				
Bonds now outstanding, or present bonded indebtedness.			\$10,000 00	
District warrants now outstanding			2,847 09	
TAX LEVY—				
Number of mills levied by the county for school purposes			4	
Highest number of mills levied for special school fund by any district in the county			15	
SCHOOL HOUSES-				
			36	
MISCELLANEOUS-				
Estimated value of school apparatus, in-				
cluding maps, charts, globes, etc			\$3,039 00	
Schools having course of study			I	
Schools owning text books			20	
County Superintendent's salary			\$1,760 00	
WANTAY CHIMINA	D 37			
FINAL SUMMARY.				
RECEIVED—			\$25,258 53	
Total receipts			Ψ231230 33	
PAID—				
Total paid out during year			17.711 03	

SUPERINTENDENT OF PUBLIC INSTRUCTION. 191

LARIMER COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL		
School population between 6 and 21	1,467	1,381	2,848		
Average daily attendance			1,347		
Average monthly salary in graded schools	\$122 78	\$68 39			
Average monthly salary in rural schools.	49 92	46 04			
Teachers employed in graded schools	4	23	27		
Teachers employed in rural schools	21	57	78		
Average number of days of school during the year in rural schools		~~~~	. 125		
Average cost per month for each pupil, based on average attendance			\$4 O2		
SCHOOL-BONDS AND WARRANTS-					
Bonds now outstanding or present bonded indebteduess			\$32,750 00		
District warrants now outstanding			12 438 10		
TAX LEVY—					
Number of mills levied by the county for school purposes			5		
Highest number of mills levied for special school fund by any district in the county			15		
School Houses-					
			53		
MISCELLANEOUS-					
Estimated value of school apparatus, including maps, charts, globes, etc			\$6,443 50		
Schools having course of study			44		
Schools owning text books			28		
Received from fines, sales of estrays, etc			\$131 00		
County Superintendent's salary			\$1,870 00		
FINANCIAI, SUMMARY. RECEIVED—					
Total receipts			\$65,220,60		
			+-512-5 50		
PAID—					
Total paid out during year			55,265 23		

LA PLATA COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL	
School population between 6 and 21	915	849	1,764	
Average daily attendance			700	
Average monthly salary in graded schools	\$142 50	\$77 72		
Average monthly salary in rural schools	55 00	55 00		
Teachers employed in graded schools	3	15	18	
Teachers employed in rural schools	6	23	29	
Average number of days of school during the year in rural schools			126	
Average cost per month for each pupil, based on average attendance			\$ 5 68	
SCHOOL BONDS AND WARRANTS-				
Bonds now outstanding, or present bouded indebteduess			\$41,900 DO	
District warrants now outstanding				
Tax Levy-				
Number of mills levied by the county for school purposes			5	
Highest number of mills levied for special school fund by any district in the county			10	
SCHOOL HOUSES-				
			16	
Miscellaneous-				
Estimated value of school apparatus, including maps, charts, globes, etc.	*****		\$S00 00	
Schools owning text books			I	
Received from fines, sales of estrays, etc			\$240 00	
County Superintendent's salary			917 00	
FINANCIAL SUMMARY.				
Total receipts			\$34,908 65	
PAID—				
Total paid out during year			31,464 31	

SUPERINTENDENT OF PUBLIC INSTRUCTION. 193

LAS ANIMAS COUNTY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL
School population between 6 and 21	2,776	2,598	5,374
Average daily attendance			2,125
Average monthly salary in graded schools	\$92 31	\$57 64	
Average monthly salary in rural schools	49 23	40 08	
Teachers employed in graded schools	5	33	38
Teachers employed in rural schools	24	34	68
Average number of days of school during the year in rural schools			. 104
Average cost per month for each pupil, based on average attendance			\$3 13
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$107,900 0 0
District warrants now outstanding			9,377 81
TAX LEVY-			
Number of mills levied by the county for school purposes.			3
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES			
			46
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$5,186 oo
Schools having course of study			5
Received from fines, sales of estrays, etc			\$26,403 18
County Superintendent's salary			3,275 00
FINANCIAL SUMN	IARY.		
RECEIVED-			
Total receipts			\$75.539 26
PAID-			
Total paid out during year			58,233 92

LINCOLN COUNTY.

Personal Statistics-	MALE	FEMALE	TOTAL	
School population between 6 and 21	122	93	275	
Average daily attendance			83	
Average monthly salary in graded schools		\$57 00		
Average monthly salary in rural schools	\$47 00	42 00		
Teachers employed in graded schools		2	2	
Teachers employed in rural schools	4	10	14	
Average number of days of school during the year in rural schools			225	
Average cost per month for each pupil, based on average attendance			\$ 6 57	
SCHOOL BONDS AND WARRANTS-				
District warrants now outstanding			\$376 o8	
TAX LEVY—				
Number of mills levied by the county for school purposes			2	
Highest number of mills levied for special school fund by any district in the county			5	
School Houses—				
			9	
MISCELLANEOUS-				
Schools owning text books			7	
County Superintendent's salary			\$1,043 40	
FINANCIAL SUMMARY.				
RECEIVED—				
Total receipts			\$10,142 17	
PAID-				
Total paid out during year			8,275 01	

LOGAN COUNTY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL
School population between 6 and 21	516	473	989
Average daily attendance			560
Average monthly salary in graded schools	\$71 50	\$60 oo	
Average monthly salary in rural schools	40 36	34 22	
Teachers employed in graded schools	4	4	8
Teachers employed in rural schools	18	28	46
Average number of days of school during the year in rural schools			126
Average cost per month for each pupil, based on average attendance			\$ 7 04
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$10,000 00
District warrants now outstanding			2,847 09
TAX LEVY-			
Number of mills levied by the county for school purposes			4
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES-			
			36
Miscellaneous-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$3,039 00
Schools having course of study			I
Schools owning text books			20
County Superintendent's salary			\$1,760 00
FINANCIAL SUMM.	ARY		
RECEIVED-			
Total receipts			\$25,258 53
PAID			
Total paid out during year			17,111 03

MORGAN COUNTY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL
School population between 6 and 21	240	185	425
Average daily attendance			24
Average monthly salary in graded schools	\$68 65	\$52 50	
Average monthly salary in rural schools	40 00	43 00	
Teachers employed in graded schools	4	3	7
Teachers employed in rural schools	1	12	13
Average number of days of school during year in graded schools			144
Average cost per month for each pupil, based on average attendance			624
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$8,500 00
District warrants now outstanding			
Tax Levy—			
Number of mills levied by the county for school purposes.			3
Highest number of mills levied for special school fund by any district in the county			15
School Houses—			
Sod, adobe or log, I; frame, II, brick or stone, 2			14
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes etc.			\$1,515 00
Schools having course of study			3
Schools owning text books			6
County Superintendent's salary			\$728 20
	. 577		
RECEIVED— FINANCIAL SUMMA	IK1.		
Total receipts			\$20,405 77
PAID			
Total paid out during year			15,504 50

SUPERINTENDENT OF PUBLIC INSTRUCTION. 197

MINERAL COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	218	226	444
Average daily attendauce			166
Average monthly salary in rural schools	\$100 00	\$65 00	
Teachers employed in rural schools	3	7	10
Average number of days of school during the year in rural schools			150
Average cost per month for each pupil, based on average attendance			\$5 50
SCHOOL BONDS AND WARRANTS-			
District warrants now outstanding			\$7,601 40
TAX LEVY-			
Number of mills levied by the county for school purposes			2
Highest number of mills levied for special school fund by any district in the county			15
School Houses—			
			ī
MISCELLANEOUS-			
Estimated value of school apparatus, in-			
cluding maps, charts, globes, etc			\$1,700 00
County Superintendent's salary			540 00
FINANCIAL SUMM	IARY.		
RECEIVED-			
Total receipts			\$1,288 92
PAID-			
Total paid out during year			1,031 11

MONTEZUMA COUNTY.

SUMMARY. .

Personal Statistics-	MALE	FEMALE	TOTAL
School population between 6 and 21	337	297	634
Average daily attendance			344
Average monthly salary in rural schools	\$58 oo	\$53 oo	
Teachers employed in rural schools	9	9	18
Average number of days of school during the year in rural schools			1,817
Average cost per month for each pupil, based on average attendance			\$5 4 5
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$14,575 00
District warrants now outstanding			2,507 90
TAX LEVY-			
Number of mills levied by the county for school purposes			2
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES-			
			16
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc.			\$1,000 00
Received from fines, sales of estrays, etc			1,469 25
County Superintendent's salary			1,151 11
FINANCIAL SUMM	IARY.		
Total receipts			\$13.402 69
PAID-			
Total paid out during year			10,984 54

MONTROSE COUNTY.

PERSONAL STATISTICS	MALE	FEMALE	TOTAL
School population between 6 and 21	580	532	1,112
Average daily attendance			433
Average monthly salary in graded schools	\$125 00	\$75 00	
Average mouthly salary in rural schools	57 84	52 20	
Teachers employed in graded schools	I	6	7
Teachers employed in rural schools	14	10	24
Average number of days of school during the year in rural schools			115
Average cost per month for each pupil, based on average attendance			\$7 14
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$21,450 00
District warrants now outstanding			5,180 08
TAX LEVY			
Number of mills levied by the county for school purposes	••••		2
Highest number of mills levied for special school fund by any district in the county			12
School Houses-			
			20
MISCELLANEOUS			
Received from fines, sales of estrays, etc			\$70 25
County Superintendent's salary	******		\$1,213 95
FINANCIAL SUMM	ARY.		
RECEIVED			
Total receipts			\$29,348 96
PAID-			
Total paid out during year			24,316 38

MESA COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	744	722	1,466
Average daily attendance			798
Average monthly salary in graded schools	\$150 00	\$72 25	
Average monthly salary in rural schools	63 00	52 54	
Teachers employed in graded schools	I	15	16
Teachers employed in rural schools	7	12	19
Average number of days of school during the year in rural schools			123
Average cost per month for each pupil, based on average attendance			\$4 7 6
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$45,850 00
District warrants now outstanding			6,777 60
TAX LEVY-			
Number of mills levied by the county for school purposes			21/2
Highest number of mills levied for special school fund by any district in the county			15
School Houses-			
			20
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$2,020 00
Schools having course of study			12
Schools owning text books			II
Received from fines, sales of estrays, etc			\$76 60
County Superintendent's salary			\$1,171 50
FINANCIAL SUMM	ARY.		
RECEIVED-			
Total receipts			\$55.575 49
PAID—			
Total paid out during year			29,318 39

OURAY COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	518	465	983
Average daily attendance			436
Average monthly salary in graded schools			£93 00
Average mouthly salary in rural schools			63 00
Teachers employed in graded schools	2	6	8
Teachers employed in rural schools	I	13	14
Average number of days of school during the year in rural schools		•••••	1 26
Average cost per month for each pupil, based on average attendance			\$ 5 07
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness.			\$35,650 00
District warrants now outstanding			10,923 57
TAX LEVY-			
Number of mills levied by the county for school purposes			I
Highest number of mills levied for special school fund by any district in the county			15
School Houses-			
			14
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$4.484 50
Schools having course of study			5
Schools owning text books			2
Received from fines, sales of estrays, etc			\$25 00
County Superintendent's salary			\$620 8 0
· FINANCIAL SUMM.	ARY.		
RECEIVED—			
Total receipts	*******		\$31,396 16
PAID-			
Total paid out during year			25,035 92

OTERO COUNTY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL
School population between 6 and 21	759	717	1,476
Average daily attendance			713
Average monthly salary in graded schools	\$111 66	\$62 50	
Average monthly salary in rural schools	48 44	46 25	
Teachers employed in graded schools	3	13	16
Teachers employed in rural schools	8	12	20
Average number of days of school during the year in rural schools			130
Average cost per month for each pupil, based on average attendance			\$4 90
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded	•		
indebtedness			\$28,600 00
District warrants now outstanding			10,110 09
TAX LEVY-			
Number of mills levied by the county for school purposes			2
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES-			
			19
Miscellaneous			
Estimated value of school apparatus, including maps, charts, globes, etc			\$3,000 00
Schools having course of study			20
Schools owning text books			3
County Superintendent's salary			\$1,487 oo
FINANCIAL SUMM	IARY.		
RECEIVED-			
Total receipts			\$37,196 85
Paid			
Total paid out during year			31,240 03

PARK COUNTY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL	
School population between 6 and 21	348	374	722	
Average daily attendance			347	
Average mouthly salary in graded schools	\$76 66%	\$53 331/3		
Average monthly salary in rural schools	4 8 444	41 40		
Teachers employed in graded schools	3	3	6	
Teachers employed in rural schools	12	27	39	
Average number of days of school during the year in rural schools			143	
Average cost per month for each pupil, based on average attendance.		••••	\$6 17	
SCHOOL BONDS AND WARRANTS-				
Bonds now outstanding, or present bonded indebtedness			\$3,500 00	
District warrants now outstanding.			2,609 56	
TAX LEVY-				
Number of mills levied by the county for school purposes			2	
Highest number of mills levied for special school fund by any district in the county			15	
School Houses—				
*			26	
MISCELLANEOUS-				
Estimated value of school apparatus, iucluding maps, charts, globes, etc			\$1,910 00	
Schools having course of study			9	
Schools owning text books.			6	
Received from fines, sales of estrays, etc.			\$25 00	
County Superintendent's salary			\$991 00	
FINANCIAL SUMMARY.				
Total receipts			\$19 700 SI	
PAID—				
Total paid out during year			14,042 45	

PHILLIPS COUNTY.

Personal Statistics—	MALE	FEMALE	TOTAL
School population between 6 and 21			890
Average daily attendence			549
Average monthly salary in graded schools	\$85 00	\$53 oo	
Average monthly salary in rural schools	33 80	30 00	
Teachers employed in graded schools	I	3	4
Teachers employed in rural schools	II	40	51
Average number of days of school during the year in rural schools			95
Average cost per month for each pupil, based on average attendance			\$4 49
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$69,000 00
District warrants now outstanding			5,123 52
TAX LEVY-			
Number of mills levied by the county for school purposes			4
Highest number of mills levied for special school fund by any district in the county			15
School Houses— °			
			, 4I
Miscellaneous-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$10,000 00
Schools having course of study			40
Schools owning text books			31
County Superintendent's salary			\$1,640 00
FINANCIAL SUMM.	ARY.		
RECEIVED-			
Total receipts			\$18,972 67
PAID—			
Total paid out during year			14,812 77

PITKIN COUNTY.

Personal Statistics—	MALE	FEMALE	TOTAL
School population between 6 and 21	881	931	1,812
Average daily attendance			721
Average monthly salary in graded schools	\$176 92	\$8 ₅ 6 ₅	
Average monthly salary in rural schools	60 01	69 00	
Teachers employed in graded schools	2	23	25
Teachers employed in rural schools	I	16	. 17
Average number of days of school during the year in rural schools			105
Average cost per month for each pupil, based on average attendance			\$5 31
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness.			\$58,000 00
District warrants now outstanding			5,550 73
TAX LEVY-			
Number of mills levied by the county for			
school purposes			2
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES—	•		
			12
Miscellaneous-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$14,059 43
Schools having course of study	,		5
Schools owning text books			2
County Superintendent's salary			\$1,244 36

FINANCIAL SUMM	AKY.		
RECEIVED—			¢=6 0:
Total receipts			\$56,592 80
PAID-			
Total paid out during year			39,088 58

PROWERS COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	278	277	555
Average daily attendance			171
Average monthly salary in graded schools	\$90 00	\$50 00	
Average monthly salary in rural schools	47 50	36 89	
Teachers employed in graded schools	ī	3	4
Teachers employed in rural schools	3	17	20
Average number of days of school during year in rural schools			107
Average cost per month for each pupil, based on average attendance			\$9 85
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$15,550 00
District warrants now outstanding			1,612 02
TAX LEVY-			
Number of mills levied by the county for school purposes.			4
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES—			
			19
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$3,203 91
Schools having course of study			7
Schools owning text books			7
Received from fines, sales of estrays, etc			\$30 00
County Superintendent's salary			\$1,644 85
FINANCIAL SUMM.	ARY.		
Total receipts			\$23,725 13
PAID-			
Total paid out during year			17,335 28

PUEBLO COUNTY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL
School population between 6 and 21	4,890	4,394	9,284
Average daily attendance			3.094
Average monthly salary in graded schools	\$134 02	375 45	
Average monthly salary in rural schools	54 16	43 10	
Teachers employed in graded schools	13	91	104
Teachers employed in rural schools	13	41	54
Average number of days of school during year in rural schools			123
Average cost per mouth for each pupil, based on average attendance			\$ 6 69
SCHOOL BONDS AND WARRANTS			
Bonds now outstanding, or present bonded indebtedness.			\$401,464 15
District warrants now outstanding			68,6o1 86
TAX LEVY			
Number of mills levied by the county for school purposes			3
Highest number of mills levied for special school fund by any district in the county			15
School Houses—			
			61
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$9,575 00
Schools having course of study			15
Schools owning text books			12
County Superintendent's salary			\$2,500 00
FINANCIAL SUMM	ARV		
RECEIVED—			
Total receipts			\$333,626 34
PAID			
Total paid out during year			306,643 25

RIO BLANCO COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	147	135	283
Average daily attendance			11813
Average monthly salary in graded schools	\$100 00	\$55 oo	
Average monthly salary in rural schools	65 37		
Average number of days of school during the year in rural schools			134
Average cost per mouth for each pupil, based on average attendance			\$5 37
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$12,050 00
District warrants now outstanding			1,669 40
TAX LEVY-			
Number of mills levied by the county for school purposes.			2
Highest number of mills levied for special school fund by any district in the county			8
SCHOOL HOUSES—			
			8
MISCELLANEOUS			
Estimated value of school apparatus, includ- ing maps, charts, globes, etc			\$1,140 00
Schools having course of study			4
County Superintendent's salary			\$686 oo
FINANCIAL SUMM	IARY.		
Total receipts			\$10,768 07
PAID—			
Total paid out during year			8,293 48

SUPERINTENDENT OF PUBLIC INSTRUCTION. 209

RIO GRANDE COUNTY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL		
School population between 6 and 21	593	530	1,123		
Average daily attendance			601		
Average mouthly salary in graded schools.	\$45 00	\$44 00			
Teachers employed in graded schools	5	6	11		
Teachers employed in rural schools	13	9	22		
Average number of days of school during the year in rural schools		**	111		
Average cost per month for each pupil, based on average attendance			\$ 5 57		
SCHOOL BONDS AND WARRANTS-					
Bonds now outstanding, or present bouded indebtedness			\$20,850 00		
District warrants now outstanding			3,611 54		
TAX LEVY—					
Number of mills levied by the county for school purposes			2		
Highest number of mills levied for special school fund by any district in the county			11		
School Houses—					
			21		
Miscellaneous-					
Schools having course of study					
Received from flues, sales of estrays, etc			\$154 00		
County Superintendent's salary			985 70		
FINANCIAL SUMMARY.					
RECEIPTS-					
Total receipts			\$21,579 44		
PAID—					
Total paid out during year			18,170 58		

ROUTT COUNTY.

Personal Statistics—	MALE	FEMALE	TOTAL
School population between 6 and 21	308	272	580
Average daily attendance			120
Average monthly salary in graded schools	\$70 00	\$50 00	
Average monthly salary in rural schools	43 00	42 00	
Teachers employed in graded schools	2	2	4
Teachers employed in rural schools	7	28	35
Average number of days of school during the year in rural schools			. 78
Average cost per month for each pupil, based on average attendance			\$6 68
SCHOOL BONDS AND WARRANTS			
Bonds now outstanding, or present bonded indebtedness			\$3,800 00
TAX LEVY-			
Number of mills levied by the county for school purposes			5
Highest number of mills levied for special school fund by any district in the county			10
SCHOOL HOUSES-			
Sod, adobe or log, 24; frame, 5			29
MISCELLANEOUS-			
Estimated value of school apparatus, in- cluding maps, charts, globes, etc			\$400 oo
Schools having course of study			2
Schools owning text books			I
County Superintendent's salary			\$950 00
FINANCIAL SUMM	IARY.		
RECEIVED—			
Total receipts			\$12,285 33
PAID			
Total paid out during year			8,424 45

SUPERINTENDENT OF PUBLIC INSTRUCTION. 211

SUMMIT COUNTY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL		
School population between 6 and 21	238	251	489		
Average daily attendance			229		
Average monthly salary in graded schools			\$7 1 67		
Average monthly salary in rural schools			61 25		
Teachers employed in graded schools			7		
Teachers employed in rural schools			2		
Average number of days of school during the year in rural schools			144		
Average cost per month for each pupil, based on average attendance			\$5 08		
SCHOOL BONDS AND WARRANTS-					
Bonds now outstanding, or present bonded indebtedness			\$9.900 00		
District warrants now outstanding			908 25		
TAX LEVY-					
Number of mills levied by the county for school purposes			4		
Highest number of mills levied for special school fund by any district in the county			7		
School Houses—					
			8		
MISCELLANEOUS-					
Estimated value of school apparatus, in- cluding maps, charts, globes, etc			\$860 00		
Schools having course of study			4		
Schools owning text books			I		
County Superintendent's salary			\$1 ,0 64 60		
FINANCIAL SUMMARY.					
RECEIVED					
Total receipts			\$14.751 33		
PAID—					
Total paid out during year			10,455 99		

SAGUACHE COUNTY.

Personal Statistics—	MALE	FEMALE	TOTAL
School population between 6 and 21	492	531	1,023
Average daily attendance.			437
Average monthly salary in graded schools	\$105 00	\$53 33 ¹ / ₃	
Average monthly salary in rural schools	48 30	45 50	
Teachers employed in graded schools	I	3	4
Teachers employed in tural schools	17	23	40
Average number of days of school during the year in rural schools			114
Average cost per month for each pupil, based ou average attendance			\$ 5 2 7
School Bonds and Warrants-			
Bonds now outstanding, or present bonded indebtedness			\$13,270 00
District warrants now outstanding			2,640 40
TAX LEVY-			
Number of mills levied by the county for school purposes.			2
Highest number of mills levied for special school fund by any district in the county			15
School Houses—			
			21
MISCELLANEOUS-			
Schools having course of study			23
Schools owning text books			IO
County Superintendent's salary			\$1,304 06
FINANCIAL SUMM	ARY.		
Received—			
Total rcceipts			\$19,328 72
PAID—			
Total paid out during year			15,041 11

SEDGWICK COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	202	171	373
Average daily attendance			214
Average monthly salary in graded schools	\$75 00	\$50 00	
Average monthly salary in rural schools	36 25	34 00	
Teachers employed in graded schools	I	2	3
Teachers employed in rural schools	6	29	35
Average number of days of school during the year in rural schools			115
Average cost per month for each pupil, based on average attendance			\$5 89
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$2,000 00
District warrants now outstanding			1,358 95
TAX LEVY-			
Number of mills levied by the county for school purposes			4
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES-			
			24
Miscellaneous-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$5.040 00
Schools having course of study			I
Schools owning text books			16
County Superintendent's salary			\$1,045 03
FINANCIAL SUMD	IARY.		
RECEIVED-			
Total receipts			\$15,220 86
PAID-			
Total paid out during year			10,280 40

SAN MIGUEL COUNTY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL
School population between 6 and 21	196	187	383
Average daily attendance			159
Average monthly salary in graded schools	\$125 00	\$80 00	
Average monthly salary in rural schools	52 50	62 00	
Teachers employed	I	2	3
Teachers employed in rural schools	2	10	12
Average number of days of school during the year in rural schools			49
Average cost per month for each pupil, based on average attendance			\$5 53
SCHOOL BONDS AND WARRANTS-			
District warrants now outstanding			\$471 45
TAX LEVY-			
Number of mills levied by the county for school purposes			3
Highest number of mills levied for special school fund by any district in the county			7
SCHOOL HOUSES-			
			5
MISCELLANEOUS -			
Estimated value of school apparatus including maps, charts, globes, etc.			\$260 oo
Received from fines, sales of estrays, etc			280 00
County Superintendent's salary			299 60
FINANCIAL SUMM	A D 3"		
RECEIVED—	AKI.		
Total receipts.			\$9,695 35
Total receipts.			***********
PAID			
Total paid out during year		*********	7,958 48

SAN JUAN COUNTY.

PERSONAL STATISTICS-	MALE	FEMALE	TOTAL
School population between 6 and 21	84	104	189
Average daily attendance			76,
Average monthly salary in graded schools	\$120 00	\$75 00	
Teachers employed in graded schools	I	2	3
Average number of days of school during year in graded schools			200
Average cost per month for each pupil, based on average attendance			\$6 68
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bouded indebtedness			\$8,000 00
TAX LEVY-			
Number of mills levied by the county for school purposes			5
Highest number of mills levied for special school fund by any district in the county			5
School Houses—			
Frame, I			1
Miscellaneous			
Estimated value of school apparatus, including maps, charts, globes, etc			\$400 00
Schools having course of study			I
Schools owning text books			I
Received from fines, sales of estrays, etc			\$113 00
County Superintendent's salary			85 00
FINANCIAL SUMM	ARY.		
RECEIVED-			
Total receipts			\$4.517 89
PAID			
Total paid out during year			4,437 99

WELD COUNTY.

Personal Statistics—	MALE	FEMALE	TOTAL	
School population between 6 and 21	1,967	1,712	3,679	
Average daily attendance			1,807	
Average monthly salary in graded schools	\$79 io	\$56 40		
Average monthly salary in rural schools	48 00	45 50		
Teachers employed in graded schools	9	29	38	
Teachers employed in rural schools.	20	60	80	
Average number of days of school during the year in rural schools			138	
Average cost per month for each pupil, based on average attendance		*	\$ 5 35	
SCHOOL BONDS AND WARRANTS-				
Bonds now outstanding, or present bouded indebtedness			\$12,057 00	
District warrants now outstanding			11,755 83	
TAX LEVY-				
Number of mills levied by the county for school purposes			4	
Highest number of mills levied for special school fund by any district in the county			15	
SCHOOL HOUSES—				
			76	
MISCELLANEOUS-				
Estimated value of school apparatus, including maps, charts, globes, etc			\$10,840 00	
Schools having course of study			3	
Schools owning text books			7	
County Superintendent's salary			\$1,890 00	
RECRIVED				
Total receipts			\$99,902 17	
PAID-				
Total paid out during year			82,701 43	

SUPERINTENDENT OF PUBLIC INSTRUCTION. 217

WASHINGTON COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	274	246	520
Average daily attendance			284
Average monthly salary in graded schools	\$70 00	\$48 00	
Teachers employed in graded schools	1	4	5
Teachers employed in rural schools			36
Average number of days of school during the year in rural schools			127
Average cost per month for each pupil, based on average attendance			\$8 oc
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding, or present bonded indebtedness			\$17,500 oc
District warrants now outstanding			5-995 74
TAX LEVY-			
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES-			
			25
Miscellaneous-		•	
Estimated value of school apparatus, including maps, charts, globes, etc			\$2,770 00
Schools having course of study			6
Schools owning text books			4
County Superintendent's salary			\$815 oo
FINANCIAL SUMM	IARY.		
RECEIVED			
Total receipts			\$13,214 96
PAID			
Total paid out during year			11,574 75

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YUMA COUNTY.

PERSONAL STATISTICS—	MALE	FEMALE	TOTAL
School population between 6 and 21	274	403	777
Average daily attendance			393
Average monthly salary in graded schools	\$60 00	\$46 33	
Teachers employed in graded schools	I	3	4
Teachers employed in rural schools	10	42	52
Average number of days of school during year in rural schools			114
Average cost per month for each pupil, based on average attendance			\$ 4 96
SCHOOL BONDS AND WARRANTS-			
Bonds now outstanding or present bonded indebtedness			\$9,000 00
District warrants now outstanding			1,835 22
TAX LEVY-			
Number of mills levied by the county for school purposes.			5
Highest number of mills levied for special school fund by any district in the county			15
SCHOOL HOUSES			
			32
MISCELLANEOUS-			
Estimated value of school apparatus, including maps, charts, globes, etc			\$500 00
Schools having course of study			35
Schools owning text books			10
County Superintendent's salary			\$1,037 00
FINANCIAL SUMM	ARY.		
RECEIVED—			
Total receipts			\$16,689 20
PAID-			
Total paid out during year			14,275 01

REPORTS

OF

County Superintendents.



