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HIGH SCHOOL, DENVER.

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MRS. HELEN L. GRENFELL

Superintendent of Public Instruction



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TWELFTH BIENNIAL REPORT

OF THE

SUPERINTENDENT

OF

PUBLIC INSTRUCTION

OF THE

STATE OF COLORADO

DECEMBER, 1900.

TO THE GOVERNOR



DENVER, COLORADO: THE SWITH-BROOKS PRINTING CO., STATE PRINTERS, 1900.

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LETTER OF TRANSMITTAL.

STATE OF COLORADO. OFFICE OF THE SUPERINTENDENT OF PUBLIC INSTRUCTION.

TO HIS EXCELLENCY.

HON. CHARLES S. THOMAS, GOVERNOR OF THE STATE OF COLORADO.

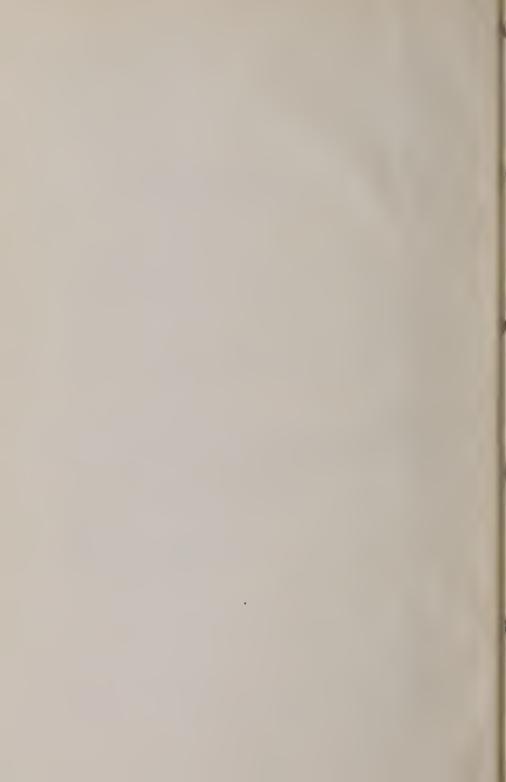
DEAR SIR:

IN COMPLIANCE WITH THE PROVISIONS OF THE LAW, I HAVE THE HONOR TO SUBMIT TO YOU THE TWELFTH BIENNIAL REPORT OF THE SUPERINTEND-ENT OF PUBLIC INSTRUCTION FOR THE TWO YEARS ENDING NOVEMBER 15, 1900-

VERY RESPECTFULLY,

YOUR OBEDIENT SERVANT,

HELEN L. GRENFELL, SUPERINTENDENT OF PUBLIC INSTRUCTION.



OFFICE OF THE

STATE SUPERINTENDENT OF PUBLIC INSTRUCTION.

1898-1900.

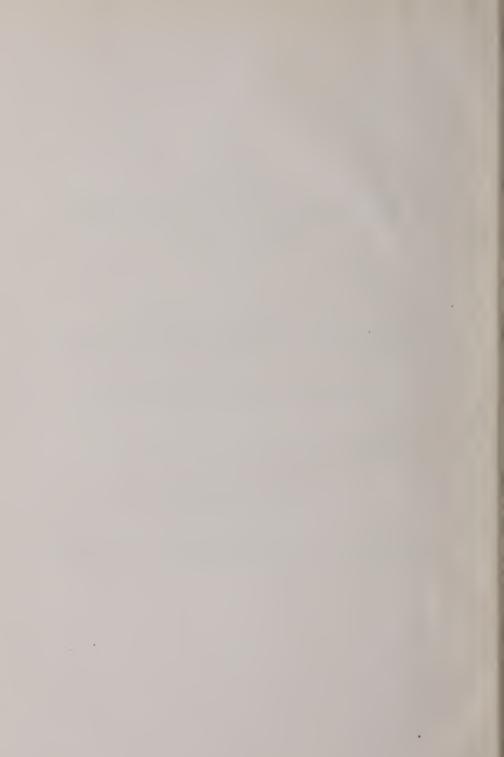
HELEN LORING GRENFELL, SUPERINTENDENT OF PUBLIC INSTRUCTION AND EX OFFICIO STATE LIBRARIAN.

CELIA F. OSGOOD PETERSON, ASSISTANT SUPERINTENDENT OF PUBLIC INSTRUCTION, 1899.

ELIZABETH SKINNER, ASSISTANT SUPERINTENDENT OF PUBLIC INSTRUCTION, 1900.

> HATTIE E. STEVENSON, ASSISTANT STATE LIBRARIAN.

MARGARET E. FALLON, CLERK AND STENOGRAPHER IN THE OFFICE OF THE SUPERINTENDENT OF PUBLIC INSTRUCTION.



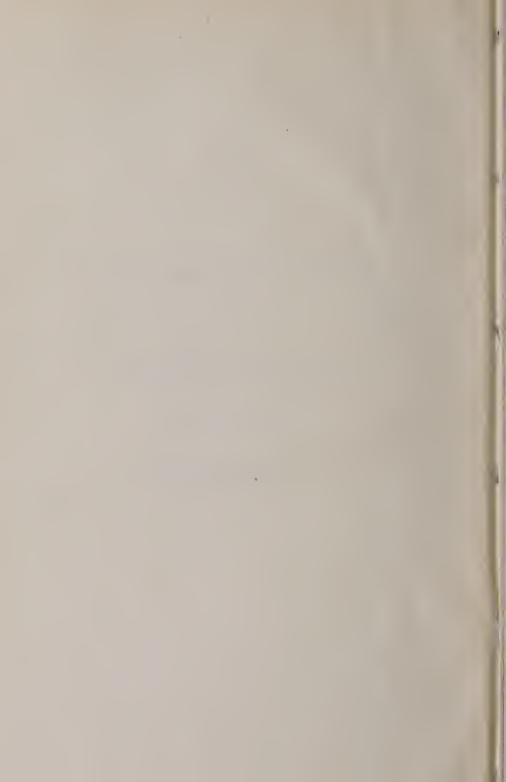
STATE BOARD OF EDUCATION.

1898-1900.

HELEN LORING GRENFELL. SUPERINTENDENT OF PUBLIC INSTRUCTION.

ELMER F. BECKWITH, SECRETARY OF STATE.

DAVID M. CAMPBELL, ATTORNEY GENERAL.



INTRODUCTION.

The Public

School.

Under the enlightened government of nineteenth century civilization no institution is of more importance than that of the public school. It is the outcome of that intense love

of liberty that was born of the wrongs of the long darkness of past ages and sprang into vigorons prime in the eighteenth century. It is the expression of the inner longing of the race for a fuller, richer, nobler development. It is a close second to the institution by civilized man of the home, in representing the greatest factors of the steady march of progress.

The American Public School. The American prominence in the eyes of the nations. Into our civilized, half-civilized and

savage new possessions already the school has followed the flag and is unquestioningly accepted as the light-bearer to those foreign peoples.

It is, therefore, with justifiable pride The Colorado that the citizen of Colorado can rank the Public School. School of his state as among the best in America. From its earliest history Colorado

has been notable for the enterprising and progressive spirit of her people. The cosmopolitan character of the West has no better exemplification than within the borders of our own state and the breadth and liberality springing from such character are most wholesome in effect upon the schools. The criticisms that should be made and are made upon the details of the working of our schools are such as apply to similar schools throughout the country. Despite constant reminding of the fact, the American taxpayer has not yet fully learned that it is cheaper to prevent than to punish crime, and doubtless, for some time yet, the money needed to provide more room for school children in cities, better equipment in country districts and more professional teachers in both, will continue to be applied to the maintenance of prisons and reformatories.

Fortunately it has come to be well known The Standard that the most important feature of the school, —and more important than all others combined,—is the teacher. A good teacher, under

any probable disadvantages of situation, will do good work, while a poor teacher, with all possible advantages, will do poor work. With our normal and high schools turning out annually many aspirants to the teachers' profession, and with an ever-increasing immigration of excellent teachers from other states, there is no longer any reason for accepting poorly qualified teachers in any school district in Colorado. The standard of requirements has for some years past been gradually rising. During the present administration it has been thought proper to raise the minimum per cent, for obtaining a third grade certificate from fifty to sixty. It is to be hoped that the time is not far distant when the third grade certificate will be abolished.

County Examination Questions.

In the preparation of county examination questions the Superintendent has requested the assistance of a number of prominent and practical educators in different parts of the state, believing that a fairer test

could be obtained than by means of an examination which was the work of any one mind. The result has justified the method, and sincere thanks are tendered to those superintendents and teachers who so cordially responded to the request and so skillfully met its purpose.

Colorado Bar Examination and Dental College. Additional work has been asked of the Superintendent's office during this biennial in the conduct of the academic examination of applicants for admission to the bar, and of applicants for admission to the dental college. For the former, two examinations a

year have been arranged, to take place at the various county seats coincident with the teachers' examinations in March and December. For the latter, an annual examination in the fall has been appointed. The results of each examination occurring during this administration will be found in this report. StateThe law governing the granting of stateStatediplomas having been amended by the legis-
lature of 1899, the rules of the Board of Ex-
aminers have been revised. The details of
these changes are recorded elsewhere.

School Law.

The school laws of Colorado have been revised, with new indexing, and for the first time annotated.

State Course of Study. As no new course of study had been provided for the schools of the state since that of 1890, which was prepared by a committee appointed by the State Teachers' Association,

and a universal desire having been expressed for a broader course to meet the many changes of the past decade, the State Superintendent, assisted by seven of the leading educators of the state, prepared an entirely new state course of study, which was issued in July, 1900. This course has already been cordially received throughout the state and elsewhere, and has been very generally introduced in the schools throughout the state.

School Libraries.

Great interest has been taken in the important work of founding school libraries. In nearly every county a majority of the districts, rural as well as those of the towns, have

taken steps to establish such libraries in connection with the public school, and although in many instances the beginning is small, the growth is steady, and already the influence is noticeable upon the progress and culture of the pupils.

Parents' Meetings.

The widespread interest in parents' meetings has been felt in Colorado, as in most of the states, and with characteristic energy our teachers have worked to obtain the co-opera-

tion of the parents in establishing such meetings in the majority of our cities, towns and rural districts. The movement seems to be productive of better understanding between teachers and parents, and while it is probably, by its nature, destined in its present form to be short-lived, a permanent good may be expected to remain with us.

Our State Schools.

Our State University, State Normal School, State Agricultural College and State School of Mines have won for themselves a place and a name that are becoming national.

Although they are laboring under financial disadvantages,

great interest in them has been noticeable throughout the state. Never before has the attendance been so large as during 1900, and never have our people so fully realized that we have state schools that are unexcelled in their several lines.

School for the Deaf and Blind. The School for the Deaf and Blind is doing excellent work and is receiving the state patronage from localities where such an institution is lacking.

Third Grade Certificates. In 1895 the law was passed that but two third grade certificates should be issued to the same person. This necessitated the compiling for the use of superintendents a list of

those holding third grade certificates. This list, including those so certificated during the two previous administrations, was compiled and issued in the early part of the present administration. Supplementary lists are issued after each of the three examinations of the year, and forwarded to each county superintendent for reference when granting certificates.

State Teachers' Associations. An unusual number of interesting and profitable teachers' associations and other educational meetings throughout the state have convened during the biennial period just ended. These meetings have been character-

ized by large attendance and the superior quality of papers and other work presented, and have done much in arousing a greater interest in educational matters on the part of the community. The statutes of the state requiring that the State Superintendent shall visit and participate in educational gatherings, the present incumbent has attended and addressed every normal institute, as well as teachers' associations and other educational meetings, in forty-six of the fifty-seven counties of the state.

By invitation of the National Educational Association, the State Superintendent also addressed that body during its meeting at Los Angeles in 1899.

The Normal Institute.

1

In each of the thirteen normal institute districts of the state an institute of two weeks' duration is held yearly during the summer vacation. The purpose of these institutes is not

to cram applicants for a teacher's certificate, but to present by high-class educators such matter in such form as will inspire the common school teacher with high ideals and noble purposes, and to instruct him in the methods whereby such ideals may be approached and such purposes attained. It may safely be said that no single line of endeavor is doing more to professionalize the vocation of the common school teacher than is the effort put forth in the direction of the normal institute.

How to increase its efficiency is a problem constantly before the mind of those who have charge of the organization and management of the institute. Lack of funds is the great obstacle. The law provides that each pupil in attendance shall pay a fee of one dollar, and that the county from which the pupil enrolls shall pay an additional two dollars for such attendance. Attendance upon the institute is in nowise compulsory. The teacher may attend or not, as he sees fit. If he fails to attend, he suffers only in loss of opportunity for increased knowledge and culture.

Since the institute offers to many teachers their only opportunity for professional training, and since the greatest hindrance to the usefulness of the institute is lack of funds, it would seem wise that some legislation be enacted requiring attendance, if not of all, then certainly of those who have never received the professional training of a normal school or of the pedagogical department of college or university.

It may be added that the statute establishing the normal institute provides for the payment by the state of 850 to each institute district holding the yearly two weeks' session, but as no session of our legislature has ever made an appropriation for the purpose, this intended means of support has never paid its contribution.

It has been suggested that the fund might be increased by collecting a fee of one dollar from each person presenting himself for examination, and a like fee for each renewal, endorsement or certificate of like grade. In objection it has been urged that under present conditions there is an abundance of money properly to support an institute in some of the districts, and that to increase their fund is not necessary. This is true of not more than three normal institutes of the state, while the other ten languish for lack of funds.

If the fees collected as suggested were paid into a common fund to be divided amongst the thirteen districts, either equally or inversely according to enrollment, the manifest advantage to the weaker districts would certainly more than overcome any reasonable objection to the plan. It is firmly believed that the enactment of such a law would meet the approval of all interested in our local educational affairs, those on whom the tax would be laid included.

Duties of County Superintendents. Under the present mode of administration, the welfare of our rural schools depends on the skill and intelligence found in the office of county superintendent more than on any other factor. It is unfortunate that in many

counties the compensation allowed lacks so much of adequacy to the duties exacted, a condition that will repel, rather than attract, men and women of proper qualification. Yet, notwithstanding the fact that, in justice, subtractions from, rather than additions to, their burdens should be made, it seems imperative that they should assume further responsibilities.

In many rural districts generous provision is made by the taxpayers for the support of a good school of adequate length of term. But it sometimes occurs that through the illadvised action of the directors in purchasing apparatus as useless as it is expensive, and in the practice of other unbusinesslike methods, the money is squandered and the ends of true education defeated.

Warrants drawn in excess of revenue for the year are illegal. But so few secretaries of rural districts are accustomed to the keeping of accounts that revenues are frequently overdrawn, or warrants are drawn on an exhausted fund while money stands to the credit of another, and money which should be spent in the education of children goes to swell the profits of the warrant shaver.

It is a part of the county treasurer's duty to keep the school districts' accounts, but it is not a part of his duty to check the account as each warrant is presented, and notify the district secretary of the condition of the funds.

A law making the county superintendent anditor of school warrants, and forbidding their payment without his signature, would remedy these evils. Such a law would, of course, necessitate the keeping of an account with each district by the county superintendent; but his increased labor would result in economy of the people's money.

School Directors.

The interests of a school or school district are sometimes hampered by the refusal of a director to perform his duty. Being elected and qualified he is answerable alone to

his constituents, and to them only at the expiration of his term of office, and in case he should seek re-election. The only way to enforce a proper discharge of his duty is through the conrts, a process so expensive and unpleasant that, rather than resort to it, teachers and patrons of the school often suffer inconvenience.

A law making school directors accountable for the proper discharge of their duties to the county superintendent, and clothing that official with authority to remove, would, in many instances, conduce to harmony and promote the ends of education.

Compulsory Education.

The compulsory education law applicable to third-class districts sadly fails to accomplish its intended purpose. Its enforcement is made the business of everybody in general

and of nobody in particular. It contains a provision relieving from educational responsibility the parents of children living more than two miles from a school house. In the sparsely settled localities of our state it is impracticable to place a school house within two miles of each child; and while most of our people are anxions for the education of their children, and many of them make heroic sacrifices to this end, yet some avail themselves of the weakness of the law and permit their children to grow up in utter ignorance.

The new compulsory education law of 1899 is generally commended, but as yet is not in full operation. Details concerning its enforcement are given elsewhere.

Our Rural Schools.

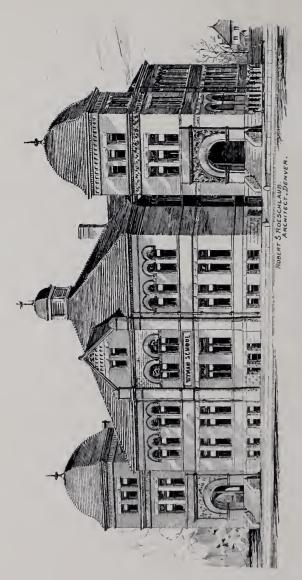
In arriving at the consideration of the rural school problem, I approach the heart of the whole system. It is here that we are confronted by the greatest difficulties, and here

that we may do our greatest work. The bone and sinew of the great national frame have always come from the country. Many of our young people are acquiring their education solely in the district school, and it is our high duty to see to it that the best conditions possible for us to obtain are theirs.

The schools of the towns and cities of Colorado are properly ranked among the best in the land, and our rural schools compare favorably with similar schools elsewhere. But it is not enough that our country schools compare favorably with the country schools of other communities situated similarly to ourselves. There are both room and opportunity for improvement.

The chief evils of our country schools are unequal taxation, short and unequal terms, unequal equipment, untrained and poorly paid teachers, small schools, lax supervision. Under the existing method of administration it sometimes occurs that a district, through its large school population, is able to maintain a nine months' school without special taxation, while its neighbor, because of the few persons resident within it and its low assessed valuation can have but a four months' term, although taxing itself to the maximum limit allowed by law. The wealthy and populous district is plentifully supplied with reference and library books, maps, charts, globes, etc., while its neighbor is forced to do without these aids to successful teaching. In many districts the directors regard it of less importance to secure a teacher of skill and training than one who will exchange his efforts for a small amount of money. Districts may be established wherever there are ten persons of school age, and once established may be continued indefinitely, even when there is no longer a child to be educated. Every one familiar with school administration knows that the maintenance of a school for two or three pupils is an extravagant expenditure of money, and knows, too, that the consolidation of several small schools into one graded school would result in immeasurable benefit to the pupils as well as economy of funds. The efforts of the superintendent divided among many small schools are less effective than they would be if his time and energy were given to fewer and larger schools; and in many instances the salary is so insignificant that a competent person can not be expected to give his entire time to the work. Close and skillful supervision is as rare as it is desirable.

How may these evils be remedied? Since they do not assail the city school, it is possible that a method of administration patterned as clearly as practicable after that of the city would result in some measure of relief. The city, while still a "district," is a populous and wealthy unit; its directors are selected because of peculiar fitness for the duties involved; taxation, equipment and length of term are equal; only trained and experienced teachers are employed; and the entire administration of details is under the skillful direction of a person well educated, well trained and well paid.



WYMAN SCHOOL, DENVER.

To approach these conditions in the country, the district system must be abolished; and justice as well as expediency seems to demand that the county be made the unit of administration. With one board of directors for the entire county, its three or five members would more likely be selected because of fitness for the office; uniform taxafion, uniform length of term, and uniform equipment would follow; fewer and larger schools would be maintained, and remote pupils transported at public expense; the higher salaries made possible by consolidation of schools would attract better teachers, and supervision might become something more than a name.

It is not expected that an immediate change will be made from the district to the county unit, but it is believed that the time has come when the practicability of such a change should receive the serious and careful consideration of those interested in the betterment of our rural schools.

RECOMMENDATIONS TO THE MEMBERS OF THE THIRTEENTH CENERAL ASSEMBLY.

To the consideration of the Thirteenth General Assembly the following are submitted as proper subjects of legislation :

1. Conferring upon the county superintendent of schools authority to remove a school director for failure or refusal to perform the duties of his office.

2. Making the county superintendent of schools auditor of school warrants, and forbidding the county treasurer to pay them without the county superintendent's signature.

3. Requiring a fee of one dollar from applicants for a teacher's certificate, and from successful applicants for a renewal, endorsement or certificate of like grade, such fees to constitute a state normal institute fund.

4. Increasing the number of biennial reports printed by this department from 500 to 2,000.

5. Making provision for the reimbursement of the state school fund.

The Unavailable State School Fund. It is a well known fact that a princely sum belonging to the school fund of this state, and which should be so invested as to yield a yearly revenue for the support of our schools, is "tied up" in warrants of this state

which have been declared by the Supreme Court to be illegal. There is no doubt in the mind of those who have investigated this matter that these warrants were issued in a regular manner for the payment of just and honest debts of the state. Not only were they thus issued, but the school fund was invested in them in pursuance of legal enactment. Interest on these warrants is unpaid and accumulating year after year, to the irreparable injury of the school children of the present generation, for whose education this interest should be spent yearly as it accrues.

The Constitution of our state says that the school fund shall forever remain intact, and that any loss it may suffer shall be made good by the people. A constitutional direction to the people so plain as this should not pass inheeded by lovers of law and constitutional authority. Twice the attempt has been made to restore this fund, and twice defeated, because, it is believed, that it was sought by the same act to provide for the payment of other similar warrants. Without entering into the merits or demerits of the claims of the holders of other warrants, it may with all propriety be urged that this matter be constantly kept before the people until the right action is taken. The school fund will undoubtedly some time Delay is not only senseless, but criminal, be reimbursed. since it robs the school children of this generation of a goodly portion of their birthright, and I urge the Thirteenth General Assembly to take such action as is necessary to bring about the restitution of the funds diverted from their lawful use.

Respectfully submitted,

HELEN L. GRENFELL, Superintendent of Public Instruction.

LIST OF NEW BOOKS IN STATE LIBRARY.

REPORT OF STATE LIBRARY.

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REPORT OF STATE LIBRARY.

Hon. Helen L. Grenfell, Superintendent of Public Instruction and Ex Officio State Librariau:

Madam—I have the honor to submit for your consideration the following report of the Colorado State Library for the years 1899-1900:

The history of the library for 1899-1900 might well be characterized as prosperous. A satisfactory increase has been noted in the number of patrons, in the recorded use of the books, in the number of volumes available, and in the means of making these more useful. The library is situated on the third floor of the Capitol building, and includes the library proper, the librarian's office and a cataloguing room, which latter is used for the librarian's office during the sessions of the legislature. The entire west end of the library is occupied by the patent office reports, which, with their wonderful specifications and drawings, are used perhaps more than any other books in the library.