TO COUNTY SUPERINTENDENTS.

I am not going to to lecture you, but I feel that experience brings wisdom, and be a man ever so qualified for the position of county superintendent, he just begins to learn his duties at the end of a term of two years. Therefore I especially recommend that you read and consider with care, the circular sent from this office and use it freely; also the circular sent from the county superintendent of Pueblo county to the school directors of his county. Herein is contained many valuable suggestions which it would be well for newly elected county superintendents to Through the courtesy of County Superintendent Shepard of Arapahoe county, I am enabled to place before you an annual report from his office to the county commissioners. Occupying the office for four terms, in a county representing one-third of the state's wealth, his county embracing the richest district in the state, whose buildings are palaces and whose teachers are paid \$70 per month, ten months annually; also the joint district, whose house is a dug-out, poorly equipped, and whose teacher receives \$20 per month four months annually; I feel that his experience has given him knowledge which would be of great benefit to those who have recently been elected or may hereafter be elected. Study well his report and see if you cannot get your county commissioners to assist you, as does Mr. Shepard. Give each one of your teachers of your best wisdom, and be sure to have a pleasant smile and a kind word for each child vou meet.

Office of County Superintendent of Schools,

Denver, Colo., October 1, 1894.

To the Honorable the Board of County Commissioners of Arapahoe County, Colorado:

Gentlemen—In accordance with the provisions of section sixty-four (64), School Law of the state of Colorado, it is my duty to certify to you the amount of tax that it will be necessary for you to levy for the "General School Fund" as provided for in said section sixty-four (64).

The assessed valuation of the county, as given me by the assessor, is \$85,860,910. The school population as given in the last census returns is 32,100. On this basis it will require a levy of three (3) mills. Section 92, School Law, makes it your duty, as county commissioners, to levy a special tax on the property of each school district that has created a bonded debt, in an amount sufficient to pay the interest thereon. School districts Nos. 1, 2, 6, 7, 9, 10, 17, 18, 21, 22, 27, 49, 81 and 98 has each created a bonded debt and each has certified a special tax which is sufficient for all purposes, interest on bonds included. Districts Nos. 5 and 71 has each a bonded debt. In the case of district 71 the school board has certified a levy of three (3) mills for a special purpose, and has made no levy for interest on bonds. It will require an additional levy of two-tenths (2-10) of one mill to pay the interest on said bonds, and a further levy of twotenths (2-10) of one mill to provide for the payment of the principal of said bonds, as specified in section 92, making a total of three and four-tenths (3 4-10) mills. In the case of No. 5 the directors have certified a levy of two and one-half (2 1-2) mills, divided as follows: Special building fund, seven-tenths (7-10) of one mill: interest on bonds, one and eight-tenths (1 8-10) mills. This district has a bonded debt of \$30,000 on which the annual interest amounts to \$1,- 800. The valuation of district 5, as given by the assessor, is \$1,004,395. One and eight-tenths (1 8-10) mills on this amount would give \$1,807.91. When you take into consideration the cost of collection, errors, double assessments, rebate and delinquent taxes that are liable to occur, I do not deem the levy sufficient to protect the county treasurer in the payment of the interest as it becomes due, nor does the levy come within the requirements of section 92. The addition of three-tenths (3-10) of one mill will furnish a safe margin.

Section 92, school law, makes it your duty, after the expiration of five (5) years next after the issue of such bonds, to levy annually a tax sufficient to take up "at least ten (10) per centum and not more than twenty (20) per centum of the principal of such bonds." * * *

School districts Nos. 1, 2, 6, 18, 27 and 81 have provided for this purpose in the levy made by them. School district No. 17 has bond issues that come within the provisions of this section, viz.: May 1, 1883, \$22,000; May 1, 1884, \$15,000; August 1, 1888, \$35,000; December 1, 1888, \$31,000; total, \$103,000, all bearing interest at the rate of six (6) per cent. per annum. An additional levy of one mill will be necessary for this purpose.

Districts Nos. 51 and 64 are annulled. Districts Nos. 14 and 97 have a surplus which they deem sufficient for the current year.

Respectfully yours,
A. D. SHEPARD,
County Superintendent of Schools.

ARAPAHOE COUNTY.

Hon. John F. Murray, State Superintendent of Public Instruction:

Dear Sir—In reply to your request for a statement of the condition of the public schools of this county, permit me to say that I have endeavored to supervise the work so as to obtain the best of results.

We have, in this county, ninety-nine (99) school districts, the management of each is vested in a board of directors consisting of five for districts of the first class and three for districts of the second and third classes, making a total of 304 directors in the county. The directors are elected annually for a term of years, and I have succeeded in making the term of office of each uniform—that is to say, this year each district elected a president for three years. In 1895, one treasurer will be elected for three years, in 1896, one secretary will be elected for three years. I believe this to be the intent of the law, and I know it gives better results than electing directors without regard to a specific term of office.

I have also devoted considerable time toward enforcing the law in regard to directors issuing warrants in excess of the net income for each school year, and as a result, school district warrants in this county are worth par, and most of them are cashed when presented to the county treasurer, and all are paid some time within the current year.

There are employed in the several schools of the county about 600 teachers; 400 in the city schools and 200 in the surburban and country districts, the latter class coming under my immediate supervision. I have insisted on a high standard and have compelled applicants to come up to the requirements of the state department before I would issue to them either first or second grade certificates and this course has been productive of good results, as many

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districts will not employ teachers who hold third grade certificates. I think I can safely say that the corps of teachers in this county will compare favorably with a like number selected from any part of the United States.

The office of the county superintendent is located in the court house and consists of three rooms. Room 20 is the general office; room 21 is a private office, adjoining which is a large court room containing 140 school desks and is used for examination purposes, teachers' meetings and educational purposes in general.

On the whole, the public school system, in all of its departments, is in very good condition. We believe in progress and shall endeavor, from year to year, to still further elevate the standard of the schools.

Respectfully yours,
A. D. SHEPARD,
County Superintendent.

PUEBLO COUNTY.

Pueblo County, Vacation Season, 189...

To the School Officers of Pueblo County:

Sirs—In order that the schools of the county may attain the highest possible excellence it is necessary that there be cordial co-operation between the school boards and the county superintendent. A few words of advice in the line of duty, it is believed, therefore, will be helpful to directors, especially as many have been only lately elected or appointed.

The public schools are for the children. The child, therefore, and his interests, should be the central thought in the mind of every school officer. This is the intent of the law. Viewing the subject from this standpoint, it is plain that the school is not in-

tended merely to furnish a position and salary for some needy teacher, nor for the pecuniary benefit or convenience of any head of a family.

In order to secure for each child the benefit of an elementary education, it is essential that school boards see that four things are accomplished.

FOUR MAIN THINGS.

- I. That a complete, qualified board of directors is maintained.
 - II. That a comfortable school house is provided.
- III. That the best teacher that the means of the district will justify be employed.
 - IV. That a proper levy of tax is made each year.

BOARD OF DIRECTORS.

It is of prime importance that each district keep up its organization. The board of directors should have no vacancies. As new members are elected or appointed, they should promptly file their oaths and official bonds with the county superintendent. secretary is the member upon whom falls the burden of the work, but all are responsible for all things. The census must be taken in April to enable the district to receive its share of the general school fund. The election notices must be posted in time, the election be duly held and returns made to county superintendent. The district annual report for the school year ending June 30 is the most laborious, intricate and important work of the secretary. The last three matters must be attended to if the district is to be continued intact. If there is no secretary for the time being, one of the other directors should look after these things.

SCHOOL HOUSE.

The school house should be clean and kept clean, comfortable, furnished with improved desks, plenty

of blackboard surface, wall maps and a dictionary. It should have window shades to keep the sun from injuring the eyes of the pupils. The summer, during vacation months, is the time to make the repairs and improvements about the school house. It is a good investment to have tight wooden shutters for the windows of district school houses. In some cases a strong wire netting answers the purpose of protection to the glass as well as against thieves and trespassers.

TEACHERS.

Beware of incompetent, inexperienced teachers. A teacher may pass the county examination as to scholarship and moral character well enough to secure a second or third grade certificate, and yet be sadly lacking in qualities quite as essential, such as interest in the work, industry, governing ability, gentlemanly habits and manners. One poor teacher may do more harm, especially in the matter of order, than can be undone by three good ones who follow him. As to salary, perhaps a happy medium is the safest course, but a first-class school for six months is worth more than a cheap dragging affair of eight or nine. When the board knows of no teacher suited to its needs, the county superintendent will always be ready to render any assistance in his power to secure the right kind of a teacher. His office is in receipt of hundreds of applications by letter or in person during each year, and a registry of applicants is kept for the benefit of school boards. In employing teachers it will be a safe thing to consider all applications at once, when the board is together. It often leads to trouble for a director individually to make promises before seeing the other members.

THE SPECIAL TAX LEVY.

The tax levy provides the "sinews of war." The apportionment fund is seldom sufficient to maintain

the proper length of term. A special levy is therefore necessary to "piece out." Fifteen mills is the highest amount that may be levied on the taxable wealth of the district. The levy may be made by the voters in a regular or special meeting. It should be attended to not later than September 1, and the amount certified to the county clerk. The assessed valuation of the previous year will have to be used as a basis, because the one for current year cannot usually be known in time.

A decision has been rendered by the Colorado Court of Appeals (page 682, volume 33, Pacific Reporter) against the constitutionality of the law authorizing boards of directors to levy a special tax; hence the levy must be made by the legal voters of the district at a regular or a special meeting called for the purpose.

MISCELLANEOUS.

Visit the school—Directors ought to be frequent visitors at the school. Only in this way can they get a good idea of the character of the work being done.

Daily register—The teacher's daily register should be inspected and required to be kept according to instructions therein. A new register should invariably be obtained for the beginning of a new school year (July 1).

Course of study—It will be well for boards that have not already done so to adopt a course of study. The course found printed in the daily register is an excellent one, and may safely be adopted as a whole. Teachers will then have a chart by which to work.

Free text books—Free text books have been voted in several districts of the county and the plan gives great satisfaction. It has been recommended by the county directors' association.

Report cards—Report cards for teachers to send to parents are most useful, and serve as a stimulus to pupils as well as teachers. As the state does not furnish them it is advised that the board procure them at the district expense, which would be but a trifle.

Agents—Agents or peddlers of many contrivances for the school room will call upon members of school boards, endeavoring to sell their wares. While I do not condemn the charts and other devices offered, it is safer to provide the essentials, such as have already been enumerated. None of these schemes are available, except in the hands of skillful special teachers. There is no short-cut, patented road to learning. A good, living instructor is the best aid in the world.

School law—Copies of the school law can usually be supplied from this office. Directors are requested, where possible, to procure the copies held by their predecessors and in like manner to turn them over to their successors. Study the law and adhere closely to its requirements.

Finally—Further information upon points of school administration or law will be cheerfully given so far as in his power lays by

Your obedient servant,

CHAS. W. BOWMAN, County Superintendent.

REMARKS.

Beyond the statistical report of Pueblo county, not much can be added which is not true of the other counties of the state.

The graded schools of Pueblo county are, without doubt, the equal of any others in the state, and in quality of work there is little room for improvement. With larger revenues, special branches of study could be added, the financial stringency having compelled a little curtailment in this respect during the two years past.

In the district schools the belief is indulged that an improvement has been effected by the employment of teachers who will average better, and by the introduction throughout the county of the state course of study. The number of districts having free text books is rapidly increasing.

Obstacles to the employment of the best teachers in the rural districts still remain, among which may be mentioned the moderate salaries paid, and often the disposition to favoritism by the local board. Two remedies for this evil suggest themselves; namely, a county board of education, whose province would be to select teachers for third-class districts; second, the abolishment of the third grade certificate.

The rural districts have heretofore suffered from the incursions of travelling agents of charts and other appliances not essential to the equipment of a school room, which have been sold at enormous prices. Happily, by repeated warnings, a check has been put upon this business.

Since my last annual report seven school houses have been erected in the rural districts—six of them brick, and one adobe.

The problem of what shall be done with districts which have fallen below ten in population, is still with us. Several districts in this county continue to maintain their organization with an attendance of only one or two pupils—a condition which, to my mind, calls for legislation. To this end I have drawn a bill putting all such districts in a new class, to be designated as sub-districts, allowing them one director only, and providing that for school purposes two or more of them may be united into an itinerant district, and that they be authorized, with the co-operation of the county superintendent, to employ itinerant or ambulatory teachers.

There are other matters which seem to demand legislation, of which only mention can be made here, namely, a new basis for the apportionment of the general school fund; a state tax to supplement the public school income fund; the change of school age to 18 years instead of 21; the employment of special teachers to instruct in rural schools, where desired, in music, physical culture, drawing and other branches.

CHARLES W. BOWMAN, County Superintendent.

BACA COUNTY.

Springfield, Colo., September 3, 1894.

Hon. J. F. Murray, Superintendent Public Instruction, Denver, Colo.:

Dear Sir—I herewith submit my annual report, ending June 30, 1894.

Failure of crops the past year has driven many of our settlers out, and thus worked a hardship to our schools.

Many of the districts have so few children that it is almost impossible to have school. At present we have twenty-five organized districts. The state course of study is being followed more closely than heretofore. Ceutral examinations were conducted in in different parts of the county at close of winter terms.

I conducted a teachers' institute, commencing August 20 and closing August 30. Number of teachers and advanced students in attendance, thirty. Great interest was manifested during the term. Two very interesting lectures were delivered before the institute by Rev. Copeland, of Springfield, and Rev. Thomas Leland, of Minneapolis. I am much in favor of a high school in this county, and shall use my influence to have one established before another year. I think the third grade certificate should be abolished, and the granting of a temporary certificate should not be limited, but left to the discretion and best judgment

of the superintendent. The manner in which the general school fund is apportioned I think wrong. The law supposes that a school containing fifteen or more pupils can be run four months at the rate of \$40 per month. We find many of the rural districts sparsely settled, and containing fewer that fifteen pupils; hence they must necessarily carry on a school by special tax, while they only receive a small per cent. of the general tax paid by them. As the expense of carrying on schools containing fewer than fifteen is about the same as that of larger ones, I think the better plan is to apportion to each district, according to the number of teachers employed, a sufficient sum to carry on four months at the rate of \$40 per month, regardless of the number of pupils. If a district wishes to have more school than the law requires, then levy a special tax to carry on the extra school and expense.

I am heartily in sympathy with the interest you have taken in the educational interest of the state, and the many good suggestions offered.

Yours respectfully.

E. S. VAN DEREN, County Superintendent.

MONTEZUMA COUNTY.

Montezuma county, one of the youngest in the state, has fifteen districts and one high school doing good work.

School interests are materializing in substantial stone and frame school houses, some of them with halls below and rooms above partially furnished with latest and best charts and maps.

Educational sentiment is developing to demand teachers of natural and acquired ability, pleasing manners and refined morals, tact and skill, culture

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of latest and best methods, to teach our 654 pupils—the hope of our new and growing country of innumerable mineral and agricultural resources of wealth on the western slope of the rock-ribbed continental divide.

Nearly all our enterprising teachers seem to be reasonably adequate to present necessities. But advanced thought will demand coming teachers of Greek intellect, Roman will, Hebrew conscience and modern methods to develop children physically, intellectually, socially and morally to work, think and adore; to acquire physical strength and mental vigor and moral worth to stand in the arena of vigorous thought and benevolent action that they may be the peers of statesmen and philanthropists, clergymen and philosophers, with sound principles, correct practice and stainless characters.

True science of school government and real art of school management adopt educational forces and human instrumentalities to rational development of child-nature into citizens who think most to the best purpose, feel noblest, act wisest as loyal citizens of our grand republic.

OTERO COUNTY.

Otero county has twenty-one rural and three graded schools, a school population of 1,753, and employs forty-one teachers; a gain of 263 in school population, five in the number of schools, and nine in the number of teachers employed since my last biennial report.

The La Junta high school has established a four years' course, and prepares for the scientific and Latin scientific departments of the State University.

Rocky Ford gives a three years' course above the eighth grade, but teaches no language except the English.

Catlin has commenced grading, and does some work above the eighth grade.

Only one district, La Junta, has made the kindergarten a part of the public school system.

The state manual and course of study is used in all the rural schools of the county. A number of pupils finished the course this year, and received diplomas that admit them to the high schools of the county.

More than half of the schools of the county have adopted free text books, and the people are generally well pleased with this system of supply.

The school work of the county for the past year has shown some real advancement. In the management and control of the children there has been a very marked improvement. No complaints have been made to this office, and none of a grave character have been discovered in my visits among the people and to the schools.

The teachers, I think, without exception, have done the best they could, and have earnestly tried to become real teachers; but there have been quite a number of changes for the coming year, and some of them not for the best.

The common sentiment, that any person who can pass an examination in certain branches of study, and get a certificate, is well qualified to teach in rural schools, is the one great hindrance to the improvement to these schools. Principals and superintendents of village and city schools too often foster this sentiment. They will seldom recommend their graduates to positions in their own schools without some further preparation for their work, but will strongly recommend them to the county superintendent and rural school boards, as "thoroughly qualified, sure to give entire satisfaction," for positions much more difficult to fill, requiring a far greater managing and organizing ability—though, perhaps, making a somewhat smaller draft on direct teaching power and on

the ability to use devices for holding the atention and awakening interest—than it does to do the work of graded schools.

Graduates of the high schools are often led to believe themselves much better qualified to teach a rural school than one that has had years of experience in this work, who cannot demonstrate a theorem in geometry, translate a passage from Caesar, or conjugate a German verb.

Certain it is that knowledge—and the wisdom that comes with its proper acquisition—is indispensable to the real teacher. But the learning of many facts about many things does not necessarily beget wisdom; and it is not always accompanied by such a knowledge of childhood in all its relations—physical, mental and moral—as will enable the high school graduates to step into the rural schools and take upon themselves the task of directing the activities of children of all ages and conditions of life, with the assurance that their work will have any very marked tendency towards the development of intelligent manhood and womanhood, without having given some previous thought to this subject.

I believe that the normal school should provide a conrse for rural teachers.

I would suggest that graduates from accepted high schools, not less than 18 years of age, might receive a diploma, after one year's work in the normal school, that would entitle them to teach in the rural schools; the studies and instruction for this year to have special relation to rural school work. The diploma should have the force of a state certificate, for this class of schools, for a period of years, subject to renewal as long as the holder remained in active school work. Under the present plan the normal hardly reaches the rural school, and will not for many years, and yet this is the class of schools that should

receive the most careful attention, because from their isolation and mixed character they have been neglected.

Respectfully,

C. W. FENLASON.

BOULDER COUNTY.

Boulder county should take a front rank in school matters among the counties of our state, possessing, as it does, the distinguished honor of having had the first school building of Colorado, being the seat of the State University, having five academies, a high school at Longmont, as well as the state preparatory at Boulder.

Boulder, being an agricultural and mining county, its population is not scattered as much as in other counties, and while there are a few weak districts, we have many that are wealthy and populous.

I was sorry to see the tendency this year to reduce teachers' salaries; but, when to the universal financial depression we added the local misfortune of the flood last May, and when I noted the large number of applications of teachers, both of those at home and of those from abroad, I felt myself unable to do anything to stem the tide of economy. One thing was attained, however—the special levies in the different districts were on the whole rather increased than diminished.

I suppose I should only state what is the experience of all superintendents if I say that no part of the work in the district schools needs more attention than the primary. So special are the requirements for a primary teacher that it is difficult for the teacher in a mixed school to be well prepared for this as well as for all the other work.

Our eighth grade graduating exercises were quite successful, and I have reason to believe that those exercises will not only be a permanent feature of our schools, but will increase in interest and in number

of graduates.

The people of Boulder county have at heart the welfare of the schools. School officers, as far as I have been able to observe, are doing their duty faithfully; selfish or improper considerations are put aside. In the selection of teachers, they try to get the best; relatives or local residents are not often chosen, and when so chosen, they have proved by their work the wisdom of the choice, or at least its allowability. Indeed, in weak districts this becomes a matter of almost necessary economy, the teacher being thus relieved of the expense of boarding away from home.

In a word, let me say that, while not perfect, our schools are doing a good work, and I think I can promise improvement for the future.

GEORGE L. HARDING, County Superintendent, Boulder County.

LA PLATA COUNTY.

There is great difference in this county between the graded work of the city schools and that done in the country schools. Owing to lack of funds, country schools have but short terms of four to six months and often cannot get experienced teachers for the small salary to be paid. The city schools, receiving the greater portion of the school fund, are enabled to employ teachers from nine to ten months at good salaries. Something should be done to remedy this inequality which borders on injustice, and give every district at least eight months of school.

Attempts are made by teachers in the rural districts to better classify their schools and in the main

are meeting with laudable success. Patrons of schools in city and country are interested in all plans which promise better results.

La Plata county has a school population of 1,675, a slight decrease from 1893, apparent mainly in Durango. A number of country schools show a slight increase. For the year ending June 30, 1894, the total enrollment was 1,336, as against 1,241 the year previous. There was an average shortening of the term of about twenty days as compared with 1893, in rural schools, caused by want of funds, taxes being very slow in coming in and in some cases defaulted.

A general spirit of progress is noticeable among the teachers of the county and much original research is being made by them, especially along the line of "child study." The best of feeling exists between teachers in graded and ungraded schools and hearty co-operation is a leading feature of both normal district institutes and county institutes.

One thing which has been very much needed, especially in ungraded schools, is school libraries, and in fact everything in the way of supplementary reading. The superintendent has undertaken to remedy this, and is already gratified at results as a number of district boards have already appropriated from the scanty funds at their disposal greater or less sums for the purchase of school libraries. Others have signified their intention to do so soon. Where districts have been unable to spare the money, other means have been employed to seeme funds and before another year has passed it seems probable that every district in the county will have a small circulating library.

J. R. DURNELL, County Superintendent.

PARK COUNTY.

School work in Park county continues to make commendable progress. Our educational interests are surely and steadily advancing. School houses are comfortably furnished and well supplied with appliances—too well supplied in some instances with certain useless kinds. School boards are entirely too susceptible to the influence of the festive agent's seductive tongue. They are also largely influenced in the matter of selecting teachers by local and "relative" conditions. The law should give the county superintendent something to say in the matter of selecting teachers. The first difficulty I am overcoming by inducing school boards to establish libraries in their schools. More than two hundred volumes were placed within reach of our pupils last year in our school libraries; thus making good use of money that might otherwise have been squandered in purchasing exorbitantly priced so-called appliances.

As a rule, our teachers are energetic and progressive. They are alive to the benefits and advantages to be derived from reading circle and county association work, all of which has been successfully carried forward during the past year.

They also manifested deep and appreciative interest in the normal institute by an unusually large attendance, in spite of the heavy expense and long distances necessarily traveled in the Thirteenth District.

It will be noted that teachers' wages have increased during the past year, while current expenses have decreased. Our enrollment has decreased, but our daily attendance has increased. The attendance at each school is from three to fifteen, and is nearly always less than ten, on account of sparsely settled country districts. Owing to the topography of our state, these districts will always remain thus, and our lawmakers cannot too soon begin the considera-

tion of the "omnibus" or "stage coach" plan of gathering children into reasonably sized schools, which I believe, is the only solution of the problem.

Under the present law, the county superintendent must work on the "inductive" plan. His success is limited, not by his ability as a school man, but by his power to "induce" school boards to see as he does. The school board selects the teacher, text books, course of study, has absolute control over everything.

The superintendent has no power, and consequently no responsibility. The school board, consisting of three members, who, very seldom, if ever, hold a legal meeting and make a record as a body, there is no fixed responsibility on them or either of them. Until responsibility is fixed on some one, we need look for no marked improvement in our schools. I would respectfully recommend that a school board consist of one director, elected in each district, and the county superintendent of schools. At least, the present system should be amended so that supplies, text books, course of study, teachers, etc., could not be selected without the advice and consent of the county superintendent. In short, he should have the same power and responsibility conferred upon him by law that city school boards confer upon the superintendents they select.

> GEORGE A. MILLER, County Superintendent.

PHILLIPS COUNTY.

There has been a district formed during the year, and the school institutes of the county may be said to be on the upward scale, as evidenced by the increase in the length of the term, as well as the increased attendance in the schools. Much necessary and needed apparatus has been added during the

year. Our teaching force has grown stronger, much of which may be ascribed, I think, to the interest and attention given by the teachers of the county to our institute and reading circle work. The latter has gone successfully forward during the entire year, and our regular meetings of the circle, the third Saturday in each month, have been well attended, and much interest shown. The teachers, while they have studiously read the reading circle work, and passed a most creditable examination therein, have done much other reading suggested by this along educational lines and have grown stronger thereby.

CHARLES B. TIMBERLAKE.

MESA COUNTY.

In the annual report of 1894, the financial showing of the different school districts is not the most desirable. The cause of this can be attributed to the county treasurer's embezzlement of \$4,600 of the school funds, and to the railroad refusing to pay nearly \$3,000 of its school tax in those districts; that the special levy was not ordered by the electors. The increase in the number of school districts is five. The increase in the census list is 11 per cent. The increase in the average daily attendance, about 15 per cent. Several districts organizing late in the year necessarily have incomplete reports.

The secretary's report on text books is never satisfactory. It should be made by the teachers direct to the county superintendent, at the close of school. I would also recommend that the school law be so amended as to place the supervision of the building of school houses under the control of such persons as will give special attention to ventilation, lighting and style of architecture. Our present state superintendent is to be complimented on his efforts to improve the condition of the state school fund, and it

is hoped his successor will be able to carry into effect the work already so well begun. Grand Junction will employ sixteen teachers for the coming year, and Fruita six teachers. The school board has added a commercial department to the high school, and employed a special teacher to instruct in typewriting, shorthand and bookkeeping.

> EDWARD T. FISHER, County Superintendent.

CUSTER COUNTY.

Rosita, Colo., December 14, 1894.

Hon. J. F. Murray, State Superintendent of Public Instruction, Denver, Colo.:

My Dear Sir-As secretary of school board, district No. 1, Custer county, I am obliged to come to you for your assistance in regard to our financial situation in this district. I will first staté to you something in regard to the past management of affairs in the district which have led up to the present embarrassing situation. This town and school district was at one time the wealthiest in the county; but after a time the place began to decline. At that time the school board began to issue a large amount of warrants in advance of the income of the district, which are doubtless illegal, and will take nearly all of our funds for years to come, if they are ever paid. warrants of 1888 amount to \$280; of 1889, \$280; of 1890-1891. \$675: all of which are outstanding against the general fund with accrued interest from their respective dates.

These warrants were given to teachers for their services. One young lady, now in poor health, holds \$500 of the same.

In 1892 there were warrants issued against the special fund for \$203, one of which was given to one

F. F. Frishey, for \$143, which is the next in order for payment. This warrant will call for all the money of that fund for this year.

Then, on May 12, 1894, the board issued a warrant for \$82.50 on the special fund, and sold it for \$50, to pay one month's teaching; this, with the one for \$143.40, is the last outstanding against the special fund. There is in the county treasury about \$85 to our special fund, which the treasurer will of course apply to the payment of the above warrant of 1892, for \$143.40.

As you will see, we are now cut off from any possible income in any manner whatsoever for the support of our public school; and you, without doubt, will see that the issue of so many warrants against the school fund in excess of the tax levy of the year of the issue is illegal and prohibited by law. We do not wish to refuse the payments of these warrants, on account of the great hardships it would work in some cases. We must, however, have some money for the support of our school, as we have had no school this year so far.