In a majority of the states the law library and the state library are the same. In Colorado they are separate. However, all Supreme Court reports and Court of Appeals reports from other states are sent to the State Library, recorded in the accession book, receive the accession number and are then sent to the Supreme Court Library.

All books entering the State Library are recorded in the acession book, receive the acession number, the state stamp, have their leaves cut, and require a great deal of preparation before being ready for the use of the public. All pamphlets pertaining to Colorado state reports have been bound, numbering seventy-four volumes. Those published by the United States government, some of which contain valuable and useful information, have been classified and placed in brown paper pockets.

To meet the demands and wants of the public, much time and attention have been given to the selection of books purchased. A list of books called for has been kept, and as far as possible, such books have been obtained. The last selection of books has anticipated the wishes of the people, as has been demonstrated by the constant demand for and use of the new books. A number of incomplete sets of books have been completed, as far as our fund would allow. The appearance of the library room has been greatly improved both in cleanliness and beauty by the laying of a new tiling floor and the tinting of the walls. Other additions are five new open book-cases, one large enclosed case for the most valuable books, and a beautiful oak cabinet that will hold twentyfour bound volumes of newspapers. Much time and energy have been spent in completing the files of the Colorado documents. The search seemed almost hopeless for there were many gaps to be filled, dating from territorial times. Of the results of this effort, we feel justly proud and wish to heartily thank the many citizens who have so generously aided us in the work—in many cases giving all their private collections—and at present few state libraries can boast of as complete a file of state documents. During this administration, the following files have been completed:

Reports	of	State	Treasurer.
Reports	of	State	Land Board.
Reports	of	State	Board of Charities and Corrections
Reports	\mathbf{of}	State	Board of Pardons.
Reports	of	\mathbf{State}	Bureau of Health.
Reports	of	\mathbf{State}	Bureau of Mines.
Reports	\mathbf{of}	State	Board of Capitol Managers.
Reports	of	\mathbf{State}	Board of Labor.
Reports	of	State	Coal Mine Inspector.
Reports	of	State	Boiler Inspector.
Reports	of	State	Industrial School for Boys.
Reports	of	State	School of Mines.
Reports	of	State	Engineer.
Reports	of	State	Insane Asylum.
Reports	of	\mathbf{State}	Penitentiary.
State No	orm	al Sci	hool Catalogues.
Reports	of	State	Superintendent of Insurance.

The Session Laws of 1899 provided for the appointment of a Library Commission, the members to be appointed by the Governor. The commission was appointed, but owing to the lack of funds, was not organized and nothing has been done. Seventeen states in the Union have state library commissions and six of these states have traveling libraries connected with the state libraries. New York, New Hampshire, Michlgan and other states report very favorable results.

Traveling libraries are a great benefit to people in remote districts where no other books find their way, helping those who are interested in reading and awakening an interest in good literature. If the members of the legislature would interest themselves in the library commission, I feel quite confident they would appropriate sufficient funds to aid the commission in carrying out its purpose.

On assuming the duties of Assistant State Librarian, January 10, 1899, I found that there were 13,000 bound volumes. The bound volumes now number 14,896.

During 1899 and 1900 there were 1,896 bound volumes received, 1,533 paper-covered books and pamphlets, and 24 maps. There were received from the Secretary of State 97 Supreme Court and Court of Appeals Reports of Colorado.

The State Library has turned over 217 bound volumes to the Supreme Court Library.

An alphabetical authors' list of the general works of the library has been prepared for the purpose of rendering the library more useful to the citizens of the state, and calling their attention to the large number of valuable volumes it contains. This catalogue will be published in pamphlet form at an early date.

BRA	RY = F	UND.

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To appropriation		\$ 500.09
By books purchased	\$ 299-20	
By maps purchased	2 00	
By binding books and newspapers	74 25	
By work in library	114 25	
By library supplies	7 35	
By express for library	2 95	
	\$ 500-00	\$ 500 00

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RECOMMENDATIONS TO THE LEGISLATURE.

Colorado, which can boast of one of the finest educational systems in the United States, is not generous with its appropriations for the State Library. The state of Michigan appropriates for the maintenance of its state library, \$10,000 per annum, while the great state of Colorado appropriates only \$500 per annum. The State Superintendent, Mrs. Helen L. Grenfell, may feel justly proud of the judicious expenditure of the library fund, to which she has devoted much time and thought.

I would earnestly invite the members of the legislature to visit the State Library and see the many needs for money, and would respectfully recommend an appropriation of \$1,000 per annum. It is also suggested that all state documents have the name printed on the back of the book.

Our State Library exchange system is unsatisfactory, other states being far more generous with us than we have the means of being with them. There are not sufficient Colorado documents published to enable us to exchange with all other state libraries, but this work has been strengthened by obtaining from the Secretary of State all the available state documents to be used for that purpose. I would recommend that at least five hundred more copies of the State Superintendent's Biennial Report, and one hundred more copies of state documents of each department be published and sent to the State Library for exchange purposes.

It has been very gratifying to us to be able to place on our exchange list the Field Columbian Museum. Among their many valuable productions is "The Birds of Eastern North America," a work which has been much used by students.

Respectfully submitted,

HATTIE E. STEVENSON, Assistant State Librarian.

LIST OF BOOKS.

PURCHASED BY THE STATE LIBRARY DURING THE YEAR 1899.

TITLE	Anthor	Vols
Abraham Lincoln, the Man of the People	Norman Hapgood	1
Americau Commonwealth	James Bryce	2
American Institutions and Their Influence	De Tocqueville	1
American Politics	Thomas V. Cooper.	1
Appleton's Annual Encyclopaedia		16
Century Atlas of the World		
Chemical and Geological Essays	T. Sterry Hunt	1
Coutemporaries	T.Wentworth Higginson	1
Diplomatic History of the War of the Union	W. H. Seward	1
Dutch and Quaker Colonies	John Fiske	2
Economic Geology of the United States	R. S. Tarr	1
Elements of Geology	Joseph LeConte	1
Expansion Atlas (Revised Edition).	Rand, McNally & Co.,	
France and England in America	Francis Parkman	1
Conspiracy of Pontiac -2 vol.	Francis Parkman.	41
Count Frontenac and New France under Louis XIV.	Francis Parkman	
Half-Century of Conflict-2 vol.	Francis Parkman	
Jesuits in North America—2 vol.	Francis Parkman	
La Salle aud the Discovery of the Great West	Francis Parkman	16
Montcalm and Wolfe -3 vol.	Fraucis Parkman	
The Old Regime in Canada—2 vol.	Francis Parkman	
Oregon Trail	Francis Parkman	
Pioneers of France in the New World-2 vol.	Francis Parkman	IJ
Geological Sketches	Louis Agassiz	2
Geological Sketches at Home aud Abroad		1
Geological Story Briefly Told		1
Geological Survey of Iowa	Samuel Calvin	2
Hand Book of Rocks	James Kemp	1
Hero Tales of American History		
History of American Civil War		1
History of the Bible.		
History of the United States—4th volume		

* Colorado Author.

TWELFTH BIENNIAL REPORT

LIST OF BOOKS.

PURCHASED BY THE STATE LIBRARY DURING THE YEAR 1899-Continued.

TITLE	Author	Vols
History of the United States of America	Nathaniel Shaler	3
History of the United States Navy	Edgar Maclay	2
History from Cartier to Fontenac	Justin Winsor	1
History of Christoper Columbus	Justin Winsor	1
History of the Mississippi Basin	Justin Winsor	I
History of the Westward Movement	Justin Winsor	1
Imperial Democracy	David Starr Jordan	1
Life of David, Son of Jesse	Cortes Jackson*	
Life and Public Services of Edwin M. Stauton	George Gorham	2
Lives of the Presidents of the United States	J. S. C. Abbott and R. H. Conwell	1
Manual of the Botany of the Rocky Mountain Region	John Coulter	
Manual of Mineralogy and Petrography	James D. Dana	1
Map of Colorado—J. M. Flower & Co.,	Publishers	
Miuerals and How to Study them	Edward S. Dana	1
Mineral Industry—Edited by	R. R. Rothwell	7
Natural History aud Geological Survey of Miunesota	N. H. Winchell	-
Naval War of 1812	Theodore Roosevelt	I
New Testament with Apostolic References	Cortes Jackson*	1
Old Virginia and Her Neighbors	John Fiske	
Ore Deposits of the United States and Canada	James Kemp	1
Outlines of Field Geology	Archibald Geikie	1
Political History of the United States	Goldwin Smith	1
Popular Flora of Denver, Colorado	Alice Eastwood*	1
Puritan Republic	Daniel Howe	1
Puritan in England, Holland and America	Douglas Campbell	2
Readers' Handbook of the American Revolution	Justin Winsor	1
Reconstruction during the Civil War in the United States	Eben Scott	1
Riverside Natural History-Edited by .	John S Kingsley	11
Vol. I.—The Lower Invertebrates	John S. Kingsley	8
Vol. 11Crustacea and lusects.	John S. Kingsley	1 - E
Vol. 111. Fishes and Reptiles	John S. Kingsley	} 6
Vol. IV. Birds	John S Kingsley	1
Vol. V,Mammals	John S. Kingsley	1
Vol. V1. Man	John S. Kingsley	1

* Colorado Anthor.

LIST OF BOOKS.

PURCHASED BY THE STATE LIBRARY DURING THE YEAR 1899-Concluded.

Henry Wilson	3
Henry Cabot Lodge.	ł
James D, Dana	1
Edward S, Dana	1
J. A. Phillips, H. Louis	1
Alexander Winchell	1
Theodore Roosevelt	4
Walter Wyckhoff	1
Walter Wyckhoff	1
	Henry Cabot Lodge. James D. Dana Edward S. Dana J. A. Phillips, H. Louis Alexander Winchell Theodore Roosevelt Walter Wyckhoff

LIST OF BOOKS.

PURCHASED BY THE STATE LIBRARY DURING THE YEAR 1900.

TITLE	Author	Vols
Anatomy, Descriptive and Surgical	Henry Gray	1
Ancient America, Notes on American Archaeology	John Baldwiu	1
Ancient Cities of the New World	Desire Charmays	1
Antelope and Deer	Caton	1
Big Game of North America	George O. Shields	1
Bird Land Echoes	Charles C. Abbott	1
Bird Life	Frank Chapman	1
Bird Neighbors	Meltje Blanchan	1
Birds About Us	Charles C, Abbott	1
Birds of Eastern North America	Frank Chapman	1
Birds that Hunt and Are Hunted	Meltje Blanchan	1
Break-Up of China	Charles Beresford	1
Butterfly Book	J. W. Holland	1
Campaigning in Cuba	George Kennan	1
Century of Science	John Fiske	1
Chemistry	Ira Remseu	1
Correspondence of John Lothrop Motley	John Lothrop Motley	1
Creatures of Other Days	N. H. Hutchinson	1
Day Butterflies and Dusk Fliers	E. Knobel	1

TWELFTH BIENNIAL REPORT

LIST OF BOOKS.

PURCHASED BY THE STATE LIBRARY DURING THE YEAR 1900 - Concluded.

TITLE	Author	Vols
Decimal Classification and Relative Index	Melvil Dewey	1
English Men of Letters—Edited by John Morley		13
English Synonymes	George Crabb	1
Factors of Organic Evolution	E. D. Cope	1
Field Book of the War of 1812	B. J. Lossing	1
Footnotes to Evolution	D. S. Jordan	1
Fresh Water Fishes	E. Knobel	1
Gallinaceous Game Birds	D. G. Elliott	1
Geographical Distribution of Animals	Alfred R, Wallace	2
Guide Map of Denver		2
Guide to Wild Flowers	Alice Louusberry	1
Guide to Wild Trees	Alice Lounsberry	1
Harper's Book of Facts-Edited by Lewis Charlton		
Harper's Pictorial History of the United States	H. H. Guerusey and Henty Alden	2
History of the English People	J. R. Green	4
How to Know Ducks, Geese, Etc	Charles Cory	1
How to Kuow Shore Birds	Charles Cory	1
Indians of Southern Mexico	Fred Starr	1
Iudustry of Animals	F. Housay	1
Life of General Isaac Stevens	Hazard Stevens	2
Life and Death of John Barnefield, John of Barnevelt	John Lathrop Motley	2
Life of Samuel Johnson	James Boswell	6
Manual and Three Folios	Frank Chapman	1
Mineral Industry, Vol. 8 – Edited by R. R. Rothwell		1 - 0
Nature's Gardens	Meltje Blanchau	1
North American Shore Birds	D, G, Elliott	1
One Thousand American Fungi	Charles McIlvaine	1
Pictorial Field Book of the Revolution	Benson J. Lossing	2
Pre Historic Natious	John Baldwin.	1
Quadrupeds of North America	J. W. Audubon	3
~ • • Study of Licheus		1
Tuitles, Snakes, Frogs, Etc	E. Knobel	1
Wild Fowls of the United States	D. C. Elliott	1

LIST OF BOOKS.

DONATED TO THE STATE LIBRARY, 1899-1900.

TITLE	Author	Vols.
American National Red Cross Relief Committee Reports		
Among the Pueblo Indiaus	Carl Eickemeyer	1
An Evening With Colorado Poets, (Compiled by Frances Kidder)		1
An Evening With Poets' and Authors' Club of Colorado	Kistler & Co., Pub	1
A Way that Seemeth Right.	H, Martyu Hart	1
Banta Genealogy	M. T. Bauta	1
Colorado and Homes in the New West	P. E. Tenney.	1
Caude Ore of the Rockies	S. J. DeLan	1
Double Mau	B. F. Dowd	1
Elementary Psychology	James H. Baker	1
Experiments and Adventures in the Atmosphere	Hatton Turnor	1
Freuch History, Essays on	James Farmer	1
Glimpses of the Crand Canon of the Colorado	F. Thayer, Pub.	1
Hasta Luego	Marguerite Zeariug	1
History of Battle Monument at West Point	C. M. Larned and E. Miner	1
History of Equal Suffrage in Colorado	Joseph Brown	1
Holy Bible		1
Iouia, Laud of Wise Men aud Fair Women	Alexauder Craig	1
John Harvey, a Tale of the Twentieth Century	Anon Moore	1
Legal Adviser—Edited by J. Warner Mills	. <u></u>	1
Legislative and State Blue Book of Colorado	W, H. Lawreuce, Pub.	1
Life and Letters of Charles Bullfinch	S. E. Bullfuch	1
Living Christ	Paul Tyuer	1
Mining and Metallurgical Journal		*
Mining Map of Eldora District	C. F. Armstrong	
Ordinances and Charter of Denver		1
Political Economy of Natural Law	Henry Wood	1
Sketches of the Life and Public Services of William Richardson.	Frank Hackett	1
Stock Growers' Convention Report, First-Compiled by Chas. Martin		1
Stock Growers' Convention Report, Second-Compiled by F. Martin		1
Temple-A magazine, edited by Paul Tyner		
Through the Invisible	Paul Tyuer	1
Vibrations, the Law of Life	W. H. Williams	1

TWELFTH BIENNIAL REPORT

LIST OF BOOKS.

DONATED TO THE STATE LIBRARY, 1899-1900-Concluded.

TITLE	Author	Vols
Victor Serenus	Henry Wood	1
Weighty Words from the Writings of J. M. Darby	J. M. Darby	1
Where Angels Fear to Tread	Marguerite Zearing	1
Year-Book and Almanac. 1899-Denver Times, pub		1

LIST OF BOOKS RE-BOUND IN 1899-1900.

FOR USE OF STATE LIBRARY.

TITLE	Author	Vols.
Birds of Eastern North America		2
Colorado Resources	·	1
History of the Rebellion and Civil War in England	Edward, Earl of Claren- don	6
Histories	William H. Prescott	16
Japan Described and Illustrated-Edited by F. Buckley		3
Miscellaneous Works	William H, Prescott	1
Napoleon	Adolphe M. Thiers	5
Proceedings of Colorado Scientific Society-1883-1886	····· · · · ·	
Proceedings of Colorado Scientific Society-1887-1890		
Proceedings of Colorado Scientific Society-1891-1896		
Revised Statutes of Colorado-1868		1
Rocky Mountain Health Resorts		1
Statesman's Manual-Compiled by Edwin Williams		1
Works of Josephus	Flavins Josephus	1

LIST OF NEWSPAPERS BOUND IN 1899.

FOR USE OF STATE LIBRARY.

NAME	Date	Vols
Denver Post	1899	- 3
Deuver Republican	. 1897	1
Deuver Republicau	. 1899	- 3
Denver Times	1899	3
Rocky Mouutain News .	1897	
Rocky Mountain News	. 1899	- 3

LIST OF NEWSPAPERS BOUND IN 1900.

FOR USE OF STATE LIBRARY.

NAME	Date	Vols
Denver Post		1
Denver Post		
Denver Republican .	1899	
Denver Republican		
Deuver Times		1
Denver Times	1900	
Rocky Mountain News		1
Rocky Mountain News		4

COLORADO DOCUMENTS BOUND IN 1899.

FOR USE OF STATE LIBRARY.

TITLE	Date
Laws and Bulletins relating to Bureau of Labor	
Laws and Bulletins relating to the Bureau of Mines	
Reports Board of Capitol Managers	1895-1898
Report Bureau of Labor	1889–1890
Report of Bureau of Labor	1895-1896
Report, State Board of Charities and Corrections	

COLORADO DOCUMENTS BOUND IN 1899.

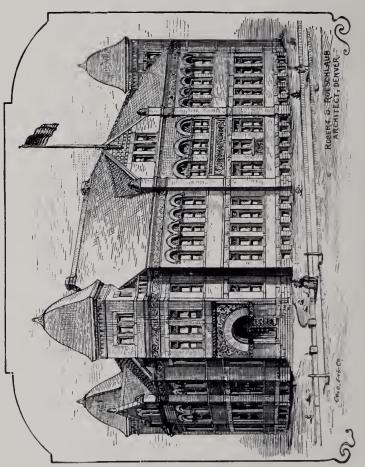
FOR USE OF STATE LIBRARY-Concluded.

TITLE	Date
Report, State Board of Pardons	
Report, State Engineer	
Report, State Engineer-Part one	
Report, State Engineer—Part two	
Report, State Engineer—Part one	
Report, State Engineer—Part two	
Report, State Eugineer	
Report, State Engineer—Part one	
Report, State Engineer—Part two	
Report, State Penitentiary	
Report, State Penitentiary	
Report, State Penitentiary	
Report, Superintendent of Insurance	

COLORADO DOCUMENTS BOUND IN 1900.

FOR USE OF STATE LIBRARY.

TITLE	Date
Agricultural College Experiment Station	
Agricultural College Experiment Station	1894–1899
Arbor Day Suggestions.	1897-1899
Annual Report, State School of Mines	. 1885-1889
Biennial Report, State School of Mines	1881 1898
Bienmal Report, State School of Mines.	1886
Bulletins, Colorado Agricultural College-30 to 39	
Bulletins, Colorado Agricultural College-10 to 52	
Catalogues, Agricultural College	1888-1894
Catalogues, Agricultural College	
Catalogues, State Normal School.	1894-1898
Catalogues, State School of Mines	
Catalogues, State University	1878-1892
Catalogues, State University	1894-1899
Constitution of the State of Colorado	



COLORADO DOCUMENTS BOUND IN 1900.

FOR USE OF STATE LIBRARY-Concluded.

TITLE	Date
Colorado Industrial School for Boys, Report	
First Regiment, Colorado Volunteers	
Forest, Game and Fish Commissioners' Report	
Game Laws of Colorado	1897-1899
General Laws of the State of Colorado	
General Laws of the State of Colorado	
Insane Asylum Reports	
Investigation of the Insane Asylum	1899
Laws Governing Colorado Iudustrial School for Boys	
Laws Relating to the State Land Board	
Manual Training and School Libraries of Colorado	
Messages of the Governors of Colorado.	
Report of the Attorney General	
Report of State Auditor	
Report of Territorial Auditor	1871-1874
Reports of the Adjutant General	
Report State Board of Equalization	
Reports of State Geologist	
Reports of State Board of Horticulture, Vol. 2	
Report State Inspector of Coal Mines	
Report State Inspector of Coal Mines	
Report State Inspector of Steam Boilers	
Report State Board of Land Comuissioners	
Report, Secretary State Board of Health	
Reports Soldiers' and Sailors' Home	1891-1898
Reports, State Reformatory	
Reports, State School of Mines.	1886
Reports, State Treasurer	
Reports, State Treasurer	
Report, Secretary of State	
Report, Secretary of State	1883-1886
Report, Secretary of State	
Report Territorial Officers of Colorado	
Statistics of State Agricultural College	_1883-86-87-93
School Laws of Colorado	1868-1897

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STATE BOARD OF EXAMINERS.

DATES OF MEETINGS. CIRCULAR OF INFORMATION. COMPLIMENTARY STATE DIPLOMAS. BULLETIN TO COUNTY SUPERINTENDENTS.



STATE BOARD OF EXAMINERS.

The State Board of Examiners held meetings on the following dates:

January 30, 1899. May 2, 1899. June 20, 1899. July 26, 1899. August 12, 1899. November 18, 1899. January 6, 1900. January 13, 1900. March 17, 1900. May 5, 1900. May 26, 1900. June 25, 1900. July 30, 1900. September 29, 1900.

The first five meetings were held by State Superintendent Helen L. Grenfell, chairman; James H. Baker, president of State University; Regis Chauvenet, president State School of Mines, and B. O. Aylesworth, president State Agricultural College. On November 18, 1899, and thereafter the meetings included Z. X. Snyder, president State Normal School, he having been made a member of the State Board of Examiners by the amended law of 1899 concerning the Board.

CIRCULAR OF INFORMATION ISSUED BY THE STATE BOARD OF EXAMINERS AND APPOINTORS.

Denver, Colorado, March 17, 1900.

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 supersede 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, for the grade of work indicated, unless revoked by the State Board of Education.