There is a sum of money due this district from the county on account of property sold for taxes, which was bid in by the treasurer for the county, and since sold by the county commissioners, and the commissioners have taken all the money received, passed it to the county general fund without prorating to the school district our part on account of the district levy. This property, of course, was in our district. sale of this property has been going on for a series of years, until the proceeds amount to about \$1,400, of which the county has taken the whole. I have met the county commissioners, who have, by a considerable hard pushing, agreed to order a prorating of our part of the money at the next regular meeting, January 1. But by the ill feeling that some of the commissioners have toward me on account of my urgent demands for a settlement, they have stated that they would see to it that I did not get a cent of the money to carry on a term of school with, but that the money should all go on our old warrants. In view of the present extreme difficult situation, I am obliged to ask you to give us your assistance, as I think the case one which comes fully under your jurisdiction.

I wish you to give the treasurer of the county instructions to pass to the credit of school district No. 1 the full sum due the district on account of property sold for taxes by the county commissioners, and also to hold a further sum of \$20 of the cash now in his hands, to the credit of our special fund, and pay out the same in cash upon the orders of the school board of district No. 1 for the support of its school for the present year, irrespective of the warrants now outstanding against the district. By doing this, we shall have \$75 to \$100 to use. To this we will add private subscriptions, and so be able to have the required amount of school. I have seen most of the parties holding our warrants next in order for payment, and they are willing that we should have this money to carry on the school, as it is in their interest, as well as to the school district's.

I inclose my request for instructions to the county treasurer, which I would like you to send to me, as I would hold them until the treasurer gets his order to prorate from the commissioners; then I will give them to him.

There is no way to maintain a term of school in this district unless this request can be granted.

If we can use this money to pay for our school this year, our special fund will soon pay off the warrants against it, and so give us some income to help the district along.

Yours very truly, GEORGE F. BARKER,

Secretary School Board, District No. 1, Custer County, Colo.

Postoffice address, Rosita, Colo.

Denver, Colo., December 22, 1894.

George F. Barker, Rosita, Colo.:

My Dear Sir—As far as the state is concerned, the question of excess warrants has been fully settled [see 13th volume Colorado Reports, pages 316 to 329, inclusive]. Each year's revenue must meet the expenditures therefor before any outstanding paper can be paid.

The law in relation to school district warrants is identical with the state law, and I believe the decision rendered by the supreme court would hold as to the district warrants. Section 68, page 48, School Law pamphlet is as follows:

"It shall be the duty of the county treasurer to open and keep separate accounts with each school district in his county, and hold the funds of each district, subject to the legal warrants of the president, as provided by section 53 of this chapter. the legal warrant of any school district in his county be presented to the county treasurer when there are no funds in his hands to the credit of the district fund against which the warrant is drawn he shall endorse such warrant 'No funds,' and said warrant shall draw interest from the date of such endorsement at the same rate as county warrants in like condition. The treasurer shall keep a list of all warrants so endorsed, and shall pay them whenever there is sufficient money to the credit of the proper fund in the order of such endorsement. The interest on such warrants shall stop when the treasurer shall give notice that he has funds to pay the same; Provided, It shall not be lawful for the officers of any district to issue warrants at any time in an amount in excess of the tax levy for the current year."

Thus the law protects the school children of future years from filchings or ignorance of present boards. While I hope every warrant issued by your school district will be paid in full, yet I hope that some citizen of the state residing in your school district will, through county attorney, object to the payment of outstanding warrants by this year's revenue; then you can have school this year. Let the future take care of the excess warrants.

Very truly,

JOHN F. MURRAY.

LET US WORK TOGETHER.

Saguache, Colo., January 1, 1895.

To School Directors in Saguache County:

To-day we begin another year in the cause of education, the cause of civilization; therefore I take this means of addressing you in the interests of that cause. I do not wish to burden with dry statistics, but to impress with the importance of our school system of which the director is on important part. To that end allow me to offer the following hints and suggestions:

- 1. Visit the school without delay, that you may know of needed improvement, and, while there, make it your business to look over the building; see if repairs are needed; look at the out-buildings; can their appearance be improved; are they in good sanitary condition, well ventilated? If not, why not?
- 2. See that each child is supplied with needed books; it is your duty to do so. Lack of necessary books hinders not only the individual child lacking them, but also hinders the best progress of the whole school. Look over your school fund and see if you cannot afford a few books for the library. A few books added each year will soon make quite a library. Make a start this year.
- 3. Is the teacher all that you could desire? Does she use the latest methods? Is she neat? Is her room well swept, well aired, well heated? It is

easy to find fault but not so easy to form a judgment which will be fair to all concerned. A kind word at the right time has helped many a struggling teacher, and you are the one to give it if it is merited. Remember that a teacher can do much better work when well supplied with apparatus. So much for the school as it now exists, with the added suggestion that you repeat the visit in the near future. Such visits always benefit a school.

4. It is for the good of the schools that you interest yourself in the May election and see to it that persons are elected who will qualify and serve. At the present time almost one-fifth of the directors in this county hold their positions by virtue of appointment by the county superintendent. It should not be so. See to it that energetic workers are chosen to fill vacancies.

Several school districts failed to list all children of school age in the district on April 10. Do not allow it to occur in 1895, as it decreases the revenue about \$5 for each child omitted.

5. When the summer institute begins see to it that all the older pupils and the teacher attend. It will benefit the school and if the directors will give the matter attention much good will result. These summer schools are for the benefit of the public and should be taken advantage of. In most instances it is better to discontinue school during the term of the school for teachers.

By all means insist that your teacher attend the two-weeks' session of the district normal. It is a wise school board which selects a teacher who is progressive enough to attend these teachers' gatherings.

6. If your teacher has given satisfaction employ her for the next term before the present one closes. Secure good teachers, even though you shorten the term. Six months with a good teacher will usually give a better result than a much longer term with a

poor teacher. It is your duty to see to it that all the children of school age are in school. Try and secure a good attendance.

7. It is time our directors' association met to consider important measures in regard to uniformity of text books, district ownership and other business which concerns the schools. Therefore, at the request of a number of directors, a meeting of the directors' association is hereby called for Saturday, January 26, at 1 o'clock, p. m., at the school house in Saguache, Colorado. I wish to make a personal request to you to come.

Wishing you a happy New Year, I remain,
Yours truly,
O. C. SKINNER,
County Superintendent.

COUNTY SUPERINTENDENTS OF SCHOOLS. 1894-1896.

COUNTY	NAME	POST-OFFICE
Arapahoe	A. D. Shepard	Denver
Archuleta	F. A. Byrne	Pagpsa Springs
Baca	S. E. Van Deren	Springfield
Bent	Jno. A. Murphy	Las Animas
Boulder	G. L. Harding	Boulder
Chaffee	John S. Kilgore	Salida
Cheyenne	I. F. Jones	Cheyenne Wells
Clear Creek	A. E. Barker	Idaho Springs
Conejos	D. E. Newcomb, Jr	La Jara
Costilla	A. G. B. Maddox	Mosca
Custer	J. W. Scott	Westcliffe
Delta	Frank W. Robinson	Delta
Dolores	Jos. W. O'Bannon	Rico
Douglas	Frank D. Ball	Castle Rock
Eagle	B. L. Smith	Red Cliff
Elbert	C. F. Lindsley	Flizabeth
El Paso	Clarence O. Finch	Colorado Springs
Fremont	Alfred Durfee	Canon City
Garfield	Fred C. Childs	Satank
Gilpin	Rob't A. Campbell	Central City
Grand	W. H. Throckmorton	Hot Sulphur Springs
Gunnison	H. C. Getty	Gunnison
Hinsdale	O. H. Knight	Lake City
Huerfano	C. G. Brown	Malachite
Jefferson	J. W. Arasmith	Golden
Kiowa	H. A. Long	Sheridan Lake
Kit Carson	W. H. Burnett	Burlington
Lake	Mrs. Anna K. Page	Leadville
La Plata	James R. Durnell	Durango
Larimer	S. T. Hamilton	Fort Collins
Las Animas	W. R. Smethers	Trinidad
Lincoln	H. A. Lowell	Hugo
Logan	D. C. Fleming	Sterling

250 REPORT SUPERINTENDENT PUBLIC INSTRUCTION.

COUNTY SUPERINTENDENTS.—Concluded.

COUNTY	NAME	POST-OFFICE
Mesa	E. T. Fisher	Graud Junction
Mineral	S. E. Van Noorden	Teller
Montezuma	G. W. Burnett	Cortez
Montrose	W. J. Horton	Montrose
Morgan	M. E. Lowe	Fort Morgan
Otero	C. W. Fenlason	La Junta
Ouray	W. W. Rowan	Ouray
Park	Geo. A. Miller	Fairplay
Phillips	C. B. Timberlake	Holyoke
Pitkin	Edward M. Scanlan	Aspen
Prowers	Geo. T. Feast	Lamar
Pueblo	Chas. W. Bowman	Pueblo
Rio Blauco	W. H. Young	Meeker
Rio Grande	Geo. P. Sampson	Monte Vista
Routt	H. B. Peck	Craig
Saguache	O. C. Skinner	Saguache
San Juan	J. N. Pascoe	Silverton
San Miguel	н. с. Ļау	Telluride
Sedgwick	W, H. Kortz	Julesburg
Summit	Geo. H. Clarke	Breckenridge
Washington	J. N. Tague	Akron
Weld	Oliver Howard	Greeley
Yuma	E. S. Klein	Yuma

REPORTS

OF

State Educational Institutions.



STATE EDUCATIONAL INSTITUTIONS.

That our lawmakers believe in education is proved by the liberal provisions and fair support for the state institutions of learning. Appended are full reports from them, which should be studied carefully by our legislators. Too much cannot be said in praise of these schools, and I would say more concerning them did I not think that the school mirrors its president, and to portray the rapid advancement of these institutions, morally, educationally and in a business sense, would be to hold the presidents and faculties up to public view. I could not do them justice without appearing fulsome in prase. Read the reports carefully, observe the work being done, then support them by such appropriations as they deserve.

The State University.

Boulder, October 1, 1894.

To the State Superintendent of Public Schools, Colorado:

Dear Sir—The ninth biennial report of the State University is hereby presented by the regents.

DEPARTMENTS.

The departments of the university remain nearly the same as described in the last report, and are as follows:

College of Liberal Arts—Classical course, leading to the degree of B. A.; philosophical course, leading to the degree of Ph. B.; scientific course leading to the degree of B. S.; literary course leading to the degree of B. L.

Graduate Courses—Leading to the degrees M. A., M. S. and Ph. D.

Colorado School of Applied Science—Civil engineering, leading to the degree of B. S. (C. E.); electrical engineering, leading to the degree of B. S. (E. E.)

Colorado School of Medicine.

Colorado School of Law.

Colorado State Preparatory School, conducted by the university.

ATTENDANCE.

The attendance has strongly and steadily increased in spite of the financial depression, and this fact is one of the most gratifying which the regents have to report. That in a period of financial prosperity this increase would have been much greater cannot be doubted.

The following table shows the attendance during each of the last four years. The enrollment for 1894 will yet be increased considerably by new names.

	University Students	Preparatory Students	Total
1891–2	66	103	169
892-3	129	158	287
893-4	159	146	305
1894-5 (to Oct. 1)	181	182	363

The students of this year are distributed as follows:

College of Liberal Arts	113	
Colorado School of Applied Science (entering class)	10	
Colorado School of Medicine	41	
Colorado School of Law	17	
	181	
Colorado State Preparatory School	182	
		363

COLLEGE OF LIBERAL ARTS.

Since the last report a professor of philosophy and pedagogy has been added to the college faculty. This important chair could not longer remain vacant. Philosophy is a department of every college and university, and pedagogy is finding a place in nearly every progressive university. This chair is especially important in state universities which are a part of the public school system, and must bear an intimate reciprocal relation to some of the other functions of that system. Of the men and women who go forth from the collegiate department, many will become special instructors in high schools, principals or professors in college. The history and philosophy of education have a practical value for all people, and they are important as a part of liberal culture.

Last year the collegiate work was completely reorganized, and the most modern thought upon university problems was considered in its relation to the conditions in Colorado. The result met the unanimous approval of the faculty, and it is presented to the state and the country with confidence in its excellence. Only the most progressive American universities have as yet attained this standard of curric-As formerly, four degrees are recognized. Certain required studies called basic are common to all the courses. Each course has certain characteristic studies appropriate to the degree sought, as Greek for the B. A. degree, and science for the B. S. degree. The remainder are free electives. The large number of electives enables the student, in addition to his general training, to become proficient in some specialty according to his aims and inclinations. In these days the theory that education is simply a means to the end of selfish enjoyment of the knowledge emotions, and serene contemplation of beauty and goodness is abandoned, and a man's training, in addition to enlarging his manhood and increasing his happiness, must contribute to more useful citizenship. Every student to-day in a modernized university may develop his mind broadly and at the same time direct his knowledge and power toward some one field of thought and useful activity. The theory is, know many things, but also much of some one thing.

The standard of the university has been so often shown that attention hardly needs to be called to it. An unusually large per cent, of the professors possess the doctor's degree in their specialties and several have made important contributions to the literature of their subjects. It is safe to say that no university, in proportion to its size and needs, has an abler body of professors. That the university is prepared to meet the ends for which it was founded may be claimed with entire confidence.

GRADUATE COURSES.

The modern university must not only provide for collegiate and professional studies, but must furnish additional instruction and facilities for ad-This is to be the characteristic feavanced work. ture of the coming universities, and each state university must maintain graduate courses. the departments already offer either majors or minors in advanced lines, and the very remarkable number of thirteen graduate students is enrolled this year. Part of these are candidates for the master's degree which requires one year of additional residence, and part are candidates for the doctor's degree which requires at least two additional years of residence. Residence for the doctor's degree is at present interpreted to mean such proximity to the university as will enable candidates to report to the professors at frequent intervals for direction, instruction and examination. The standard of the degree is carefully guarded.

SCHOOL OF APPLIED SCIENCE.

In accordance with the promise made two years ago, a school of applied science has been opened and an entering class of ten gives great encouragement for the future. This might be reckoned as a part of the college of liberal arts, as it actually is in Michigan and many other universities. It is impossible to escape the logic of events demanding provision for civil and electrical engineering for college students. Much of the civil engineering is required as labora-

tory work in a collegiate department of mathematics, and much of electrical engineering as laboratory work in the department of physics. This would be offered informally by those departments, if not formally in separate courses. Most of the state universities have engineering, and this is historic proof of the demand for it as a university department. Many who have finished a high school course demand an opportunity to proceed with their education in engineering courses containing a considerable element of general culture. Accordingly the standard of admission is placed unusually high, and the entering students rank as regular freshmen.

The extra expense to the state for these engineering courses is merely nominal; only one additional professor has been employed, the professor of civil engineering. The professor of physics conducts the special work in electrical engineering.

This great economy comes from the fact that nearly every collegiate department; without additional expense, contributes to the study of the engineering courses.

An electrical plant has been established sufficient for immediate needs, and the most important apparatus is in position. The physical laboratory—one of great excellence—furnishes all the general and elementary work. The department of civil engineering is supplied with the most important instruments.

MEDICAL SCHOOL.

The experiment of conducting part of the medical work in Denver has succeeded beyond expectation. The clinical instruction thus provided has given a new life to the department, and the students number six to one as compared with the former enrollment. The salary received by the professors and lecturers is merely nominal, yet the organization and efficiency of the department merit high commendation.

LAW SCHOOL.

The law school, opened two years ago so auspiciously, maintains its promise and its high standard of work. The law students are among the hardest workers of the university; theirs is a genuine student life, and the privilege of electing college studies in addition to regular law studies adds much to the opportunities of the school. The standard of examination last year was spoken of in terms of high praise. There were twelve graduates in the law class of 1894, the first to receive their diplomas. The devoted work of dean, secretary, professors and lecturers cannot be appreciated too highly by the people of Colorado; and there should be no delay in making possible an increase in the funds of the school. considerable library has been collected and new rooms in the Hale building have been assigned to the department.

PREPARATORY SCHOOL.

The preparatory school, as well as the university proper, shows a large growth. The school has been entirely removed from the university campus and is conducted in a building a few blocks distant. change has been made for the following reasons: First. There is not room upon the campus for both university and preparatory students; the history of universities shows that it is not favorable to the growth of either to conduct university and preparatory work under the same roof; and the energies of the university must be directed more and more to the university departments. The co-operation of the city of Boulder has been secured in supporting the school, on the ground of advantage to the preparatory pupils resident in the city. At present the district provides room, heat and incidentals for the school and pays nearly half of the salaries. The classes in chemistry and biology are conducted in the university laboratories.

The regents believe that an equitable arrangement for the immediate future would be as follows: The school to be conducted as a preparatory school; the courses and work to be maintained at a satisfactory standard and the university to pay pro rata for the pupils from other districts. The school will be of value to the state for several years to come, because many communities maintain no high school, and have need of the advantages of a preparatory school. At present the statutes require the regents to conduct a preparatory school; these should be so changed as to leave the matter to the option of the regents.

The school has grown not only in size but in standard and efficiency. Its great need is more room.

IMPROVEMENTS.

The improvements upon the grounds have been made with much care for expense. We may mention important changes. The sewerage has been centered and conducted off the grounds; a new fence, cheap but neat and substantial, has replaced the old barbed wire fence; the surface stones have been removed from all parts of the campus; the stone walks have been extended, and a small amount of grading has been done.

The Hale scientific building has been completed. This structure is of four stories, one hundred by sixty feet in plan. It is built of white and red sandstone and presents a fine architectural appearance. The first story is given entirely to physics and is fitted with all modern conveniences and improvements in the way of tables, cases, tanks, dark rooms, apparatus, etc. The second story is devoted to mathematics and civil engineering. The law school at present occupies the north end of this floor. The third floor is occupied by the biological lecture rooms, laboratories and cabinets.

The main building has been strengthened; important repairs and changes have been made from roof to basement. The plumbing was entirely replaced. The chemical laboratory has been removed from the upper floor to another building and nearly the entire third story has been given to the library. Several seminary rooms are located adjacent to the library rooms. Three rooms on the second floor have been prepared for the art collection donated by Colonel Ivers Phillips.

The old hospital which was used last year for the law school has been converted into a chemical laboratory. Every room has been completely fitted for some department of chemical work. This is one of the most important changes that has been made.

A central heating plant has been established which connects with the main buildings. It is proving satisfactory and economical.

The first story of an engineering building has been erected and an engine and electrical machinery are already in place and in working order. A dynamo and storage battery with measuring instruments are part of the equipment.

Nearly all the buildings on the campus have undergone important repairs.

Books to the value of one thousand dollars were added to the library during the summer; and the sum of \$1,500 was expended for apparatus. These sums are a very small part of the amount needed for these purposes.

NEEDS.

It is safe to say that half a million dollars should be expended upon the university grounds, buildings and equipments as soon as the state is able. The University of Missouri has received from the state since February, 1891, by direct appropriation and in interest on its endowment, \$1,525,000. The equipment of the university should be the next work taken up by Colorado after the completion of the capitol building. Kansas completed her university before erecting her capitol. The regents are not ignorant of the condition of the state's finances and will keep it in view while arging the immediate wants of the university.

A library building should be begun at once; one wing should be erected now and the rest could be completed later. A gymnasium should be provided as soon as possible. An observatory is a necessary part of a university equipment. Further repairs and improvements of the grounds are indispensable. The furnishing of some of the buildings is incomplete.

The library should be increased by several thousand volumes; and several thousand dollars should be expended for apparatus.

FINANCES.

The immediate needs as just enumerated are:

A library building.

A gymnasium.

An astronomical observatory.

Improvement of buildings and grounds.

Addition of furniture.

Additions to library.

Additions to apparatus.

The proceeds for the next year from the one-fifth mill tax will be about \$40,000. This amount will cover only the pay-roll of the university, leaving nothing for other running expenses and for repairs and improvements. In addition to this revenue, the \$20,000 lost by cutting off the one-tenth mill tax for 1894-5 should be made good to the university and the one-tenth mill should again be levied for the institution; or in some way its equivalent should be given. In addition as large a sum as possible should be set apart for the needs mentioned above.

The one-tenth mill levy would have supplied some of the university's wants, had it not been cut off, and had not the shrinkage in taxes occurred. These reasons were assigned when asking for the extra levy: (1) increased number of students; (2) needs of the library; (3) demands for apparatus; (4) need of additional professors, and (5) the expenses of the law school. The library received only about \$1,000; the various laboratories only about \$1,500; only two professors have been added, and the law school receives only \$2,500 per year for all expenses. The larger part of the needs enumerated still remains. Not more than one-eighth of the additional sum expected has it been possible to devote to the above uses.

The special appropriation of \$34,000 for buildings and grounds has been wholly expended or contracted. The items are to be seen in the appendix to this report. The larger sums were used as follows: To repay \$8,500 previously borrowed from the university income for the Hale building; to complete the Hale building, and to construct a heating plant. The balance was used for minor improvements and repairs. The appropriation was not enough to meet pressing needs, since part of the regular income is now being used for indispensable permanent improvements.

It should be sufficient to place the needs of the university before our legislators with the expectation that they will be met cordially, so far as the state's finances will allow. The educational interests of the state should be made secondary to no other consideration.

The usefulness of the university to the people of Colorado is rapidly increasing, and its growth will be limited only by lack of proper financial support.

It requires a little power of imagination to see things in perspective; to discover future success and advantage to be wrought out by present means. Already twenty graduates of one high school are in the various departments of the university and nearly every genuine high school in Colorado has its representatives. The history of other states shows that from 25 to 50 per cent, of the high school graduates in Colorado will soon use the advantages of the university. Then every community will have a vital interest in its welfare. It is important that it be so supported as to properly perform its function in the system of public education.

GIFTS AND ENDOWMENTS.

It has not been customary to endow state universities by private benefaction. The reasons are too obvious to require mention. We may expect an important change of sentiment in this regard. There are already some notable exceptions to the rule, and recently, important assistance has been rendered state universities by private bounty.

There is no way in which educational endowments could be so well employed as in supplementing the work done by the state. Such union of effort would produce magnificent results and reach the largest number of young men and women.

Endowment and gifts could well be made for any of the following purposes:

Building for the christian associations. (This would be in the hands of the trustees of the association.)

New main building.

Library building.

Building for law school.

Building for medical school.

Gymnasinm.

Astronomical observatory.

Endowment of chairs.

Art collections.

Library endowments and contributions.

Apparatus.

Improvement of grounds.

RELATION TO PUBLIC SCHOOLS AND THE PEOPLE.

The university is the capstone of the public school system. Without it the structure of public education would be incomplete and insecure. It offers to the pupils of the common schools the hope of something ahead and inspires to earnest endeavor. It is an incentive to establish high schools and to maintain them at a creditable standard. Already twelve schools have been placed upon the accredited list of the university; an equal number is striving for that recognition; other communities are desirous to begin and maintain high school work.

The work of the university is to fill every profession with men of high training; to contribute to the ranks of practical educators; to increase scientific knowledge; to influence indirectly every industry and occupation; to make intelligent, moral citizens of the highest capacity for usefulness who are in sympathy with the people; to raise the standard of manhood and womanhood, and to bring material prosperity and high reputation to the state.

REPORTS SUBMITTED.

There are submitted herewith the reports of the secretary of the board of regents, the treasurer of the university and the librarian; also a list of professors with their salaries and the enrollment of students for the current year.

Respectfully submitted,

THE BOARD OF REGENTS OF THE STATE UNIVERSITY. S. A. GIFFIN,

Secretary.

JAMES H. BAKER, President.

PAY ROLL OF THE STATE UNIVERSITY.

(Iucluding all Expenses of Law and Medical Schools.)

James H. Baker, M. A., LL. D., President of Ethics	\$4,500 00
College of Liberal Arts—	
J. Raymond Brackett, Ph. D., Dean, Professor of Comparative and English Literature	\$2,000 00
Mary Rippon, Professor of Germau Language and Liter- ature	1,600 00
William J. Waggener, M. A., Professor of Natural Philosophy (in Europe on leave of absence)	
Charles Skeele Palmer, Ph. D., Professor of Chemistry.	2,000 00
Ira M. DeLong, M. A., Professor of Mathematics	2,000 00
John Gardiner, B. Sc., Professor of Biology (in Europe on leave of absence)	
Maurice E. Dunham, M. A., Professor of Greek	2,000 00
Carl W. Belser, Ph. D., Professor of Latin	2,000 00
George H. Rowe, B. S., Professor of Physics (ad interim)	1,500 00
James H. McLeau, Ph D., Professor of History and Political Science	1,600 00
B. C. Burt, M. A., Ph. D., Professor of Philosophy and Pedagogy (ad iuterim)	1,600 00
Winfield S. Nickerson, S. D., Professor of Biology and Histology (ad interim)	1,400 00
Charles H. Farnsworth, Instructor in Music	900 00
Delphine Bell, Instructor in French	675 00
Frederick K. Kramer, M. A., B. D., Instructor in Oratory	225 00
Irving C. Andrews, B. S., Assistant in Chemistry	300 00
Frank Y. Moseley, Assistant in Biology	500 00
Russell T. Mason, E. M., Secretary	600 00
Alfred E. Whitaker, M. A., Librarian	1,000 00
SCHOOL OF APPLIED SCIENCE—	
Henry Fulton, M. S., Acting Dean, Professor of Civil Engineering	1,600 00
George H. Rowe, B. S., Professor of Electrical Engineering (already listed as Professor of Physics)	
The remaining work of the School of Applied Science is	

done in the College of Liberal Arts.

SCHOOL OF MEDICINE-

Sum set apart by the regents for total expenses of the Medical School_____

4,500 00

- Jeremiah T. Eskridge, M. D., Dean, Professor of Nervous and Mental Disease and Medical Jurisprudence.
- Herbert W. McLauthlin, M. D., Secretary, Professor of Principles and Practice of Medicine and Clinical Medicine.
- Luman M. Giffin M. D., Treasurer, Professor of Anatomy and Physiology.
- Charles Skeele Palmer, Ph. D., Professor of Chemistry.
- John Gardiner, B. Sc., Professor of Histology.
- Horace O. Dodge, M. D., Professor of Physical Diagnosis and Hygiene.
- Abdominal Surgery.
- A. Stewart Lobingier, M. D., Professor of Pathology and Clinical Surgery.
- Clayton Parkhill, M. D., Professor of Principles and Practice of Surgery and Clinical Surgery.
- G. Melville Black, M. D., Professor of Laryngology and Rhinology
- John Chase, M. D., Professor of Ophthalmology and Otology.
- John W. O'Connor, M. D., Professor of Railway and Clinical Surgery.
- Herbert B. Whitney, M. D., Professor of the Diseases of Children.
- Lewis E. Lemen, M. D., Professor of Clinical Surgery.
- George B. Packard, M. D., Professor of Orthopedic Surgery.
- Thomas E. Taylor, M. D. Professor of Obstetrics.
- Josiah N. Hall, M. D., Professor of Materia Medica. Therapeutics and Climcal Medicine.
- John Vroom, M. D., Lecturer on Bandaging, Minor Surgery and Operative Surgery on the Cadaver.
- H. C. Crouch, M. D., Lecturer on Bacteriology.
- Walter A. Jayne, M. D., Lecturer on Gynecology.
- Samuel D. Hopkins, M. D., Lecturer on Medical Chemstry and Urinary Analysis.
- A. Mansfield Holmes, M. D., Lecturer on Applied Anatomy.
- Emley B. Queal, M. D., Demonstrator of Anatomy.
- Earl H. Fish, M. D., Assistant to the Chair of Surgery.

SCHOOL OF LAW-

- Sum set apart by the regents for total expeuse for the Law School
- \$2,500 00
- Moses Hallett, L.L. D., Dean, Professor of American Constitutional Law and Federal Jurisprudence.
- Charles M. Campbell, P. B., B. C. L., Secretary, Professor of Law.
- Oscar O. F. A. Greene, M. A., Professor of Roman Law.
- Herbert B. Shoemaker, B. A., LL. B., Professor of Law.
- Lewis S. Young, B. L., Professor of Law.
- William M. Maguire, Assistant Professor of American Constitutional Law and Federal Jurisprudence.
- Albert A. Reed, LL. B., Instructor in Law.

LECTURERS-

- Vincent D. Markhain, B. A., Lecturer on the Law of Contracts.
- Ebenezer T. Wells, Lecturer on the Law of Real Property.
- Willard Teller, B. A., Lecturer on Equity Jurisprudence, Pleading and Practice.
- Hugh Butler, Lecturer on Common Law and Code Pleadings and the Peculiarities of Colorado Law and Practice.
- Victor A. Elliott, Lecturer on the Irrigation Laws of the West.
- Luther M. Goddard, LL. B., Lecturer on the Laws of Patents, Copyrights and Trade-marks.
- Robert S. Morrison, Lecturer on the Laws of Mines and Mining.
- John Campbell, M. A., L.L. B., Lecturer on the Law of Private and Municipal Corporations,
- Charles S. Thomas, I.L. B., Lecturer on the Law of Bailments and Evidence.
- William C. Kingsley, Lecturer on the Law of Domestic Relations.
- Henry T. Rogers, M. A., Lecturer on the Law of Wills, Executors and Administrators.
- Thomas Ward, Jr., B. A., Lecturer on Criminal Law.
- John D. Fleming, B. A., LL. B., Lecturer on the Law of Insurance.
- Lucius M. Cuthbert, M. A., LL. B., Lecturer on the Conflict of Laws.
- Calvin E. Reed, B. A., L.L. B., Assistant Lecturer on the Law of Real Property.

\$39,911 00

LECTURERS-Concluded,

- Henry C. Charpiot, B. S., L.L. B., Assistant Lecturer on the Law of Domestic Relations.
- Albert S. Blake, Assistant Lecturer on the Law of Contracts.
- Horace G. Lunt, B. A., Assistant Lecturer on the Law of Private and Municipal Corporations.
- William H. Bryant, B. S., LL. B., Assistant Lecturer on the Law of Bailment and Evidence.
- George Z. Dimmitt, M. A., L.L. B., Assistant Lecturer on Criminal Law.
- John H. Deunison, B. A., Assistant Lecturer on Equity Jurisprudence, Pleading and Practice.
- Frauk E. Gove, B. A., L.L. B., Assistant Lecturer on Common Law and Code Pleadings and the Peculiarities of Colorado Law and Practice.

PREPARATORY SCHOOL-

William L. Burdick, Ph. D., Principal, Teacher of History and Greek (one-half of salary paid by univer-	
sity)	\$900 00
Walter W. Remington, M. S., Teacher of Science (one- half of salary paid by university)	600 00
Helen Beardsley, B. A., Teacher of Latin aud German (oue-half of salary paid by university)	400 00
Weslie W. Putnam, B. L., Teacher of Mathematics (all of salary paid by university)	500 00
Anna M. Driggs, Teacher of Greek (all of salary paid by university)	150 00
Thyrza Cohen, Teacher of Drawing (one-half of salary paid by university)	144 00
Charles H. Farnsworth, Teacher of Music (none of salary paid by university)	
H. A. Sears, Janitor (oue-half of salary paid by university	225 00
OTHER EMPLOYES—	
J. E. Bemus, in charge of building aud grounds	600 00
George R. Moore, engineer and fireman	600 00
Six janitors for main building, Hale scientific building, Woodbury hall, medical building and chemical labora-	
tory, and one assistant in physical laboratory	792 00
Total	

TREASURER'S REPORT.

From October 1, 1892, to October 1, 1894.

RECEIPTS-

Balance cash on hand October 1, 1892.	\$ 4,946	90	
Received from state treasurer, general fund	79,166	86	
Received from state treasurer, land income	5,034	33	
Received from state treasurer, special fund	12,500	00	
Received from state treasurer, special appropriation			
fund	8,500	00	
Received from Shoemaker, secretary	1,579	10	
Received from Moseley, secretary	355	50	
Total			\$112,0S2 69

DISBURSEMENTS-

Disbursements as per vouchers	\$107,412 77	
Cash ou haud October 1, 1894.	4,669 92	
		\$112,082 69

Respectfully submitted,

C. G. BUCKINGHAM,

Treasurer.

SECRETARY'S REPORT.

Statement of the secretary of the board of regents, of the University of Colorado, as to the total amount of the warrants drawu upon the treasurer of the university, between October 1, 1892, and October 1, 1894, and for what department and purpose drawn, to-wit:

Salaries of professors, instructors, librarian and secretary of president (exclusive of law and medical departments)	\$ 56,569 49
Janitors and their supplies	1,592 75
Buildings and grounds \$ 9,444 95	
Hale scientific building 215 00	
	9,659 95
Chemical laboratory	666 64
Applied science	424 02
Regents, salaries and mileage	2,074 95
Postage, printing and stationery	2,969 55

SUPERINTENDENT OF PUBLIC INSTRUCTION.

Greek	6 (00
Literature and art	245	16
Biology	368 9	95
Physical laboratory	232	17
Electrical engineering	205	06
Medical salaries and expenses	8,896	01
Periodicals and newspapers	762	05
Latin	71 (05
French and German.	12	00
History and political economy	51	11
Mathematics	13	23
Advertising, visiting and accrediting high schools and all university work in state.	3,088	08
Horses and wagon	198	66
Sundries and small items paid out	5,248	37
Libray	594	79
Columbian Fair	241	55
Fuel, light and oil	3,898	60
Furniture and furnishing	789	05
Law salaries and expenses	3,319	I 1

\$102,391 35

This report does not include the special appropriation of \$34,000 made by the last legislature for improving the campus. This \$34,000 was kept in the state treasury and the president and secretary drew warrants directly upon the state treasurer.

Respectfully submitted,

October 1, 1894.

S. A. GIFFIN, Secretary of Board of Regents.

REPORT ON USE OF SPECIAL APPROPRIATION OF \$34,000.

Amount of appropriation		\$34,000 00
Repaid General Fund of the university as provided in the statutes	\$ 8,500 00	
Expended on Hale scientific building	8,935 76	
Expended for heating plant	7,200 00	
Expended for building for heating plant and for engi-		

neering ______ 5.733 33

Expended on president's house	41	00
Expended on main building and chemical laboratory (formerly medical building)	1,762	91
•	\$32,173	00
Balance	1.827	00
		_

\$34,000 00

The balance of \$1,827 is due on final payments on the contracts for the Hale scientific building and for the heating plant.

S. A. GIFFIN,

JAMES H. BAKER,

Secretary.

President.

LIBRARIAN'S REPORT.

BOULDER, Colo., October 12, 1894.

DR. JAMES H. BAKER,

President of the Board of Regents,

University of Colorado:

Dear Sir—I have the honor to submit herewith the report of the librarian, covering the period from October I, 1892, to October I, 1894.

Volumes	Oct. 1, 1892	Oct. 1, 1893	Oct. 1, 1894	Increase
General library	6,244	6,525	6,973	729
Public document library	1,965	2,235	2,381	416
Totals and net increase	8,209	8,760	9.354	1,145

The necessity of greater space and facilities for the consultation and reading of periodicals and the bound volumes of magazines, which we mentioned in the previous report, has been amply met in the library's new quarters on the third floor, the entire west room, spacious and light, being devoted exclusively to periodicals, magazines and newspapers.

The list of one hundred (100) periodicals is continued, and the completed volumes have been preserved and bound. No binding was done in the first year covered by this report, but during the past year thirty-seven (37) volumes have been bound, and two hundred and fifty (250) more, included in the present report, are in the binder's hands. This will bring our periodical literature well up to date, and increase, by so much, our too meagre sources of reference.

Very respectfully yours,

ALFRED E. WHITAKER,

Librariau.

CATALOGUE OF STUDENTS.

COLLEGE OF LIBERAL ARTS.

GRADUATE COURSES-13.

Name	Home Residence	Course
Andrews, Curtis Irving, B. S., University of Colorado, 1894	Boulder	M. S.
Andrews, Susie May. B. A., M. A., University of Colorado, 1893—1894	Boulder	Special
Beardsley, Helen, B. A., University of Colorado,	Boulder	M. A.
Burger, Charles Rowland, Ph. B., University of Colorado, 1892	Denver	M. S.
Burger, Frederick W., Jr., B. A., University of Colorado, 1894	Boulder	Special
Clarke, George, B. A., University of Dublin,	Montclair	Ph. D.
Cook, Charles Hall, B. A., University of Michigan, 1874	Denver	Ph. D.
*Heppenheimer, Frederick Charles, M. D., Bonn University, Germany, 1880	Boulder	Ph. D.
Kinder, Francis Shanor, Ph. B., University of Colorado, 1894.	Scenery Hill, Pa	M, A.
Kramer, Frederick A., M. A., B. D., Trinity College, 1893; General Theo. Seminary, 1891	Boulder	Ph. D.
Ling, Charles J., B. S., Cornell	Denver	Ph. D.
Smith, Sidney Fuller, U. S. Naval Academy	Denver	Ph. D.
Taggart, Inez Lorenza, B. A., M. A., University of Kansas, 1890—1892	Denver	Ph. D.

^{*}Nominally a senior pending certain examinations.

SENIOR CLASS-10.

Name	Home Residence	College Residence
Bluhm, Conrad	Northfield, Ohio	
Chase, Louise	Boulder	South of Boulder
Davis, Daisy	Greeley	Room 1, Cottoge 1
Driggs, Anna Millicent	Galesburg, Ill	Room 5, Cottage 1
Gaylord, Lewis	Grand Junction	S. A. E. House
Layton, Harry Phillip	Grand Junction	S. A. F. House
McGinnis, Harry	Nederland	S. A. E. House
Mosley, Frank Yandell	Boulder	Room 10, Woodbury Hall
Wilder, Florence	Denver	934 Spruce St.
Ziemer, Myrtle Drinnie	Milwaukee, Wis	Cor. College Ave, and 10th St.

JUNIOR CLASS-14.

Name	Home Residence	College Residence
Andrew, Henry Oresta	Boulder	North 26th St.
Bliss, Ernest Robert	Greeley	Room 11, Woodbury Hall
Burger, William Henry	Boulder	1103 Pearl St.
Bybee, William F	Lafayette	University Place
Campbell, Robert Argyll	Hanover, N. H	1714 Pine St.
Chave, Theodore Tayler	Denver	Stillman Hotel
Cohen, Thyrza	Denver	Room 9, Cottage 1
Farnsworth, Charles H	Boulder	Pine St.
Fuller, May Ridding	Boulder	1060 Spruce St.
Gamble, Elizabeth	Detroit, Mich	University Place
Greenman, Alfred A	Boulder	2035 15th St.
Miller, Charles H. C	Central City	S. A. E. House
Parsons, John Hicks	Boulder	1625 Pine St.
Wise, Jenuie Frances	Boulder	1938 Walnut St.

SOPHOMORE CLASS-34.

N a me	Home Residence	College Residence	
Bailey, Edna Jeannette	Boulder	Boulder	
Ballard, Charlotte Emeline	Watkins	Room 9, Cottage 1	
Brown, Nannie	Greeley	Room 7, Cottage 1	
Bunyan, John	Berthoud	Room 8, Woodbury Hall	
Chase, Charles Albert	S. E. of Boulder	S. E. of Boulder	
Coan, Edith Lancaster	Boulder	910 Pine St.	
Crandall, Merritt Julius	Boulder	1657 9th St.	
Dakan, Albert	Castle Rock	Room 5, Woodbury Hall	
Easley, Charles H	Golden	1140 Marine St.	
Ellet, Alfred Scarritt	Boulder	1719 Walnut St.	
Fuhrer, Frank	Greeley	Pearl St.	
Gamble, Henry Patrick	Detroit, Mich	University Place	
Haukins, Lulu	Boulder		
Haskins, Earl Weldon	La Junta	S. A. E. House	
Henry, Beulah Geuevieve	Boulder	92 Spruce St.	
Hocking, Mina	Boulder	Bet, Pearl St. & Arapahoe Ave.	
Hubbard, James Robert	Boulder	1500 Arapahoe Ave.	
Johnson, Arthur C	Denver	Room 6, Woodbury Hall	
Kendrick, Addie Agathe	Boulder	1563 5th St.	
Kesner, Edgar	Fairplay	964 Marine St.	
Martin, Daniel Roland	Cincinnati, Iowa	Cor, 12th and Walnut Sts.	
Martin, Mabel	Denver	Room 8, Cottage 1	
Neikirk, Jessie Georgia	Boulder	Portland Place	
Neikirk, Lewis Irving	Boulder	Portland Place	
Parker, Mary Lilliau	Georgetown	Room 10, Cottage 2	
Richey, Luzerne A	Senecaville, Ohio	1140 Marine St.	
Rider, William Leslie	S. Norwalk, Conn.	1140 Marine St.	
Sherman, George Thieman	Pueblo	S. A. E. House	
Shotwell, Sue Graeme	Boulder	1028 Maple Ave.	
Squires, Blanche Miranda	Boulder	1019 Spruce St.	
Studinski, Charles Heitler	Pueblo	S. A. E. House	
Tague, Edgar Lemuel	Akron	Room 5, Woodbury Hall	
Taussig, Claude Melnotte	Denver	S. A. E. House	
Weymouth, Edith	Central City	Room 8, Cottage 1	

FRESHMAN CLASS-33.

Name	Home Residence	College Residence
Arnett, W. D.	Chicago, Ill	Boulder
Baldwin, Eliphelet Coomer	Denver	S. A. E. House
Bertschy, Ray D	Saguache	Room 7, Woodbury Hali
Bunyan, William Chalmers	Berthoud	Room 8, Woodbury Hall
Callahan, James	Florence	Room 7, Woodbury Hall
Campbell, Eva Viola	Denver	Cor. River and 17th Sts.
Coleman, Lafayette Saterfield	Denver	Boulder
Haskins, Beulah Pearl	La Junta	Room 7, Cottage 2
Holstein, Charles	Boulder	1735 Pine St.
Hubbard, Margaret	Boulder	
Kettle, Eliza Caroline	Westcliffe	Room 2, Cottage 2
Kettle, Sarah Isabella	Westcliffe	Room 2, Cottage 2
Knapp, Maude Lulu	Albany, Wis	St. Gertrude's Academy
McClure, Bessie Moseley	Boulder	Cor. 11th and Spruce Sts.
Metzler, Daisy Dawn	Crested Butte	Room 3, Cottage 2
Newman, Edna	Durango	Cor. 13th and Spruce Sts.
Nye, Arthur Maurice	Denver	S. A. E. House
Ogden, Eugene Hampton	Boulder	1628 Pine St.
Paddock, Carl Hiram	Trinidad	Room 12, Woodbury Hall
Pritchard, Anna	Greenhorn	Room 3, Cottage 2
Rooney, Nora	Morrison	1212 Pearl St.
Shaefer, Robert Walter	Deuel	Woodbury Hall
Shafer, Wilson Marion	Boulder	1027 Pine St.
Smith, Homer Amos Arthur	Snyder	Room 42, Hale Scientific Bldg.
Southard, Charles Erastus	Greeley	Room II, Woodbury Hall
Thompson, John Royal	Longmont	Cor. Arapahoe Av. and 15th St.
Ward, Louis Elmer	Longmont	1539 9th St.
Waters, Lilian	Grand Junction	Room 9, Cottage 2
West, Frank Callende r	Durango	1418 Walnut St.
Whitaker, Milton Clarence	Durango	Room 7, Woodbury Hall
Whitmore, May	New York, N. Y	1514 Pine St.
Williams, Edith	Greeley	Room 8, Cottage 2
Wise, Elinor	Boulder	1938 Walnut St

SPECIAL STUDENTS-9.

Name	Home Residence	College Residence.
Baker, T. O	Durango	Boulder
Boot, Nettie	Boulder	2433 6th St.
Downer, Charlotte	Bouider	
Hankins, Martha	Boulder	Room 2, Cottage No. 1
Houghtou, Annie Prince	Portland, Me	Mrs. Perry's, University Place
Jones, George W., M. D	Boulder	Cor. 8th and Pine Sts.
Kingsley, Charles M	Boulder	2126 6th St
Silliman, Flora Edna.	Dunlap, Ill	Bowen Hotel
Whitmore, Grace	New York, N. Y	1514 Pine St.

SCHOOL OF APPLIED SCIENCE.

SOPHOMORE CLASS-I.

Name.	Home Residence.	College Residence.
Whiteside, Frederick Wm	Denver	S. A. E. House

FRESHMAN CLASS-9.

Name.	Home Residence	College Residence
Emerrson, George Dana	Denver	Room 4, Woodbury Hall
Hardcastle, William Bodwell	Denver	S. A. E. House
Hayden, Charles Christopher	Walsenburg	1732 12th St.
Hogarty, Barry	Greeley	Room 11, Woodbury Hall
Stahl, John Henry	Denver.	1732 12th St.
Swaim, Louis Bunn	Walsenburg	1732 12th St.
Ward, Arlie McCoy	Longmont	1532 9th St.
West, Arthur Benjamin	Denver	S. A. E. House
Wood, Franklin Porter	Boulder	2326 13th St.

SCHOOL OF LAW.

SENIOR CLASS-8.

Name.	Home Residence	College Residence
Darley, Alexander Ward	Denver	724 Walnut St.
Hamill, James Nesbitt	Denver	S. A. E. House
Ingram, Edwin John	Boulder	1827 Walnut St.
Luethi, Francis Samuel	Boulder	Boulder
Marsh, Grant M	Gunnison	Boulder
Regennitter, Erwin Louis	Davenport, Iowa	S. A. E. House
Sumner, Charles Marsh	Durango	S. A. E. House
Wales, George Francis	Boulder	Room 6, Woodbury Hall

JUNIOR CLASS-9.

Name	Home Residence.	College Residence
Carney, Patrick	Ouray	Room 7, Woodbury Hall
Condit, James	Buena Vista	Room 9, Woodbury Hall
Graham, Royal Reed	West Fairfield, Pa	S. A. E. House
Jacobs, John Theodore	Greeley	12th St.
Mallory, Thomas Matteson	Denver	Batchelor's Hall
Monahan, Patrick W	Grand Junction	Room 9, Woodbury Hall
Rooney, Will Clark	Denver	Boulder
Wanless, Frederick Randall	Denver	1914 Arapahoe Ave.
White, Walter Evans	Denver	S. A. E. House

SCHOOL OF MEDICINE.

GRADUATE COURSE-2.

Name	Home Residence	*College Residence
Frary, Louis Alliston, M. D.	Denver	311 West 14th Ave.
Love, Minnie C. T., M. D	Denver	1670 Broadway

^{*}Denver.

SENIOR CLASS-II.

Name	Home Residence	*College Residence
Bless, Victor A	Denver	1738 Pearl St.
Clements, Annie	Denver	1411 Champa St.
Commings, Benjamin F	Denver	1709 Stout St.
Delehanty, Edward	Denver	1420 So. 15th St.
Gardiner, Mary Louise	Denver	1208 So. 10th St.
Gardiner, Matthew Henry	Denver	1208 So. 10th St.
Jones, John Franklin	Denver	1616 Arapahoe St.
Loustano, Andrew Jerome.	Denver	1521 Stout St.
MacDonald, William C	Denver	Highlands, Colo.
Moore, William Alexander	Elizabeth	3021 Lawrence St.
Sigmun, Horace Grant	Pneblo	956 Broadway

^{*}Denver.

JUNIOR CLASS-12.

Name	Home Residence	*College Residence
Alger, Charles Joseph	Denver	1533 Lafa y ette St.
Chapman, Walter Scott	Denver	1628 Broadway
Cline, John Wilbie	Hazeltine	2330 Washington Ave.
Hayes, Alfred Irwin	Denver	1125 23d St.
Herrick, Seldon Foster	Denver	146 West Ellsworth St.
Kaverry, Mary	Denver	14th and Arapahoe Sts.
Lake, Mary Alice	Denver	1627 Lincoln Ave.
Medill, David W	Denver	16th and Stout Sts.
Pullman, John Donglas	Denver	146 West Ellsworth St.
Roberts, Leonidas Bane	Colorado Springs.	
Robinson, Martin Arthur	Lake City	1717 Stont St.
Wigglesworth, Albert M	Durango	
	1	

^{*}Denver.

FRESHMAN CLASS-16.

Name	Home Residence	College Residence
Bird, Mary	San Jose, Cal	Room 12, Cottage 2
Connacher, Sara S	Hampton, Va	Room 12, Cottage 2
Davis, Orlando Morton	Gorham, Me	
Edmiston, Matthew Arnold.	Littleton	1515 9th St.
Fullerton, Robert E	New Castle	1518 Walnut St.
Guthrie, Alice	Denver	Cor. 14th and Walnut Sts.
Jones, John Anderson	Las Animas	1302 17th St.
Maxwell, James Graham	Castle Rock	1723 12th St.
McGill, Earl Duane	Morrison	1515 9th St.
O'Brien, George Gilbert	Boulder	Boulder
Roberts, May	Colorado Springs	Room II Cottage 2
Rumsey, Frank William	Goshen, N. Y.	
Sheldon, Daniel W	Boulder	1817 Arapahoe Ave.
Weaver, Charles David	Longmont	, 1645 12th St.
Weaver, John Audrew	Longmont	1645 12th St.
Wilcox, Henry William		r2th St.

STATE PREPARATORY SCHOOL.

FOURTH YEAR-20.		
NAME.	SCHOOL RESIDENCE.	
Anderson, Josephine	Arapahoe and 26th St.	
Andrews, Frances Ruth	1903 Walnut St.	
Brown, Garry Estep		
Burnham, Joseph Lloyd	1203 Grove St.	
Calvert, Edna Lee	University Addition	
Chase, Harry Albert	1201 Hill St.	
Embree, Wesley Moreland	Hill St.	
Grayson, Carrie Belle	420 Pear1 St.	
Hahu, Mabel Josephine	Arapahoe and 15th St.	
Morrison, Richard Charles	1603 Walnut St.	
Niles, Clara Elizabeth	Cor. 40th Parallel and 17th St.	
Ogden, William Brayton	1914 Arapahoe Ave.	
Perry, Fred Lewis	rio5 rith St.	
Pickle, Havden Lowrey	2019 Grove St.	

Name.	SCHOOL RESIDENCE.
Rule, William Lloyd	Newland Addition
Shute, Pearl Amanda	Hill and 15th Sts.
Stanton, Mary Jessie	East Pine St.
Temple, Elmer Smith	Pine and 15th Sts
Van Fleet, Edwin Wilson	1002 Spruce St.
Wolf, Winifred Mary	Spruce and 18th Sts.
THIRD YEAR-43. NAME.	SCHOOL RESIDENCE.
Campbell, Gertrude Jane	1702 Pine St.
Chipman, Reeve	
Collie, Joseph Edward	
Cullacott, Bertha Louise	
Crandall, Roy Eugene	
Cutler, James Elbert	
Dennett, Guy Russell	Mapleton Heights
Danford, Mary Agues	1526 Spruce St.
Dodge, Horace Colburn	1605 Pine St.
Eggleston, Ada Myrtle	Marine and 18th Sts.
Fulton, Henry, Jr.	
Fowler, John Clare.	2029 Walnut St.
Fowler, May Pearl	2029 Walnut St.
Frey, Emma	826 Pearl St.
Griffin, Frank Albee	Mapleton Heights
Hammond, Edward Mackubin	556 University St.
Hixou, Howard H.	_Arapahoe and 18th St.
Hixon, T. E.	Arapahoe and 18th St.
Harmon, Hattie Palmer	508 Pearl St.
Jellison, Laura Mabel	704 Spruce St.
King, Herbert Dean	University Place
Lockwood, Fred William	517 Pine St.
McIntire, Joseph Phillips	1538 Arapahoe Ave.
Miller, James PiersonWalnu	t, between 13th and 14th
Montgomery, Mabel	1802 Water St.
Pettengill, Bertha Elizabeth	803 Spruce St.
Quick, Richard James	III6 Pine St.

Ralli, Edith_____1626 9th St.

NAME.	SCHOOL RESIDENCE.
Rosier, Charles	
Roth, Frederick Eugene	
Ruffenach, Rosa	
Salsbury, John Allen	
Sholes, Julia Anna	
Smith, Bertie E	
Stewart, Walter McCutcheon	
Thornton, Emma Jane	1607 9th St.
Tourtellot, Aimee	
Tyler, Lu Clinton	Boulder
Wells, Letta Belle	1505 9th St.
Wolcott, Frank Howard	905 Marine St.
Wood, Daisie Huntington	2326 13th St.
Wood, Minnie	Court House
Woollett, Francis Ives	724 Arapahoe Ave.
SECOND Y	
NAME.	SCHOOL RESIDENCE.
Austin, Claribel Harriett	
Autrey, Bernice Edith	
Bell, Rosetta Gordon	
Blore, Wm. H.	
Callahan, Ella	2138 Walnut
	1327 Walnut
	1651 9th St.
Danford, Jessie Maria	1651 9th St. 1526 Spruce St.
Danford, Jessie Maria DeLong, Edith	
Danford, Jessie Maria	
Danford, Jessie Maria DeLong, Edith Ellet, Laura Foote, Bessie Miuerva	
Danford, Jessie Maria DeLong, Edith Ellet, Laura Foote, Bessie Miuerva Foote, Ethel Wilhelmina	
Danford, Jessie Maria DeLong, Edith Ellet, Laura Foote, Bessie Miuerva Foote, Ethel Wilhelmina Hammer, Julia	
Danford, Jessie Maria DeLong, Edith Ellet, Laura Foote, Bessie Miuerva Foote, Ethel Wilhelmina Hammer, Julia Henry, Luella	
Danford, Jessie Maria DeLong, Edith Ellet, Laura Foote, Bessie Miuerva Foote, Ethel Wilhelmina Hammer, Julia Henry, Luella Hocking, Elmer Vincent	
Danford, Jessie Maria DeLong, Edith Ellet, Laura Foote, Bessie Miuerva Foote, Ethel Wilhelmina Hammer, Julia Henry, Luella Hocking, Elmer Vincent Holly, Charles Alonzo	
Danford, Jessie Maria DeLong, Edith Ellet, Laura Foote, Bessie Miuerva Foote, Ethel Wilhelmina Hammer, Julia Henry, Luella Hocking, Elmer Vincent Holly, Charles Alonzo Johnson, Adelia Elizabeth	
Danford, Jessie Maria DeLong, Edith Ellet, Laura Foote, Bessie Miuerva Foote, Ethel Wilhelmina Hammer, Julia Henry, Luella Hocking, Elmer Vincent Holly, Charles Alonzo	

SOFEKINIENDENT OF TOTAL	
NAME.	SCHOOL RESIDENCE.
Martin, Harold	Boulder Co.
McClure, George A	
Mosher, George Warren	1610 Piue St.
Nichols, Guy Clifford	East Pearl St.
Parsons, Mattie Adelaide	1823 Hill St.
Ricketts, Blanche Ethelyn	713 Marine St.
Ricketts, Elizabeth Leota	713 Marine St.
Rust, CarolineAr	apahoe, bet. 20th and 21st.
Savory, Ada	1714 Pine St.
Sheldon, Harrison W	1817 Arapahoe Ave.
Smith, Eva Venetia	13th, bet. Hill and Bluff,
Sternberg, Grace Revina	East Arapahoe Ave.
Sternberg, Irene	
Stryker, George Washington	536 Walnut St.
Sutherland, Rachel Josephine	
Thompson, Bertha Margaret	802 Walnut St.
Thompson, Donald	
Trimble, Elva Carrie	
Waite, Fred Morrison	
White, Fred Lewis	
Whitney, Leou	
FIRST YEAR—79.	School Residence.
NAME.	
Adams, Ethelbert B	S. E. University Addition
Andersou, Emma Catherine	Arapanoe and 2/th St.
Andrew, Ida May	Ding and 16th St.
Austin, Evan Gilbert	
Baker, Nettie	
Bell, William	
Bellmau, George	2 1 1221 Fine St.
Booth, Frank Lamare	Goss, bet. 20th and 21st.
Bush, Mary Helen	
Campbell, Coline Monica	
Carbaugh, Maude May	
Cheney, Charles Homer	Biun and 12th St.
Clarke, Elbra Paul	North Boulder.