Section 4. State diplomas, which may be of different classes, not to exceed three in number, shall be granted upon public examination, of which due notice shall be given, in such branches and upon such terms and by such State Board of Examiners as the Superintendent of Public Instruction, the president of the State University, the president of the State Agricultural College, the president of the State School of Mines and the president of the State Normal School may appoint; Provided, that the State Superintendent of Public Instruction shall be a member of said board and the presiding officer thereof. The State Board of Education may also, upon the 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 six years. Such diplomas may be of different classes, not to exceed three in number, as may be prescribed by the State Board of Examiners. [L. '99, p. 224, Sec. 2, amending G. L. '77, p. 808, Sec. 2450; G. S. '83, pp. 879, 880, Sec. 2999, as amended by L. '87, p. 379, Sec. 1; Mills' Ann. St., Sec. 3968.]

The State Board of Examiners and Appointors, under the authority above quoted, makes the following announcements:

The board will meet in the office of the Superintendent of Public 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 the state diplomas will be held in Denver, August 22, 23 and 24, 1900.

All applications and accompanying papers must be filed in the office of the Superintendent of Public Instruction not later than August 7, 1900.

Candidates for the state diploma are subject to the following named conditions:

First—They shall possess a first-class, unexpired county certificate issued in Colorado.

Second—They shall pass a satisfactory written examination in each of the following named branches of study: Algebra, geometry, physiology, botany, physics, general history, civil government, including the Constitution of Colorado, English literature and rhetoric, psychology and pedagogy, and Latin, or French, or German.

Third—They shall pass a satisfactory written examination in any three subjects to be selected by them from those herewith named: Trigonometry, astronomy, physical geography, geology and mineralogy, zoology, chemistry, logic and political economy.

Such applicants as have passed a satisfactory examination, before the State Board of Examiners and Appointors, in any of the subjects before named within two years, will receive full credit therein without further examination.

No one will be recommended to receive the state diploma, without examination, who has not given satisfactory evidence of higher educational qualifications and who does not present such thesis as may be prescribed by the State Board of Examiners and Appointors.

In considering an applicant's claim 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 responsible educational positions will receive due recognition in considering any one's fitness to receive a complimentary state diploma.

> HELEN L. GRENFELL, Superintendent of Public Instruction. JAMES H. BAKER, President of the State University. BARTON O. AYLESWORTH, President of the State Agricultural College. REGIS CHAUVENET, President of the State School of Mines. Z. X. SNYDER, President of the State Normal School. State Board of Examiners and Appointors.

Address all inquiries to Helen L. Grenfell, Superintendent of Public Instruction, Denver, Colorado.

On account of the changes made in the law relating to complimentary state diplomas, and in the rules of the board regard the same, involving the examination of theses, and owing to the fact that a large number of applications had accumulated, a delay was necessitated in the granting of such diplomas, but recommendations will be made that they be issued in December of 1900.

BULLETIN TO COUNTY SUPERINTENDENTS.

The attention of the County Superintendents is called to the following rules established by the State Board of Examiners in relation to the granting of normal institute certificates to conductors and instructors:

1. No normal institute conductor or instructor's certificate shall be granted unless a written application for such certificate be received from the one desiring the certificate. The applicant must present satisfactory statements concerning his educational qualifications and experience in teaching in such lines, as would be apt to insure his success in the line of work for which he desires the certificate. Satisfactory names must be given as references in regard to his work, and at least one letter from a responsible educator, testifying as to his qualifications, must be submitted to the board.

2. No applications for such certificates will be considered later than May 15th of each year.

By order of the State Board of Examiners,

HELEN L. GRENFELL,

President.

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STATE BOARD OF EDUCATION.

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DATES OF MEETINGS.

CASES OF APPEAL.

NAMES OF HOLDERS OF STATE CERTIFICATES.

LIST OF TERRITORIAL AND STATE SUPERINTENDENTS OF COLORADO.

COLORADO'S EDUCATIONAL EXHIBIT AT THE PARIS EXPOSITION OF 1900.

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STATE BOARD OF EDUCATION.

The State Board of Education, consisting of Mrs. Helen L. Grenfell, State Superintendent of Public Instruction; Elmer Beckwith, Secretary of State, and D. M. Campbell, Attorney General, held meetings upon the following dates:

February 27, 1899. May 5, 1899. June 28, 1899. August 9, 1899. October 18, 1899. December 18, 1899. January 16, 1900. February 16, 1900. February 26, 1900. June 25, 1900. July 23, 1900. July 26, 1900. July 28, 1900. September 26, 1900.

The Board has acted upon the recommendations of the State Board of Examiners, and issued two state diplomas, forty-nine normal institute instructors' certificates and considered thirty-four appeal cases.

The cases considered and acted upon by the State Board of Education during the present administration are as follows:

February 27, 1899.

The appeal of Edward C. Cohnan from the markings of the county superintendent of Dolores county, at the county examination for teachers, held in August, 1898, was dismissed.

The appeal of E. J. Van Vorst from the markings of the county superintendent of Fremont county, at the county examination for teachers, held in December, 1898, was dismissed.

The appeal of Jennie Jones from the markings of the superintendent of Montrose county; who gave her a third grade certificate at the examination of December, 1898, was sustained. and a second grade certificate granted to Miss Jones. The appeal of Leila Jones from the markings of the superintendent of Montrose county, at the examination of December, 1898, was dismissed.

The appeal of Katherine McGetrick from the markings of the superintendent of Ouray county, who had issued her a third grade certificate at the examination of August, 1898, was sustained, and the superintendent directed to grant Miss McGetrick a second grade certificate.

The appeal of Irene Borton from the markings of the superintendent of Chaffee county, at the examination of December, 1898, was dismissed.

The appeal of Nettie Campbell from the markings of the superintendent of Montrose county, at the examination of December, 1898, was dismissed.

May 5, 1899.

The appeal of Mer L. Hogue from the markings of the superintendent of Saguache county, at the examination of March, was dismissed.

The appeal of Winifred Nickolds, from the markings of the superintendent of El Paso county, at the March examination, was dismissed.

The appeal of W. B. Swearingen from the markings of the superintendent of Hinsdale county, at the March examination, was dismissed.

In the matter of the appeal of the board of directors of School District No. 20, Elbert county, from the decision of the county superintendent as to the length of term and compensation of the teacher, Mrs. A. H. Mayer, the appeal was dismissed.

June 28, 1899.

The appeal of Lizzie B. McClelland from the markings of the superintendent of Montrose county, at the March examination, was dismissed.

The appeal of Eldredge Messenger from the markings of the superintendent of Arapahoe county, at the March examination, was dismissed.

The appeal of Vera Phelps from the markings of the superintendent of Arapahoe county, at the March examination, was dismissed.

October 18, 1899.

In the matter of the appeal of Mrs. Mary Little from the decision of the superintendent of Arapahoe county, in dismissing on June 30th her appeal to him from the decision of the school board of District No. 6, at a meeting held by the board on April 28, to investigate certain charges of injustice towards her children on the part of M. E. Eagleton, principal of Littleton school, it was found by the state board that Mrs. Little's appeal to Superintendent Knapp was not taken within the time prescribed by law, and the appeal to the state board was dismissed.

The appeal of Mattie Walker from the markings of the superintendent of San Miguel county, at the examination of August 18 and 19, was sustained, and a third grade certificate ordered to be issued to Miss Walker.

In the matter of the informal appeal of Mrs. H. S. Filkins from the action of the superintendent of Arapahoc county, in appointing a deputy to hold an examination at Kirk, the board decided that the superintendent had acted within his jurisdiction, and no action had been taken from which an appeal could be made.

In the matter of the appeal of Esther Bickford from the action of the superintendent of Montrose county, in refusing to examine Miss Bickford's papers written at the August examination, and forwarded to said superintendent by the superintendent of Arapahoe county, the board decided that a long existing custom would justify the sending of the papers, and that the superintendent receiving such papers should either reject them at once or examine and grade them according to custom.

January 16, 1900.

The appeal of Frank J. Bell from the markings of the superintendent of Douglas county, at the examination of December, 1899, was dismissed.

February 1, 1900.

In the matter of the appeal of District 41, El Paso county, from the action of the superintendent of schools of that county, in authorizing the formation of a new school district out of a portion of the territory of said District 41, the board found that the action of the superintendent was the result of careful deliberation and not an abuse of discretion, and the appeal was dismissed.

February 26, 1900.

The matter of the appeal of L. J. Caldwell from the action of Warren E. Knapp, county superintendent of Arapahoe county, in refusing to permit said Caldwell to take a portion of the subjects provided for the regular county teachers' examination at other than the specified time, was carefully considered, Mr. Caldwell's appeal being based upon the theory that it was an infringement upon his religious rights to be compelled to take the examination upon the seventh day or Sabbath, and also upon the claim that the examination could legally be held only upon Friday. Superintendent Knapp's defense was based upon the theory that to comply properly with the provisions of the law and the regulations of the state superintendent, and to preserve the necessary uniformity of the details of the examination, and to insure impartiality to all taking the examination, Mr. Caldwell's request to do a certain portion of the work at other than the specified time could not be granted. The appeal was dismissed.

The appeal of D. B. Updegraff from the markings of the superintendent of San Miguel county, at the December examination, was dismissed.

May 26, 1900.

In the matter of the appeal of John Lobdahl and others from the action of the superintendent of Elbert county, in refusing to grant the petition to establish a new school district from territory included in District No. 3, the board found that the superintendent had acted in good faith, and in accordance with the terms of the school law, and the appeal was dismissed.

The appeal of L. P. Milburn from the action of the superintendent of Larimer county, in refusing to transfer him from District No. 23 to District No. 13, was dismissed.

July 23, 1900.

The appeal of W. L. Bush and M. L. Green from the action of the superintendent of Prowers county, in refusing to permit the establishment of a new school district out of territory taken from Districts 3, 4. 42 and unorganized territory, was dismissed.

The appeal of W. L. Davidson and Green S. Blosser from the decision of the superintendent of Prowers county that no valid and legal election was held in District No. 19, on May 7, 1900, was dismissed.

In the matter of the appeal of District No. 5, Mineral county, concerning the action of the superintendent of said county in declaring certain lines to be the boundaries of said district, it appearing that the superintendent had declared the boundaries in accordance with the records of the office and testimony submitted, the board considering that only in the courts could the reliability of said records and evidence be passed upon, decided that it could take no action in the matter and the papers were ordered back to the superintendent and district board. excepting those addressed to the state board.

The papers in the so-called appeal of W. L. Shane, Morgan county. having been examined, it was found that the case presented nothing to be acted upon by the board, as the county superintendent had committed no error as had been previously decided in the courts, and it was decided that the complainant be so informed.

July 26, 1900.

In the matter of the appeal of E. H. Crowder from the action of the superintendent of Rio Grande county, in annulling his certificate to teach. upon the ground of incompetency, the appeal was ordered dismissed.

In the matter of the appeal of the school board of District No. 5, Rio Grande county, from the action of the superintendent in revoking Mr. Crowder's certificate, the state board, having sustained the decision of the county superintendent in the same matter, ruled that the case presented by the district board was thereby disposed of, and ordered the appeal dismissed.

September 26, 1900.

The appeal of Daisy Reed from the markings of the superintendent of El Paso county, at the August examination, was dismissed.

The appeal of Mrs. S. Hendrie Buffington from the markings of the superintendent of Arapahoe county, was sustained, and it was ordered that a third grade certificate be issued to Mrs. Buffington.

In the matter of the appeals of Mrs. Kizzie G. Snyder and Miss Gertrude Stahl from the action of the superintendent of Fremont county, in refusing them certificates upon papers presented by them at the examination of August 17 and 18, the appeal was sustained and it was ordered that third grade certificates be issued to Mrs. Snyder and Miss Stahl.

PERSONS WHO HAVE RECEIVED STATE CERTIFICATES.

Issued Prior to 1891.

H. M. Hale. Aaron Gove. Justin E. Dow. F. J. Annls. 1. C. Dennett. J. H. Baker. H. L. Parker. H. F. Wagener. Mary Thomas. Adele M. Overton. Ira W. Davis. A. E. Chase. Robert Casey. F. E. Smith. P. H. Hanus. J. C. Shattuck. F. B. Gault. C. L. Ingersoll. W. W. Remington. J. S. McClung. E. C. Stevens. W. C. Thomas. Miss N. O. Smith. Mrs. Cornelia Miles. S. A. Wilson. Robert H. Beggs. A. B. Copeland. Miss A. E. De Lan. E. L. Byington. Wm. Eisenman. J. H. Freeman. J. P. Jackson. C. V. Parker. ·Miss Atta L. Nutter. E. C. Hill. J. A. Guttery. Mrs. E. K. LaBarthe. W. T. Eddingfield. A. C. Courtney. Grace Espy Patton. L. S. Cornell.

Issued in 1891-1892.

Fanny Manly, Denver. Benjamin R. Gass, Denver. Emma E. Maxwell, North Denver, Ellen Wallace Collins, Georgetown.
James W. Lawrence, Fort Collins.
Alice Biggs, Gunnison.
J. M. Daniels, La Junta.
G. W. Wyatt, Denver.
G. L. Harding, Longmont.
O. S. Moles, Cañon City.
Fred Dick, Denver.

Issued in 1893-1894. Bell Minor, Cañon City. T. O. Baker, Durango. J. H. Allen, Cañon City. P. M. Condit, Colorado City. J. S. Eagleton, Golden. W. V. Corey, Boulder. N. B. Coy, Denver. P. H. Hammond, Castle Rock. Frona Houghan, Denver. W. H. Smiley, Denver. L. C. Greenlee, Denver. J. S. Young, Denver. J. H. Van Sickle, Denver. Chas. A. Bradley, Denver. W. E. Knapp, Denver. M. E. Eagleton, Littleton. M. H. Lobdell, Georgetown. P. K. Pattison, Colorado Springs, Geo. E. Turnbull, Colorado Springs. Wm. Triplett, Golden. A. H. Dunn, Fort Collins. P. W. Search, Pueblo. A. L. Penhallow, Colorado City. Tilman Jenkins, Mosca. A. J. Floyd, Greeley. W. H. Eagleton, Golden. Issued in 1895-1896. W. A. Haggott, complimentary, Idaho Springs.

A. J. Fynn, complimentary, Alamosa.
J. H. Matthews, complimentary, Black Hawk.
Kate Murphy, examination, Denver.
Hannah M. Curnow, examination, Denver.
Edgar Kisner, examination, Boulder.
Cora M. Carson, examination, Ouray.
Ada G. McClave, examination, Denver.
O. C. Skinner, complimentary, Saguache.
G. E. Osborne, examination, Akron.
Flora E. Haffy, complimentary, Del Norte.



TWENTY-FOURTH STREET SCHOOL, DENVER.

M. D. L. Buell, complimentary, Salida.
E. T. Fisher, complimentary, Grand Junction.
Isabel Halloway, complimentary, Deuver.
Jas. W. Ellison, examination, Berkeley.
Forrest Dollinger, examination, Leadville.
D. R. Hatch, complimentary, Georgctowu.
F. C. Spencer, complimentary, Monte Vista.
Lucy E. R. Scott, complimentary, Denver.
Mary A. Smith. complimentary, Aspen.
Edward F. Hermanns, complimentary, Denver.

Issued in 1897-1898.

Kate Arundel, examination, Denver. Helen W. Bailey, examination, Colorado Springs. Margaret McKay, examination, Telluride. James Westhaver, examination, Denvcr. Alston Ellis, complimentary, Fort Collins.

Issued in 1899-1900.

Wellington B. Givens, upon examination, Denver. Charles A. Burbank, upon examination, Starkville.

TERRITORIAL AND STATE SUPERINTENDENTS OF COLORADO.

The office of the state superintendent became elective in 1876.

List of Superintendents:

1861-1863-W. J. Curtice, territorial, appointed by governor.

1863-W. S. Walker, territorial, appointed by governor.

1866-F. W. Atkins, territorial, ex officio, treasurer.

1867-1869-Columbus Nichols, territorial, ex officio, treasurer.

1870-1872-Wilbur C. Lothrop, territorial, appointed by governor.

1872-July, 1873-Wilbur C. Lothrop, territorial, reappointed by governor, resigned.

July, 1873-January, 1874—Horace M. Hale, territorial, appointed by governor to fill vacancy.

1874-1876-Horace M. Hale, territorial, reappointed by governor.

1876-1878-Jos. C. Shattuck, state, elected.

1878-1880-Jos. C. Shattuck, state, re-elected.

1880-1882-Leonidas S. Cornell, state, elected.

1882-1884-Jos. C. Shattuck, state, elected.

1884-1886-Leonidas S. Cornell, state, elected.

1886-1888-Leonidas S. Cornell, state, re-elected.

1888-1890-Fred Dick, state, elected.

1890-1892-Nathan B. Coy, state, elected.

1892-1894-John F. Murray, state, elected.

1894-1896-Mrs. Angenette J. Peavy, state, elected.

1896-1898-Miss Grace Espy Patton, state, elected.

1898-1900-Mrs. Helen L. Grenfell, state, elected.

COLORADO'S EDUCATIONAL EXHIBIT AT THE PARIS EXPOSITION OF 1900.

In response to the following letter, a number of photographs of the best school buildings of Colorado were sent to the Paris exposition:

Albany, N. Y., March 10, 1899.

To State Superintendents of Public Instruction:

A circular of general information concerning the educational exhibit of the United States at the Paris exposition of 1900 has recently been mailed to you. As stated therein the plan of the exposition renders it impossible to make individual assignments of space, and a collective exhibit, national in character and carefully classified, will be shown.

Many exhibits of a general nature can be arranged for at once, and valuable suggestions and information given concerning others. The time is none too long for adequate preparation, and your prompt attention to the following requests is earnestly asked:

Will you send to the director of this department:

(1) Photographs of ten of the best school buildings in your state? The exterior view and at least two good interior views of each are desired. The photographs should be either 8x10 inches or 11x14 inches in size, and should be sent unmounted. On the back of each print should be plainly written with a pencil (a) grade of school, (b) location, (c) date of erection, (d) cost exclusive of site. Photo-engravings of architect's plans will also be valuable.

(2) One copy, bound in leather, of your last state report?

(3) One copy, bound in leather, of the latest edition of the school laws of your state?

(4) Copies of administrative blanks and forms used in conducting the business of your office?

Will you fill out the accompanying blank and return it to this department at your earliest convenience?

Yours very respectfully,

HOWARD J. ROGERS,

Director Department of Education and Social Economy.

Six cities of the United States were requested to send exhibits of educational work, Denver being one of these.

The three large districts of the city of Denver united and prepared an exhibit of the schools for the Paris exposition. The material sent included specimens of work from all departments, including drawing, manual training work, kindergarten, woodwork in the grades, and manuscripts from pupils of each study in each class in the city. The manuscripts were sent in bound volumes. In addition to these about two hundred large photographs of interiors and exteriors of the school houses were prepared. These latter were adujated in frames at the exposition. A large number of copies of the school report was sent, and fifty volumes, each volume including a copy of the report, courses of study of the high schools and of the elementary schools were included.

The exhibit received favorable mention, was awarded a gold medal, and after reserving one-half of the manuscripts to be returned for preservation in the archives of the Colorado State Historical Society, the remainder were turned over to the United States commissioner at Paris for distribution in compliance with his request in the following letter:

> United States Commission, Paris Exposition of 1900, Paris Offices, Sept. 28, 1900.

Hon. Aaron Gove, Superintendent of Schools, Denver, Colorado:

Dear Sir—It was understood when the exhibit of the Denver schools was forwarded to the Paris exposition, that all the material was to be returned at the close of the exposition.

Your exhibit, however, has attracted so much favorable attention that I am in receipt of many requests from France, Russia, Austria, England and Italy to give to their educational representatives specimen work of the pupils. This is mostly contained in bound volumes and albums. May I ask whether you are willing to release a part or all of the exhibit for this purpose?

If fifty per cent. of the bound volumes could be given to meet these requests. I think that the courtesy would be highly appreciated by the foreign administrative departments of education.

Please reply to this letter promptly, as but little time remains to select the material before the close of the exposition.

Yours respectfully,

HOWARD J. ROGERS, Director of Education and Social Economy. •

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COLORADO STATE TEACHERS' READING CIRCLE.

PROGRAM FOR 1899.

PROGRAM FOR 1900.

LETTERS OF STATE SUPERINTENDENT AND MANAGER OF READING CIRCLE, 1899-1900.

COLORADO STATE TEACHERS' READING CIRCLE.

Advisory Board, 1899—Helen L. Grenfell, State Superintendent of Public Instruction; J. H. Hays, Assistant Principal State Normal School, Greeley; G. L. Harding, County Superintendent, Boulder.

Secretary and Manager-G. L. Harding.

Advisory Board, 1900-Helen L. Grenfell; Barton C. Aylesworth, President Agricultural College, Fort Collins; J. E. Snook, County Superintendent, Weld county.

Secretary and Manager-J. E. Snook.

Course of Reading for 1899-1900 (Eighth Year)—Hinsdale's "Teaching the Language Arts," and Eggleston's "Beginners of a Nation."

Course of Reading for 1900-1901-Wilson's "Nature Study Manual," and Elson's "Side Lights on American History."

ORGANIZATION.

The State Teachers' Reading Circle of Colorado is under the control of an advisory board, with secretary and manager appointed by the State Teachers' Association. Each county superintendent is made manager of the reading circle in his county and has supervision of the work in detail so far as his county is concerned. All teachers in the state, or persons desiring to become teachers, are eligible to membership. The only requirement of members is that, under the direction of the county superintendent, they pursue diligently the course of reading as outlined by the state board. No membership fee is assessed, and the sole cost of membership is the price of the two books read annually. All teachers showing that they have completed the cost for a year are furnished a certificate to that effect, signed by the county manager.

ENROLLMENT CARD.

Fill out and send to your county superintendent:

County Superintendent.

Please enroll me as a member of the Colorado State Reading Circle for the year 1900-1901, and send me

.....Wilson's Nature Study Manual.

.....Elson's Side Lights on American History.

..... P. O.

READING CIRCLE REPORT, 1899-1900.

Greeley, Colo., October 23, 1900.

Hon, Helen L. Grenfell,

State Superintendent Public Instruction,

Denver, Colo.