NAME.	SCHOOL RESIDENCE.
Collins, Mary	2127 Walnut St.
Daḥlstrom, Hilma Charlotte	615 Spruce St.
Davis, Ilma Mabel	South 24th St.
Dunn, Alice	1316 Pearl St.
Durward, Florence May	Walnut, bet. 19th and 20th.
Evans, Emma Gertr u de	Arapahoe aud 15th St.
Faivre, Lula	Pearl, bet. 14th and 15th.
Feeny, Clara Blanche	2228 12th St.
Fisher, Dau	Pearl St.
Fitzgerald, John	
Garbarino, Lucinda Marie	
Giffin, Horace Leou	1244 Pine St.
Glauer, Daisy Arnetta	Wolff's Addition
Hall, William Henry	East Boulder
Hankins, Elton Ellsworth	Cottage No. 1
Harmon, Edward Everett	508 Pearl St.
Hayward, Maud Anna	South 24th St.
Henderson, Samuel Edward	2511 Hill St.
Heppenheimer, Fred	1427 Spruce St.
Hixon, Alice	Arapahoe aud 18th St.
Holmes, Emma Hubble	Arapahoe and 15th St.
Hubbard, John Charles	1515 Marine St.
Huffmau, Della	East Arapahoe St.
Johnson, Catherine	935 Pearl St.
Jones, May Ellen	Bluff, bet. 11th and 12th
Kesner, Rebecca Sophia	964 Marine St.
Koehler, Hermine	941 Pearl St.
Laesch, Walter Philip	Mapletou Heights
Law, Alfred Howard	1621 9tlı St.
Linkletter, William Alexander	Northeast Boulder
Lockwood, John Spaulding	517 Pine St.
Malden, Elmo	1610 Railroad St.
Mallinckrodt, Philip Herman	1750 9th St.
McIntosh, Josephine	North 12th St.
Montgomery, Josephine Edith	
Nelson, Hulda Sophia	Walnut and 18th Sts.

NAME.	SCHOOL RESIDENCE.
Nelson, Ida Catherine	South Boulder, bet. 23d and 24th
Nelson, Lewen Russel	438 Pearl St.
Nelson, Mary Ethel	438 Pearl St.
Nay, Samuel Wesley	
Neikirk, Thomas	Portland Place
Parks, Ida Lulu	1612 Spruce St.
Pate, Edgar Thomas Alexander	S. E. University Addition
Patterson, Robert Milton	2224 13th St.
Peterson, Henry	East of University
Peterson, Minnie Clara	East of University
Royer, Floyd E.	Bet. 12th and 13th, Pine St.
Ruffenach, Mary	601 Spruce St.
Saggau, Bertha Mary	901 Pearl St.
Seeley, Effie	1117 Pine St.
Shafer, Alla	1404 Pearl St.
Snarr, Mina	1618 12th St.
Snyder, Maud Anna	552 Arapahoe St.
Stevens, Ruth Ella	1805 Mariue St.
Taylor, Roy Fred	627 Spruce St.
Tevis, Lora Bell	1530 Walnut St.
Torrey, Anna Caroline	1840 Grove St.
Tourtellot, Jo	2245 Hill St.
Upton, Gertrude Eliza	Pearl, bet. 14th and 15th
Van Fleet, Nora	
Volk, Allen	12th, bet. Hill and Pine
Ward, George	1532 9th St.
Wellman, May Louise	1828 Pine St.
Wolf, Edith Alice	North 12th St.
Wolf, Ernest Laverne	1820 Hill St.
Wood, Mary Ella	2326 13tlı St.

SUMMARY.

Graduate students		13
College of Liberal Arts—		
Seniors	10	
Juniors	14	
Sophomores	34	
Freshmen	33	
Special students	9	
		100
School of Applied Science		10
School of Law		17
School of Medicine		41
		181
State Preparatory School.		182
Total		363

The State Normal School.

Greeley, Colo., August 1, 1894.

To the State Board of Education, Denver Colo.:

Below please find report of the Board of Trustees of the State Normal School for the year ending July 31, 1894:

NUMBER OF STUDENTS, NAMES, RESI-I. DENCE.

The whole number of students enrolled during the year:

Females	275	
Males	88	
Total in normal department		363
Preparatory	30	
Model school	57	
Kindergarten	65	
Total		152
Grand total		515

Their sex, residence, etc., being shown as fully as may be by catalogue of 1893-1894 hereto attached and marked "Exhibit A," and is a part of this report.

See pages 14 to 28 inclusive.

II. THE ATTENDANCE.

The average daily attendance, first term (estimate), 97 per cent.

The average daily attendance, second term (estimate), 94 per cent.

The average daily attendance, third term (estimate), 98 per cent.

The average daily attendance, for entire year, 96 1-3 per cent.

The number of days in session during the year, 190.

III. CURRICULUM, CLASSIFICATION AND DE-PARTMENTS.

For branches taught and time devoted to each, text books, etc., we refer you to catalogue for 1893-1894 attached to and made a part of this report, marked "Exhibit A."

See pages 35 to 106, inclusive.

Apparatus—The apparatus of the school consists of set of psysiological models (imported), relief maps, reading and number charts, globes, together with such psysical chemical apparatus as is required for laboratory work.

Library—The library numbers, including text books, books of reference, educational reports, etc., about 3,000 volumes.

IV. NUMBER OF STUDENTS IN EACH DE-PARTMENT CLASS.

Senior	35
Junior	90
Sophomore	10
Freshman	28
Preparatory	30
Model school	57
Kindergarten	55

There were thirty-five (35) diplomas granted, as follows:

Julia Gardiner, Denver, Colo. Margaret Rank, Central City, Colo. Grace A. Catherwood, Blair, Neb. Alice Durkee, Greeley, Colo.-Nellie Day, Central City, Colo. Lulu Wright, Greeley, Colo. Lottie Lewis, Central City, Colo. Irene Welch, Greeley, Colo. Ella Work, Red Cliff, Penn. Anna Robinson, Evans, Colo. Flora B. Turner, Avada, Colo. Ruth Burnett, Burlington, Colo. Carrie Cordes, Greeley, Colo. Anna Peters, Trinidad, Colo. Dora Severance, Timnath, Colo. James Woods, Castle Rock, Colo. John Lynch, La Junta, Colo. William Shumway, Denver, Colo. Eloise Delbridge, Greeley, Colo. Katie Creager, Albuquerque, N. M. Charles Clark, Greeley, Colo. Anna Work, Red Cliff, Penn. Louise A. Merrill, Lamar, Colo. Gillian Coffey, Denver, Colo. Pearl Melvin, Saguache, Colo. Maude Freeman, Greeley, Colo. Maude Gass, Denver, Colo. Nellie Williams, Castle Rock, Colo. Minnie Nauman, Greeley, Colo. Edna Messinger, Central City, Colo. May McGhee, Colorado Springs, Colo. Beatrice Trehearne, Denver, Colo.

Jessie Yard, Canon City, Colo. Dell Bond, Denison, Iowa. Suspensions—None. Expulsions—None. School in session—190 days.

V. THE NAMES AND NUMBER OF TEACHERS.

Total number of teachers employed, 16.

DEPARTMENTS	Time of Service, Years	Annual Salary
Z. X. Snyder, Pres., Psychol., Hist. and Science of Education.	3	\$5,000
Jas. H. Hays, Vice-Pres., Pedagogics and Latin	3	2 100
Elma Ruff, Preceptress, History and Literature	2	2,000
Roland W. Guss, Psycical Science	21/3	2,000
Mary D. Reid, Mathematics	5	1,500
N. M. Fenneman, Geography and Political Economy	2	1,500
A. F. Beardsley, Biology	2	1,200
Sarah B. Barber, Elocution Delsarte	21/3	1,300
J. S. Young, United States History and Grammar	1/3	1,500
Edgar L. Hewitt, Penmanship	2	500
J. R. Whiteman, Vocal Music	5	400
C. T. Work, Sloyd and Drawing	2	1,300
Sarah G. Fenneman, Supt. Model School	22/3	1,500
Helen C. Dresser, Asst. Supt. Model School.	2	600
Lizzie Kendel, Asst. Supt. Model School	I	300
Laura E. Tefft, Supt. Kindergarten	2	1,500

VI. OTHER EMPLOYES.

A. J. Park, Secretary Board of Trustees, \$300 per annum.

C. H. Wheeler, Treasurer Board of Trustees, \$100 per annum.

W. L. Young, Librarian, \$850 per annum. Benjamin Stevens, Janitor, \$720 per annum. A. L. Evans, Gardener, \$720 per annum. VII. For statement of financial affairs of the school, see attached statement, marked "Exhibit B." There is still an outstanding indebtedness of \$9,400 cansed by the failure of the appropriation of 1889 for \$10-000, account of building.

VIII. EXPENSES FOR THE ENSUING YEAR.

There will be required for the ensuing year for furnishing and maintenance about \$35,000.

Respectfully submitted,

JAMES W. McCREERY, President Board of Trustees.

Attest: A. J. PARK, Secretary.

STATE OF COLORADO, SS. COUNTY OF WELD,

I, James W. McCreery, trustee and president of the board of the State Normal School of Colorado, do solemnly swear that the foregoing statement is a true report of the affairs of said school for the past year to the best of my knowledge and belief.

(Seal)

JAMES W. McCREERY.

Subscribed and sworn to before me this 26th day of November, 1894.

CHARLES D. TODD,

(Seal).

Notary Public.

My commission expires October 1, 1898.

FINANCIAL STATEMENT

OF THE STATE NORMAL SCHOOL OF COLORADO, FOR THE YEAR ENDING JULY 31, 1894. EXHIBIT B.

MAINTENANCE.

RECEIPTS— MAINTENANCE.			
Balance on hand July 31, 1893	\$ 48	97	
Received from taxes	34,060	00	
Received from library (account fees)	1,465	90	
Received from reading room (account fees)	405	50	
Received from laboratory (account fees)	109	00	
Received from model school	140	50	
Received from kindergarten	184	00	
Received from Sloyd	3	25	
Received from Public School Income Fuud	162	33	
Total			\$ 36,574 45
DISBURSEMENTS-			
Account, faculty	\$ 22,575	00	
Account, other employes	2,966	20	
Account, library	1,075	71	
Account, apparatus.	208	05	
Account, furniture	240	95	
Account, reading room	189	35	
Account, laboratory	194	53	
Account, Sloyd laboratory	380	30	
Account, model school	302	51	
Account, kindergarten	184	96	
Account, grounds	388	31	
Expense—			
Postage	200	00	
Fuel	468	61	
Light	150	00	
Water tax	277	50	
Telephone	63	14	
Insurance, (five years)	1,318	75	
Rent	322	50	

SUPERINTENDENT OF PUBLIC INSTRUCTION. 293

Expense—Concluded.		
Janitor (kindergarten)	125 00	
Trustees	215 70	
Stationery	55 85	
Printing	47 21	
Advertising	401 90	
Catalogue, 1893	. 520 30	
Catalogue, 1894	340 56	
Institute expenses	295 45	
Commeucment expenses	66 75	
Merchandise	105 84	
Freight	48 84	
Lumber	15 71	
Grading street	25 00	
Repairs	109 73	
Labor	53 37	
Interest	739 58	
Sundries	302 38	
Total		6.6.6
Total		6,269 67
Balance	-	1,603 91
Grand total		\$36,574 45
BUILDING ACCOUNT.		
Received from the state treasurer on appropriation		\$31,070 63
DISBURSEMENTS-		
Overdraft July 31, 1893	\$16,682 65	
Finishing interior central building	11,024 77	
Architect, on account	1,642 79	
Sewer	634 97	
Water maius and hydrants for fire purposes	556 85	
Total		\$30,542 03
Balance		528 60
Grand total	-	\$31,070 63

REPORT OF THE PRESIDENT OF THE STATE NORMAL SCHOOL.

Greeley, Colo., December 11, 1894.

To Hon. J. F. Murray, State Superintendent of Public Instruction:

I have the honor to submit the following periodic report of the State Normal School of Colorado:

In our civilization there are three fundamental agencies—the home, the school and society. The most powerful of these is the home. Whenever its sacredness is maintained there will be found a high state of civilization. The controlling interest in it is the child. All interests finally center in its preservation and development. The school and civic society are both instituted for its benefit. True, these agents are reciprocal in their influence, but the school and civic society exist for the home and the home for the child. It is clear that the child, after spending a period at home and at school, enters society. That is when he has attained his majority. What should be his preparation for this new duty?

A glance at society reveals the fact that muscle, voice, ink and steam are each and all most powerful in the development and preservation of our civiliza-The products of muscle through labor are enor-There is muscle in all material advancement; farming, mining, railroading, building, etc., are all enterprises constructed and operated by labor. human voice performs no small share in moving men to action. Great causes have been won and others lost through the power of human speech. It has long been disputed which is the more powerful—the pen or the sword. The best thoughts, sentiments and aspirations of the human family are embalmed in ink. What a mighty factor in an all-round growth is the pen! Through it each generation has access to the accumulated knowledge of the race. In this knowl-

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edge is a mighty potency to action. To serve as a distributer of these products of head and hand is the steam engine, carrying them from state to state, from nation to nation. Distance between the city and the country is practically eliminated. The city is taken to the country and the country to the city.

From the above brief analysis it becomes apparent what the school should do to prepare the child to enter conscientiously into the life about him.

It implies physical training to the end (1) that he may have good health, (2) that he may have ease of body, (3) that he may have skill of muscle; in short, he should have such training as will make his body a vigorous and ready servant of the will. It implies mental training to the end that he may have a healthy and active mind; that he may be able to express himself through voice and hand.

It implies ethical training to the end that he may enter righteously into the conscious life about him.

In accordance with this conception of education, the trustees and management of the State Normal School have adopted a course of study especially fitted to prepare prospective teachers for the important work which they are to undertake. To do this exalted work, the normal school must not only keep abreast the times, but it must lead the educational van. must project the future. There must be within it a continual growth in scholarship, power culture and influence such scholarship, such power, such culture, such influence as will grow strong men and women, equipped for the work of teaching. To this end those who graduate must be scholars and teachers—teachers possessing a high type of character. To make the former there must be strong academic departments; the latter, strong professional training. possess a scholarship consisting not in an accumulation of knowledge, but in a trinity of knowledge, power to think and culture. Such a trinity is the result of very careful training. It demands experts as

teachers of the various subjects. Such the school has. Each one was selected because of his or her special fitness for the work of the department.

That phase of training with which the professional department has to deal is power to teach. To quicken and develop this power, appropriate stimuli and training are necessary. To know the child and how to lead it give rise to the proper stimuli. These stimuli consist in observing the activity of children, in observing expert teachers' work, in reading professional literature, and in the presence of a living teacher. Training results from a response to the above stimuli. For such a professional training the school is prepared. In short, the function of the school is to promote and elevate the teacher, and by so doing promote and elevate the profession of teaching, which will result in the rise of the general intelligence and culture of the people of the state.

COURSE OF STUDY.

LANGUAGE.

- 1. English Grammar.
- 2. Speech.
- 3. English Composition.
- 4. Rhetoric and Latin.

SCIENCE.

- 1. Physiology.
- 2. Chemistry.
- 3. Zoology.
- 4. Botany.
- 5. Public School Science.
- 6. Physics.
- 7. Geography.

MATHEMATICS.

- 1. Arithmetic.
- 2. Algebra.
- 3. Geometry.
- 4. Mensuration.

HISTORY, LITERATURE AND CIVICS.

- 1. United States History.
- 2. General History.
- 3. History of Literature.
- 4. Study of Authors.
- 5. Civics.

ART.

- 1. Writing.
- 2. Drawing.

- 3. Kindergarten.
- 4. Sloyd.
- 5. Music.
- 6. Painting.

PROFESSIONAL WORK.

1. Theoretical Work—

Psychology.

Science and Art of Education.

History and Philosophy of Education.

School Management.

Methods.

Ethics.

2. Practical Work—

Psychology.

Art of Education.

School Management.

Methods.

Observation and Teaching in Model School.

Kindergarten.

For attendance, faculty, etc., the reader is referred to the statistical report of the secretary of the institution, found elsewhere in this report.

Extending my thanks to the department of public instruction, to the educational people of the state, to the trustees, the faculty, the alumni, the students, and the citizens of the state for their sympathy, their interest and co-operation in my labors, I am,

Yours very sincerely,

Z. X. SNYDER, President State Normal School.

The State Agricultural College.

Extracts from an act of the General Assembly of Colorado to establish a State Board of Agriculture and to define its duties:

"That a board is hereby constituted and established which shall be known by the name and style of The State Board of Agriculture. It shall consist of eight members, besides the governor of the state and the president of the State Agricultural College, who shall be ex-officio members of the board. The governor, by and with the consent of the senate, on or before the third Wednesday of January of each biennial session of the General Assembly, shall appoint two members of the board to fill the vacancies that shall next occur, which vacancies shall be so filled that at least one half of the appointed members of the board shall be practical farmers." (The term of a member of the board is eight years.)

"The State Board of Agriculture shall have the general control and supervision of The State Agricultural College, the farm pertaining thereto, and lands which may be vested in the college by state or national legislation, and of all appropriations made by the state for the support of the same. The board shall have plenary power to adopt all such ordinances, bylaws and regulations, not in conflict with the law, as they may deem necessary to secure the successful operation of the college and promote the designed objects.

"As soon as suitable buildings can be erected and furnished a school shall be established, and shall be known by the name and style of The State Agricultural College. The design of the institution is to afford thorough instruction in agriculture, and the natural sciences connected therewith. To effect that object most completely, the institution shall combine physical with intellectual education, and shall be a high seminary of learning, in which the graduates of the common school, of both sexes, can commence, pursue and finish a course of study, terminating in thorough theoretical and practical instruction in those sciences and arts which bear directly upon agriculture and kindred industrial pursuits."

Extracts from acts of Congress relating to colleges giving instruction in agriculture and the mechanical arts:

PURPOSE OF GOVERNMENT AID.

"The leading object shall be, without excluding other scientific and classical studies, and including nullitary tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the states may respectfully prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." (Section 4, Morrill act," July 2, 1862.)

ADDITIONAL ENDOWMENT BY THE GEN-ERAL GOVERNMENT,

"For the more complete endowment and maintenance of colleges for the benefit of agriculture and the mechanic arts now established, or which may be hereafter established, in acordance with an act of Congress approved July 2, 1862, the snm of \$15,000 for the year ending June 30, 1890, and an annal increase of the amount of such appropriation thereafter

for ten years by an additional sum of \$1,000 over the preceding year, and the annual amount to be paid thereafter to each state and territory shall be \$25,000, to be applied only to instruction in agriculture, the mechanic arts, the English language, and the various branches of mathematical, physical, natural and economic science, with special reference to their applications in the industries of life and to the facilities for such instruction." (Section 1, "Morrill act," August 30, 1890.)

THE STATE BOARD OF AGRICULTURE.

Term Expires.

Hon. Charles H. Small, Pueblo......1895

Hon. Frank J. Annis, Fort Collins.....1895

Hon. John J. Ryan, Fort Collins.....1897

Hon. A. L. Emigh, Fort Collins.....1897

Hon. James E. Du Bois, Fort Collins...1899

Hon. Joseph S. McClelland, Ft. Collins.1899

Hon. James L. Chatfield, Gypsum....1901

Hon. A. Lindsley Kellogg, Rocky Ford.1901

Governor Davis H. Waite......Ex-officio

President Alston Ellis.......Ex-officio

OFFICERS.

A. L. Emigh, President.

Daniel W. Working, Secretary.

Charles H. Sheldon, Treasurer.

BOARD OF INSTRUCTION.

Alston Ellis, A. M., Ph. D., LL. D., President and Professor of Political Economy and Logic.

James W. Lawrence, B. S., Professor of Mechanical Engineering and Drawing.

Maude Bell, Professor of History, Literature and Languages.

Louis G. Carpenter, M. S., Professor of Physics and Irrigation Engineering.

Charles S. Crandall, M. S., Professor of Botany and Horticulture.

Clarence P. Gillette, M. S., Professor of Zoology and Entomology.

Grace Espy Patton, B. S., Professor of English and Stenography.

William J. Meyers, B. S., Professor of Mathematics.

Daniel W. Working, B. S., Secretary of the Faculty.

Wells W. Cooke, B. S., M. A., Professor of Agriculture.

William P. Headden, A. M., Ph. D., Professor of Chemistry and Geology.

Harry D. Humphry, First Lieutenant Twentieth Infantry, United States Army, Professor of Military Science and Tactics.

Mattie J. Wulfjen, Instructor in Oratory and Physical Culture.

D. D. Gage, Instructor in Vocal Music.

Lathrop M. Taylor, B. S., Stenographer, President's office.

Celia May Southworth, B. S., Librarian.

ASSISTANTS.

Frank L. Watrous, Agriculture.

L. D. Crain, B. M. E., Mechanics and Drawing.

J. D. Stannard, B. S., Physics and Engineering.

Charles F. Baker, B. S., Zoology and Entomology.

Corydon A. Woody, B. S., English and Mathemat-

ics.

Charles J. Ryan, Chemistry.

Marion J. Huffington, Horticulture.

Robert E. Trimble, B. S., Meteorology.

Edward McCabe, Florist.

THE STATE EXPERIMENT STATION.

Board of Control—The State Board of Agriculture.

Executive Committee in Charge—Hon. J. S. McClelland, Hon. John J. Ryan, Hon. A. L. Kellogg, the president of the board and the president of the college.

Station Council—Alston Ellis, A. M., Ph. D., LL. D., President and Director; Wells W. Cooke, B. S., A. M., Agriculturist; C. S. Crandall, Horticulturist and Botanist; William P. Headden, A. M., Ph. D., Chemist; L. G. Carpenter, M. S., Meteorologist and Irrigation Engineer; C. P. Gillette, M. S., Entomologist; Daniel W. Working, B. S., Secretary; Lathrop M. Taylor, B. S., Stenographer.

Assistants—Frank L. Watrous, Agriculturist; M. J. Huffington, Horticulturist; Charles F. Baker, B. S., Entomologist; Charles Ryan, Chemist; R. E. Trimble, B. S., Meteorologist and Irrigation Engineer.

Sub-Stations—F. A. Huntley, B. S. A., superintendent, Arkansas Valley Station, Rocky Ford, Colorado; J. H. McClelland, superintendent Divide Station, Table Rock, Colorado; Charles A. Duncan, B. S., superintendent San Luis Valley Station, Monte Vista, Colorado; J. B. Robertson, superintendent Rain Belt Station, Cheyenne Wells, Colorado.

WORK OF STATIONS AS SPECIFIED BY ACT OF CONGRESS MARCH 2, 1887.

"That it shall be the object and duty of said experiment stations to conduct original researches or verify experiments on the physiology of plants and animals; the diseases to which they are severally subject, with the remedies for the same; the chemical composition of useful plants at their different stages of growth; the comparative advantages of rotative

cropping as pursued under a varying series of crops; the capacity of new plants or trees for acclimation; the analysis of soils and waters; the chemical composition of manures, natural or artificial, with experiments designed to test their comparative effects on crops of different kinds; the adaption and value of grasses and forage plants; the composition and digestibility of the different kinds of food for domestic animals; the scientific and economic questions involved in the production of butter and cheese; and such other researches or experiments bearing directly on the agricultural industry of the United States as may in each case be deemed advisable, having due regard to the varying conditions and needs of the respective states or territories." (Section 2.)

REVENUE FOR STATION SUPPORT—WHENCE DERIVED.

"That for the purpose of paying the necessary expenses of conducting investigations and experiments, and printing and distributing the results as hereinbefore described, the sum of \$15,000 per annum is hereby appropriated to each state, to be specially provided for by Congress in the appropriations from year to year." (Section 5.)

INSTRUCTORS, EMPLOYES AND ANNUAL SALARIES.

	,	
	College	Experi- ment Station
Faculty-		
Alston Ellis	\$6,000	
James W. Lawrence	2,000	
Maud Bell	1,500	
Louis G. Carpenter	1,500	500
Charles S. Crandall.	1,500	500
Clarence P. Gillette	1,500	500
Grace E. Patton	1,500	
William J. Meyers	1,500	

INSTRUCTORS, EMPLOYES AND ANNUAL SALARIES-Concluded.

	College.	Experi- ment Station
Faculty—Concluded.		
Daniel W. Working	1,200	*
Wells S. Cooke	1,500	500
William P. Headden	1,500	500
Harry D. Humphrey, (U. S. A.)		
Stenographer—		
Lathrop M. Taylor	900	
Librarian—		
Celia M. Southworth	600	
Instructors—		
Mattie J. Wulfjen*	600	
D. D. Gage†	450	
Assistants—		
Frank L. Watrous		1,000
L. D. Crain	1,000	
J. D. Stannard.	1,000	
Charles F. Baker		Soo
Corydon A. Woody*	300	~~~~~
Charles J. Ryan		800
Marion J. Huffington		1,000
Robert E. Trimble		800
Edward McCabe	730	
Sub-Station Superintendents—		
Fred A. Huntley		1,000
J. H. McClelland		800
Charles A. Duncan		800
J. B. Robertson		600
Engineers and Janitors—		
William Kelly	780	
John H. Cameron, Sr.	600	
James L. Veazey	480	

^{*} Half time.

[†] Two days each week.

Farm laborers, an average of ten in number, from \$40 to \$45 per month, paid from college and station funds in nearly equal sums.

Student labor, at an average of 12 cents per hour, in two years \$1,060, or \$530 per year.

Grand total of yearly sums paid to all employes, in any way connected with college and station work, \$43,570.

REPORT OF THE PRESIDENT.

Fort Collins, Colo., Nov. 30, 1894.

Hon. John F. Murray, State Superintendent of Public Instruction:

Agreeably to statutory provision, I herewith submit a brief report of the condition and progress of the State Agricultural College for a period of two years ending with date hereof.

The fiscal year of the state closes November 30. The law says the annual meeting of the State Board of Agriculture shall be held on the second Wednesday of December, at which time reports from the secretary of the board and the president of the college shall be presented. The law further requires that a report from the secretary, giving financial statements and other information, shall be made to the governor on or before the third Monday in December of each year. The Session Laws of 1881 make it the duty of the president of the State Agricultural College and others to make a biennial report to the superintendent of public instruction on or before the first day of December of each year preceding the meeting of the General Assembly." Another section of the statute book requires the president of the college to cause to be taken annually in December an inventory of all college property.

These sections of the statutes are cited to show that the biennial report to the state superintendent of public instruction is required before the time fixed for making out the yearly financial statements of the college and the auditing of the accounts of the secretary of the State Board of Agriculture by the proper committee. The financial statements—if any are made—for the year ending November 30, 1894, must be forwarded at a later date and become a supplement to this report.

GROUNDS AND BUILDINGS.

The college is situated just south of the city of Fort Collins. The experimental farm takes up the greater portion of the two hundred and forty acres of land owned by the college. All this land was a donation to the state of Colorado. The corner-stone of the main college building was laid in 1878. The college buildings are grouped in the northeastern part of the grounds. These buildings are not large or expensive. As located, they present a homelike appearance and give the best possible security against their total destruction by fire. The burning of one building would not necessarily carry with it the loss of any other. The total value of the grounds and buildings, at the present time, is estimated at \$200,000.

PERMANENT IMPROVEMENTS.

Permanent improvements for the year ending November 30, 1893, are as follows:

Trunk sewer with laterals, including cost of super- vision	\$8 000 00	
Changes in dormitory building to fit it for the use of the department of physics and irrigation en-		
gineering	2,075 51	
Heating apparatus, mechanic arts hall.	793 30	
Addition to mechanic arts hall	182 75	
Heating apparatus, agricultural hall	945 00	
Heating apparatus, farm house	670 35	
Stand-pipis and attachments, to afford better protec-		
tion from fires	275 80	
Well for irrigating purposes	321 25	
Total		\$13,263 96

For	the year	ending	Novem	ber 30,	1894,	the	permane	ent
	improve	nents ar	d their	cost m	ay be	sum	marized	as
	follows:							

Pipe line for securing an additional water supply for the college far m	\$2,896	22	
Reservoir for storing water	130	00	
Extension of water-main to different portions of the college grounds	759	43	
Trench digging and drainage pipe from college build- ings to trunk sewer	378	27	
Roof drainage, main building	105	00	
Closets in mechanic arts hall and horticultural hall	418	91	
Electric light pole and fixtures	50	00	
Lumber and labor, cattle sheds	250	00	
Root cellar, material and labor	175	00	
Amount paid for material and labor, new horticultural hall	7,579	41	
Total.		_	\$12,742 24
Total sum expended on permanent improve- ments for the two years ending November 30,			
1804			\$26,006 20

COLLEGE REVENUES.

At the last session of the General Assembly, the college received a special appropriation of \$6,500 to be used in the construction of a trunk sewer from the college grounds to the Cache la Poudre river, more than a mile distant. The sewer could not be built at a less cost than \$8,000. The city of Fort Collins contributed an additional \$2,000, and by so doing enabled the college authorities to complete the work. The appropriation before referred to is the only special one made by the General Assembly for college use within a period of over five years. The total of special appropriations made to the college by the General Assembly since the founding of the college seventeen years ago, is \$39,500.

The annual revenue of the college may be summarized as follows:

1. Land income fund, derived from interest on money received from sales of land donated by the general government, and rents of leased lands not yet sold, \$7,000.

- 2. "Hatch act," support of the United States experiment stations, \$15,000.
- 3. United States fund, "Morrill bill," in 1894, \$20,000. (This will ultimately reach \$25,000 per annum).
- 4. Special fund, derived from sale of stock, farm products and the like (estimate based upon the average for four years), \$1,500.
- 5. State tax fund, one-sixth mill on all taxable property of the state, \$35,000.

Yearly receipts from all sources, \$78,500.

The revenue derived from the general government under what is known as the "Hatch act" can not be used in payment of any part of what are legitimately college expenses. The fund intact must be used in support of the experiment stations located in six different sections of Colorado. Acts of Congress prescribe definitely to what purposes the revenue derived under the "Morrill bill" shall be applied. "No portion of said moneys shall be applied, directly or indirectly, under any pretence whatever, to the purchase, erection, preservation or repair of any building or buildings." There will be a falling off in college revenue in 1895, occasioned by a recent decision of the supreme court of the state reducing the "mill tax," for college support, from one-sixth to three-twentieths of a mill. The decrease of revenue for the year, from this cause, will not fall short of \$4,000, a sum whose loss is deplored in consideration of what may be properly considered imperative needs in the way of additional facilities for instruction.

DEPARTMENTS OF INSTRUCTION.

The college has the following-named departments: Agriculture, botany and horticulture, chemistry and geology, history and literature, mathematics, mechanical engineering and drawing, military

science, physics and irrigation engineering, zoology and entomology, English and stenography, elocution and physical culture, logic and political economy, psychology and civil government, civil engineering, vocal music, and the experiment station.

SCOPE OF THE INSTRUCTION GIVEN.

It has been the aim of the college faculty to prepare a scheme of study, recitation and labor that would meet all legal requirements and the wants of the industrial classes of the state. Four courses of study, each complete in itself, are now within the choice of students—agricultural course, mechanical course, irrigation engineering course, and ladies' course. These courses are fully outlined in the last edition of the college catalogue. By faculty action, any student may have opportunity to make selection of a special course. The requirements in such case relate to the amount of work to be taken and the student's fitness, from previous attainments, to enter upon it. A prominent idea connected with the work of preparing these courses of study was to make the work of the college as far-reaching for the good of the people of the state as possible. No one seeks to make the college an institution where all university degrees can be obtained, and no one, with the best interests of those who come to us for instruction at heart, would willingly see the college work limited to the merest rudiments of knowledge, coupled with a little narrow, one-sided technical teaching. The special work of the student must be based upon a general education broad enough and firm enough to make him an intelligent man of affairs as well as a specialist. The more of general intelligence—the more of mind and heart culture—a student acquires, the greater the certainty that he will make wise selection of some special line of work and follow it perseveringly and successfully. One way, and the best way, to give skill to the hand,

clear sight to the eye, and effectively to use the strength of muscle is to develop power in the brain. The farmer and the mechanic need an education—book-knowledge, self-knowledge, power to originate and express ideas, ability to reason logically, and the like—fully as much as does the lawyer or the doctor. The power to think aright, to act up to intelligent conviction, to discriminate justly and nicely between right and wrong, ought to be the exclusive possession of no class of people. A workman—and what name is more honorable?—ought to have a grade of intelligence above the machine he operates or the team he drives to the field or along the highway.

There is no disposition on the part of the college authorities to extend instruction into unprofitable fields. The tendency is towards a too conservative rather than a too radical course. Civil government and political economy now receive more attention than formerly, but in other respects the present course of study, outside of its better arrangement, is essentially what it was five years ago. The ladies course has been much improved by the omission of higher mathematics, and the requirement of greater attention to history, literature, drawing, vocal music, physical culture, elocution, applied psychology, stenography, landscape gardening, home hygiene, civil government, logic, political economy and sociology. In view of the important part women are taking in the affairs of this commonwealth, it is highly desirable that some of the training they receive in our educational institutions be along lines indicated by the studies last named in the foregoing list.

ENROLLMENT OF STUDENTS.

At the end of the fall term, November 30, 1893, the college records showed the names of 139 students enrolled. The enrollment of students for the fall term of the present year (1894) is shown as follows: Males, 148; females, 57; total, 205.

The following sub-division of the enrollment last named is given:

Post graduates, 3.

Senior class, 16.

Junior class, 18.

Sophomore class, 33.

Freshman class, 65.

Preparatory class, 39.

Irregular students, 25.

Special students, 6.

Total, 205.

The enrollment of students and the number of graduates for each college year since the opening of the college, are as follows:

ENROLLMENT.

Years	Males	Females	Total	Graduates
ISSo	14	τI	25	0
1881	35	22	57	0
1882	49	32	81	0
1883	50	31	Sī	0
1884	40	37	77	3
1885	50	46	96	6
1886	45	42	87	I
1887	63	42	105	4
1888	72	38	109	4
1889	73	34	107	2
1890	56	ıS	74	9
1891	77	29	106	3
IS92	101	45	146	9
1893	135	44	179	7
1S94	142	56	198	7
1894*	148	57	205	0

^{*}Fall term ending November 30, 1894.

EXPERIMENT STATIONS.

The experiment stations under the control of the State Board of Agriculture are the college station at Fort Collins and sub-stations at each of the following named points. Monnment, Rocky Ford, Monte Vista and Chevenne Wells. The land connected with these stations is more than eight hundred acres. The rain belt station, located at Chevenne Wells, has been in operation only a year. A fruit station, already located in Delta county, will be put in active operation as soon as money for its proper support is provided. The work of these stations is in the main progressive and of great practical value to the agricultural and horticultural interests of the state. Since the last biennial report, the following named publications have been issued under the authority of the station conneil:

No. 21. (1) "Sugar Beets;" (2) "Irish Potatoes;" (3) "Frnit Raising" by F. L. Watrous.

No. 22. "A Preliminary Report on the Duty of Water," by L. G. Carpenter.

No. 23. "Colorado Weeds," by C. S. Crandall.

No. 24. "A Few Common Insect Pests," by C. P. Gillette.

No. 25. "The Loco and Larkspur," by David O'Brine.

No. 26. (1) "Farm Notes for 1893," (2) "Garden Notes for 1893;" (3) "Seeding, Tillage and Irrigation," by Fred A. Huntley.

No. 27. "Measurement and Division of Water" (revised edition of bulletin No. 13), by L. G. Carpenter.

No. 28. "The Russian Thistle," by C. S. Crandall.

About six thousand copies of each of these bulletins were distributed to citizens of Colorado, station officers and employes in other states, and libraries and scientific institutions in the United States and foreign countries. The demand for this kind of literature is constantly increasing.

SHORT COURSE IN AGRICULTURE.

A special school making provision for a short, practical course in agriculture, was opened January 8, 1894, in agricultural hall. Forty-six students were enrolled, nine of whom were ladies. The subjects that received special attention were dairying, stock feeding, irrigation hydraulics, horticulture, entomology, agricultural chemistry, farm machinery and tools and civil government. Laboratory work in milk testing, detection of adulteration, irrigation, horticulture and tool handling formed an interesting and instructive part of the exercises of each afternoon. More thorough preparation has been made for the opening of another school, January 7, 1895. This course will continue four weeks and will be open to all prepared to enter upon its work free of charge.

PRESSING NEEDS OF THE COLLEGE.

To some, the annual revenue of the college may seem adequate to meet its reasonable needs; but an institution whose work is largely scientific and technical, as is that of the State Agricultural College, calls for a different and far more expensive equipment than does the college or university best known to the public. Shops, laboratories, museums, apparatus and working supplies must be provided if the work done is to possess any real scientific and cultural value. A technical school calls for well conducted and costly appliances for work and investigation at every turn, and of liberal quantity, too. It is admitted that the scientific equipment of the college is creditable—makes a good showing to visitors —but it is not adequate to the needs of the various The character of the work is such as to necessitate duplication of tools, scientific instruments and other working appliances. Any increase of students makes more apparent the need of additional

facilities for instruction, particularly in the shops and laboratories. The law requires not more than three or less than two hours' labor daily from each student. It is impossible with the accommodations now provided to give effect to this provision of the statute. All departments of shop work are running four hours per day and lack of room compels the division of students into three shifts. In the physiological, chemical and physical laboratories, the division of classes—and a consequent increase in the time devoted to instruction—is a matter of compulsion.

A department of domestic economy is needed. There is a growing demand from college patrons for such instruction as departments of this kind are designed to furnish.

The farm department, if its work is to meet the approval of those of our people engaged in agricultural pursuits, must be kept in a high state of efficiency. Ordinary farm operations, successfully conducted, will not meet the demands justly made upon our agriculturist and his assistants by the people of the state. There is request for more and better information upon such subjects as dairying, stock breeding, cattle feeding and sheep raising.

The work of the professor in chemistry and his assistant is onerons in the extreme. The demands that come from different parts of the state for analyses of soils, waters, feed stuffs, etc., are more numerous than can be met, were the whole working force of the chemical department to make the attempt. Much more work of the kind named might be profitably done. Its performance in any prompt and satisfactory manner cannot be promised under existing conditions. The building in which the classes in chemistry and geology meet for recitations and laboratory work is too small and not well adapted to the work of the department. A larger, better planned and better equipped building is a pressing need. A

summary of needs that the state ought to supply—also an estimate of their cost—is herewith given:

- 1. A new building for the department of chemistry and geology, \$12,000.
- 2. Enlargement of the building now used by the department of mechanical engineering, \$10,000.
- 3. Remodeling the present chemical building for the use of a department of domestic economy, \$5,000.
- 4. A dairy building and adjuncts on the college farm, \$8,000.

All the needs and estimates are named in conservative terms. Nothing elaborate or costly in plans or material is contemplated. It will require careful, economical management by those in authority to make the improvements needed and keep within the estimates given.

SOME QUOTED STATEMENTS.

"The building which contains the class rooms and laboratories of the chemical department is in an unsafe condition and argently calls for extensive repairs. The better plan, doubtless, would be to tear down the building and build a better and larger one."

"A building with all the necessary appliances, in which domestic economy could be taught, is a pressing need. Such instruction would be of prime value to the rapidly increasing number of young lady students. We recommend that such a building be put up at the earliest practicable time."

"We deem it unwise and injudicious for the state to grant appropriations of money to other institutions to be used in duplicating departments of special instruction now in successful operation at Fort Collins." (Report of visiting committee, representing the State Grange, the State Bee Keepers' Association and the State Board of Horticulture, January 6, 1894.) "We would call attention to the fact of there being insufficient facilities for the practical training of the young lady students. We would, therefore, recommend that the building now used as a chemical laboratory be used in connection with the establishment of a department of domestic economy and that a larger and more suitable building be erected for chemical purposes."

"The dairy interests of the state are demanding attention and a vast amount of good will result from practical experiments along this line. We therefore recommend that proper steps be taken to further this object." (Report of visiting committee, representing the State Board of Horticulture, the State Dairy Association, the State Bee Keepers' Association and the State Grange, September 12, 1894.)

CONCLUSION.

Indications point to a prosperous future for the State Agricultural College. The rapidly increasing attendance of students shows that the people of the state are realizing, as never before, the value of its practical work. All the influences about the college which operate upon the student are healthy to body, mind and morals. The college authorities are justly proud of the exemplary deportment and earnest spirit of the students. Those in control of the college acknowledge with thanks the numerous courtesies and generous treatment received from the proprietors and editorial staffs of the newspapers of Colorado.

Respectfully submitted,

ALSTON ELLIS,

President.

The State Industrial School.

BOARD OF CONTROL.

President—Hon. B. F. Williams, of Denver. Secretary—Hon. Joseph Mann, of Golden. Mrs. Emma G. Curtis, of Canon City.

OFFICERS.

Superintendent—G. A. Garard.
Assistant Superintendent—H. H. Sweetland.
Physician—J. P. Kelly.
Matron—Mrs. G. A. Garard.

SEVENTH BIENNIAL REPORT OF THE BOARD OF CONTROL.

To the Hon. John F. Murray, State Superintendent of Public Instruction:

The Board of Control of the State Industrial School respectfully submit this, their seventh biennial report for the two years commencing January 1, 1893, and ending December 31, 1894.

The Ninth General Assembly appropriated for the general support and maintenance of this institution the sum of \$75,000 with the cash receipts of the institution for the two years.

They also appropriated \$12,500 for a new cottage. The accompanying tables show the expenditure of moneys thus appropriated. With the \$12,500 we have erected a cottage of brick, with iron roof,

38x73 feet, two stories high, with full basement, in which we have Company C, composed of forty boys. Of the sum appropriated we turn back into the state treasury the sum of \$1,487.54. We also had an appropriation of \$1,000 for the erection of a hospital building. We have erected a hospital building, size 26x42 feet, one story high, which is well furnished for all needful purposes.

We also had an appropriation of \$1,500 for a cabinet and blacksmith shop. We have attached the blacksmith shop to the boiler house for purposes of safety, economy and convenience, and isolated the cabinet shop in order to promote safety in regard to

fire.

We also had an appropriation of \$2,000 for the provision and application of steam heat; steam heat has been put into five buildings.

We had an appropriation of \$400 for iron fencing; this appropriation was inadequate, but we made it provide what fence it would, being about five hundred feet.

The loss by fire of the administration building occurred in February, 1893, and the state legislature appropriated what money might be realized upon the insurance thereof to erect another administration building. From said insurance we received the sum of \$5,750, less the expenses of collection, and have erected a handsome and substantial building therewith.

We received an appropriation of \$800 for furniture, and \$150 for library, both of which funds have been expended for the purpose intended.

There being a great and pressing need of a beiler house, kitchen and bakery, we erected those buildings, employing our own labor to the greatest possible extent. These buildings are good and substantial and admirably answer the purposes for which they were built. Attached to the boiler house we erected a smoke-stack fifty-five feet in height, the

same being a great gain in utility and safety over the sheet-iron flue formerly employed.

Although many needed improvements have been made during the last two years, there are others very necessary, to which we respectfully invite your attention.

- 1. We need an electric plant, which plant would save us an outlay of about \$90 per month, which sum we now pay for indifferent lighting.
- 2. Our laundry is in need of improved and modern machinery; we have at present only the most antiquated and inadequate implements; we need \$500 for the improvement thereof.
- 3. Some of our buildings are still heated with stoves, which we consider dangerous in the highest degree. We ask for \$2,000 for the extension of steam heat to these buildings.
- 4. Our barns are dilapidated frame structures, no longer safe against either fire or wind. We ask for \$2,000 with which to erect a brick barn and stables.
- 5. Our fencing being totally inadequate to protect the premises from the depredations of trespassing stock, we ask for \$1,000 for the erection and completion of a substantial fence around the premises.
- 6. We are of the opinion that the erection of cottages for our other families is a very important matter. We therefore ask for \$12,000 for the purpose of erecting one.
- 7. As conditions now promise we believe that at least \$75,000 will be necessary for the maintenance of this institution for the next two years; we therefore ask your honorable body to grant that amount.

The superintendent's, physician's and book-keeper's reports are attached.

Respectfully submitted,

B. F. WILLIAMS, President. JOSEPH MANN, Secretary. EMMA G. CURTIS.

SUPERINTENDENT'S REPORT.

Golden, Colo., November 1, 1894.

To the Honorable Board of Control:

Since January 1, 1893, three superintendent's have had charge of this institution: D. R. Hatch, from January 1, 1893, to July 1, 1893; R. W. Morris, from July 1, 1893, to March 10, 1894, and the present incumbent from April 5, 1894, to the present time. W. M. Tudor was in charge as acting superintendent from March 10, 1894, to April 5, 1894. As there are many matters of interest that are not of record, I may be excused for not making a more detailed and exhaustive report.

Appended are such tables as can be prepared from reliable data.

A large amount of work in the way of valuable and permanent improvements was done under the supervision of Mr. Hatch and Mr. Morris. Three hundred and twenty-five thousand brick were made in 1893, all of which were used in permanent improvements upon the premises.

Since April 1, 1894, besides regular routine work, we have done a considerable amount of road work, completed a system of water-works, built a brick cabinet-shop 30x60 feet, built a brick blacksmith shop 20x39 feet, made 140,000 brick, besides other improvements.

It seems to be the impression of some people that our boys are a set of idlers; such is not the case. Suppose that you have six boys of your own, from 10 to 18 years of age and that you have them make and mend their clothes and shoes, do all of the housework of every kind, take care of the hogs, horses and cows, raise a good garden for the family, make hay for the stock, make permanent improvements on the place, keep up repairs, and be in school half the day—now you have superintended the work, and can say how nearly the boys have been idle. Many of

our boys are diligent, industrious and painstaking; some of them, of course, like some grown people, are indolent and indifferent. It takes a long and persistent course of discipline to eradicate habits of idleness whose roots extend back through generations. We strive to have our boys form habits of industry and economy.

THE OLD LAW AND THE NEW.

Until July 5, 1893, justices of the peace, as well as county and district courts, committed boys to this school. Such commitments were for terms varying from nine months to three years.

Under the present law only district and county courts can commit, and all commitments are for minority. This change in the law was made upon the recommendation of Superintendent Hatch, and was a long stride in the right direction.

I suggest, however, that the age for commitment be changed to from 8 to 16 years instead of from 10 to 16, as at present. I would give more for the two years from 8 to 10 than for any four subsequent years for the purpose of molding character.

It will be evident on first thought that the immediate effect of the new law would be to greatly reduce the number of inmates. Such has been the case. While this is the immediate effect of the law the ultimate effect will evidently be to increase the population of the school, as those who come under the present law are committed for from five to eleven years. It is estimated that according to the present movement of population the attendance will within a year be as great or larger than it was when the present law came into effect.

Under the old law when any justice of the peace could by summary proceedings commit a boy to this school, many hasty and ill-advised commitments were made, and in no case were they for long enough to effectually change or shape the character of the average bad boy. Such boy, for example, after staying here for, perhaps, a year, goes back to the streets of Denver to his old haunts and associates and he must be stronger than most men if he does not shortly fall back into his old habits. This institution is under the present law the guardian of all boys committed to it until they attain their majority. This is as it should be. In order to make this guardianship effective, some way should be provided for some officer of the school to look after parolled inmates.

MERIT SYSTEM.

In July of this year the Board of Control on the recommendation of the superintendent adopted a merit system based upon the allowance of double time for good conduct. It enables a boy to cut his sentence half in two by diligence and good conduct. It shows him that it pays to do right and that every stroke in the right direction is a substantial benefit to him. A complete record of all misdemeanors is kept in permanent form, so that at a glance a boy's whole course of conduct for the entire time that he has been here can be seen. The following is the list of the elements of demerit:

Disobedience	2
Disorder	1
Destruction	5
Falsehood	3
Fighting	4
Insolent	2
Lazy	2
Out of place	2
Poor work.	3
Profanity	5
Quarreling	2
Talk	I
Theft	7
Threatening	2

Tobacco		2
Vulgarity	4	4
Wastefulness	3	
Scheming	50	c

Running away takes off all credits. Every good day counts two. Five demerits takes off one day of credit.

The board has wisely declared its intention to adhere to this system except in especially meritorious cases or extreme emergency.

THE IDEAL

Of the superintendent for this institution is that it shall be a good home and a good school for our boys. These boys by reason of heridity and unfortunate environments should enlist our most active interest and sympathy. They are away from mother, father, sister, brother, home; possibly have never known either, in fact. Now, what is our duty to them? To be mother, father, sister, brother, teacher, friend to them. This is practical paternalism. This is the spirit of the new dispensation. This is the way. This is the only way. It is the modern, the progressive, the humane, the Christian way. It is not my way; it is not your way; it is God's way.

A person who cannot enter heartily into the spirit of this new dispensation is not in my judgment a fit person for an officer in a school of this kind. One without a living humanity within cannot beget it in others. It is one thing to herd a lot of boys and drive them to do a given amount of work; it is quite another thing to lead and guide the same boys along the highway to a noble manhood. In law we stand in loco parentis to these boys; let us see that we do so in fact. With all this paternal kindness, however, there must be firmness and even severity if necessary—but justice always.

The objection is raised that all this costs money. It does. But shall we not save the boys even if it does cost money? What is a man worth in gold coin at the present standard of value? What is the expense of a criminal from his youth up to the gallows to the public and to the individual? What would be the expense of these boys at large with their vicious habits and tendencies? We all grant that there is some good in every boy; is it not wise economy to spend money to develop that good, rather than to have him prey upon society and spend more, much more, to prosecute and imprison him? Older schools that have been working on this humane basis estimate that at least 75 per cent. of their boys become useful, law-abiding citizens.

If the object of sending boys here were punishment there is no need of this institution. There are the reformatory and the penitentiary, both of which are better equipped for that purpose than is this school. I do not regard these boys or any boys under the age of 16 years as criminals. To treat boys as criminals and confine them in jails with hardened criminals is barbarous. With a wise and humane management here much can be done to check the contagion of crime and make men of those who would otherwise be criminals. There is no danger of any boy having to stay here longer than is for his good though he be sentenced for minority, but the friendly hand of this institution will be over him until he reaches his majority.

No judge would hesitate to commit a boy to this school rather than to send him to jail if he felt that the only object sought here is the boy's good—his development physically, mentally and morally. The only excuse or reason that there is for the existence of this institution is that it may thus form, reform and transform these boys from what they are when they come to a higher, better and nobler state.

MANUAL TRAINING.

It seems to be generally held by those competent to express an opinion upon the subject that intelligent activity with a correct moral basis is the key to success in this work. Indeed, intelligent activity with a proper moral basis is not a bad measure of manhood. The trouble with most of our boys is that they have been left idle amid vicious surroundings. For this state we substitute healthful surroundings and industry.

It is a notorious and lamentable fact that there is practically no place in this country for a boy to learn a trade systematically and well. He may pick one up in a bungling way of some bungler who has picked it up of some one who has picked it up, and so on back to the landing of the Mayflower. Most of our skilled labor that is really well done is done by foreigners. A good authority says: "Out of \$23,000,-000 paid annually to mechanics in the building trades of New York City less than \$6,000,000 goes to those who are American born. In other words, \$17,000,-000 of this American money goes to foreigners, and vet 3,000,000 Americans are walking our streets today vainly asking for work. The son of the average American, after a common school education, learns to draw some, sing a little, and may reach the high school and get a smattering of Latin; the son of the Emperor of Germany learns a trade." No European nation is so backward to-day as we in the matter of manual training and trade teaching. We are profuse, even extravagant, in the expenditure of the public money for decorative, classical and professional instruction; but we have not even risen to the dignity of being stingy with the great, useful arts that are the basis of human comfort; we simply ignore them. I believe that every county should have a central manual training school. This need not necessitate an increased expenditure of public money. Now the

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time of the most expensive instructor is usually largely occupied with teaching a few girls and one boy how to make a living by butchering a dead language. We are trying to do better than this. We have a tailor shop, shoe shop, carpenter shop and printing office in operation, besides a large garden. Our boys do all the work of every kind about the institution. They make brick and do much of the work upon all permanent improvements made upon the premises.

SLOYD.

We now have completed and in operation a department of sloyd wherein are instructed daily about twenty boys. Miss Lisa Osterholm, who is an expert in this line of work, is in charge of this department and is doing excellent work.

We have just completed a blacksmith shop with two forges.

It is the desire of the management to develop the trades here as rapidly as possible so that every boy who goes out henceforth shall be expert in some line of useful employment and will be an industrions, useful and self-respecting citizen, not only not ashamed of his connection with this school, but may look back and bless the day when he was sent here. In the organization of this department we are greatly indebted to Prof. B. B. Wheeler, principal of the Fort Morgan, Colo., schools.

OUR FRIENDS.

We appreciate deeply the kindly interest and sympathy manifested by very many good citizens of Denver and the state at large in the school and its management during our administration. Probably no other state institution has so many visitors as this. While this may be due in part to its proximity to our metropolis, still we attribute the fact in the main to the interest felt in our boys. Although we have no chaplain and no money with which to pro-

vide one, we have an excellent Sabbath school. The good church people of Golden have taken a great interest in our boys. Rev. Mrs. Beach's interest in the boys never flags. She is with us every Sabbath when at home and never fails to receive a cordial welcome from all.

Rev. John Lonsdale, as superintendent of our Sabbath school, with the help of his able assistants, has raised it from a mechanical to a spiritual plane and the boy's singing from the realm of noise to the realm of music. Hon. W. H. Whitehead, Miss Johnson and Mrs. J. H. Brown have been his assistants in this noble work. The Golden Flower Mission has frequently furnished bouquets for the boys and officers.

OUR NEEDS.

The fence about our premises is so poor that we are constantly annoyed by tresspassing stock. We should have \$1,000 with which to build a neat and substantial fence about the place.

Our stables are old and of a temporary nature and liable to be blown down at any time.

We need a barn and can build a good brick and stone bank barn for \$2,000. We wash after the fashion of our grandmothers and ought to have \$500 with which to fit up a laundry and thus save a vast amount of drudgery.

Our main building, in the third story of which from sixty to eighty boys sleep, is heated with stoves. This is expensive and dangerous. Two thousand dollars would fit it up with a steam-heating apparatus.

We get our light from the Golden electric plant at an expense of about \$90 per month. Two thousand dollars will build and equip such plant.

Despite changes and improvements recently made, the city of Golden has declared our present system of local sewerage a nuisance. In order to have an effective and safe system our sewerage will have to reach Clear Creek. This would cost about \$3,000.

We think these requests moderate and in the interest of economy.

ESTIMATE FOR NEXT TWO YEARS.

Maintenance	\$75.000 00
Sewage system	3.000 00
Electric light plant	2,000 00
New barn	2,000 00
Extension of steam heat	2,000 00
For new fence	1,000 00
Laundry plant	500 00
For insurance.	500 00
Library and amusements	400 00

\$86 400 00

Respectfully submitted this 1st day of November, 1894.

G. A. GARARD, Superintendent.

SUPPLEMENT.

On November 1, 1894, there were to our credit on the books of the state auditor the following amounts:

Maintenance	\$11,354 59
Construction	2,781 08
Shops	1,129 24
Insurance	508 13
Cash	24 00
Furnishing	606 40
Heating	368 18
Library	252 95
Hospital	25 00
-	

\$17,049 57

If no more warrants are issued by the state auditor on any of these funds there will necessarily be outstanding at the end of this biennial period about \$13,000 in vouchers issued by our board on these several funds. What the outcome of pending litigation will be we are unable to predict; but if warrants are not issued on these vouchers an appropriation should be made to cover this deficiency.

In no case have our expenditures exceeded our appropriations and more than \$4,000 is turned back into the state treasury.

These vouchers were issued with full expectation that warrants would be issued therefor. These bills are owing mostly to our merchants who have furnished us with the necessaries of life and to our employes for their labor. From the time when the present superintendent took charge of the institution it would have been impossible to have run the school for the remainder of the biennial period without almost the entire balance then in the maintenance fund.

Respectfully submitted,
G. A. GARARD,
Superintendent.

PHYSICIAN'S REPORT.

To the Honorable Board of Control:

In accordance to the request of the superintendent I beg leave to submit the following report, covering the work accomplished by the medical department during the past two years.