Dear Madam—In answer to your request for a report of the reading circle work for the past two years, I would say that material for a specific report is very hard to obtain. Orders for books have usually been made by county superintendents directly from the publishers, and the latter are seldom willing to tell the truth about the extent of their sales. I have, however, made diligent inquiry of county superintendents, as did Mr. Harding at the close of last year, and think from a comparison of figures obtained by each, that there was an undoubted growth both in membership and interest during 1899.

The reading circle board for that year consisted of Hon. Helen L. Grenfell, State Superintendent; Professor Jas. H. Hays, of the State Normal, and Superintendent G. L. Harding, of Boulder county, with the latter as secretary and manager. The books chosen were "The Beginners of a Nation," by Eggleston, and "Teaching the Language Arts," by Hinsdale, both published by Appleton & Co. From reports received during the spring of 1900 I was able to trace about 450 members in 36 counties. Fifteen counties reported no sales, and from six counties there was no report. The five counties showing the largest membership, in their order, were Weld, Boulder, Pueblo, Delta and Arapahoe.

At the last meeting of the State Teachers' Association, President B. O. Aylesworth, of the State Agricultural College, was elected a member of the board upon the retirement of the faithful and efficient Superintendent Harding, and at the first meeting of the new board I was requested to act as secretary and manager for the present year. At a later meeting the board selected as reading text for the current year, "Side Lights on American History," by Elson, and "Nature Study in the Elementary Schools," by Mrs. Wilson, the two books being obtained from the Macmillan Co., for members of the circle, at seventy cents and eighty cents respectively, with a discount of five cents each for handling and the usual concessions of free carriage and the return of unsold copies.

Three general circulars and a large number of personal letters have been sent out by me since my connection with the work. So far as possible I have encouraged superintendents to send orders for books through the manager's hands, so that I might keep better posted as to the work. In this way I have a record of thirty-two counties, with orders amounting to 549 sets of books. Of these counties the following ten, Bent, Garfield, Grand, Las Animas, Montezuma, Montrose, Ouray, Phillips, Routt and Saguache, had no members last year, but have ordered this year 120 sets of books. It is fair to presume that many of the remaining counties have also placed orders with the publishers, as there was manifested early in the season a determination to push the work this year harder than ever. I look, therefore, to an increased membership over last year, and I hope to be able to report more definitely at the December meeting of the State Teachers' Association.

Respectfully submitted,

J. E. SNOOK,

Secretary and Manager Colorado Reading Circle.

CIRCULAR SENT TO COUNTY SUPERINTENDENTS.

County Superintendent of Schools:

Several superintendents having asked how the reading circle work can best be organized. I enclose an outline of the method pursued with good results in Weld county last year. Let me say, however, that the books will be helpful to the teachers who cannot meet with others in clubs, and such may well pursue the course alone, especially when the books are such practical school room helps as they are this year. The club plan can be successfully used where from six to a dozen teachers can meet at some central point, especially if the county superintendent can occasionally attend the meetings. In Weld county the club proposition was brought before the teachers at the district institute and adopted by them there, details of arrangement being left to the county superintendent and a committee appointed by him.

Respectfully,

J. E. SNOOK.

OUTLINE OF CLUB ORGANIZATION.

The club consists of teachers within five or six miles of a common point, meeting for the purpose of discussion and study along certain definite lines.

Membership includes all persons engaged in teaching in the districts within club boundaries and other persons sufficiently interested to take up the work.

Meetings occur monthly. (The third week of the school month.)

Programme outlines a part of the reading circle work and one other educational subject for each meeting. Every member should take part.

The county superintendent is general manager for the county and each club secretary should report attendance and proceedings of each meeting to him.

Greeley, Colo., November 22, 1900.

Hon. Helen L. Grenfell,

State Superintendent Public Instruction, Denver, Colo.

Dear Madam—In answer to your letter of the 12th instant, in regard to the reading circle work, I desire to say that I have found quite an in-

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terest in the work on the part of county superintendents, and this is especially true in the mountain counties. San Miguel has long been the banner county in per cent, of teachers enrolled, but this year Delta is looking for first place. Superintendent Browne writes: "I need twelve sets more—I believe every teacher in Delta county will read the books this year—I feel proud."

Mrs. Lucy DeWitt, Superintendent Garfield County—"I hereby authorize you to double the order I sent you. * * * I feel particularly anxious to interest my teachers in the reading circle work, and if you can offer any suggestions that may aid me, I shall be grateful."

G. H. Hobart, Superintendent Kit Carson County—"I order at a venture thirty sets, and think that number can be sold. I shall be in attendance at the institute a large part of the time and will look after this matter personally."

C. O. Secrest, Superintendent Jefferson County—"I have twenty-six members at present." (Ten sets were sold last year.)

Miss Anna Watson, Superintendent Baca County—"Will work to induce the teachers of Baca county to take up the work."

Miss M. E. Gill, Superintendent Larimer County—"I shall see that the sale of books is given attention."

E. M. Scanlan, Superintendent Pitkin County—"I will gladly urge the sale of the reading circle books."

Mrs. Thera H. Satterlee, Superintendent Teller County—"I shall devote my time to the circle books at the institute."

In Weld county there are at present sixty-five members of the circle. all supplied with the books. I believe the choice of books has been very satisfactory and that the work has been helpful.

Sincerely,

J. E. SNOOK.

COUNTY HIGH SCHOOLS.

BILL.

REPORTS FROM COUNTIES.

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COUNTY HIGH SCHOOLS.

An Act to provide for the establishment and support of high schools in counties of the fourth and fifth classes. Approved April 8, 1899. In force July 7, 1899. [L. '99, p. 267.

ESTABLISHMENT OF HIGH SCHOOL-ELECTION.

Section 1. At any general election subsequent to the passage of this act, the question of organizing any county of the fourth or fifth class as classified by law with reference to the salaries of district attorneys and county officers into one school district for high school purposes shall be submitted to the qualified electors of such county, provided a petition signed by fifty taxpayers resident therein asking that the question be thus submitted, shall have previously been presented to the county commissioners not later than their regular October meeting. At which time the first petition presented shall be alone considered. Said petition shall state the maximum amount of tax to be levied for the support of the high school, which shall in no case exceed the limit fixed by this act. [L. '99, p. 267, Sec. 1.

1. Union High School. Sec. 33.

HIGH SCHOOL COMMITTEE-HOW SELECTED-OFFICERS.

Sec. 2. Whenever a majority of the votes cast on the question of organizing any county of the fourth or fifth class into one school district for high school purposes shall be in favor of such organization, the superintendent of schools of such county shall, by notification through the mail and by publication where practicable, call a meeting of the boards of directors of all the districts of said county, which meeting shall elect by ballot from among the members of said boards of directors shall, at the same time, be members of the high school committee; Provided, That no two members of any board of directors shall, at the same time, be members of the high school committee, except in counties where there are fewer than four districts. The county super-intendent of schools shall be, ex-officio, a member of the high school committee, and secretary thereof. The committee shall select from its members a president, and, if need be, a treasurer. [L. '99, p. 267, Sec. 2.

1. Committee on Union High School. Sec. 34.

TERM OF OFFICE-VACANCY, HOW FILLED.

Sec. 3. The term of office of a member of the high school committee shall expire simultaneously with the expiration of his term of office as a director of the school district wherein he resides, and the vacancy thus created shall be filled by the boards of directors of the various districts of the county at a meeting held not later than thirty days subsequent to the occurrence of the vacancy. The secretary of the committee shall give each board of directors at least ten days' notice of the holding of such meeting. All vacancies caused in any other manner than by expiration of term of office shall be filled by appointment by the county superintendent of schools. [L. '99, p. 268, Sec. 3.

MEETINGS OF COMMITTEE.

Sec. 4. The regular meetings of the high school committee shall be held on the first Saturday of March, June, September, and December of each year, and special meetings may be held upon call of the president or secretary of said committee, or upon call of any two members thereof. [L. '99, p. 268, Sec. 4.

POWERS-DUTIES-LIMIT OF TAX.

Sec. 5. With reference to any high school organized under the provisions of this act, or heretofore organized, as a Union High School at any county seat, under section 3997, Mills' Annotated Statutes. The high school committee shall exercise all powers, and perform all duties, that are, at the time of adoption of this act, accorded to, and required off (of) directors of first and second-class districts throughout the state; provided, that the amount of tax certified to the county commissioners for the maintainance (maintenance) of the high school shall in no case exceed two mills on the dollar of the assessed valuation of the county. [L. '99, p. 268, Sec. 5.

1. Section 3997 referred to is Sec. 33 hereof.

ADMISSION-TUITION FEE.

Sec. 6. Admission to any high school organized and maintained under the provisions of this act, or heretofore organized as a union high school at any county seat, under section 3997. Mills' Annotated Statutes, shall be upon terms prescribed by the high school committee; but no tuition fee shall be exacted from any resident of the county wherein such high school exists. [L. '99, p. 269, Sec. 6.

1. Section 3997 referred to is Sec. 33 hereof.

HIGH SCHOOL TAX-COMMISSIONERS LEVY-COLLECTED.

Sec. 7. It is hereby made the duty of the county commissioners of any county wherein a high school is organized under the provisions of this act, or heretofore organized as a union high school at any county scat, under section 3997 Mills' Annotated Statutes, to levy annually at the time of levying taxes for other purposes, a high school tax on all the taxable property of the county, said tax not to exceed two mills on the dollar of the assessed valuation. The high school tax shall be collected in the same manner as other taxes are collected, and shall be pald out by the county treasurer on warrant drawn by the secretary of the high school committee, signed by the president and countersigned by one other member. [L. '99, p. 269, Sec. 7.

1. Section 3997 referred to is Sec. 33 hereof.

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INCREASE OF TAX LEVY.

Sec. 8. Whenever, subsequent to the organization of a high school under the provisions of this act, it shall deem desirable to increase the tax levy for high school purposes, beyond the maximum fixed by the original petition, the question of such increase may be submitted to the qualified electors of the county in the manner provided by section one of this act for the submission of the original question. [L. '99, p. 269, Sec. 8.

REPORT UPON COUNTY HIGH SCHOOLS.

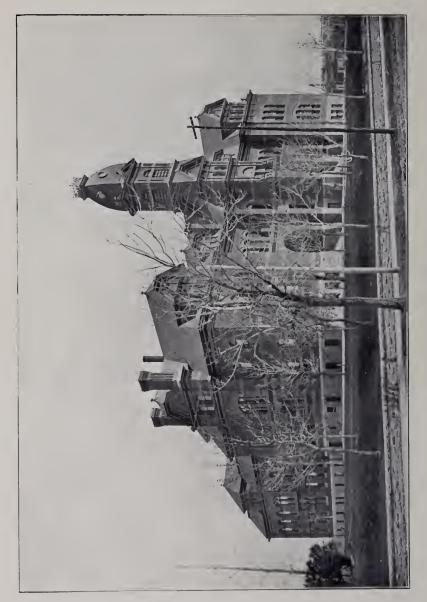
By an act of the general assembly, approved April 8, 1899, counties of the fourth and fifth classes, as classified by law with reference to the salaries of district attorneys and county officers, are empowered to determine by a vote of the people at a general election, whether such counties shall be organized as one district for high school purposes.

In pursuance of this act, a vote was taken at the general election of November, 1899, in Donglas, Huerfauo, Jefferson, Kit Carson, Montrose, Routt and Saguache counties. In Donglas and Saguache counties the vote was favorable, and county high schools have been established. In Jefferson county a majority of the people declared themselves in favor of the proposition, but the vote was held to be of no effect because of failure to conduct the ballot as directed by the election law of the state. In other counties named a majority of the people declared against the establishment of such school.

The following counties voted in 1900, and carried the proposition: Huerfano, Logan, Phillips. The following counties voted in 1899, and defeated the proposition: Montrose, Routt. Kit Carson county voted in 1900 and defeated the proposition.

An additional provision of the law above referred to is that any county in which a union high school had been established at a county seat, under the old union high school law, should be regarded as one district for high school purposes, without a vote of the people. Under the operation of this provision of the law the former union high school at La Junta is now a county high school, supported by a uniform levy on all taxable property of Otero county.

Other counties containing high schools existing under the old law, are Bent and San Juan.



ASHLAND SCHOOL, NORTH DENVER.

COMPULSORY EDUCATION LAW.

REPORTS UPON DETAILS OF WORKING. SAMPLE COPY OF LEGAL NOTICE. SAMPLE REPORT CARD.

SCHOOL BUILDINGS.

EIGHTH GRADE EXAMINATIONS.

3

COMPULSORY EDUCATION LAW.

An Act to secure to children the benefit of elementary education. Approved April 18, 1889. In force July 17, 1889. [L. '89, p. 59.

UNLAWFUL TO EMPLOY CHILDREN UNDER FOURTEEN DURING SCHOOL-FINES.

Section 1. That it shall be unlawful for any person, persons or corporation to employ any child under the age of fourteen years to labor in any business whatever during the school hours of any school day, of the school term of the public school, in the school district where such child is, unless such child shall have attended some public or private day school where instruction was given by a teacher qualified to instruct in those branches required to be taught in the public school of the state of Colorado, or shall have been regularly instructed at home in such branches by some person qualified to instruct in the same, at least twelve weeks in each year, eight weeks at least of which shall be consecutive, and shall, at the time of such employment, deliver to the employer a certificate in writing, signed by the teacher, certifying to such attendance or instruction; and any person, persons or corporation who shall employ any child contrary to the provisions of this section shall, upon conviction, be deemed guilty of a misdemeanor and fined in a sum not less than twenty-five (25) dollars nor more than fifty (50) dollars; and all fines so collected shall be paid into the county treasury, and placed to the credit of the school district in which the offense occurs. [L. '89, p. 59, Sec. 1; Mills' Ann. St., Sec. 417.

CHILDREN MUST BE SENT TO SCHOOL-EXCEPTION-CLOTHING.

Sec. 2. Every parent or guardian, or other person in the State of Colorado, having control of any child or children between the ages of eight (8) and fourteen (14) shall be required to send such child or children to a public school, or private school taught by a competent instructor, for a period of at least twelve (12) weeks in each year, at least eight (8) weeks of which time shall be consecutive, unless such child or children are excused from such attendance by the board of the school district in which such parent, guardian or person having control resides, upon its being shown to their satisfaction that such child's bodily or mental condition has been such as to prevent attendance at school, or application to study for the period required; Provided, That if such parent or guardian is not able, by reason of poverty, to properly clothe any such child, it shall be the duty of the school board of the proper district, upon the fact being shown to their satisfaction, to furnish the necessary clothing and pay for the same out of the school fund of such district, by warrant drawn as in other cases, or that such child or children are taught at home in such branches as are usually taught in the public schools, subject to the same examination as other pupils of the district in which the child resides; or that there is no school taught within two miles by the nearest traveled road. [L. '89, p. 60, Sec. 2; Mills' Ann. St., Sec. 418.

FAILURE TO COMPLY WITH ACT-MISDEMEANOR-PENALTY.

Sec. 3. Any parent, guardian or other person failing to comply with the provisions of section 2 of this act shall, upon conviction, be deemed guilty of a misdemeanor and fined in a sum not less than five nor more than twenty-five dollars for each offense; and all fines so collected shall be paid into the county treasury and placed to the credit of the school district in which the offense occurs. [L. '89, p. 60, Sec. 3; Mills' Ann. St., Sec. 419.

SCHOOL DIRECTOR PROSECUTE—FAILURE—PENALTY.

Sec. 4. It shall be the duty of any school director of the district to inquire into all cases of neglect of the duty prescribed in this act, and ascertain from the person neglecting the reason, if any, therefor; and he shall forthwith proceed to secure the prosecution of any offense occurring under this act; and any director neglecting to secure such prosecution for such offense, within ten days after a written notice has been served on him by any taxpayer in said district, unless the person so complained of shall be excused by the district board of education for the reasons hereinbefore stated, shall, upon conviction, be deemed guilty of a misdemeanor and fined in a sum not less than ten nor more than fifty dollars; and such fines when collected, shall be paid into the county treasury and placed to the credit of the school district in which the offense occurs. All actions for offenses committed under this act shall be prosecuted for in the name of The State of Colorado. [L. '89, p. 61, Sec. 4; Mills' Ann. St., Sec. 420.

MALICIOUS PROSECUTION.

Sec. 5. That upon the trial of any offense as charged herein, before any court of competent jurisdiction, if it shall be determined that such prosecution was malicious, then the costs in such case shall be adjudged against the complainant and collected as fines in other cases. [1. '89, p. 61, Sec. 5; Mills' Ann. St., Sec. 421.

ATTENDANCE AT NIGHT SCHOOL-EQUIVALENT.

Sec. 6. Two weeks' attendance at half time or night school, shall be considered within the meaning of the article equivalent to an attendance of one week at a day school. [L. '89, p. 61, Sec. 6; Mills' Ann. St., Sec. 422.

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An Act to compet the elementary education of children in school districts of the first and second class. Approved April 12, 1899. In force July 12, 1899. [L. '99, p. 396.

CHILDREN SENT TO SCHOOL-EXCEPTION-APPEAL.

Section 1. That in districts of the first and second class in this state, all parents, guardians and other persons having care of children shall instruct them or cause them to be instructed in reading, spelling, writing, English grammar, geography and arithmetic. In such districts every parent, guardian or other person having charge of any child between the ages of 8 and 14 years, shall send such child to a public, private or parochial school for the following period: In each school year beginning in September, not less than 20 weeks, at least 10 weeks of which, commencing with the first four weeks of the school year, shall be consecutive: Provided, however, That if two reputable physicians within the district shall certify in writing that the child's bodily or mental condition does not permit of its attendance at school, such child shall be exempted during such period of disability from the requirements of this act; and, Provided, further, That if in the opinion of the county superintendent of schools, the child is being instructed at home by a person qualified, such child shall not be required to attend as herein provided. An appeal may be taken from the decision of such superintendent to the county court of the county in which such district lies, upon giving bond within 10 days after such refusal, to the approval of the judge of said court, conditioned to pay all costs of appeal, and the decision of the county court shall be final. All children between the ages of 8 years and 14 years shall attend school for the full term in the schools in the district in which they reside, unless excused for the reasons above named. [L. '99, p. 396, Sec. 1.

CHHLDREN UNDER 14 YEARS NOT EMPLOYED-PENALTY FOR EMPLOYING.

Sec. 2. No child under the age of 14 years shall be employed by any person, persons, company or corporations during the school term and while the public schools are in session, unless the parent, guardian or person in charge of such child shall have fully complied with section one of this act. Every such employer shall require proof of such compliance, and shall make and keep a written record of the proof given, which shall be subject to the inspection of the truant officer, superintendent of schools, or any school director of the district. Any employer employing any child contrary to the provisions of this section, shall be fined not less than twenty-five nor more than one hundred dollars. [L. '99, p. 397, Sec. 2.

MINORS BETWEEN 14 AND 16 MUST READ AND WRITE-DUTY OF EMPLOYER--PENALTY.

Sec. 3. All minors over the age of 14 years and under the age of 16 years who can read and write the English language, shall attend school at least one-half day of each day, or attend a public night school, or take regular private instruction from some person qualified, in the opinion of the county superintendent of schools, in which such district or the greater portion of the same lies, until such minor obtains a certificate from such superintendent that he or she can read at sight and write legibly, simple sentences in English. Every employer employing or having in employment any such minor shall exact as a condition of employment the school attendance or instruction required by this section, and shall on request of the truant officer, furnish the evidence that such minor is complying with the requirements of this section. Every employer failing to comply with the requirements of this section as to any minor employed by him or in his employ, shall be fined not less than twenty-five dollars, and not more than one hundred dollars; Provided, That any employer with the approval or consent of the county superintendent of schools may make provision for the private instruction of minors in his employ. [L. '99, p. 397, Sec. 3.

TRUANT-WHO IS-JUVENILE, DISORDERLY PERSON.

Sec. 4. Every child between the ages of 8 and 14 years, and every child between the ages of 14 and 16 years, who can not read and write the English language or not engaged in some regular employment, who is an habitual truant from school, who absents itself habitually from school, or who is in attendance at any public, private or parochial school and is incorrigible, vicious or immoral conduct, or who habitually wanders about the streets and public places during school hours, having no business or lawful occupation, shall be deemed a juvenile disorderly person, and be subject to the provisions of this act. [L. '99, p. 398, Sec. 4.

TRUANT OFFICER-POWERS-DUTIES-RECORD.

Sec. 5. To aid in the enforcement of this act, the board of school directors in districts of the first and second class shall have power, ant [and] it shall be their duty, to appoint one or more truant officers whose compensation shall be fixed by the board appointing him. The truant officer shall be vested with police powers, and shall have authority to enter workshops, factories, stores and all other places where children may be employed, in the way of investigation or otherwise, to enforce this The truant officer shall institute proceedings against any officer, act. parent, guardian, person or corporation who shall violate any of the provisions of this act, and shall otherwise discharge the provisions of this act and perform such other services as the county superintendent of schools or the board of directors of the school district may deem necessary to preserve the morals and secure the good conduct of school children, and to enforce this act. The truant officer shall keep a record of his transactions for the inspection of the county superintendent of schools and of the directors of the school district, and suitable blanks shall be provided for his use by the secretary of the school district. [L. '99, p. 398, Sec. 5,

TRUANT OFFICER-DUTIES-CONVICTION OF PARENT-PENALTY-BOND-DEFENSE.

Sec. 6. The truant officer shall examine into any case of truancy within his district, and shall warn the parent, guardian, or others in charge of the child of the final consequences of truancy if persisted in. When any child between the ages of eight and fourteen years, or any child between the ages of fourteen or sixteen years, who can not read and write the English language, or is not engaged in some regular employment, or any child between the age of fourteen years and sixteen years who has been discharged from employment to obtain instruction or schooling, is not attending school without lawful excuse and in violation of the provisions of this act, the truant officer shall notify the parent, guardian, or other person in charge, of the fact, and require such person to cause the child to attend some recognized school within five days from the date of the notice, and it shall be the duty of such person so to cause its attendance at some recognized school. Upon failure to do so, the truant officer shall make complaint in the county court of the county in which such child lives, against the parent, guardian or other person having such child in charge, and upon conviction, the parent. guardian or other person in charge, shall be fined not less than five dollars nor more than twenty dollars, or the court may, in its discretion, require the person so convicted to give a bond in the penal sum of \$100, with sureties to the approval of the judge of such court, conditioned that he or she will cause the child under his or her care to attend some recognized school within five days thereafter, and to remain at school during the term prescribed at law. And upon the failure or refusal of the parent, guardian or other person to pay such fine or furnish such bond according to the order of the court, the said parent, guardian or other person shall be imprisoned in the county jail not less than ten days nor more than thirty days. For violation of the bond, suit may be brought in any court of competent jurisdiction, in the name of the school district, and the amount recovered shall go to the school fund of the district. If the parent, guardian or other person shall prove his inability to cause the child to attend a recognized school, it shall be a defense, but the child shall be deemed a juvenile disorderly person within the meaning of section 4 of this act. [L. '99, p. 399, Sec. 6.