One hundred and seventy-nine (179) cases have been treated in the hospital. Several cases of a chronic character have been cared for without confining them to the hospital. There was but one death. The above figures are suggesitve of the amount of good work done for poor and suffering humanity by this department. I desire to record my convictions that some method must be adopted by which, as occasion requires, and without long delays, the contagious sick may be safely isolated. A consideration of the wants of the medical department brings me to the question of adequate building facilities. The want of these is conspicuously illustrated by the unavoidable utilization of unsuitable rooms. I must therefore renew in the most energetic manner my earnest recommendation that immediate steps be taken to provide this dpartment with an additional building.

In concluding this my seventh biennial report, I feel justified in expressing my general satisfaction at the present good sanitary condition of the school. I am especially indebted to Mrs. Garard and Mrs. Babcock for most valuable assistance in this work.

Respectfully submitted,

JOHN P. KELLY, Physician to School.

EXHIBIT NO. 3.

Showing from what counties children have been sent:

Arapahoe	40
Beut.	I
Boulder	7
Chaffee	4
Clear Creek	2
Conejos	3
El Paso	9
Fremont	3
Garfield	2
Gilpin	τ
Huerfano	1
Jefferson	5
Lake	12

La Plata	5		
Larimer	2		
Las Animas	2		
Mesa	3		
Mineral	I		
Montezuma	3		
Montrose	2		
Otero	10		
Pitkin	3		
Pueblo	17		
San Miguel	I		
Weld	4		
Wyoming	I		
Boarders	3		
Total	_	147	
Total		/	
EXHIBIT NO. 4.			
Showing ages when received:			
Eight years	3		
Niue years	3		
Ten years	9		
Eleven years	16		
Twelve years.	28		
Thirteen years	20		
Fourteen years	24		
Fifteen years.	22		
Sixteen years	22		
Total	_	147	
EXHIBIT NO. 5.			
Showing nativity of children:			
California	3		
Colorado	39		
Dakota	I		
Indiana	I		
Indian Territory	I		

SUPERINTENDENT OF PUBLIC INSTRUCTION. 333

Illinois	4	
Iowa	4	
Kansas	15	
Kentucky	2	
Massachusetts	2	
Michigan	2	
Minnesota	2	
Missouri	14	
Nebraska	3	
Nevada	I	
New_Jersey	2	
New York	9	
Ohio	I	
Pennsylvania	4	
Tennessee	I	
Texas	2	
Utah	4	
Washington	I	
Wyoming	I	
Denmark	I	
England	I	
Germany	I	
Ireland	I	
Italy	4	
Mexico	1	
Scotland	I	
South Wales	I	
Sweden	I	
Wales	I	
Unknown	15	
Total		147

EXHIBIT NO. 8.

Number in school at last report	156
Number received during two years	147
Whole number in school during two years	303
Total number leaving the institution	276

Discharged	266
Es c aped	9
Died	. I
Boarders	. 6
Number in Institution November 1, 1894	127
	
EXHIBIT NO. 9.	
Offenses for which committed:	
Arson	. 2
Assault	
Burglary	
Carrying weapons	
Disturbing peace	
Forgery	
False pretenses	
Incorrigibility	
Larceny	
Petit larceny	
Grand larceny	
Malicious mischief	
Vagrancy	
No offense	
Boarders	
Total	
STATEMENT OF RECEIPTS AND EXPENDITURES	
Expenditures-	
Provisious\$ 14,673	62
House furnishing5,002	65
Clothing6,867	16
Repairs and improvements 29,273	04
Farm2,772	19
Fuel and light 5,526	88
Tools and implements	16
Office expense and printing	7.4

SUPERINTENDENT OF PUBLIC INSTRUCTION. 335

	Police expense	995 29			
	Salaries	24,611 35			
	School requisites	735 97			
	Insurance	1,009 87			
	Hospital.	967 28			
	Funeral expense	38 65			
	Voucher returned.	424 15			
	Total		\$ 95,937 60		
M	AINTENANCE—				
	Total of vouchers issued		70,356 25		
	Appropriation	\$75,000 00			
In	SURANCE CASH FUND—				
	Total of vouchers issued		5,652 67		
	Amount deposited with state treasurer	5,676 67			
CA	BINET AND BLACKSMITH SHOP FUND-				
	Total of vouchers issued		1,465 52		
	Appropriation	1,500 00			
Fτ	ERNITURE FUND—				
	Total of vouchers issued		800 00		
	Appropriation	800 00			
Co	TTAGE FUND—				
	Total of vouchers issued		10,812 46		
	Appropriation	12,500 00			
Sc	CHOOL APPARATUS FUND—				
	Total of vouchers issued		65 43		
	Appropriation	150 00			
Ļ	LIBRARY FUND-				
	Total of vouchers issued		95 39		
	Appropriation	150 00			
F	ence Fund—				
	Total of vouchers issued		400 00		
	Appropriation	400 00)		
н	OSPITAL FUND—				
	Total of vouchers issued		1,000 00		
	Appropriation	1,000 00)		

STEAM HEAT FUND-				
Total of vouchers issued		1,99. 82		
Appropriation	2,000 00			
Insurance Fund-				
Total of vouchers issued		1 009 87		
Appropriation	1,500 00			
Cash Fund—				
Total of vouchers issued		2,286 79		
Amount credited by state treasurer	2,825 58			
Amount received from state funds		95,936 20		
Unsettled balance		I 40		
		2 (-		
	:	\$95,937 60		
Amount expended for sundries	\$95,937 60			
:				
Total amount appropriated.	\$ 95,000 00			
Total amount deposited with state treasurer	8,502 25			
	\$103,502 25			
Amount received		\$ 95,937 60		
Balance		7,564 65		

\$103,502 25

The State School for the Deaf and Blind.

BOARD OF TRUSTEES.

Term	Expires.
Daniel Hawks, President, Greeley	1895
W. K. Sinton, Secretary, Colorado Springs.	1897
Mrs. E. L. C. Dwinell, Colorado Springs	1899
Joseph A. Davis, Westcliffe	1895
Henry Bowman, Idaho Springs	1897
J. H. Thedinga, Treasurer of the Board,	
Springs.	

EDUCATIONAL DEPARTMENT.

D. C. Dudley, A. M., Superintendent.

TEACHERS.

Deaf Department—W. K. Argo, A. M.; G. W. Veditz, A. M.; E. C. Campbell, Miss Tillie Garman, Miss Minnie Powell, Miss Flora St. Clair.

Blind Department—F. H. Manning, A. M.; Miss Mary P. Wright, Miss Jessie Baker, Miss Harriet Rees, Miss M. E. Churchman, Teacher of Music; Bruce Adamson, Assistant Teacher of Music.

Domestic Department—B. P. Anderson, M. D., Physician; E. M. Marbourg, M. D., Oculist; Mrs. J. M. Taylor, Matron; Mrs. M. F. Miller, Girls' Supervisor; Grace E. Young, Assistant Girls' Supervisor; W. A. McWhorter, Boys' Supervisor; Miss Ella Cornish, Assistant Boys' Supervisor; J. W. Taylor, Engineer; J. H. Marshall, Night Watchman. Industrial Department—H. M. Harbert, Teacher of Printing; Samuel Gale, Teacher of Carpentry; W. J. Heritage, Teacher of Broom and Mattress Making; Harry E. Britton, Teacher of Baking; A. F. Colvin, Teacher of Piano Tuning; Miss Anna M. Harrington, Teacher of Sewing; E. C. Campbell, Teacher of Art.

SUPERINTENDENT'S REPORT.

To the President and Board of Trustees of the Colorado Institute for the Education of the Mute and Blind:

Gentlemen—It becomes my duty to lay before you at this time the tenth biennial report of the institution, detailing its operations during the past two years, and its condition at the present.

In many respects this has been a period of more than usual prosperity. The attendance has been greater than ever before; the same admirable instructors, with few exceptions, remain with us, while the facilities have been greatly increased by the new buildings so generously provided by the last legislature.

ATTENDANCE.

The total enrollment during the period reported has been 178, which are accounted for as follows:

Removed from the state	8	
Graduated	3	
Honorably discharged	4	
Dismissed as ineligible	16	
Expelled	I	
Deaths	2	
Voluntarily remaining at home	28	
Present attendance	116	
Total	ī	78

Among those dismissed as ineligible, were several whose hearing or sight had been so much improved that they might profitably be instructed in the public schools.

The three graduates were all from the deaf department. They were: Miss Sadie Young, of Evans; Miss Bessie Bigler, of Denver; and Miss Hattie Kennedy, of Aspen. The former of these is continuing her studies at Gallaudet College, Washington, D. C.

HEALTH.

Under the efficient care of Dr. B. P. Anderson, for many years now the institute physician, the health of the household has been remarkably good. There have, however, been two deaths among the pupils—that of Harley Snively, a deaf boy of 14, who had been with us for about eight years, and Robert Riel, a member of one of the oral classes, who had been in school but a single year.

Harley left us for the summer vacation apparently in good health. A few days after reaching home, he was attacked by pneumonia, which soon terminated fatally. Harley had profited by his stay with us, and even though his life was short, it was made all the happier by reason of his education. We have cause to hope that, if conscious in his last moments, he had the comforting anticipation of an immortality where he would be freed from the limitations imposed upon him here by his misfortune.

Robert Riel had just entered the second session when he was stricken with brain fever. He was removed to his home in the city, but in spite of all that could be done, the disease made steady progress, until the little life was the forfeit. Robert was a dear little fellow whom every one loved, and it was a sad blow to the whole school when he was called away.

CLASSIFICATION.

The deaf pupils are organized into six classes and the blind into four. There are, besides, special classes for the deaf in art and for the blind in music.

The course of instruction for the deaf leads, when completed, to admission into the introductory department of Gallaudet College, while that for the blind is about equivalent to what is usually mastered in a high school course, with the exception of the languages.

Our pupils are, of course, greatly hampered by the loss of hearing or sight; nevertheless, by having special attention in small classes, they are able to approximate what is ordinarily accomplished by normal children in the same time.

The following is the course of study in each department:

DEAF DEPARTMENT—FIRST YEAR.

Language—Names of objects. Simple verbs—intransitive; transitive, with object. Noun modifiers and possessive case. Personal pronouns.

Penmanship—Formation of letters, beginning with the principles and movement.

Arithmetic—Spell the numbers and write the figures from one to twelve. Teach concretely. Illustrate with objects.

SECOND YEAR.

Language—American Asylum Series, No. 1. Continue action writing from objects used in school room. Lead to original language from occurrences outside of school and in their homes. As an aid, use pictures. Teach direct quotation, infinitive and the potential forms of verbs. Journal writing.

Penmanship—Practice on movement and formation of letters.

Arithmetic—Addition and subtraction, from one to fifteen, illustrated by objects. Concrete work.

THIRD YEAR.

Language—American Asylum Series, No. 2. Action writing continued. Original sentences and writing from pictures and objects. Journal writing. Questions and answers. Grammatical symbols.

Penmanship—Copy-books. Letter writing.

Arithmetic—Exercises in addition, subtraction and multiplication. Concrete work.

FOURTH YEAR.

Language—American Asylum Series, No. 3. Journal and story writing. Writing from actions, pictures, words and phrases. Grammatical symbols. Questions and answers.

Penmanship—Copy-books and letter writing continued.

Arithmetic—Division and review of previous exercises learned. Problems prepared by teacher introduced. Book used as guide.

FIFTH YEAR.

Language—American Asylum Series, No. 4. Journal and story writing. Original exercises from actions, words, pictures and phrases. Questions and answers. Grammatical symbols.

Geography—Of the institution grounds and the city.

Penmanship—Copy-books and letter writing continued.

Arithmetic—Primary arithmetic to compound numbers. Promiscous examples introduced involving judgment.

Drawing—First lessons in drawing.

SIXTH YEAR.

Language—"Talks and Stories." Journal and story writing. Original exercises from actions, words, pictures and phrases. Descriptions of objects. Questions and answers. Grammatical symbols.

Geography—Monteith's Manual.

Penmanship—Letter writing.

Arithmetic—Primary arithmetic completed.

Drawing—Drawing lessons continued.

SEVENTH YEAR.

Language—Reading "Bits of History," and Harper's Third Reader. Original compositions embodying difficult constructions selected from text books. Journal and story writing. Questions and answers. Grammatical symbols.

History—History of the United States, prepared by the teacher. Foster's "Story of the Gospel."

Geography—Barnes' Complete Geography, to page 69.

Penmanship—Letter writing.

Arthmetic—Felter's Arithmetic, to page 112.

Drawing—Drawing lessons continued.

EIGHTH YEAR.

Language—Reading lessons from Harper's Fourth Reader and descriptions. Original compositions from subjects assigned. Journal and story writing. Letter writing. Exercises from difficult constructions in text books. Grammatical symbols.

History—Barnes' Brief History of the United States. Foster's "Story of the Gospel."

Physiology—Blaisdell's "Our Bodies and How We Live," to page 176.

Geography—Barnes' Complete Geography completed.

Arithmetic—Felter's Arithmetic, to page 200.

Drawing—Drawing lessons continued, and water colors introduced.

NINTH YEAR.

Language—Reading lessons and definitions. Compositions upon assigned subjects. Story and letter writing. Sentences upon difficult constructions in text books.

History—Peter Parley's Universal History, to page 238.

Physiology—Blaisdell's "Our Bodies and How We Live" completed.

Arithmetic—Felter's Arithmetic, to page 314.

Grammar—Swinton's Language Lessons, to page 60.

Drawing—Drawing and water colors continued.

TENTH YEAR.

Language—Letter and story writing. Original compositions from assigned subjects. Reading lessons and definitions. Sentences from difficult constructions in text books. Supplementary reading.

History—Peter Parley's Universal History, to page 558, used as a reader. Berard's History of England, to Henry VIII.

Arithmetic—Felter's Arithmetic completed.

Grammar—Swinton's Language Lessons completed.

Natural History—"Familiar Animals and Their Wild Kin," and Steele's Zoology, used in reading lessons.

Drawing—Drawing and painting, oil colors introduced.

ELEVENTH YEAR.

Language—Letter and story writing. Original compositions from assigned subjects. Exercises from difficult constructions in text books.

History—Berard's History of England completed.

Arithmetic—Arithmetic reviewed. Book-keeping, for such as will use it.

Grammar—Kerl's English Grammar.

Natural History—Lubbock's "The Beauties of Nature," as supplemental reading.

Physical Geography—Houston's Physical Geography, to page 84.

Drawing—Drawing and painting.

TWELFTH YEAR.

Language—Reading lessons. Original essays. Reproductions. Exercises from difficult constructions in text books.

Natural Philisophy—Steele's Physics.

Botany—Gray's "How Plants Grow."

Geography—Houston's Physical Geography completed.

Civil Government—Young's Government Class Book.

Drawing—Drawing and painting.

BLIND DEPARTMENT—PRIMARY GRADE— THREE YEARS.

Kindergarten—Hand work; clay modeling; first two years.

Spelling—Three years; from readers.

Arithmetic—Three years; to short division.

Language—Three years; from readers. Blaisdell's Child's Book of Health. Supplementary reading.

Line Reading—Three years; through third

reader.

Point Reading—Second and third years; through second reader.

Point Writing—Second and third years.

INTERMEDIATE GRADE—THREE YEARS.

Arithmetic—Through denominate numbers; Ray's Practical.

Geography—Three years; Barnes' Series.

Grammar—Three years; Metcalfe and Bright's Language Lessons.

Reading—Three years; through seventh reader.

Point Writing—Three years; letter writing.

Spelling—Three years; Reed and Kellogg's Word Book.

GRAMMAR GRADE—THREE YEARS.

Arithmetic—Three years; Ray's Practical Arithmetic completed.

United States History—First two years; Barnes'.

Grammar—First two years; Harvey's Series.

Geography—First year; Barnes' Complete.

Reading—Three years; supplementary.

Writing—Three years; from dictation; original compositions.

Etymology—Second year.

General History—Third year; easy lessons.

English and American Literature—Third year. Shaw's.

Typewriting—Three years.

HIGH SCHOOL GRADE—THREE YEARS.

Algebra—First two years; Robinson's.

General History—First year; Anderson's.

Zoology—First year; Steele's.

Physical Geography—First year; Maury's; Houston's.

Botany—One-half second year; Gray's "How Plants Grow."

Geology—One-half second year; Dana's Geological Stories.

Chemistry—One-half second year; Steele's.

Physiology—One-half second year; "Our Bodies and How We Live."

Physics—Second year; Rolfe and Young's.

Civil Government—Second year; Fiske's.

Braille Point Reading and Writing—Second and third years.

Geometry—Third year; Well's Plane Geometry.

Political Economy—Third year; Perry's Introduction.

Mental Philosophy—Third year; Loomis'.

Moral Philosophy—Third year; supplementary reading.

Rhetoric, Logic and Higher English—Third year; Hill's.

Recitations and Compositions—Through the whole course.

Music—Vocal and instrumental music throughout the course.

METHODS.

The system of instruction in the deaf department is what is generally known as the "combined system." That is, we combine all known methods of teaching the deaf, suiting the process to the individual.

When a deaf child comes to us he is placed first in one of the pure oral classes where the instruction is exclusively by lip reading and speech. If, after full and fair trial, it is found that he cannot be taught by that method, he is transferred to another class where he may have the advantages of signs and spelling. Mental development and progress in knowledge are the ends sought and if these may be reached through lip reading and speech, that method is surely to be preferred, as there is evidently a great advantage in being able to communicate with the world verbally. If, however, in order to secure this accomplishment, it should be necessary to sacrifice, in any great degree, the mental and moral development of the pupil, we should consider it a crime against the state and the individual to persist.

When the great variety of minds coming to us and the impossibility of reaching all in the same way are considered, the advantage of the combined sys-

tem is apparent.

While upon the subject, I desire to say a word regarding the sign language. To those who regard speech as the summum bonum of the education of the deaf, the sign language is, of course, something to be shunned. As a rule, such teachers are not acquainted with this ready means of communication and entirely underestimate its value in broadening the intellectual horizon of the pupil. From the standpoint of those who believe in the judicious use of signs and spelling, speech, while desirable, is not indispensable. Speech is not education, and education, after all, is the object in view.

We will educate by speech, if possible; if not, speech must stand aside and education proceed by other means.

Greatly exaggerated statements are frequently seen in our daily papers, usually from the pens of newspaper reporters, claiming much more for oral teachers than they would claim for themselves. Judg-

ing from these hastily written, ill-digested articles, one would think that the sign language and finger spelling has been entirely superseded by lip reading and speech.

The following statistics, however, prepared by Dr. Fay, the able editor of the American Annals for the Deaf, show the matter in a different light:

"The total number of pupils reported as presented in American (United States and Canada) schools, November 15, 1893, was 9,052. Of these, 4,324 were taught wholly by the manual method; 2,317 partly by the manual method and partly by speech; and 168 by the manual alphabet method; 4,724 were taught speech; 2,163 were taught wholly by the oral method and 80 wholly by the anricular method."

In justice to the oral method, however, it should be remarked that oralism has been making steady gains. In November, 1892, nineteen per cent. of the whole number were taught exclusively by lip reading and speech; in November, 1893, there were twentythree per cent., a gain of two per cent. a year.

In our own school the percentage taught by the oral method is thirty, or seven per cent. more than the average of the entire country.

It would be profitless to discuss further the relative value of methods. They are all on trial and must stand or fall by their results. "The survival of the fittest" rules here as elsewhere, and all the arguments in the world can avail nothing if opposed to facts. The only question is, What are the facts? and this is what all true friends of the deaf are trying by experiment and observation to find out.

METHODS IN THE BLIND DEPARTMENT.

The methods pursued in the blind department are similar to those used with normal children, modified, of course, as the exigencies of the case demand. Books in raised print are becoming more common since the establishment of the American Printing House for the Blind. The bulk of instruction, however, is still given orally. Mental work in mathematics is greatly relied upon to strengthen the memory, which faculty needs to be developed to the utmost in those who are shut off from most of the reference books available to others.

The invention of point writing has given larger liberty to the blind, as by means of it they may take notes in class, prepare memoranda and write music to be practiced at leisure afterward.

MUSIC.

It is a matter of remark that great attention is paid to music in all schools for the blind.

This is true for two reasons. First, a knowledge of music adds materially to the happiness of those who are shut off by their blindness from many of the pleasures of life; and, secondly, because in many cases it proves an open door both to society and to the earning of a comfortable livelihood.

If the means were at your disposal I should urge an extension of this department to include instruction on the pipe organ.

By means of entertainments, several hundred dollars have been raised and a part of the proceeds devoted to paying for instruments and a band teacher. On occasions the Blind Boys' Band discourses quite creditable music. I wish the means were at hand to continue this training, but do not deem it legitimate to use much of the time belonging properly to school work for the preparation of entertainments.

OUTSIDE AIDS.

The work of the school rooms in both departments has been supplemented by lectures from prom-

inent citizens who have generously bestowed their services. The deaf have been frequently entertained and instructed by stereopticon illustrations, while both departments have maintained literary societies. A library of 590 carefully selected volumes furnishes supplemental reading.

TRADES.

The trades remain the same as in the last report except that baking has been added for the deaf boys and piano tuning for the blind boys.

The object of teaching trades is not as some suppose, that the school may reap pecuniary benefit, but to inculcate industrious habits and prepare the pupils, as far as possible, for the struggle which lies before them as bread winners in competition with the seeing and hearing.

CHANGES.

There have been several changes of officers and teachers. In regard to those which occurred before my selection as superintendent, I will not go into particulars further than to say that the vacancies have all been filled by experienced persons and the work was never more prosperous than at present. It has, of late years, been the policy of this school not to train young teachers. The course has been to select those already trained elsewhere, and as many wish to come to us for climatic considerations, it is no difficult task, ordinarily, to fill any gap that may occur.

On the 7th of last August, Mr. John E. Ray, the superintendent, resigned to accept a similar position in the Kentucky School for the Deaf at Danville. The following resolutions of the board, passed upon his retirement, shows in what esteem his labors were held:

"Whereas, Prof. John E. Ray, superintendent of the Colorado Institute for the Education of the Mute and Blind, has tendered his resignation of said office to accept a similar position in the Kentucky School for the Deaf, and

"Whereas, We, the Board of Trustees of the Colorado School, desire to place upon record our appreciation of Mr. Ray's services to this school; therefore,

"Resolved, That for the past seven years Mr. Ray has labored assiduously and efficiently toward the upbnilding of the Colorado School, so that during this period the attendance has been doubled, the conveniences multiplied greatly and the teaching force much improved.

"Resolved, That we cheerfully and cordially recommend Mr. Ray to his associates and superior officers in his new field of labor as an enthusiast in his chosen profession, thoroughly capable in the business matters of a school of this character and one whose tireless industry cannot but result in the advance of any school he has in charge.

"Resolved, That these resolutions be spread upon the minutes and a copy handed Prof. Ray."

Mr. Ray was succeeded by Mr. D. C. Dudley, the present incumbent, who once before had been connected with the school as superintendent and who for the preceding seven years had served in the capacity of principal teacher in the deaf department.

The vacancy occasioned by the promotion of Mr. Dndley was filled by the appointment of Mr. W. K. Argo, late superintendent of the Kentucky School, who brings with him a ripe experience as a teacher and an executive ability which won for him the respect and admiration of his co-workers in his former field and which cannot but result in great benefit to the school here.

The institution is thus compensated for the loss of Mr. J. A. Tillinghast, an enthusiastic and capable

teacher, who left us during the past summer and who is now the honored head of the newly established School for the Deaf in Montana.

There have been two new teachers added in the blind department, Miss Harriet Rees, teacher of the primary department and Mr. Bruce Adamson, assistant music teacher.

Miss Rees is a graduate of a normal school and has had several years of experience both as a teacher of the seeing and of the blind. Her work here has been of a very high order and I consider it a piece of good fortune that the institute was able to secure her services.

Mr. Adamson is one of our own pupils who, by energy and perseverance under difficulties, has won his way up to this position of honor and responsibility. His labors are just beginning, but if the same enthusiasm characterizes his future endeavors as has inspired him in the past, it is easy to predict that he will be successful.

There have also been two teachers added in the deaf department, Miss Minnie Powell, of Philadelphia, and Miss Flora St. Clair, of Humphrey, Mo. Miss Powell had taught four years in the oral school for the deaf at Scranton, Penn., and Miss St. Clair, besides teaching two years in Humphrey's College and two years in the public schools of Milan, Mo., had had two years' experience in Miss McCowen's oral school for the deaf at Englewood, Ill.

Both these ladies are well prepared for the duties which fall upon them in teaching orally where other methods prevail. They are enthusiastic and energetic and are doing excellent work. If they do not demonstrate the superiority of the oral method over all others, as time rolls by, it will not be for lack of any element of success in themselves.

At the opening of the present session, Miss Sarah A. Tillinghast, who had served the school quite acceptably as matron for the preceding year, resigned to take a similar position in the school for the deaf at Talladega, Ala. She was succeeded by Mrs. J. W. Taylor, a lady who has been connected with the school for several years, and who has always proved herself to be efficient and trustworthy. I have no doubt, judging from the past three months, that her administration of the domestic affairs will be satisfactory to the household and economical to the state.

In the readjustment incident to the change in matrons, it became necessary to appoint a girls' supervisor, and Miss Grace E. Young, one of our gradnates, was chosen for the position. Miss Young is one who has always reflected great credit upon the school and one whom we therefore delight to honor in this way.

PERMANENT IMPROVEMENTS.

The permanent improvements mentioned incidentally heretofore consist of an industrial building and a boiler house. The former is constructed of lava stone, with red sandstone trimmings and is of the same general style as the other buildings. Though still incomplete, it is quite comfortable, and we are having the use of it for the different trades, including the laundry and the bakery, which latter is also a recent addition.

In locating the industrial building, according to the suggestion of the Board of Charities, it became necessary to move the boiler house, and while making the change it was thought wise to enlarge it so that it might meet the requirements of the future.

These buildings put us in fine condition as to house room. What now remains is to fit up the interior so that it may be in keeping with the external appearance. This is especially true in regard to school room appliances and musical instruments.

SUGGESTIONS.

There are a few suggestions I desire to make. First, I should like to have the school age increased from four to six. As long as the law remains as at present we shall be obliged to receive little babes who do next to nothing in the school room and involve added expense and care.

If we had a home for these little ones, separate from the main school, where they could have more motherly care, and if the time up to six years of age were not counted against them, it might be well to receive them. As it is, however, I am convinced that nothing is gained by so early a separation from their mothers of children who are more than ordinarily helpless.

Another suggestion I would make is that the name of our institute be changed to "The Colorado School for the Deaf and the Blind." This is exactly what it is and any other name too vaguely expresses its purpose. A law making this change was introduced in the last legislature but failed to reach a vote.

ACKNOWLEDGMENTS.

Our thanks are due and gratefully tendered to the railroads of the state for reduced fares and to the Rapid Transit Company of this city for many delightful excursions made possible by the light expense imposed.

We are also under many obligations to the merchants and other residents of the city for gifts to the children on holiday occasions; to Prof. A. C. Pearson for musical treats extended to the blind children, and to Prof. David Rawley for faithful training of the Blind Boys' Band with very meagre compensation.

Thanks are also extended to the editors and proprietors of those state and institution papers that have placed our school on their free list. The children enjoy reading, and those who furnish the material are really assisting in their education.

Nor would we forget to mention Dr. Gregg, Dr. Montague, Dr. Snyder, Father Bender, Mr. Ehrich, Mr. Bell and others who have contributed time and energy to the preparation of suitable lectures for the children of both departments.

CONCLUSION.

In conclusion I desire to thank the board for its kindness to me personally and for its hearty sympathy and ready advice so promptly given in every emergency.

A dual school like ours with its financial, educational, industrial and domestic interests, naturally taxes to the utmost all the resources of the superintendent and the burden would at times become insupportable were it not for the encouragement and assistance of his superior officers.

I should be remiss in duty also if I failed to acknowledge that a large share of the credit for any success we may have attained is due to the teachers and other subordinates, who, secluded from the public gaze, are patiently and carefully working out the problems of character building in those committed to their care.