JUVENILE, DISORDERLY PERSON-COMMITMENT-TERM-EXPENSE.

Sec. 7. Whenever a child shall be a juvenile disorderly person within the meaning of this act, it shall be the duty of the truant officer to make complaint in the county court of the county in which such child resides. The county court shall hear and determine such complaint, and if it is determined that such child is a juvenile disorderly within the meaning of this act, he or she shall be committed to a children's home if eligible, or to the Boys' Industrial School or the Girls' Industrial School, or to some other juvenile reformatory, taking into account the years of the child with reference to the institution selected. Any child committed to a children's home on its being shown to the judge of said court that it is incorrigible and vicious, may be transferred to the industrial school or other reformatory. No child committed to any reformatory shall be detained beyond the age of 16 years, and may be discharged sooner by the trustees, under rules and restrictions applicable to other inmates. Any order of commitment may be suspended by the judge of the county court during such time as the child may regularly attend school and properly conduct itself. The expense of the transportation of the child to the juvenile reformatory, and of the costs of the case in which the order of commitment is made, shall be paid by the county from which the child is committed. [L. '99, p. 400, Sec. 7.

CHILD UNABLE TO ATTEND SCHOOL-RELIEF.

Sec. 8. When any truant officer is satisfied that any child within the requirements of this act is unable to attend school because required to work at home or elsewhere in order to support itself or help or support others legally entitled to its services, the truant officer shall report the case to the authorities charged with the relief of the poor, who shall thereupon afford such relief as will enable the child to attend school; Provided, That such child shall not be required to attend more than three hours a day during school days. In case the child or its parents or guardians neglect or refuse to take advantage of such provision made for its instruction, such child may be committed to a children's home or juvenile reformatory, as hereinbefore provided. [L. '99, p. 400, Sec. 8.

VIOLATION-PENALTY.

Sec. 9. Any person who violates any provision of this act for which a penalty is not herein provided, shall be fined not more than fifty dollars. [L. '99, p. 401, Sec. 9.

SECOND CONVICTION-PENALTY-TRIAL BY JURY.

Sec. 10. Every person who, after having been convicted once of violating any of the provisions of this act shall be convicted a second time of a similar offense, may, in addition to the punishment by way of fine elsewhere provided for, be imprisoned not less than 10 days nor more than 30 days; Provided, That in all cases arising under this act in which a fine or imprisonment may be a part of the judgment, trial shall be by a jury if not waived. [L. '99, p. 401, Sec. 10.

NOT APPLY TO DISTRICTS WITHOUT ACCOMMODATIONS.

Sec. 11. This shall not apply to school districts in which there are not sufficient accommodations in the public schools to seat children compelled to attend under the provisions of this act. [L. '99, p. 401, Sec. 11.

COMPULSORY EDUCATION LAW.

From reports regarding the enforcement of the compulsory education law of 1899, are learned the following data:

A special truant officer has been appointed in eight districts,—two at a salary of five dollars per month, one at ten dollars, one at twenty-five, one at forty and one at ninety dollars per month, one at \$2.50 per day while serving, and in one district, two at twenty-five dollars each per month.

In seven districts the superintendent or members of the school board served as truant officers without compensation. In five districts the city marshal served,—in four without compensation,—in one at five dollars per month. In one district the mayor placed one policeman at the service of the superintendent and the board. Other officers served without pay in two districts.

Five districts reported no need for enforcement of the law, two reported nothing done, and three reported that the law had not been enforced on account of the crowded condition of the schools.

The total number of cases investigated was 4,519. Convictions were seven. The number proceeded against as juvenile disorderly persons was forty-nine, and thirty-eight commitments were secured. The law was enforced in sixtyfive cases, and in a majority of the cases investigated, notices sent to parents proved sufficient.

TWELFTH BIENNIAL REPORT

(Sample Copy of Legal Notice.)

Name and Address of Parent or Guardian	No
Date and Form of Service	Name and Address of Parent or Guardian
Remarks NOTICE OF WARNING TO PARENTS OR GUARDIANS OF TRUANTS. Denver, Colo.,	Date of Notice
Denver, Colo.,	
Denver, Colo.,	
To M	NOTICE OF WARNING TO PARENTS OR GUARDIANS OF TRUANTS.
No	Denver, Colo.,
Your	
Truant Officer. AN ACT To Compel the Elementary Education of Children in School Distriets of the First and Second Class. Section 1. That in districts of the first and second class In this state all parents, guardians and other persons having care of children, shall instruct them, or cause them to be instructed in reading, spelling, writing, English grammar, geography and arithmetic. In such districts every parent, guardian or other person having charge of any child between the ages of 8 and 14 years, shall send such child to a public, private or parochial school for the following period: In each school year beginning in September, not less than 20 weeks, at least 10 weeks of which, commencing within the first four weeks of the school year, shall be consecutive. * * All children between the ages of 8 and 14 years, not engaged in some regular employment, shall attend school for the full term in the schools in the district in which they reside. * * Sec. 4. Every child between the ages of 8 and 14 years, and every child between the ages of 14 and 16 years, who cannot read and write the English language, or not engaged in some regular employment, who is an habitual truant from school, who absents itself habitually from school, or who is in attendance at any public, private or parochial school and is incorrigible, victous or immoral in conduct, or who habitually wanders about the streets and public places during school hours, having no business or lawful occu- pation, shall be deemed a juvenile disorderly person, and be subject to the provisions of this act. * *	Voun
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provisions of this act. * * * * Sec. 6. The truant officer shall examine into any case of truancy within his district and shall warn the parent, guardian or others in charge of the child of the final consequences of truancy, if persisted in. When any child between the ages of 5 and 14 years, or any child between the ages of 14 or 16 years, who cannot read and write the English language, or is not engaged in some regular employment, * * is not attend- ing school without lawful excuse, * * the truant offleer shall notify the parent, guardian, or other person in charge, of the fact, and require such person to cause the child to attend some recognized school within five days from the date of the notice. * * * Upon failure to do so, the truant officer shall make complaint in the county court of the county in which such child lives, against the parent, guardian or other person having such child in charge, and upon conviction, the parent, guardian or other person in charge, shall be fined. * * And upon the failure or refusal of the parent, guardian or other person to pay such fine or furnish such bond as covered by the Act, according to the imprisoned in the county jail not less than 10 days nor more than 30 days. * * If the parent, guardian or other person shall pore this inability to cause the child to attend a recognized school. * * the child shall be deemed a juvenile disorderly person. * *	
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When any child between the ages of 8 and 14 years, or any child between the ages of 14 or 16 years, who cannot read and write the English language, or is not engaged in some regular employment, * * is not attend- ing school without lawful excuse, * * the truant offleer shall notify the parent, guardian, or other person in charge, of the fact, and require such person to cause the child to attend some recognized school within five days from the date of the notice. * * * Upon failure to do so, the truant offleer shall make complaint in the county court of the county in which such child lives, against the parent, guardian or other person in charge, shall be fined. * * And upon the failure or refusal of the parent, guardian or other person to pay such fine or furnish such bond as covered by the Act, according to the order of the county jall not less than 10 days nor more than 30 days. * * * If the parent, guardian or other person, shall prove his hallility to cause the child to attend a recognized school. * * *	his district and shail warn the parent, guardian or others in charge of the child of the final consequences of truaney, if persisted in.
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the parent, guardian or other person in charge, shall be fined. * * * And upon the failure or refusal of the parent, guardian or other person to pay such fine or furnish such bond as covered by the Act, according to the order of the court, the said parent, guardian or other person shall be imprisoned in the county jail not less than 10 days nor more than 30 days. * * If the parent, guardian or other person shall prove his inability to cause the child to attend a recognized school. * * the child shall be deemed a juvenile disorderly person. * *	county court of the county in which such child lives, against the parent, guardian or other person having such child in charge, and upon conviction.
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	to cause the child to attend a recognized school, * * the child shall be deemed a juvenile disorderly person. * * *

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SUPERINTENDENT OF PUBLIC INSTRUCTION. 75

SCHOOL ATTENDANCE OFFICER.

Denver, Colorado,

School.	Principal
Teacher.	
Pupil's Name	
Pupil's Address	
Age Non-attendance.	Grade
Mo. Day	•

SCHOOL BUILDINGS.

The number of new school buildings erected during the years 1899-1900 is given in the following, so far as it has been possible to obtain report:

In Cripple Creek, Victor, Leadville and Rocky Ford, new high school buildings have been erected, which are unsurpassed in completeness of equipment, in comfort, and in convenience. In Aspen, a beautiful private residence was given to the city for the use of the high school. In Pueblo, four small buildings have been enlarged into buildings of from twelve to fifteen rooms, and so carefully remodeled as to be virtually new.

The quality of the buildings in the rural districts has wonderfully improved during the last decade. In place of the barn-like, improperly lighted, poorly ventilated structures once almost universally found in country districts, we find artistic, healthful, convenient houses being constructed in every locality, when a new school house is needed. While many counties present a most attractive array of rural school buildings, Mesa county, at the present time, leads them all in point of numbers.

Photographs are presented throughout this report of a variety of buildings, which are designed to meet the requirements of the different city and country districts.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

COUNTIES	No.	COUNTIES	No,
Arapahoe	10	Mesa	13
Baca	2	Montezuma	<u>•)</u>
Boulder	3	Montrose	2
Clear Creek	3	Otero	6
Costilla	1	Park	5
Delta*	3	Phillips	<u>.</u>
Douglas	1	Pueblo	4
Elbert	6	Pitkin	1
Premont	ŧ	Prowers	6
Sarfield	1	Rio Blauco	З
Guunison	2	Saguache	4
Auerfano	3	San Juan	1
Jefferson	3	San Miguel	I
Logan	6	Sedgwick	4)
Lincoln	1	Teller	5
Lake	2	Washington	2
La Plata	5	Weld	×
Las Animas.	3	Total	126

NUMBER OF NEW SCHOOL BUILDINGS ERECTED IN DIFFERENT COUNTIES DURING 1899 AND 1900.

* Chiefly by private subscription.

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STATISTICS REGARDING EIGHTH GRADE.

In response to a letter of inquiry from the State Superintendent, the following reports regarding eighth grade pupils and examinations have been received:

Counties having uniform systems of eighth grade examinations are:

Arapahoe. Boulder. Conejos. Douglas. Eagle. Jefferson. Las Animas. Mesa. Park. Phillips. Saguache. Sedgwick. Weld.

Counties whose superintendents furnish eighth grade examination questions to graded schools are:

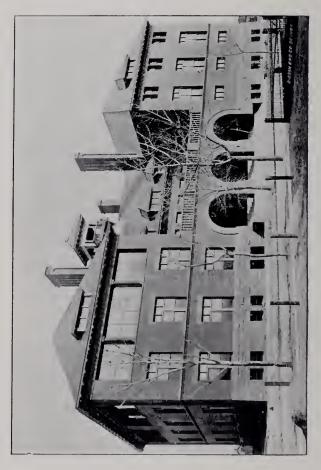
Boulder (except to Boulder and Longmont). Conejos. Custer. Delta. Douglas. Elbert. Garfield. Jefferson (except to Golden). Park. Phillips. Saguache. Sedgwick. Washington. Weld (about half). Counties whose superintendents furnish eighth grade examination questions to rural schools are:

Arapahoe. Bent. Boulder. Clear Creek. Conejos. Custer. Delta. Douglas. Eagle. Elbert. El Paso. Garfield. Gunnison. Huerfano. Jefferson. La Plata. Logan (on request). Mesa. Morgan. Phillips. Saguache. Sedgwick. Washington (on request). Weld.

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HIGH SCHOOL, WEST DENVER.

STATISTICAL REPORTS.

1899-1900.

CENSUS.

ENROLLMENT AND ATTENDANCE.

TEACHERS AND SALARIES.

PER CAPITA EXPENSES AND SCHOOL HOUSES.

RECEIPTS.

DISBURSEMENTS.

SCHOOL BOND ACCOUNT.

EXAMINATION OF TEACHERS.

APPORTIONMENT.

COMPARATIVE TABLES, 1899-1900.

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CENSUS, 1899.

~*************************************		Between 6 and 21			Between 8 and 14	
COUNTIES	Male	Female	Total	Male	Female	Total
Arapahoe	18,854	19,515	38,369	8,655	8,728	17.383
Archuleta	192	193	385	76	7 6	170
Baca	142	56	239	62	51	113
Bent.	373	374	147	197	182	379
Boulder	3,208	3,279	6,487	1,416	1.444	2,860
Chaffee	890	831	1,721	523	503	1,026
Cheyenne	58	. 60	118	33	29	62
Clear Creek	1,002	066	1,992	440	448	888
Concjos	1,783	1,713	3,496	769	704	1,473
Costilla	933	872	1,805	408	60 1	817
Custer.	514	462	976	271	238	209
Delta	923	881	1,804	432	857	1,289
Dolores	127	107	234	76	52	128
Douglas	530	512	1,042	P.C.	528	452
Eagle	287	247	534	156	111	267
El Paso	3,870	3,841	7,711	1 731	1,705	3,436
Elbert	601	301	1,102	250	231	481
Fremont	2,243	2,070	4,313	1.032	666	2,031
Garfield	785	505	1,494	397	391	162

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TWELFTH BIENNIAL REPORT

Gilpin	903	1,039	2,032	112	119	531
Grand	106	8.5	101	39	39	78
Gunuisou	565	585	1,150	246	27.5	521
Hinsdate	OFI	167	307	7.5	85	160
Huerfauo	1,518	1,4×8	3.006	777	710	1,517
Jefferson	1,618	1,365	2,983	114	622	1,336
Kiowa	104	102	206	-13	31	14
Kit Carson	237	263	500	114	116	(){;;;
I,ake	1,603	1,627	3,230	786	746	1,532
I.a Plata	1,034	1,020	2,054	453	<u>e</u> #	863
L,arimer	1,889	1,787	3,676	830	796	1.626
I,as Animas	3,317	3,116	6,433	1.571	1,504	3,07%
Lincotu	113	117	230	47	41	88
I,ogan	469	111	880	211	194	435
Mesa	1,314	1,188	2,502	630		1.219
Mineral	193	195	388	85	101	186
Montezuma	403	435	838	166	607	375
Montrose	800	758	1,558	400	35-0	780
Morgan	06ŧ	243	733	245	(-(-(-	167
Otero	1,577	1,476	3,053	703	663	1.366
Ouray	522	101	686	07	6660	115
Park	352	362	111	150	163	313
Phillips	267	97.0	193	106	109	615
Pitkin	668	895	1,794	123	7.55	845
Prowers	530	500	1,030	200	205	111
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SUPERINTENDENT OF PUBLIC INSTRUCTION. 83

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CENSUS, 1899—Concluded.

		Between 6 and 21			Between 8 and 14	
CC21152	Male	Female	Total	Male	ltemale	Total
Pueblo	5,403	5,030	10,433	2,091	2,077	4,168
Rio Grande	719	739	1,458	312	408	720
Rio Blanco.	245	211	456	89	92	181
Routt	501	427	928	218	220	438
Saguache	672	628	1,300	305	324	629
San Juau	150	150	300	. 67	11	138
San Miguel.	397	334	731	189	160	349
Sedgwick	186	169	355	47	11	145
Summit	251	215	466	113	8.5	198
Teller	2,420	2,338	4,758	1,227	1,120	2,347
Washington	184	117	331	86	58	144
Weld	2,505	2,357	4,862	1,0865	1,053	2,139
Уита	296	273	549	116	611	235
Totals	72,297	70.169	142,466	32,S09	32,603	65,412

TWELFTH BIENNIAL REPORT

TABLE II. CENSUS, 1900.

and which the		Between 6 and 21			Between 9 and 11	
COUNTRS	Male	l'emate	Total	Male	Female	Total
Arapahoe	20,613	20,615	11.458	688.6	646*6	19,83%
Archuleta	300	246	608	117	115	202
Baca	130	89	219	58	11	6343
Bent	217	358	63.5	1×0	169	319
Boulder	3,211	3,292	6,536	1,504	1.602	3,106
Chaffee	951	206	1,558	511	165	616
Cheyenne	64	62	126	31	18:	65
Clear Creek	616	116	1,890	127	437	862
Concj is	1,862	1 802	3,664	\$05	2.1%	$1,6^{22}$
Costilla.	918	016	1,858	478	181	626
Custer	509	135	196	257	236	515 F
Delta	948	818	1.826	400	611	106
Dolores	101	16	198	57	21	102
Douglas	F6F	493	98-7	236	202	503
Eagle	366	300	(3636)	222	173	395
El Paso	4,089	161.4	5,2NO	1,892	1.812	3,731
Bilbert.	571	495	1,066	273	203	964
Fremout	2,118	2,438	1,856	1.037	1,122	2.159
			-			

SUPERINTENDENT OF PUBLIC INSTRUCTION.

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II.	
TABLE	

CENSUS, 1900-Concluded.

		Between 6 and 21			Between 8 and 14	
C00311ES	Male	Female	Total	Male	Female	Total
Garfield	825	736	1,581	434	424	858
Gilpin	1,005	166	1,996	488	505	993
Grand.	105	Ľ	176	<u>1</u> †	30	22
Gunuison	574	606	1,150	281	303	584
Hinsdale	146	175	321	66	80	146
Huerfano	1,538	1,459	2,997	780	179	1,559
Jefferson	1,586	1 359	2,945	684	613	1,297
Kiowa	107	103	210	46	43	89
Kit Carson	264	280	† † <u>2</u>	115	125	240
Lake	1,658	1,657	3,315	197	796	1,593
La Plata	1,148	1,110	2.2.8	570	543	1,113
Larimer	2,010	1,840	3.850	998	875	1,873
Las Animas	3,590	3,252	6,842	1,646	1,598	3,244
Lincoln	124	120	214	50	51	106
Logan	493	438	931	234	193	427
Mtsa	1,426	1,329	2.735	634 *	62×	1,262
Mineral	201	205	106	142	146	258
Montezuma	402	438	810	156	192	348
Montrose.	572	792	1,664	419	<u>(</u> ()]-	×24

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TWELFTH BIENNIAL REPORT

SUPERINTENDENT OF PUBLIC INSTRUCTION. 87

TABLE	III
	L.

ENROLLMENT AND ATTENDANCE, 1899.

						PUPILS					
COUNTIES	Enrolled	Enrolled in Graded Schools	Enrolled	Under 16 Enrolled	1	Whole	Whole Number Enrolled in Public Schools.	ırolled ols,	Number Between 8 and 14	Average	r Eu- in Pri- elools
	In High School	Below High Schools	in Rural Schools	in Public Schools	in Public Schools	Male	Female	Total	Enrolled in Public Schools	Attend- ance	bəlfor bəlfor data
Arapahoe	2.311	24,594	1,796	26,775	1,926	13,921	14,780	28.701	17,063	22,668	1,630
Archuleta		153	155	220	82	153	155	308	174	152	
Baca			185	129	56	105	80	185	127		
Bent	25	268	267	1 6†	99	275	285	560	324	353	51
Boulder	308	3,518	1.528	4,852	472	2.733	2,621	5,354	3,202	3,603	13
Chaffee	84	1,085	322	1 353	129	756	735	167'1	817	953	152
Cheyenne		8	50	124	9	58	72	130	80	76	
Clear Creek	156	1,090	302	1,402	971	739	603	1,548	889	1,228	27
Conejos	ι	166	1,182	1,904	276	1,149	1,031	2,180	1,266	. 484	227
Costilla.		400	790	1,010	180	672	518	1,190	620	756	10
Custer		174	575	249	102	100	349	641	161	49F	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
Delta	68	201	846	1,242	211	215	700	c14.1	177	106	
Dolores	15	169	17	190	11	113	R	201	76	132	
Douglas	27	129	114	760	110	434	436	870	181	987	8
Hagle	0†	134	421	528	11	208	297	595	341	321	-
glbert			×31	693	138	436	395	831	488	16f	

TWELFTH BIENNIAL REPORT

El Paso	469	1,741	1,127	5.785	555	3,176	3,161	6,337	3,692	1,221	114
Fremont	173	2,416	609	3,351	280	1,350	1,848	3,19%	2,002	2,441	48
Garfield	-10 1	200	699	1,130	179	675	634	1,309	7.16	198	
Gilpin	58	1,223	126	1,342	29	129	753	1-407	200	1.095	20
Grand	\$1	57	19	92	(=	69	10	123	£	73	
Gunnison	38	172	661	938	29	168	137	1,005	600	615	:
Hinsdale	15	183	9	189	15	103	101	204	06	165	
Huerfano	:30	827	1,019	1,700	206	1,001	902	1,906	1,135	786	
Jefferson	113	856	1,210	116,1	235	1.091	1,055	2.179	1.279	1,412	
Kiowa	4 0 1 0 0 0 0 0 0 0	8 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	176	148	-90 -00	86	06	176	65	11%	
Kit Carson		×	109	358	102	231	259	061	211	194	
I,ake	53	1,798	172	1,949	111	1,000	1,023	2,023	1,162	1,437	:
La Plata	82	1,006	178	1,136	130	789	111	1,566	876	1,040	
I,arimer	172	1,328	1,359	2,527	332	164,1	1,405	2,659	1.637	1,992	
I,as Animas.	162	2,194	2,213	4,313	2.56	112.2	2 298	4,569	2,912	C##	ec.
Lincoln	13	185	1	153	14	101	93	197	66	128	¢1
Logan	-C.	279	438	635	107	394	318	712	354	362	
Mesa	148	1,262	767	1,836	341	1,098	1,079	2,177	1,1(4)	1,496	
Mineral		312	11	312	11	115	178	323	162	177	1
Montezuna	10	281	171	169	141	360	4:32	798	1983	506	
Montrose	36	<u>309</u>	606	1,003	118	169	260	1.151	661	ste	
Morgan	68	362	375	685	57	410	395	×02	433	130	
Otero	151	1,657	639	2,133	317	1,241	607,1	2,150	1,201	69	
Ouray	35	432	309	202	69	:384	342	116	397	198	
Park		233	369	523	61	276	326	602	333	318	ļ
	1	I				-					

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III
TABLE

ENROLLMENT AND ATTENDANCE, 1899-Concluded.