In reviewing the history of the school and tracing the Divine guidance from small beginnings to our present proportions; in noting the brightness which through its instrumentality has come into otherwise darkened souls; in realizing that most of those who go out from us win success in the hard battle of life, there is much to encourage renewed effort in the fu-

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ture. The past is one, on the whole, of which those who have labored may well be proud. The experience already gained, however, should prove but a stepping stone to higher attainments in the future.

Respectfully submitted,

D. C. DUDLEY, Superintendent.

LIST OF PUPILS

IN ATTENDANCE AT THE

State School for Deaf and Blind.

LIST OF PUPILS

IN ATTENDANCE FROM NOVEMBER 30, 1892, TO NOVEMBER 30, 1894.-DEAF DEPARTMENT.

Name	Parent or Guardian	Postoffice	County
A library and	111		Vioun
Apport, Millinopila	William B. Abbott	Chilying ton	
Alger, Wilma	Mary E. Alger	Denver	Arapahoe
Ashton, Oscar	W. W. Ashton	Denver	Arapahoe
Bailey, Fred	Mrs. Laura Bailey	Gunnison	Gunnison
Barber, China	F. G. Barber	Claremont	Kit Carson
Barton, Coral	Mrs. Carrie Barton	Canon City	Fremont
Beasley, Rebecca.	Mrs. C. H. Moll.	Denver	Arapahoe
Bertholf, Glenn.	Juo. M. Bertholf	Colbran	Mesa
Biauchi, Lucy	J. J. Bianchi	Montezuma	Summit Summit
Bigler, Bessie	W. W. Bigler	Denver	Arapahoe
Blakely, Blanche	Mrs A D. Blakely	Ramah	El Paso
Blanco, Manuel	Andreguez Blanco	Apishapa	Las Auimas
Block, Henry.	Henry G. Block	Flagler	Kit Carson
Bouru, Ralph	Mrs. Jas. W. Bourn	Colorado Springs	El Paso
Brauer, Lena	Frank J. Brauer	Denver	Arapahoe
Brooks, Lloyd	Mrs. Mollie Brooks	Montrose	Montrose
Brooks, Maggie	Robert Brooks.	Denver	Arapahoe

Burtnett, Eddie	Mrs. Lucy Burtnett	Roswell	El Paso
Chaudier, Zoe	J. B. Chandler	San Juan.	Sau Miguel
*Christensen, Martin	Nels Christensen	Mink Creek	Idaho state
Clesson, Jno	Gabriel Clessou	Miuneapolis	Baca
Cunningliam, Beu	W. D. Cunningham	L'eadville	Lake
Dawson, Rosa	Mrs. Alice B. Dawson	Gunnison	Gunnison
Decker, Daniel	Mrs. Mary O'Brien	Denver	Arapahoe
Donnelly, Agnes	Charles Donnelly	Cripple Creek	El Paso
Drumm, Edna	August Drumm	Denver	Arapahoe
Duffy, Ella	Mrs. H. M. Duffy	Denver	Arapahoe
Dunbar, Flora	James Dunbar	Moute Vista	Costilla
Edmonds, Guertha	W. H. Edmouds	Loveland	Larimer
Espinoza, J. Marcelo	Juau de J. Espinoza	Weston	Las Animas
Foss, Edgar	W. H. Foss	Silver Cliff	Custer
Foster, Harold		1 0 0 1 0 0 0 1 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Gajewski, Francis	Michael Gajewski	Denver	Arapahoe
Gallegas, Frank	Melquiades Gallegas	Weston	I,as Animas
Gallegas, Marcelina	Melquiades Gallegas	Weston	Las Animas
Gardner, Hettie	Mrs. M. J. Beunick	Ute	Huerfano
Garrison, W. Frank	Mrs. Agnes Garrison	Pueblo	Pueblo
*Gerdel, Emma	Peter Gerdel	Big Horu	Gordon, Wyo.

*Pay pupils from other States.

LIST OF PUPILS-DEAF DEPARTMENT-Continued.

L. W. Goddard A. Mrs. Cal Cunte Mrs. Sophia A. Mrs. Sophia A. David F. Day V. Greenewald Juo. Harris. George M. Hill Jannes Henry. R. Houeywell	arent of Guardian	Lostomee	County
Α			0
Α		Boulder	Boulder
		Pueblo	Pueblo
	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Querida	Custer
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Querida	Custer
		Ignacio	I,a Plata
а		Denver	Arapahoe
e la		Coal Creek	Fremont
,ela 		Denver	Arapahoe
		Denver	Arapahoe
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	cII.	Pueblo	Pueblo
		Denver	Arapaboe
Horton, William Mrs. Mary Horton		Denver	Arapahoe
Hosea, Stephen		Coal Creek	. Fremont
Howard, Ora		Monte Vista	Rio Grande
Hurley, Edmund Patrick Hurley		Buena Vista	Chaffee
Jacobs, Fred	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Greeley	weld
Johnson, Robert James M. Johnson, Jr	1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Colden	Jefferson
Jordan, Mary Mrs. L. M. Jordan		Alamosa	Conejos

Kelsey, Bessie	George A, Kelsey	Denver	Arapahoe
Kennedy, Hattie	E. J. Kennedy	Aspen	Pitkin
Kennedy, Linnie	Mrs. E. Kennedy	Colorado Spriugs	El Paso
Kerlee, Lillie	Mrs A. M. Kerlee	Ute	Huerfano
Knudsen, Karl, Jr Knudsen	Karl Knudsen	Highlands	Arapahoe
Lane, Robert	Robert Laue	L'ouisville	Boulder
* Lee, Bessie	J. V. Lee	Boise City	Idalio, state
Lessley, Frank	Engene Lessley	Denver	Arapahoe
* Lund, Matilda	W. II. Lund	Preston	Oneida, Idaho
McCounell, Loy.	James A. McConnell	Denver	Arapahoe
McDonald, Mabel	Asa B. McDonald	Denver	Arapahoe
McGowan, Eddie	Mrs. A. McGowan	Denver	Arapahoe
Maes, Juan A	Antonio Maes	Weston	.Las Animas
Masapust, Frank F	Frank J. Masapust	Globeville	Arapahoe
Mawhiney, Bonita	Mrs. Agnes Mawhiney	Leadville	Lake
* Mickelsen, Helmer	Christian Mickelsen	Lago	Bingham, Ida
Miller, Frank	Mrs. Hellen Miller	Ġolden	Jefferson
* Morse, Melissa	J. R. Morse	Mesa City	Arizona, state
* Mosey, Baxter	George Mosey	Evanston	Unita, Wyo.
Nelson, Frederick R	Rasmus Nelson	Brush	Morgan

^{*} Pay pupils from another state.

LIST OF PUPILS—DEAF DEPARTMENT—Continued.

Name	Parent or Guardian	Postoffice	County
Parker, Pearle	Mrs. Émma D. Parker	Denver	Arapahoe
Parks, Audrew	Andrew J. Parks	Denver	Arapahoe
Patterson, Birdie	N. F. Patterson	Pueblo	Oldeni Pueblo
Rachofsky, Julia	Harry Rachofsky	Bald Mountain	Gilpin
Reichenecker, Louise	A. Reichenecker	Сото	Park
Reichenecker, Mary	A. Reichenecker	Como	Park
Riel, Robt	A. R. Riel	Colorado Springs	El Paso
Riley, James	Wm. Riley	Denver	Arapahoe
*Ritchie, Ethel	J. J. Pollock	Montreal	Canada
Rodriquez, Nicholas	Mrs. J D. Rodriquez	Autonita	Conejos
Romero, Alcanita	Philippe Romero	Ignacio	I,a Plata
Romero, Eufemia	Philippe Romero	Ignacio	I,a Plata
Romero, Timotea	Philippe Romero	Ignacio	I,a Plata
Sabott, Joseph	Michael Sabott	Pueblo	Pueblo
Seeley, Nora	Chas. W. Seeley	Idaho Springs	. Clear Creek
Shideler, Maggie	Wm. Shideler	Colorado Springs	El Paso
*Smith, Verdie	Julia Smith	Boise City	Idaho, state

Sniveley, Harley	W. W. Sniveley	Berthoud	Larimer
Sparling, William	J. B. Sparling	Highlauds	Arapalioe
Stotts, May	Israel Stotts	Delta	Delta
Taylor, Ethel Z	John W. Taylor	Colorado Springs	El Paso
Taylor, Ory N	E. J. Stockwell	Loveland	Larimer
Thompson, Levi	Limou ThompsonInompson.	Colorado Springs	El Paso
Thompson, Lillie	H. J. Thompson	Fountain	El Paso
Thurston, Walter	Mrs. R. A. Thurston	Colorado Springs	El Paso
Turner, Margaret	J. Y. Turner	Pitkin	Gunnison
Valdez, Agustin	Concepcion Valdez	Hoehue	Las Animas
vigil, Alvauita	Donaciano Vigil	Sopris	Las Animas
Vigil, Huberto	Isidoro Vigil	Gulnare	Las Animas
Watson, Lillie	Joseph W. Watson	Denver	Arapahoe
White, John T	M. T. White	Colorado Springs	El Paso
Wilkins, Joseph.	Hamilton Wilkins	Fort Collins	Larimer
Williams, Annie	F. V. Williams	Durango	La Plata
Williams, Edith	Edward Williams	Louisville	
Wise, William	Andrew Wise	Boulder	Boulder
Young, Sadie	G. H. Young	Eyans	Weld

*Pay pupils from another State.

LIST OF PUPILS—Continued.

BLIND DEPARTMENT.

			-
Name	Parent or Guardian	Postoffice	County
Adams, Ripley	Juo. W. Adams.	Delta	Delta
Adamson, Bruce	Lloyd Adamson	Cripple Creek	El Paso
Adamson, Helen	Lloyd Adamson	Cripple Creek	El Paso
Anderson, Emil	Mrs. Thilea Anderson	Loveland	Larimer
Balfour, Carlton	Mrs. C. M. Balfour	Colorado Springs	El Paso
Brose, Clara	Mrs. Helen Brose	Fort Collins	Larimer
Brunk, Daisy	Mrs G. W. Brunk	Denver	Arapahoe
Bueno, Francesca	Alveno Bueno	El Moro	Las Animas
Bustos, Cipriano	Pedro Bustos	Sopris	Las Animas
Cheatley, Pauline G.	Juo. F. Chcatley	Central City	Gilpin
Chewawa, (Kila Rose)	David F. Day	Ignacio	La Plata
Christian, Johannes	Juo. Christian	Colorado Springs	El Paso
Christian, Martha	Juo. Christian	Colorado Springs	El Paso
Cline, Edward	Thomas Cline	Fort Collins	Larimer
Coe, Eliska	Jno. P. Coe	Trinidad	Las Animas
Cooper, A. C.		Powell	Las Aninas
Cope, Frederick	Mrs. Henry Brunker	Leadville	Lake

Cornforth, Arthur	Charles W. Cornforth	Ouray	Ouray
Cornman, Win	George Cornman	Greeuwood	Custer
Custer, Fred Saur	Frank Saur	Denver	Arapahoe
Davis, Hattie	George A. Verner	Colorado Springs	El Paso
Davis, Ralph	George A. Verner	Colorado Springs	El Paso
Druery, Dena	W. H. Wieman	Stewart	
Engleman, Harry	Dr. C. C. Eugleman	Green Mountain Falls	El Paso
*Francis, Elmer	Clinton Francis	Princeton	Idaho, state
Gilbert, Ira	Mrs Mattie Dyer	Cotopaxi	Fremont
Gordou, Peter	Mrs. Sophia A. Gordon	Rosita	Custer
Hardin, Mattie	J. W. Hardin	Rye	Pueblo
Harris, William	Mrs. J. Pettepier	Deuver	Arapahoe
*Hawes, Pearl	B F. Hawes	Boise City	Idaho, state
*Heller, William	Frank Heller	Wallace	Idaho, state
Herpich, Anna	August Herpich	Denver	Arapahoe
Highby, Myrtle	Frank A. Highby	Denver	Arapahoe
Howard, Fiva E	J. B. Coe	Stonewall	Las Animas
Hubbard, W. O	D. P. Hubbard	La Salle	weld
Jackson, Anna	A. J. Jackson	Delta	Delta
*Jones, George	Frederick E. Joues	Evauston	Wyoming, sta
Jones, Ivy	Marion Jones	Colorado Springs	El Paso

*Pay pupils from another state.

LIST OF PUPILS—BLIND DEPARTMENT—Continued.

Name	Parent or Guardian	Postoffice	County
Kavanaugh, Thos.	Mrs. Jane Kavanaugh	Denver	Arapahoe
Kennel, David	Juo. R. Kennel	Типтиан	Arapahoe
L'esher, Ella	Frank Lesher	Fort Collins	Larimer
McCabe, Ilugh	Col. Henry Bownnan	Denver	Arapahoe
McGraw, Gueunie	Leonard McGraw	Argo	Arapahoe
McGraw, Pearly	Leonard McGraw	Argo	Arapahoe
Martin, Grant		Pueblo	Pueblo
May, Mary	Hugh M. McVey	Denver	Arapahoe
Morgan, Chas	Mrs. Mary Morgan	Argo	Arapahoe
Myers, Juo., Jr	Juo. Myets	Denver	Arapahoe
Ograsky, Emil	Ernest G. Ograsky	Westcliffe	Custer
Payton, Idonia	Juo Payton	Colorado Springs	El Paso
Peasley, Le Roy	Geo. K. Peasley	Greeley	Weld
*Rains, Jesse	Mrs. S. Rains	Los Angeles	Califor, state
Ralston, Henry	Mrs. Augusta Raiston	Eaton	
Rudd, Lizzie	Thos. E Rudd	Cripple Creek	El Paso
Ruiz, Delida	Francisco Ruiz	Weston	Las Animas

Salazar, Albino	Manuel Salazar	Weston	Las Animas
Satafuits (Emma Coane)	David F. Day	Ignacio	La Plata
Schoolcraft, Luverne	Mrs. Ettie Schoolcraft	Hygiene	
Semple, Robert	Robert Semple	Colorado Springs	El Paso
Simmons, Lizzie	James Simmons	Golden	Jefferson
Smith, Walter	C. C. Smith	Colorado Springs	El Paso
Tilyon, Dudley	Mrs. Leon Tilyon	Evans	weld
Todd, Eliza	William Todd	Boulder	Boulder
Williams, David	Margaret R. Williams	Highlands	Arapahoe
Wilson, Mabel	A. W. Wilson	Harrisburg	
Wyatt, Jessie	D. B. Wyatt.	Greeley	weld

*Pay pupil from another State.

CAUSES OF DEAFNESS-180 CASES.

Congenital, 47; unknown, 22; scarlet fever, 17; spinal meningitis, 16; cold, 11; brain fever, 9; eruption, 7; typhoid fever, 6; whooping cough, 6; measles, 6; catarrh, 5; teething, 4; fall, 4; spasms, 3; pneumonia, 3; fever, 3; diphtheria, 3; scarlet fever and meningitis, 2; paralysis, 1; throat disease, 1; sunstroke, 1; muscular rheumatism, 1; diphtheria and meningitis, 1; impure blood, 1.

PLACES OF BIRTH.

In Colorado, 65; unknown, 30; Illinois, 11; Kansas, 10; Iowa, 8; Ohio, 5; Missouri, 5; Utah, 5; New York, 4; England, 3; Nebraska, 3; Minnesota, 3; Wisconsin, 3; Pennsylvania, 3; Denmark, 3; Scotland, 2; Indiana, 2; Wyoming, 2; Kentucky, 2; Texas, 2; Michigan, 1; Norway, 1; Mississippi, 1; Florida, 1; Canada, 1; Sweden, 1; Prussia, 1; New Mexico, 1; Georgia, 1.

CAUSES OF BLINDNESS-77 CASES.

Congenital, 11; unknown, 10; inflammation, 11; small-pox, 6; measles, 5; cold, 5; spinal meningitis, 4; scarlet fever, 2; powder explosion, 2; fall, 2; scrofula, 2; scissors cut, 2; ashes blown into the eyes, 1; St. Vitus' dance, 1; fever, 1; lifting, 1; pitch fork stuck in, 1; snow blind, 1; struck by snow ball, 1; stuck fork in, 1; knife cut, 1; glass cut, 1; bone cut, 1; atrophy, 1; stigmatism, 1; spinal fever, 1; medicine, 1.

PLACES OF BIRTH.

In Colorado, 22; Ohio, 8; Kansas, 7; nnknown, 6; Indiana, 4; Missouri, 4; Iowa, 4; Illinois, 2; Nebraska, 2; Wyoming, 2; Scotland, 2; Mississippi, 1; Wales, 1; Pennsylvania, 1; New Mexico, 1; New England, 1; Wisconsin, 1; Michigan, 1; Canada, 1; England, 1; Idaho, 1; Utah, 1; Sweden, 1; Denmark, 1.

KINSHIP.

The parents of six of our deaf pupils were related before marriage. One child has deaf parents. Twenty-six have some deaf relatives.

Not one of the blind pupils has blind parents. Eight of them have blind relatives.

APPENDIX.

Character of the School, Etc.—This school, which was established in 1874, is supported by the state for the purpose of educating its deaf and blind children, who, by their misfortune, cannot be instructed in the schools for children possessing all their faculties. The institution has fulfilled its mission when it has educated these children to an extent equal to that attained by children of normal faculties through the instrumentality of the public schools of the state. accomplish this end much time and patience need to be exercised by trained specialists in these particular fields of instruction, and buildings provided in which the pupils may be assembled from their homes in various parts of the state, in order to receve such instruction at a minimum expense. The state of Colorado is abreast with her sister states in provision for this branch of her educational system, and by law has had buildings erected and equipped and provided for the support of the deaf and the blind at this insti-The general management is under the control of a board of trustees, five in number, residents of The administration of the affairs of the school is intrusted to competent and experienced officers and teachers, who are familiar with the methods employed in instructing the deaf and the blind.

Terms of Admission—All deaf and blind persons, of sound mind and body, between the ages of six and twenty-two years, actual residents of Colorado, are entitled to admission to the institution free of charge.

This includes all those whose hearing or sight is so impaired as to prevent them from obtaining an education in the public schools. Of necessity the board and washing of pupils, with books and apparatus used in teaching, are also furnished free of charge. In cases of absolute poverty, the respective counties assume the expense of traveling and clothing.

Sessions—The school opens on the first Wednesday of September and closes on the first Wednesday of the following June of each year; thus giving the pupils nine months at school and three months at home each year.

Trades—It is the aim of the school so to educate the pupils partaking of its benefits that they may, on finishing the course, be able not only to communicate intelligently with persons with whom they are thrown, but successfully to follow some certain branch of handicraft as well. The trades of printing, carpentry, baking, broom making, mattress making, piano tuning and cane seating are now taught, and other trades will be introduced as soon as the means at hand will permit. The girls are instructed in dressmaking, hammock weaving, needle work and general housekeeping.

General Remarks—The School for the Deaf and the Blind of Colorado is an educational institution, and for this purpose it is equipped and officered. This fact should be borne in mind, and the idea that it is an asylum or hospital for afflicted children who are burdens to their parents and friends should be eradicated from the public mind.

Promptness in coming at the opening of the school term must be insisted upon, especially with pupils who have before been in attendance and are familiar with the rules of the school. Pupils who are not present by the 15th of September will not be received, unless satisfactory reasons for delay are furnished the superintendent. If it is impossible to come at the time of opening, the superintendent

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should be notified of the cause and of the time when the arrival may be expected.

Any person knowing of deaf or blind children in the state who have not yet attended the school, would confer a great favor upon them by notifying the undersigned of their postoffice address, or by making personal explanation of the work and objects of the school to them. The superintendent can, upon application, secure half rates over the railroads for pupils, but not for their attendants.

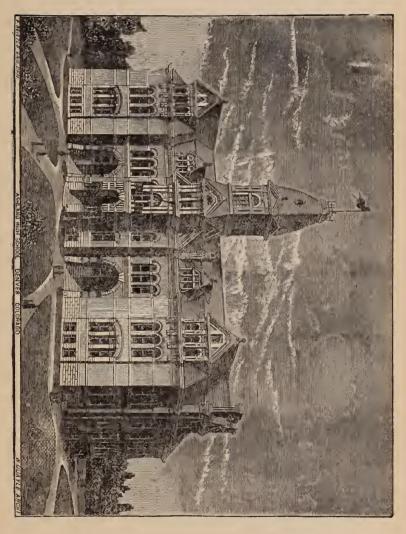
All are cordially invited at any time to inspect the school and its work, but parents and friends of the pupils must not expect entertainment at the school, since the room will not justify nor permit it.

All communications addressed to the under-

signed will receive prompt attention.

D. C. DUDLEY, Superintendent.

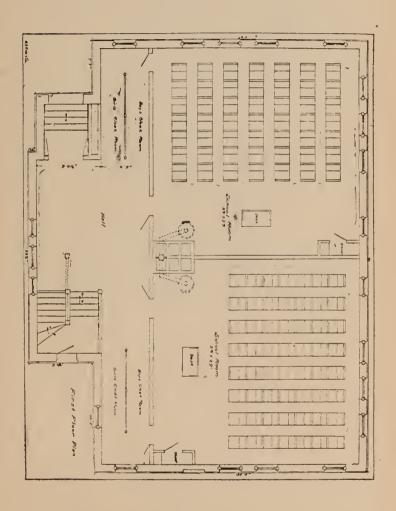




SCHOOL BUILDINGS.

Through the courtesy of Wm. Quayle, architect, of Denver, I am enabled to present the following cuts and descriptions of a one-roomed and a two-roomed school building. It will pay school boards that contemplate building to examine these plans.

A school house, erected from the two-room plan as herein illustrated, can be seen in District No. 98, Arapahoe county, Colorado. The arrangement of rooms, cloak rooms, hall, etc., can be readily understood from the engraving. Light enters at the back and left of each room. The hot air and ventilating shafts are arranged for either school house ventilating stoves or furnaces. Basement contains furnace and fuel room below hall. The building at present is one story high, furnished with high-pitched roof, with dormers in front, and a neat open tower above the front entrance, making a well-arranged interior Basement walls are of and a beautiful exterior. hardest red stone; superstructure of pressed brick and brown stone trimmings. Cost was \$3,110. walls, joists and other timbers are of the required size and dimensions for the addition of a second story, to be arranged similarly to first story, with the addition of a principal's room above vestibule and part of hall. A large and easy stairway in hall will ascend to second floor.

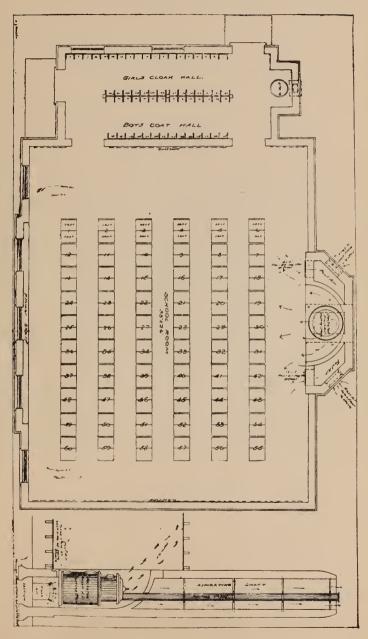


The accompanying cut represents the plan of a one-story, one-room country school, and illustrates a simple, inexpensive and practical mode of heating and ventilation.

Any ordinary jacketed school room heater may be used. It is placed in a niche to avoid encroachment on the school room and to centralize the air currents. As shown by the sectional drawings, cold air is taken from the atmosphere at the base of the stove, which, passing between the heater and jacket; is heated and expelled through the openings in the top of the stove. This volume of heated fresh air rises to the top of the room and gradually falls to the floor to fill a vacuum caused by the air being exhausted through the openings at either side of the heater, which are connected with the asperating shaft.

The air in said shaft is rarified by the waste heat from the smoke stack extending up through it, which gives the column of air its upward movement.

A perfect circulation is thus brought about within the room and a continual change of fresh outside air is secured.



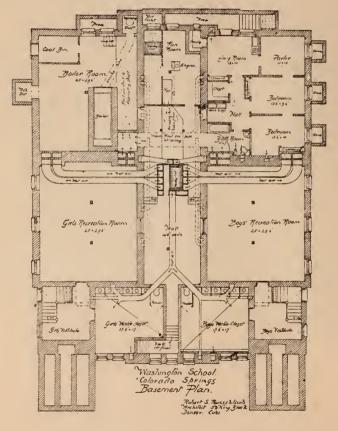




CASCADE SCHOOL, COLORADO SPRINGS.

DESCRIPTION OF WASHINGTON SCHOOL.

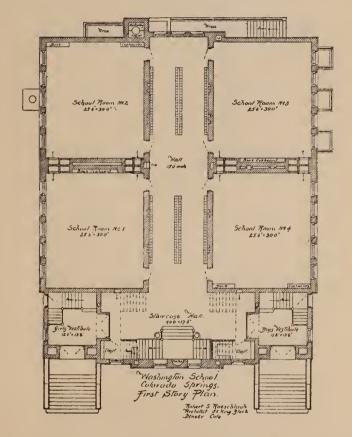
The Washington School at Colorado Springs, now in course of erection, is somewhat original in plan in its system of heating and ventilation.



The heating and ventilating plant consists of a steam boiler, convertible to low or high pressure.

The radiation consists of two stacks of indirect radiators, one being placed near the fresh air entrance, and warms the air entering the fan room to 65 degrees. This air is driven through the system of ducts shown to the various rooms by a fan, the delivery being 1,200 to 2,000 cubic feet of air per pupil per hour.

The vitiated air, through the pressure of fresh air in the various rooms, is forced out through a sys-

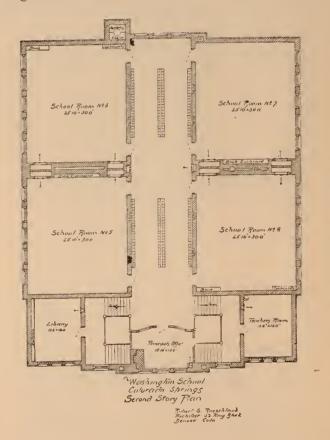


tem of ducts to an asperating shaft, whence it is carried to the atmosphere at the top of the building.

In extremely cold weather, the incoming fresh air supply is super-heated and raised in temperature

by passing through the second stack of radiators in the hot air chamber.

The Johnson heat regulator is installed in this building and automatically accomplishes the following results:



It is set to hold the temperature of all the rooms at 70 degrees (or such temperature as may be required). While the temperature is below this point, this apparatus holds open the draft dampers in the boiler and all hot air valves, admitting only hot air

to the rooms. As the temperature of each room is raised to 70 degrees, the hot air damper is closed and the cool air damper opened, and so continues to deliver alternately, hot or cool air into each room, maintaining the general temperature at 70 degrees. The device also operates the steam valves to the two radiators; first holding both open, then closing off one of them, as well as the boiler drafts, after all rooms are heated to 70 degrees.

To husband the warm air and steam remaining after the close of school and when the active operations of the heating plant are closed down, a valve in the exhaust ducts to the asperating shafts is closed, connecting the exhaust system directly with the fan room, thus converting the system into a gravity job. This condition of the ducts remains while heating up the building in the morning before school, by which arrangement the cold air is drawn from the interior of the building directly to the fan, driven through the coils and heated, and returned to the the rooms. At the opening of school, the valve to the asperating shaft is opened and the school room air is driven from the building. The fact of being able by this system of heating and ventilating to deliver unerringly the requisite amount of air for each pupil and drawing off the vitiated air, renders it unnecessary to supply one extra foot of floor space more than is required for the proper management of the school. This accounts for the unusually small rooms, in which ample provision is made for the desks, passages, black board space and teacher's desk. Each room is provided with cupboards for general supplies and book cases for the text books not in use at any time.

The halls are made of ample dimensions to permit the rapid passage of the pupils from the building and the cloak screens are so arranged and placed as to obviate the crossing of lines of pupils. The clothing in the coat racks is ventilated by the same means as the school room.

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One feature of the building is the arrangement of water closets. They are accessible from the grounds and also from the vestibules, but do not connect in any way with the interior of the building.



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