						PUPILS					
COUNTIES	Eurolled	Enrolled in Graded Schools	Enrolled	Under 16 Furolled	Over 16 Furdled	Whole in	Whole Number Enrolled in Public Schools	rolled	Number Between 8 and 14	Average Daily	in Fri-
	in High School	Below High Schools	in Kural Schools	in Public Schools		Male	Female	Total	Eurolled in Public Schools	Attend- ance	Numbe bəlloı əfev
Phillips	37	100	321	385	10	237	221	458	227	296	
Pitkin.	109	1,313	262	1,417	267	816	868	1,684	106	1,332	* * * *
Prowers		337	468	698	107	421	384	805	399	101	
Pueblo	121	4,432	1,195	5,491	557	2,936	3,112	6.018	3,312	3,962	105
Rio Blanco		160	671	196	50	174	161	335	185	199	
Rio Grande	601	515	581	1,134	101	586	652	1,238	369	247	32
Routt		117	568	623	143	386	380	766	397	518	
Saguache	25	134	111	836	100	t2t	162	986	510	528	÷
San Juan		2:30	12	236	15	128	123	102	138	155	
Ssm Miguel	9	277	333	266	52	330	987	616	354	368	:
Sedgwick	18	62	185	246	61	160	135	505	140	190	ł
summit		236	153	356	33	195	101	389	217	264	
Teller	27.8	3,734	282	3,711	478	2.072	2,202	1127	2,624	2,775	=
Washington	32	132	158	262	99	117	113	3.00	166	212	
Weld	264	1,563	1,731	3,177	385	1,970	1,892	3,862	2,197	2,530	-
Yuma		161	300	131	(10)	268	226	FGF	232	337	
Totals	6,323	68,725	33,768	98,330	10,464	51,249	54,567	108,816	62,208	69,547	2,778

TABLE IV.

ENROLLMENT AND ATTENDANCE, 1900.

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					PUPILS	ŝ				
COUNTINS	Furolled	Enrolled in Graded Schools	l'urolled	Whole	Whole Number Burolled in Public schools	trolled ols	Number Com-	Number Between 8 and 11	Average Daily	in Fu- irani, slooib
	School	Below High Schools		Male	Female	'l'otal	Highth Grade	Eurolled in Public Schools	Altend- ance	odmuV bollot S ofrav
Arapahoe	2,325	28,165	2,006	15,720	16,776	32,496	÷.	16,709	21,010	1,707
Archuleta		153	314	241	526	101	13	()	210	
Baca			201	113	88	201		104	128	
Bent	31	272	333	277	359	636	13	319	301	
Boulder	376	3.233	1,781	2,638	2,755	5,303	33	3,064	3,727	
Chaffee	83	1.145	317	634	116	1,545	61	818	510'1	169
Cheyeune		58	52	56	21	110		70	67	¢1
Clear Creek	124	1 022	259	697	708	1,405	63	877	1,131	11
Conejos	20	917	1,153	1,090	1,030	2.120	31	1,181	1,208	702
Costilla		218	516	596	534	1.130		619	111	
Custer		162	961	103	311	117		308	161	ł
Delta	11	612	871	191	797	1,554	11	068	670,1	•
Dolores		185	11	105	16	1991		104	126	
Douglas	17	108	• 693	417	101	818	19	139	102	
Eagle	37	135	403	342	533	575	33	3.7.0	371	
El Paso	661	5,127	1,215	3,376	3,465	6.811	145	3,401	3,401	101
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ENROLLMENT AND ATTENDANCE, 1900-Concluded.

					PUPILS	ŝ				
COUNTIES	Eurolled	Eurolled in Graded Schools	Eurolled	Whole in	Whole Number Enrolled in Public Schools	arolled ols	Number Com-	Number Between 8 aud 11	Average Daily	er En-
	School	Below High Schools	in Kural Schools	Male	Female	Total	Eighth Grade	Eurolled in Public Schools	Attend- ance	Numbo rolled S etev
Elbert			895	681	106	268	9	505	133	
Fremout	255	2,879	816	188	2,062	3 950		2,113	168,2	
Garfield	33	101	619	<u>105</u>	701	1 109	15	834	683	
Gilpin	53	1,192	111	648	7:38	1.386	21	245	895	142
Grand		16	66	63	X	101	¢٦	E	99	
Gunnison	-1	316	524	526	:){:0	1,062	18	9	630	:
lliusdale	92	239		117	157	274	·?.	146	183	
Huerfano	31	708	1,407	1,117	670'T	2.146	61	1,278	1,150	-
J efferson	137	1 032	1,010	1,120	1,059	2,179		1,312	1,431	
Kiowa.	1		141	16	87	181	-	86	131	
Kit Carson	+	1.	118	246	260	00 ⁰	0.7	246	318	
Lake	155	1,836	353	1,162	1,182	2,311	61	1,287	2,636	
La Plata	16	1,170	113	881	823	1.701	16	103	1,016	
Larimer	187	1,412	1,503	1,601	1,501	3,102	8	1.761	2.153	
Las Animas.	112	2,406	2,008	2,352	2,111	1,526		2, 187	2,439	5:0
Lincoln	÷1	111	17	112	105	217	-	115	110	ວາ
Logan	11	115	50°	146	377	823	65	431	164	

Mesa	163	1.451	531	1,242	1.203	2,445	55	1,320	1,0,04	
Mineral	1	339	16	6651	1.86	3×5	11	1163	249	
Montezunia		359	126	361	101	785		:834	439	-00-
Montrose	ie.	529	693	645	632	1.277	36	702	838	
Morgan	73	354	611	434	412	Stre	10	€) ⁷ .	30	;
Otero	153	1,977	672	1,379	1.123	2,802		612,1	1,230	
Ouray	34	460	:308	3~7	416	>03	14	137	515	
Park		175	337	262	2.33	515	t-	283	313	
Phillips	13	86	338	102	A00	121		297	302	
Pitkin	130	1,165	319	2.62	817	1.614	0 10	846	1,246	
Prowers		488	3:48	163	106	45845	12	651	511	
Pueblo	120	1,990	1,2(3	3.204	3, 529	6,733		3,953	1.211	173
Rio Grande	115	100	582	137	218	1.254	39	1 19	s I s:	:30
Rio Blanco	:		319	0×1	139	319		172	10 . 7	
Routt	36	256	175	384	3~3	767	14	131	312	
Saguache	35	171	708	170	111	116	17	202	550	
San Juan		6760 740	11	133	1:20	273		181	1:30	
San Miguel	5	423	200	339	14172	6538	ĥ	101	101	
Sedgwick	16	82	195	175	153	325		169	077	
Summit	20	226	1:-0	549	702	4.5th	61	{*[+{+	4517	
'Teiler	273	1111	101	2,495	2,393	3,015		5.9~6	2:50	46
Washington		136	177	175	138	313	10	150	202	:
Weld	202	1 952	1,846	2,056	2,007	4,063	156	2.30%	2 637	
Yuma		259	288	30*	239	242	+1	241	13%	1
Totals	6,711	77,376	33,435	58,074	135'481	117,555	112.1	61,027	73.20	3,2(1

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Mutuities Craded Schools Rural schools <th cols<="" th=""><th></th><th></th><th></th><th>T</th><th>TEACHERS EMPLOYED AT ONE TIME</th><th>EMPLOY</th><th>TED A</th><th>T ON</th><th>HE TIN</th><th>ME</th><th></th><th></th><th>Nur Feache</th><th>uber of rrs Dui</th><th>Number of Different Teachers During the Year</th><th>ent e Year</th><th></th><th></th></th>	<th></th> <th></th> <th></th> <th>T</th> <th>TEACHERS EMPLOYED AT ONE TIME</th> <th>EMPLOY</th> <th>TED A</th> <th>T ON</th> <th>HE TIN</th> <th>ME</th> <th></th> <th></th> <th>Nur Feache</th> <th>uber of rrs Dui</th> <th>Number of Different Teachers During the Year</th> <th>ent e Year</th> <th></th> <th></th>				T	TEACHERS EMPLOYED AT ONE TIME	EMPLOY	TED A	T ON	HE TIN	ME			Nur Feache	uber of rrs Dui	Number of Different Teachers During the Year	ent e Year		
NTHES Average Average Monthly	•			Graded	Schools				Rural	Schools		Grad	led Scl	nools	Rure	il Scho	ools	Aggregate Amount	
Aladie Aladie Aladie 1 2 45 2 5 4	COUNTIES				A ver Mon Sala	age thly ary				Ave Mor Sal	rage uthly ary							Paid Teachers During	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		SISM	Pennale	IntoT	əlsM	Female	əlaM	Female	Total	Male	Female	əlsM	Female	IntoT	əlsM	Female	IntoT	the Year	
	Arapahoe	X	464	247	\$103 39	65	19	×1	106	위	39	87	484	112	20	33	113	\$ 462,674 29	
	Archuleta	-	01			50 00	01	9	x	45 00	40 62	c)	÷1	-+	61	90	10	2.736 00	
	Baca	1	1	4 4 9 9			+	6	13					1	4	6	13	1.677 00	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	Bent	61	9	x			¢.1	15	17			÷1	9	80	c1	15	17	951 00	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Boulder	51	61	22		53 62	10	\$ *	53			25	65	90	L-	63	01	58,601-81	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Chaffee	9	19	50		60 00	ł	20	21			9	19	25	~~	20	23	22,956 00	
cck. 4 20 24 124 7 67 2 9 11 75 0 49 4 22 26 2 2 7 9 16 5500 4600 1× × 26 4700 4300 · 22 26 2 3 2 6 × 7000 1583 14 10 21 3882 4000 2 6 8 16 3 9 12 7.000 1583 14 10 21 4168 2 3 3 7 3 1 2 3 10 14 12 7 3 3 7 3 1 2 3 10 11 21 14 16 2 3 5 7 3 3 9 12 7.3 4500 3600 4 1 1 1 1 1 1 1 1 1 1 1 1 1		1	1	01		50 00	-	ia.	9	35 00		1	-	67	ĩ	ic.	9	3,833-00	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Clear Creek	-H-	20	5			61	6	11		49 60	4	81	26	¢1	11	13	21.911 79	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Conejos	[*	6	16		46 00	18	x	26		43 00			:	e	ŝ	9	13,690 85	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Costilla.	01	9	x	70 00	15 83	11	10	21		40 00	01	9	×	16	11	27	8,008-50	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Custer	-	c.1	63		50 00	(-	14	21		41 68	¢1	02	10	2	20	51	5.777-30	
1 3 4 110 00 75 00 1 1 1 3 4 1 3 1 90 00 60 37 46 1 3 4	Delta	80	6	12			10	14	12	45 00	36 00				1 1 1	1	:	21,416-56	
1 3 1 90 00 60 37 10 27 37 46 40 43 66 1 3 1 11	Dolores	1	~	*	110 00			-	-		45 00	-	~	÷	-	1	-	3,275 25	
			~		00 00	60 37	10	27	37	46.00	43 66	1	~	-	11	29	-10	11,731 45	

TABLE V. TEACHERS AND SALARIES, 1899.

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Hagle	1	~	4	00 02	57 50	+	13	17	59 30	57 50	1	3	-	+	13	17	7,755 00
Elbert	1	1	:			13	31	11	41.75	39 50	:	:	* * *	12	30	16	10,140 75
El Paso	11	56	106	108 21	66 31	11	36	17	16 00	43 91	16	95	111	12	015	52	97,477 74
Fremont .	18	r,0	68	80 00	60 00	10	5.5	33	00 çç	47 00	19	50	69	10	6.5	35	49.670 00
Garfield	-20	10	18	77 50	59 00	9	21	21	51 67	47 67	ø	10	18	9		161	17,967 10
Gilpin	9	20	26	103 00	67 88	:	6	6		13 00	9	21	51	1	11	£- 	19,977 25
Grand	3 6 1 0	80	~		41 66	1	10	22		36.40	-	00		:	10	a.	1,478 50
Gunnison	1	2	11	72 50	56.40	-	26	30	52 50	16 50	-	r	Π	-0	Ŧ	16	13,59~ 25
Hinsdale	I		¥.3	85 00	61 25	9 0 1 1	60	6.5		10 00	-	10	9	•		-	2,576 00
Huerfano		12	16	62 50	50 00	11	18	32	10 21	40-16	10	14	61	16	(ii)	65	12,650 82
Jefferson	12	14	:97 :97	00 69	53 00	t-	37	44	41 00	43 00	12	14	56	6	43	22	29,261 50
Kiowa	:	÷	1 1			6	so	11	48 42	11 25	:	:	1	6	×	1.	4,595-00
Kit Carson	1	1	21	45 00	15 00 T	13	15	S.S.	37 89	31 21	-	1	÷1	13	15	34	8,056.75
Lake	(-	33	40	92 00	71 66	÷I	11	13	75 00	62 >0	(-	34	11	~	13	16	32,794,77
La Plata	14	19	T	103 80	66 11	t-	12	19	52 65	45 37	12	20	62	t =	23	21	20,057 00
I,as Animas.	10	34	41	94-44	95 IC	31	(c) 	96	16 60	46.59	6	36		38	() ()	(9)	16 702 63
L'arimer.	9	32	38	CL 26	60 00	50	40	09	45.40	11 28	6	36	<u>e</u> r	0.5	-	67	38,548 71
Lincolu	3	6	51	63 33	73 33	:	+		\$ 5 5 8 8 8 8 8 8 8 8 8 8 8	41.50	33	10	13		-	-10-10	1,9%5 00
Logan	ŝ	-	t-	66 66	16 00	11	00	36	33 90	35 83	~	10	×	11	31	<u>-</u>	11.601 25
Mesa	10	1.0 1.0	3.1	70 00	52 00	-	26	30	12 00	45 00	10	Fee .	34	÷	t- ?t	30	25,002 00
Mineral	¢1	-	ę	111 25	70 00		1	-	* * * *	45 00	¢1	+	9	i	-	1	1,597 50
Montezuma	¢1	+	9	11 30	02 14		14	17	51 61	43 50	-	~			11	18	7.272-16
Montrose	. 1	6	10	100 00	65 00	11	6	50	86-61	52 73	-	10	11	10	10	07	12,025 06
Morgan	¢1	œ	10	100 55	49-16	53	1:	15	50 00	11 27	¢1	6	11	~	-	17	10.739 85
Otero.	10	30	40	85 00	24 00	9	15	I.	15 00	43 00	9	30	0f	13	=	19	28,860-00

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TEACHERS AND SALARIES.—Concluded.

			T.	TEACHERS EMPLOVED AT ONE TIME	EMPLO	VED A	T ON	IE TI:	ME			Teache	nber of ers Dui	Number of Different Teachers During the Year	ent e Year			
	1		raded	Graded Schools				Rural	Rural Schools		Grad	Graded Schools	hools	Rure	Rural Schools	ools	۲ ک 	Aggregate Amount
COUNTIES				Mon Sala	Average Monthly Salary				Ave Mot Sal	Average Monthly Salary								Paid Teachers During
	əlem	Female	[stoT	Male	Female	əlaM	Female	Total	Male	Female	Male	Female	[sjo'T	Male	Female	IsjoT	+	he Yeat
Ouray	00	1-	10	\$ 92 00	\$ 60 20	13	30	13	\$ 62 00	\$ 64 00	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	6	12	10	12	20	**	12,179 50
Park	**	60	9	86-66	58 33	5	17	53	41 14	13 25		63	9	×	27	3.5		10,435 00
Phillips	1	÷1	**	75 00	50 00	12	15	:-	31 05	29 25	1	¢1		12	15	27		5,857 00
Pitkin			55	113 24	63 29	ŝ	11	11	68 00	00 tC	53	26	ŝ	n	21	24		21,563 60
Prowers	1	9	1-	119 11	50 00	13	17	30	42 00	31 80	-	9	t. 	13	17	30		10,515 00
Pueblo	6	115	124	125 50	16-69	21	37	58	48 31	11 53	5 .	121	130	21	<u>;;</u>	61		98,323 20
Rio Blanco	1	\$1	33	00 06	120 00	10	*	6	64 00	42 50	-	¢1	00	G		5		4,325 00
Rio Grande		6	13	88 75	65 00	11	16	27	43 37	10 47	-	12	16	13	20	33		15,034 60
Routt	.0	ł	(-	66 66	42 25	55	27	30	42 50	40 35		-	2	9	33	39		7,387 45
Saguache.	÷1	÷1		57 50	-20 00	12	33	35	16 75	13 25	e1	¢1	+	13	31	Ξ		10,286 39
San Juan	-	+	10	125 00	00 0%	* * *	-	-		00 <u>ee</u>	1	+	10	:	÷1	61		4,335 00
San Miguel	÷1	9	x	112 50	80 00	~	9	1:	55 00	33 00	÷1	9	1.		12	15		8,891/25
Sedgwick .	-	51	ec.	00 06	50 00	-	19	8	32 50	29 00	-	51		-	21	25		5,626 25
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	Teller	15	15 59	F.L	76 10	11 93	1	1 11 15	15	12 00	15 86	1 15	29	14	-	14	1	58,9N7 50
	Washington	1	-	ŝ	75 00	10 00	-0	16	21	32 00	32 06	1	-	13	6	16	(-(-	6,397 50
ţ	Weld	13	43	36	69 92	52 53	<u>c1</u>	10	69	51 52	46 30	14	2	62	13	09	73	56,743-66
	Yuma	1	13	9	65 00	39 00	10	23	28	33 00	30 00	-	10	9	10	25	30	6,853 00
												1		Ì			1	+++ ++
	Total			8 9 9			1 1 1										i	\$1,505,797,79

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TEACHERS AND SALARIES, 1900.

			T	TEACHERS EMPLOYED AT ONE TIME	EMPLO	VED /	AT OF	NE TI	ME		μ,	Nun	nber o rs Dur	Number of Different achers During the Y	Number of Different Teachers During the Year		
			raded	Graded Schools				Rural	Rural Schools		Grad	Graded Schools	nools	Rure	Rural Schools	ols	Aggregate Amount
COUNTIES				Average Monthly Salary	age hly ry				Ave Mor Sal	Average Monthly Salary							Paid Teachers During
	əlsk	Female	IsioT	Male	Female	əlsM	Female	IsjoT)lalć	Female	ગ્રાહાર્ય	Pemale	IstoT	Male	Female	fsto'T	the Year
Arapahoe	S	544	626	\$ 105 79	\$ 68 24	15	-98	113	\$ 11 12	\$ 35 82	84	559	643	11	109	124	\$ 532,622
Archuleta	1	÷1		60	60	1	~	6	20 00	44 00	-	\$1	80	-	so	6	3,265
Baca	;			8		9	80	14	33 33	30 00			4 9 9 1	9	30	14	2.008
Bent	©1	9	s	80 51	57 50		15	18	46 66	46 50	\$1	8	10	~	15	18	7,787
Boulder	21	62	80	72 20	55 33	3c	51	59	50 25	43 00	ŝ1	63	85	1.1	62	56	62,002-98
Chaffee	9	19	25	86-66	63 95	-	13	17	51 66	49 37	9	19	(.e	6	20	67	19,342 56
Cheyenne	1	13	9	65 00	50 00	1	5	9	10 00	15 00	1	ŝ	9	-	5	9	3,015 00
Clear Creek	4	<u>.</u>	÷0;	115 83	67 42	1	9	10	75 00	50.55	+	23	27	-	13	11	21,596 1
Conejos	6	11	20	76 00	39 75	11	12	97	40 00	42 00	6	11	20	1	15	16	13.537 63
Costilla		÷1	10	71 66	55 00	15	16	31	33 43	40.25	~	¢1	13	15	11	35	8,668 56
Custer	1	4	10	75 00	55 00	-4	23	51	$52 \ 50$	39 90	1	-	5	7	5:3	57	6 091 25
Delta	©1	1:3	15	80.37	<u>50 75</u>	10	13		51 50	46-01	¢1	13	15	10	2	÷	14,560 75
Dolores	1	33	4	110 00	22 00		-	-	11	45 00	-		+		-	-	2,365 00
Douglas	-	0			000 110					011 111							

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No. 11 13 11 14 11 10	_	1 <u>5</u> 175 00	03 70		15	18	65 00	56 83	<u>51</u>	65	-	-	6	6	9,635,00
	97 109 109 52		67 85	11	38	55	11 93		11	101	115	17	++	61	106.557 09
11 23 34 6031 78 10 13 46 59 13 36 49 1 9 10 60.30 115.8 7 11 18 6 23 31 17 18 1 9 10 60.30 115.8 5 22 27 1 17 18 31 16 18 31 16 18 31 16 18 31 16 18 31 16 18 31 16 18 31 16 17 18 3 11 17 18 16 <td< td=""><td>3 4 60 00</td><td></td><td>47 50</td><td>10</td><td>31</td><td>44</td><td>0 15</td><td>35 (0</td><td>1</td><td>00</td><td></td><td>10</td><td>31</td><td>41</td><td>9.667 00</td></td<>	3 4 60 00		47 50	10	31	44	0 15	35 (0	1	00		10	31	41	9.667 00
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3 47 5000 4000 11 16 27 5 51 56 36 8 28 36 3800 3700 11 11 2 5 17 17 17 3 11 11 7000 3500 1 11 2 8 28 38 3500 1 11	10 13 81 66 50	22	00	10	25	35	57 70	44 000	63	11	14	11	31	61	15,220 50
	46 26 74 00 51	$\overline{51}$	00	17	÷	11	50 00	40 00	11	16	17	13	51	56	29,058 75
8 28 36 38 00 35 00 35 00 35 00 7		÷	;	6	9	15		40 00		1		10	Ŀ	17	4.830 00
3 11 14 7000 7000 7 36 43 3 11 11 5 11 19 57.30 15.65 6 33 29 5 14 19 13 49 63 18.18 42.76 8 30 38 15 55 70 31 23 54 43.16 43.26 12 43 32 26 55 70 10 25 55 57.0 35.81 5 4 32 26 58 54 55 70 10 25 35 35.81 5 4 9 10 30 40 10 25 35 1 5 9 11 11 11 25 35 1 5 4 9 10 30 40 12 12 19 11 1 10 11	1 2 50 00 50	00	20 00	00	28	36	38 00	35 09	-	1	¢1	s	28	36	7,569 50
5 11 19 57.30 15.65 6 23 29 5 14 19 13 19 63 18.18 42.76 8 30 33 15 55 70 31 23 54 43.16 43.26 8 30 33 15 55 70 10 25 53 54 43.16 43.26 12 44 32 26 58 10 25 35 35.81 5 4 9 10 30 40 11 25 35 1 50 4 9 10 30 40 12 29 56.03 40.44 4 6 10 30 40 11 12 12 19 50.03 41.44 4 6 10 10 11 13 12 12 13 12 14 13 11	35 42 102 00 62 (0		11	14	70 00	70 00	[*	36	43		11	11	31,144 65
	22 28 100 10 74 2			10	*	19		15 65	9	33	29	-5	14	19	$23.155 \ 62$
31 23 54 43 16 43 26 12 74 32 26 58 8 8 11 00 1 5 9 11 11 10 25 35 37:50 35 81 5 4 9 10 30 40 1 23 35 37:50 35 81 5 4 9 10 30 40 1 23 35 1 5 9 1 27 31 2 2 2 4 6 10 30 40 1 12 19 50.00 17 2	27 34 91 38 51 :		50	1:3	6†	63	18 18	42.76	œ	30	39	5	55	20	40,733 68
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	5 6 23 33 40	61	44		×.	×.	* * *	11 00	1	£.	6	:	11	11	5, 111 25
1 23 29 45 00 46 00 13 26 39 1 27 31 - 2 2 50 00 2 4 6 - 2 2 31 7 12 19 50 36 41 44 4 6 10 1 10 11 8 12 20 55 00 47 50 47 4 6 10 1 10 11 4 11 15 45 00 45 00 2 1 11 12 30 17 8 12 20 48 10 45 00 45 00 2 11 13 4 13 17 8 12 20 48 75 12 01 20 28 48 21 27 48	4 8 71 25 50	00	00	10	100	35	37 50	35 ×1	1.3	+	6	10	:30	40	12,858 75
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	33 45 75 66 52	55	16	30	1	20	48 19	12 01	-20	52	<i>3</i>	1.7	27	<u>×</u>	00 105.62

			T	TEACHERS EMPLOYED AT ONE TIME	EMPLO.	VED /	T ON	IE TIN	ЧE		T	Num eacher	ber of s Duri	Number of Different Teachers During the Year	ent Year	-	
		0	raded	Graded Schools				Rural	Rural Schools		Grad	Graded Schools	ools	Rura	Rural Schools	ols	Aggregate Amount
COUNTIES				Average Monthly Salary	age hly ry				Average Monthly Salary	age hly ry				-			Paid Teachers During
	Male	Female	Total	Malc	Female	Male	Female	Total	əlsM	Female)Ialc	Female	fetoT	9IsM	Hemale	Total	the Year
Ouray	\$1	6.	11	\$ 102 50	\$ 66 00		12	2		\$ 61 22	01	П	×	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	16	71	\$ 13,387
Park	00	-+	(80 20	60 00	, eo	61 61	25	\$ 50 00	43 68	30	10	~		33	92	11,062
Phillips	1	©1	03	75 00	50 00	6	18	12	31 87	30 83	ĩ	01	53	6	20	29	5,930 33
Pitkin	+	67	21	105 00	00 29	-	13	Ħ	00 01	52 42	9	26	32	01	16	13	20,837 78
Prowers	e.:	σ.	13	76 00	45 00	10	22	32	38 60	10 00		6	12	10	61	:::	12,206 00
Pueblo	10	128	13%	129 43	70.56	15	0ŧ	12	53 31	13 43	10	133	143	18	11	65	66.022-16
Rio Grande	+	=	15	82 50	67 12	9	16	<u>.</u>	43 56	11 22	*	Ξ	15	30	18	26	16,013 25
Rio Blanco					8 1 8 6 1 1	10	1	22	61 00	47 62		4 4 4	* * * *	13	ø	13	1,782 00
Routt		6	10	65 00	50 00	+	21	2.5	44 82	10.01	-	9	10	6.	35	14	9,312-18
Saguache	**	**	6	66 00	00 55	9	67	35	47 33	42 14			9	9	67	22	11,284 07
san Juan	-	+	10	1:30 00	\$2.50	:	÷1	÷1		55 00	-	-	.0		¢1	÷1	4,536-25
San Miguel	-	6	10	125 00	62 50	~	(10	26.66	54 83	-	10	11		=	=	9,955 15
Sedgwick	-	ণ		70 00	47 50	+	17	21	34 40	31 40	-	51	~		11	21	5.210-00

TABLE VI.

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Teller	15	82	16	92 00	00 09	-	13	11	15 00	17 60	16	82	98	-	16	16 17		74,095 85	
Washington	1		+	75 00	45 00	4	15	19	31 50	31.87			-	-	1.	19		5,856 50	
Weld	15	11	59	83 75	59 00	13	60	13	55 55	16 30	16	11	(00)	13	69	20		59 955 50	
Yuma	©1	10	t~	$62 \ 00$	37 00	9	20	26	32 00	31 15	c.)	1-	6	[1 T	31		7,114 12	
				-								ļ			ļ	Î	-	1	
'rotal	348	1.491	1,839	348 1.491 1,839 \$ 80 16 \$ 54	\$ 51.29	370		1.118 1.188	60	13 67 \$ 13 66		0339	359 1,539 1,898 391 1,305 1,699 \$	394	1,305	1,609	\$ 1	1,504,613 20	
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PER CAPITA EXPENSES AND SCHOOL HOUSES, 1899.

	-JU	sys ur sys	noll- noll- llo	U UDE			SCHOOL	SCHOOL HOUSES		
COUNTIES	Number of di of School d ng the year Graded Scho	Wumber of d of School d ing the year Rural School	Ачегаде соst month for e: ment ment	Average cost month for ea pupil byavers attendance	No. of Sod. Adobe or Log	No. of Frame	No. of Brick or Stone	Total	No. of School Rooms, both ownedand rented	Valuation (iu dollars)
Arapahoe	158	121	\$ 2.92	\$ 3.99	31	59	84	174	680	\$ 2,800,089 00
Archuleta	160	705	2 25		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	3		9	10	5,475 00
Baca.		88	3 97	5 48		11		16	17	4,573 00
Bent	180	144	3 33	6 19	5	11	1	14	25	21,985 00
Boulder	174	139	2 15	3 15	7	33	25	65	121	166,250 00
Chaffee	173	135	4 30	7 30	30	13	10	31		67,700-00
Cheyenne	175	111	6.79	15 15		t-		7	6	7,850 00
Clear Creek	178	155	4 52	6 03	10	9	*	15	36	56,700-00
Conejos	150	116	2 20	3 49	15	°.	+	27	39	23,555 00
Costilla	145 23	105	2 67	4 51	11	15		26	34	17,160 00
Custer	140	92.6	2 56	1 13	9	12	*	22	29	14,845 00
Delta	180	120	2 03	5 55	12	6		26	38	29,636 00
Dolores	1%0	120	2 62	3 75	-		1	¢1	LC.	10,100 00
Douglas	051	131	3 47	5 21	~	25	10	33	10	28,275 00
Eagle	178	128	2 69	4 05	9	15	1	2.2	23	25,485 00
Elbert		115	3 17	5 57		37	¢1	39	42	23,460 00
El Paso	180	132.7	3 05	5 23	-	28	11	73	126	507,210 00

Fremont	177	125	3 09	4 54		5	14	44	103	143,429 00
Garfield	100	120	3 19	5 48	6	15	t-	31	£13	39,173 00
Gilpin	190	120	4 67	5 72	1	13	-	1 5	33	54,360 00
Grand	118%3	88.3	3 30	5 33	4	61		9	* # * * * * * * * * * * * * * * * * * *	2,175 00
Gunuison	180	1011/2	3 52	5 73	10	15		66	39	43,120 00
Hinsdale	154	133	2 50	5 21	63	1	1	1.3	*****	2,000 00
Huerfano	159	111	2 12	5 21	18	-	ł	67	13	30,3×9 00
Jefferson	177	148	2 96	5 02	1-	24	19	20	72	98,497-00
Kiowa	0 0 0 1 1 1 0 1 0	141	6 13	8 25	8 8 9 9 1 1 1 1	16	6.1	18	19	13,110 00
Kit Carson	160	1151/2	4 13	6 32	21	16	1.7	<u>.</u> 1	16	22,140 00
I,ake	100	159	3 13	5 50	1	12	61	15	×5	\$2,250 00
La Plata	185	112	2 36	4 53	5	° 16	ŝ	26	39	64.060 00
I,arimer	177	138	3 02	5 03	15	31	19	65	91	10%,500-00
I,as Animas	187 4-7	11612	3 99	6 05	39	15	12	99	97	134,742 00
Lincoln	229%	22	6 21	9.18	1	12	1	11	20	193,220 00
I,ogan	175	127	4 7.5	7 05		31	¢1	37	65	23,735 00
Mesa	160	130	2 78	3 26	[*	2	÷	-10	01	53,250 00
Mineral	160	80	2 24	4 84		£		3	6	3,592 00
Montezuma	180	153	2 41	3 61	00	18	1	÷;;	26	18,951-00
Montrose	180	120	3 63	5 19	÷1	15	¢1	19	31	38,190 00
Morgan	160	140	2 77	4 63	1	17	01	20	25	25,720-00
Otero	170	150	2 31	3 74	51	13	16	31	64	93,950 00
	137	162	3 15	6 06	-	13	03	16	27	00 06F1F
	174	172	3 29	6 10	1-	17	1	97 97	34	17,672 00
Phillips	160	107	4 82	6 75	10	21	¢1		37	16,673 00

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PER CAPITA EXPENSES AND SCHOOL HOUSES, 1899-Concluded.

	dur-	-inp	toll- toll- toll-	yoe:			SCHOOI	SCHOOL HOUSES		
COUNTIES	Number of o of School ing the yea Graded Sch	Number of o of School ing the yea Rural Schoo	Average cost month for e pupil by en ment	Average cost Anonth for e pupil by aver sonsbusite	No of Sod, Adobe or Log	No. of Frame	No. of Brick or Stone	'r'otal	No. of School Rooms, both rentedand	Valuation (in dollars)
Pitkin.	180	611	\$ 1 00	\$ 6.00	6	11	-	2.1	16	\$ 69,845 00
Prowers	180	120	3 63	5 19		17	2	21	35	25,965 00
Pueblo	6.171	121	1 10	101	9	8	32	7.1	161	184,025 00
Rio Blanco	110	101	3 10	01 1	-	÷1	8	6	13	17,750 00
Rio Grande	180	129	2 75	4 62	9	16	ŝ	27	39	30,620-00
Routt.	130	03		•	80 X	÷		33	40	14,153 00
Saguache	156	126	3 01	5 42	11	11	50	31	11	25,178 00
San Juan	0×1	120	3 10	5 03		I		-	9	8,000 00
San Miguel	179	1.001	2 3×	4 52	¢1	×	-	П	18	54,458 00
Sedgwick.	0~1	114.8	3 90	11 74	9	19	-	36	67	16,770-00
Summit	180	135	4.24	6 00	01	(-		6	13	12,100 00
Teller	178	145			9	() ()		28	76	96,551-00
Washington	163	105	4 12	6 01	-	20		12	29	19,605 00
Weld	178.6	159	2 97	4 66		66	20	86	124	172,840 00
Yuma	180	100	2 23	8 10		31	•	31	34	15 535 00
Totals									:	\$ 6, (95,855 00

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PER CAPITA EXPENSES AND SCHOOL HOUSES, 1900.

2 510 28,619 516 002 SUS. 80. 건 204 8 00 \$13 in Piptary No. of Volumes Valuation (in dollars) 200.179 (6) 00 8 275 00 ()() 00.000,11 82 370 60 00 00 00.100.00 ()() \$2,150,00 7,240 (0) 26.650 (0) 8 1.474 (1.250 (17.860 (15,975 (0.18.00 57.15029,680 12,121 0.025 16 owned and No. of School Rooms, both Ξ Ξ 10 5 22 15 Ξ 26 5 5 Ξ 2 16 SCHOOL HOUSES Total 16 2 Si 8 81 52 Z 21 5 No. of Brick or Stone <u>ę</u>1 22 No, of Prame 66 21 2 16 ι--0 9 1 22 3 34) No of od, Adobe or Log 9 9 1.75 altendance 33 32 65 Ξ 5 5 16 10 61 7 3 90 pupil by average 0 ~ x = 22 22 10 12 _ Average cost per -Jusm 35 21 89 3 0 -(5) 50 I 30 00 6 60 pupil by enroll-\$1 \sim 10 21 10 -~ -22 Average cost per Mouth for each -66 of School dur-ing the veat in Rutal Schools 2 100 2 36 103 1 50 1 107 Ξ 08: Ξ Numper of days ur the year in Graded Schools SS 200 50 5 80 2 176 691 of School dur. Sumber of days COUNTIES Clear Creek Arapalioe Cheyenne Archuleta Conejos Dolores. Douglas Boulder Chaffee El Paso Costilla Custer Eagle Elbert Baca. Delta 3ent

SUPERINTENDENT OF PUBLIC INSTRUCTION.

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TABLE VIII.	PER CAPITA EXPENSES AND SCHOOL HOUSES, 1900-Concluded.
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	1 - 10 b	sysi dur- tin sla	U.28	rage sech per			SCHOOL	SCHOOL HOUSES	s		səm
COUNTIES	Number of c of school o ing the yea dog babatd	Numher of c of School o ing the yea Rutal Schoo	Average cost month for e pupil by en ment	Average cost nonth for e pupilby aver antendance	No. of Sod, Adobe or Log	No. of Frame	No, of Brick or Stone	Total	No. of School Rooms, b.dh owned and rented	Valuation (in dollars)	vo, of Volu vibraty
Fremont	178	135	\$ 3 75	\$ 6.26	11	19	11	44	66	\$ 11.502 00	1,830
Garfield	167	114	2 59	4 93	10	13	s.	31	46	58,355 00	1,103
Gilpin	190	86	3 67	7 48	1	12	1	11	36	50 235 00	3,735
Grand	129	06	3 27	4 94	Ţ	¢3		6	8	2,000 00	65
Gunnison	2:0	118	2 70	4 48	10	15	-	29	-13	42,198 00	1 201
Hinsdale	132		2 00	2 76	Ţ.		1	13	10	30,000 00	66
lluerfano.	153	601	1 69	3 11	14	13		31	17	37,867 00	663
Jefferson	180	110	2 83	1 37	13	26	61	53	17	107.382 00	1,400
Kiowa.		121	8 70	10 80		14	¢1	16	16	11.315 60	1
Kit Carson	155	111	11 2	9 73	17	1.5	13	37	16	19,755 00	:
I,ake	190	167	11	10 66	1	13		11	17	128,150 00	2,830
La Plata	160	123	2 46	4 48	9	16	9	80 1	43	75 250 00	1.162
Larimer	176	110	3 25	5 19	10	31	50	61	86	109,900 00	2,113
I.as Animas.	183	118	1 78	3 66	36	10	10	56	89	12,502 00	587
Lincoln	1.38	171	4 62	1 01		12	1	13	19	18,320 00	569
I.ogan	212	123	66 1	6.98	~	31		10	61	25,865-00	308
Mesa.	162	134	2 92	4 39	6	28		39	12	87,250 00	2,000

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	358	2.117	0.5	-	989	1.068	0	1.12	165	1,350	065	007	125	198	276	1.218	320	262	1,385	125	4.056	2:30	87,419
	19.890 00	39,965-00	25.250 00	95,750 00	43.100 00	17.650 00	19,175 00	70,371_00	33,739 00	181,020 00	28 950 00	16,500 00	12.115_00	26,951 00	10,300 00	56.6*8.00	17.255 00	10.120 00	175,825 00	69.014 00	174,733 00	15.205 00	\$ 7,125,240 00
	25	33	33	68	27	36	34		37	155	-10	11	<u>;</u>	11	9	17	26	21	107	67	1:30	35	3 150
	23	19	28	32	16	23	30	20	12	î.	26	11	35	38	51	11	26	6	66	23	84	67	1,753
	1	¢١	¢1	18	î،	1	1	-	30	33	10	£Ç.	0	-		1	¢١		50	-	21		380
	17	15	18	12	13	(i(;	20	11	16	31	16	-	~ ~	21	¢1	9	19	1-	21	ŝ	63	29	1,01
	1.7	c.1	30	\$1	1	10	6	12	0	×	13	1-	27	16	-	1	17	\$1	6	1			363
1	3 46	2 95	3 77	3 89	5 75	01 1	3 35	6 93	6 05	5 70	07 1	6 21	4 75	5 18	6 45	4 66	8 80	3 70	5 70	8 11	4 78	7 03	\$ 5 43
1	2 26	2 07	2 39	2 15	3 15	4 50	2 15	3 93	3 72	3 36	2 20	3 67	3 36	2 59	3 31	2 74	6.80	2 12	3 55	5 78	2 91	5 12	\$ 3 48
0.0	120	130	165	149	151	118	123	132	128	124	102	123	16	133	120	146	(.c.)	131	131	112	160	108	121
101	120	120	170	175	150	177	160	178	166	183	180		134	170	180	158	180	178	173	170	175	171	160
WINGRAL	Montezuma	Montrose	Morgan	Olero	Ouray	Park	Phillips	Pitkin.	Prowers	Pueblo	Rio Grande	Rio Blanco	Routt	Saguache	San Juan	San Miguel	Sedgwick	Summit	Teller	Washington.	Weld	Yuma	Total

RECEIPTS, 1899.

		RECEIVED DURIN	IG THE VEAR ENI	RECEIVED DURING THE YEAR ENDING JUNE 30, 1899.	
COUNTIES	Amount on Haud July 1, 1898 held by County and District Treasurers	From Geueral Fund by Apportioument	From Special Tax	From all other Sources. Includ ng Funds Raised for Library and Temporary Loans	Total Receipts
Arapahoe	\$ 70,182 10	\$ 253.434 88	\$ 541,106 46	\$ 120.407 72	\$ 985,131 16
Archuleta	198-97	2,687 23	1,340 30	132 41	4,358 91
Baca	869-27	1 396 58	2,487 32	792 55	5,545 72
Bent.	3,984 45	1.429 01	4,848 84	2.322 77	15,585 07
Boulder	8,314 60	21.529 47	60,496 21	24.417 59	114.757 87
Chaffee	7,464 39	5,550 98	22,726 82	2,389 34	38,131 53
Cheyenne	428 12	2,860 52	4.209 45	6 43	7,504.52
Clear Creek	11,417 44	5 260 25	28,419 90	2,941 38	48,038 97
Conejos	4.630 62	4.739-37	9,218 23	1.163 15	19.751 37
Costilla	6,438 75	4,172 70	6,925 13	2,619 29	20 155 87
Custer	1 821 54	2,155 72	5.229 56	650 05	9.859-87
Delta	3,850-36	6,330 51	10.003 86	4,585 21	21,769-94
Dolores	351.93	69 116	1,935 09	138 41	3.367 15
Douglas	5,176 11	9,860 20	7,776 01		22 812 65
Eagle	5.057 11	2,123 29	9.713 38	699 10	17.563 77
Elbert	3,570 84	7,219 50	5,359 82	591 69	16,741 85
El Paso	32,507 35	23,462 90	132,854 90	11,567 72	203,392 87

Fremout	12,349 32	17,156 34	50,665 58	13,711 05	93,912 29
Garfield	4,397 01	5,095 08	19.675 21	637 93	29,505 26
Gilpin	6,346 97	6,937 81	18,470 39	275 70	32,130 90
Grand	1,017 03	1,210 33	3×8 04		2.675 40
Gunnison	7,602 70	3,732 40	15,528 06	2,269 53	29,132 69
Hinsdale	637 98	2,525 64	2,045 14	2,261 91	7,473 67
Huerfano	01-106°2	8,020 31	11,671 67	1,879.98	27,563 36
Jefferson	1,781 92	21,905 95	15,744 16	383 70	12,815 73
Kiowa	1,481 79	2,066 00	4,327 98	72 00	77 716,7
Kit Carson	6,188-93	3,603 25	5,812 67	2.018 60	17.623 45
I,ake	29,621-98	11.608 29	30,014 68		71,274 95
I,a Plata	2,999 61	11,944 00	19,790 10	12,725 27	50, 158, 98
Larimer	8,573 89	23,383 00	29 801 43	311 13	62,009-75
I,as Auimas	11,096 91	15,869-08	15,335 05	5,432 33	77,733 37
I,incolu	1,801 91	4.202 19	4,023 01		10.030 14
J.ogan	8,041 14	6,872-00	10,636 47	1,693 10	27,212 71
Mesa	16,800 21	14,795-99	37,705 87	11,638 53	80,943 60
Mineral	687 71	1,391 53	5,039 11		7,118 35
Montezuma	4,172 01	3,695 16	5,930-67	2,694 22	16,492 06
Montrose	5,173 53	3,806 63	11,970 11	3,300 84	27.251 11
Morgan	3,334 93	5,986 47	11,272 30	1.742 42	22,336 12
Otero	8,429 99	11,817 3.1	21,588 98	7.246 55	55 112 86
Ouray	6,373 50	5,230 22	15,007 93	118 87	26,730-52
Park	7,474 61	5,491 59	7,036 75		20.002 95
Phillips	3,440.92	2,870 60	5,544 73	1,154 51	13,010 76
The second secon				-	

		RECEIVED DURI	RECEIVED DURING THE YEAR ENDING JUNE 30, 1899	ING JUNE 30, 1899.	
COUNTIES	Amount on Hand Ju'y 1, 1898, held by County and District Treasurers	From General Fund by Apportionment	From Special Tax	From all other Sources, Including Funds Raised for Library and Temporary Loans	Total Receipts
Pitkin	\$ 4,025 43	\$ 9,593 75	\$ 25,755 28	\$ 1,442 56	\$ 40 817 02
Prowers	3,502 28	7 484 07	9,406 08	2,782 01	23.174 44
Pueblo	32.923 76	42,861 03	98,177 49	38,469-84	212,432 12
Rio Blauco	764 50	3,632 21	2,097 59	2 64	6,496,94
Rio Grande	7,283 51	4,442 97	15,544 28	7,254 19	34 524 95
Routt	4.520 91	5,089 76	4,062 48		13,673 15
Saguache	4.181 16	4,521 07	10,511 36	1,933 80	21,147 39
San Juan	2,873 30	173 11		6,307 54	9,353 95
San Miguel	5,289 30	6,811 91	10,156 88	4.723 98	26,982-07
Sedgwick	4 648 34	1,697 92	5,478 98	1,011 04	12 836 28
Summit	3,757 38	2,816 37	4,247 88	945 74	11,767 37
Teller	Incomplete				* 104,704 49
Washington	1,505 97	1,572 36	9,565 33		12,643 66
Weld	18,296 46	30,792 50	43,422 96	7,887 78	100,399 50
Yuma	5,100 03	3.928 45	5,431 95	181 48	14.641 91
Total	\$ 433 820 87	\$ 693.819 50	\$ 1,509,568 91	\$ 322,969 51	\$ 2.960,178 79

TABLE IX. RECEIPTS, 1899—Concluded.

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TWELFTH BIENNIAL REPORT

* Not included.

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RECEIPTS, 1900.

ECEIVED DURING THE YEAR ENDING JUNE 30, 1900

		RECEIVED DURI	RECRIVED DURING THE YEAR ENDING JUNE 30, 1900	DING JUNE 30, 1900	
COUNTIES	A mount on Hand July 1, 1890, held by County and District Treasurers	From General Fund by Apportionment	From Special Tax	From all other Sources, Including Funds Raised for Library and Temporary Loans	Total Receipts
Arapahoe	\$ 56,556 31	\$ 307.058 81	\$ 351,669 21	\$ 77,136.92	\$ 992,412 25
Archuleta	1,601 41	2,155 11	2,998_01		6,787 59
Baca	2,226 81	1,337 63	1.281 80	295.94	5.112-15
Bent	2,515 81	4,465 38	6,778-99	1,989 87	15.750 08
Boulder	11,357 90	26,438–52	62,167 29	11,351 35	114,318,00
Chaffee	8,819 41	5.740.20	21,970 79	62 261.1	40,758 19
Cheyenne	82 126	2,022.57	2.065 72	\$ 35	5,031 40
Clear Creek	11,271 19	5,97.6 08	27,938,09	1,333 68	52,502 01
Conejos	3,328 30	5,671-93	10.952 78	6,36% 01	26.324 05
Costilla	7,896 22	4,754-80	10,993-92	54.84	23,699 78
Custer	2,561-91	2,681 20	5,724 58	1,018 61	11,989-30
Delta	4,803-61	6 821 71	12.367 17	4,600 26	28,392 73
Dolores	1.062 48	1,035 27	2,784 29	764-64	5,649-68
Douglas	6,192-29	8,929-94	7,861 33	332 89	23,316 65
Hagle	4,401 54	2,743 15	11,467 33	2.209 \$9	20, \$21.91
El Paso	23,956 23	35,861 26	139,612 62	25,313 76	224 746 87

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RECEIPTS, 1900-Concluded.

		RECEIVED DURIN	RECEIVED DURING THE YEAR ENDING JUNE 30, 1900	ING JUNE 30, 1900	
COUNTIES	Amount on Hand July 1, 1899, held by County and District Treasurers	From General Fund by Apportionmeut	From Special Tax	From all other Sources, Including Funds Raised for Library and Temporary Loaus	Total Receipts
Elbert	\$ 3,996 38	\$ 12,506 46	\$ 9,137 65		\$ 25,640 49
Fremont	18,486 73	17,495 36	61,276 98	\$ 227 60	87,486 67
Garfield	4,601 68	5,102 98	19,323 30	276 51	29,304 47
Gilpin	6,219 89	7.147 60	16,042 68	519 52	29,929 69
Grand	916 41	1,414 39	69 629		2,990 49
Gunnison .	8,321 85	5,060 00	15,810 94	3,179 34	32,372 13
Hinsdale	694 12	1,846 92	2,085 00		4,626 67
Huerfano	9,321 83	8,361 79	11,164 75	4,159 67	33,208 04
Jefferson	5,940 96	21,011 : 8	17,285 13	9,881,42	54,119 09
Kiowa	2,507 84	2,097 48	3,896-51	115 44	8,617 27
Kit Carson	6,496 15	4,850 78	8,112 09	2.047 30	21 506 32
Lake	17.347 62	19.070 05	32,141 21	61,231 21	129,810 09
La Plata	6,351 80	15,939 20	18,416 15	9,574 55	50,281 70
Larimer	13,847 39	25,732 00	30,751 42	565 47	70,896 28
I,as Animas	18.292 73	16,525 77	36,640 62	9,191 94	80,651 06
Lincoln	2,419 97	2,541 12	3,297 73		8,261 82
Logan	9,464 67	5,801 59	10,908 21	11 00	26,218 47



HIGH SCHOOL, COLORADO SPRINGS.

87,565-75	9.740 35	69 699 ST	29,00,0-09	23,078-71	63.634 73	26.137 37	06 111.00	12.018 93	56,919-58	31,399 65	213,580 00	31,008-40	6,992-29	16.016 95	21,586-36	9,565 58	31,977-06	11,735 73	11,782,17	21 902,122	11,873-89	120 808 56	14.691 20	\$ 3,382,958 50
22,030 94	2,073 19	2,775 93	3 223 03	1,990.08	7,732 95	1,101.33		82 116	17,263 03		18,576 64	1.63× 01	34	623-36	1.171 52	5,934 32	5,112-92	314 78	909 SO	65 023 96	3,340 11	16,876 62	1,536.96	\$ 120,689.94
32,071 56	1,152 83	5,771-86	15,607 39	13, 168 965	28,291 85	11.250 52	7,938-54	1,770 88	21,576-97	17.607-97	127,827 18	14,289 52	2,712 11	5,373-99	11,061 38	108 80	10,369 82	5,662-67	4,884 25	139,529-76	6,813 66	50,963 33	5,759 15	\$ 1,708,387 63
12,008 62	1,588 23	1.233 26	6 171 71	1,505.30	10 680'11	5,163-71	7 261 01	3:007-50	13,618 66	T,885 65	50,295-21	5,957-37	3,337 11	5,691 81	5,535-61	215 31	7,625 05	1,962-35	3,573 57	14,165-59	1,905 51	30.873 70	3,025 85	\$ 803.249.24
21,454-63	1,926 10	5,885-64	3,997-93	3,114 37	13,017 89	8,621 58	6,945 35	3,295 97	4,431-92 .	5,906-03	16,880-94	6,213 50	942-40	4,327 76	3,217 85	2.947 03	8,869-27	3.855 93	2,415-52	5,490-11	2,754-61	22 094 91	4,366-24	\$ 411,631.72
Mesa	Mineral	Montezuma	Muntrose	Morgan	Otero	Ouray	Park	Phillips	Pitkin	Prowers	Pueblo	Rio Grande	Rto Blanco	Routt	Saguache	San Juan	San Miguel.	Sedgwick	Summit	Teller	Washington	Weld	Yuma	Total

DISBURSEMENTS, 1899.

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			PAID DURI	NG THE YEAR
COUNTIES	For Teachers' Salaries	For Fuel, Rent Iusurance and all Current Expenses	For Sites, Buildings, Furniture, Permanent Improve- ments	For Library Purposes
Arapahoe	\$ 491,002 63	\$ 192,562-34	\$ 99,375 58	\$ 18.940 40
Archuleta	2.030 71	1.078 53		
Baca	274519	201 32		
Bent	7,228 83	2,586-39	830-99	
Boulder	56,025 25	11,229 46	8,904 53	35 00
Chaffee	25,619 17	2,072 96	1,328-65	
Chəyenne	3,833 00	2,383 60	90 89	
Clear Creek	21,859 69	5,087 56	1,900-90	750-00
Conejos	11,020-89	3,154-71	242 75	12 50
Costilla	7,778 01	1,326-58	916-60	
Custer	5,042 00	1,163-37	302 21	
Delta	11,308 13	2,258 77	2,580-75	
Dolores	1,970-00	553-19	302 46	
Douglas	11,731 45	2,021 55	2,810 40	
Eagle]	9,566-04	2,062 39	379-81	100-00
Elbert	8,427 07	1,968 86	, 595-79	
El Paso	108,658 35	28,749-01	25,587 04	922-38
Fremont	44.151 88	11,502 66	3,320 50	50 00
Garfield	17,272 20	5,829 97	1,605 47	35 43
Gilpin	19,127 25	5,064 74	539-55	92 74
Grand	1,478 50	91-91	231 63	
Gunnison	13,533-15	3,592 49	1,320 05	• • • • • • • • • • • • • • • • • • • •
Hinsdale	3,632-96	676-26	26 75	
Huerfano	12,327 46	3,311 69	204 86	
Jefferson	26,820-90	5,706-05	3,126-73	
Kiowa	3,857 25	777 15	155 32	
Kit Carson	7,861 45	1,912-80	90-03	
Lake	32,791-77	9,970-10	13,981-15	
La Plata	21,334-35	4,494 60	3.370 0 9	18-00
Larimer	35,797-03	9,171 42	2.735-01	S 66

DISBURSEMENTS, 1899—Continued.

ENDING JUNE 30, 1899.

Redemption of Bonds	For Interest on Bonds	For Temporary Loans and Interest Thereon	For Interest on Registered Warrants	For Abatements and County Treasurers' Collection Fees
\$ 53,500.00	\$ 29,146 27	\$ 34,878-19	\$ 2,327 15	\$ 6,842 29
	120-00	••••••		
1 20	192-98		138-29	11 18
1.688 16	832-90	279-19	28/40	3 61
4,622 33	3,778-99	1,043 58	2,391 24	807-97
462 19	1,026 90		728-30	
			166-30	96-00
1,456 96	756 73	8 39	18 08	409 07
	1,064 89		696-98	276 60
1.000 00	923-63		72 87	169 ×0
	261 44	102 66	389-12	75 81
2,000 15	1,229 36		480-36	32 08
				26 46
			169 70	156 51
1,000 00	526 65			888-35
637 04	601-98		341 77	
	10,615 00	1,067 17	1,827-68	3,325 13
6,700 00	2,618 07	2,161 81	3,763-31	762 68
			421 48	202 24
	66 00	813 87	50 56	56 30
220 00	1,901 83		141 50	177 36
1,000 00	456-98	40 75		33 11
1,400 00	575 92	230 00	72 67	200 74
		•	592 06	200 14
			165-76	261 59
	671 00	458-11	122 81	
				377 43
4,700 00	1,581-62	8,528 03	80 59	
		161 46	760-40	62 28

DISBURSEMENTS, 1899-Continued.

	PAID DURING THE YEAR ENDING JUNE 30, 1899.						
COUNTIES	Tota! Paid Out During Year		Balance in Hands of County (and District) Treasurer to the Credit of District June 30, 1899		Amoun District Warrant Registere and Unpa June 30, 1	is ed aid	Warrants Not Registered aud Other Forms of Indebtedness
Arapahoe	\$ 928,57	4 85	\$ 56,556	31	\$ 77,570	77	\$ 30,226 01
Archuleta	3,22	944	1,129	67	2,031	20	
Baca	3.29	0 16	2,255	56	4,164	65	· · · · · · · · · · · · · · · · · · ·
Bent	13,47	8 47	2,106	60	2 697	77	132 30
Boulder	88.83	8-35	25,919	52	34 896	66	142 \3
Chaffee	31,23	8 17	6,893	36	10,757	00	
Cheyenne	6,56	9 79	934	73	920	75	
Clear Creek	32,24	7-38	15,791	59	100	CO	35 00
Conejos	16,46	9-32	3,282	05	18.871	97	108 00
Costilla	12,18	7 49	7,968	38	1,433	21	646 37
Custer	7,33	6 61	2,523	26	7,790	13	44 20
Delta	19,88	9 04	1,880	90	5,039	75	
Dolores	2,85	2 11	515	04	974	48	
Douglas	16.88	9 61	5,923	04	3,903	72	
Eagle	14,52	3 20	3,040	57	1,853		
Elbert	12,57	2 51	4.169	34	4,579	24	
El Paso	180,75	1 76	22,641	11	15,791	60	313-36
Fremout	75,03	91	18.881	38	66,470	90	
Garfield	25,36	6 79	4,138	47	5,739	36	112 33
Gilpin	25,81	1 01	6,219	89	791		158-29
Grand	1,80	2 04	873	36			
Gunnison	20,88	3-38	8,246	31	1,347	71	356-55
Hiusdale	5,86	6 81	1,606	86	2.106	05	3 00
Huerfano	18,32	3 34	9,240	02	6,342	71	1,031 72
Jefferson	36,44	5 88	6,369	85	40,320	78	63-88
Kiowa	5,21	7 37	2,730	40	1,119	76	60 00
Kit Carson	11,11	6 20	6,507	25	2,281	29	284 46
Lake	57,12	3 75	17,151	20	536	90	
La Plata	11,10	7 18	6,351	80	1,987	01	2.841 49
Larimer	48,69	5 66	13,404	09	41,849	31	21,059-10

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DISBURSEMENTS, 1899-Continued.

	PAID DURING THE YEAR ENDING JUNE 30, 1899					
COUNTIES	For Teachers' Salaries	For Fuel, Reut, Iusurance aud all Curreut Expenses	For Sites, Buildings, Purniture, Permanent Improve- ments	For Library Purposes		
Las Animas	\$ 38,019 23	\$ 9,840.07	\$ 1,020 02	\$ 1,167-66		
Lincoln	4,985-00	1,709-92	660-00	85-00		
Logan	11 332 35	3,822-68	1,019 13	5 <u>2</u> -26		
Mesa	27,236 00	12,547-51	5,506-48			
Miueral	5,500 00	98-24				
Montezuma	7,762 34	1,548-41	514 08			
Montrose	12.027 66	5,951-18	237-37			
Morgan	10,724 20	3,660-54	2,024-76			
Otero	23,348-76	9,856-52	5,453-81	47 50		
Ouray	13,044 65	3,168 47	1,769-63	18 00		
Park	10,435 00	1,509-54	1.198 11			
Phillips	5,655 68	1,358-47	731-09			
Pitkiu	21,182 64	8,070 11	1,094 72	115-62		
Prowers	8,990-60	3,804 09	1,231 01	13-70		
Pueblo	103,168 95	38,219-65	19,472-30	33 25		
Rio Blanco	4,289-09	268-96	836-55	3 50		
Rio Grande	14 972 35	3,285-53	2,440-65	9 25		
Routt	7,387 45	1,276 81	636-37			
Saguache .	10,286-39	2.260 44	2,222 53			
San Juan	1,335-00	1,367 56	656-36			
San Miguel	8,918 25	4,333 86	430-89	\$1.35		
Sedgwick	5,813 0 0	1,176 24	622 16	3 00		
Summit	5,329-48	2,274 25	339-10	75-00		
Teller.		•				
Washington	5,299-15	1,617 15	215 05			
Weld	51,615 99	14,037 32	5,891 09	73 11		
Yuma	6.622 00	1 439 59	745 60			
Total	\$ 1,454.116 77	\$ 461,066 14	\$ 236,825 38	\$ 22,742.00		

DISBURSEMENTS, 1899-Continued.

	PAID DURING THE YEAR				
COUNTIES	Redemption of Bouds	For Interest on Bonds	For Temporary Loans and Interest Thereon	For Interest on Registered Warrants	
Las Animas	\$ 2,482 55	\$ 6.345 58	\$ 26 68	\$ 153 84	
Lincoln				170 25	
Logan	1.000 00	564 45	40 27	93 04	
Mesa	7,036 00	3,486-58			
Mineral					
Montezuma		941 70		305-89	
Montrose	2,722 06	1,728 98		471 70	
Morgan	1,067 50			660-04	
Otero	3,000-00	3,658-76		791 20	
Ouray				182-08	
Park				16 10	
Phillips	1.005 00	524 10		212 37	
Pitkin	2,000 00	2,931 00		231 68	
Prowers	1,505 58	953 43		487-92	
Pueblo	14,000 00	10,122 75		6,672 62	
Rio Blanco		6 37	34 73	47 42	
Rio Grande	42,000 00	1.617 74		555-30	
Routt	57-34		130 87	9 13	
Saguache	1,507 46	1,088 55	107-18	117 34	
San Juan					
San Miguel.		2,065 00		2 259 65	
Sedgwick	500-00	461 85	166 16	268 16	
Summit	1,011 49	270 55			
Teller .					
Washington	994 00	1,315 60		201-26	
Weld	2,056 22	2,317-99	800-00	782-04	
Yuma	915-83	206-00		40-69	
Total	\$ 127.449-06	\$ 99,586-02	\$ 51,079 10	\$ 30,788-33	

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DISBURSEMENTS, 1899-Concluded.

ENDING JUNE 30, 1899.

For Abatements and County Treasurers' Collection Fees		Balance in Hands of County (and District) Treasurer to the C edit of District, June 30, 1899	Amount District Warrants Registered and Unpaid June 30, 1899	Warrants Not Registered and Other Forms of Indebtedness	
\$, 383 89	\$ 59,439-42	\$ 18,293 95	\$ 12,729-12	\$ 276.95	
	7,610 17	2,419 97	2,451 69		
118 77	18,042 95	9,199-76	1 417 73	10 00	
1,115-53	59,958-10	20,985-59	9,500-36		
50/38	5,648-62	1.469 73	9,407 42	2,817 53	
1 79	11 074 21	5,417 85	4.213-63	80 08	
	23.250 18	4,0.0 93	7,029-79		
	18,137 04	4,199-08	6,825-80		
268 93	46.425-48	8,687-38	167 68		
1,156-16	19,338-99	7,391 53	3,052 45	455 0	
	13.158-78	6,841 17	1.101 93	154 2	
16 42	9 503 13	3,507-63	2,758-87		
402 69	36,028 46	4.785 56	1,789-61	1,136-3	
60 43	17,046-76	6,127-68	11 222 17	122 0	
3,822 11	195,511 63	16,920 49	97,617 82	892 5	
26 84	5,513 46	983-48			
1,001 66	28,082 48	6,442 47	7,053 00	90-0	
	9,497 97	4 175 18	2,247 36	81 0	
121 38	17,711 27	3,436 12	3,586 95	170 5	
48 00	6.406 92	2,947-03		55 5	
	18,089-03	8.893-04		73 1-	
59-75	9,070-32	3,765-96	3,777-56		
51 98	9,351 85	2,415-52		450 0	
	103,448 01	1,256 48			
103 90	9,782 11	2.861 55	2,127 54	120 0	
719-88	78,293 64	22,105 86.	19,520 00	8,959-6	
74 10	10.043 81	4,598-10	772 89	150 0	
\$ 25,095 25	\$ 2,508,748 06	\$ 451,430 73	\$ 521,040 70	\$ 76 773 0	

DISBURSEMENTS, 1900.

PAID DURING THE YEAR

	PAID DURING THE YEAR					
COUNTIES	For Teachers' Salaties	For Fuel, Rent, Insurance and all Current Expenses	For Sites, Buildings, Furniture, Permanent Improve- ments	For Library Purposes		
Arapahoe	\$ 532,652 89	\$ 165,166 55	\$ 125,938 95	\$ 6,849 23		
Archuleta	2,626 21	865-25	1,100 46			
Baca	2,538 70	198 09				
Bent	7,787-37	2,809 60	537 79			
Boulder	62,002 98	15,623 80	10,020 41	31 47		
Chaffee	18,913 54	5,507-97	267 95	21 00		
Cheyeune	2.420 00	1.422 47	517 46			
Clear Creek	21,590 00	6,733-29	5,437 02	280-00		
Conejos	9,682 94	2,886-83	1,904 15	18-53		
Costilla	8,933-63	1,659 44	918-28	····· ···· ·		
Custer	6,745 20	1,039-34	628 02			
Delta	15,654 78	2,441,11	2,778-32	97-09		
Dolores	2,436 25	00 98	679 60			
Douglas	11,626-23	2.276 59	2,912 06			
Eagle	9,294 35	2,153 59	256 01	54-35		
El Paso	106,557 09	35,801 31	6,574-26	165-67		
Elbert	10,610 33	7,180-68				
Fremont	49,242-09	11,378-16	3,572-49	6 05		
Garfield	16,899-60	3,386 04	1,525 70	157-94		
Gilpin	20,278 75	1,683-79	1,011 99			
Grand.	1,809-25	225 35				
Gunnison	14,757-45	3 910 20	597-77	118-65		
Hinsdale	3 019 87	720-27	3 75	• · · · · · · · · · · · ·		
Huerfano	16,637-23	2 932 26	861-88	33-76		
Jefferson	28,406-60	5,297 92	12,504 43			
Kiowa	1.121 39	1.386-20	336 40	95-52		
Kit Carson	8,893-72	2,753-12	410 44			
Lake	34 114 65	11,210 39	51,543-80	71 10		
I,a Plata	23,155-62	1,994-75	4,870-41	84-00		
Larimer	41 470 26	11,477-54	2,526-62	57-00		
Las Animas	11,903-58	8,110-19	2,033-57			

DISBURSEMENTS, 1900-Continued.

ENDING	JUNE	30, 1900
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Redemption of Bonds		For Interest on Bonds	For Temporary Loans and Interest Thereon	For Interest on Registered Warrants	For Abatement and County Treasurers' Collection Fees
ş	8,258-38	\$ 37,904-82	\$ 44,281-01	\$ 2,488-01	\$ 7,004 72
		240 00			
		95-00		346-50	
	781 07	682-10	=	130-12	21 68
	7,486 05	3,517-77	238 23	2.078/26	913-87
	100 00	2,404 50		64-38	
				74-16	
	4,448-00	554-34	100-00	2 10	150-04
	1,671 33	1,397-62	321 65	662 11	351 35
	1,200 00	707-87	152 50	102 37	141-53
	318 06	304 65		437-98	68-74
	1,746 49	1,049-93		657-14	25 72
		800 00		119-90	
			94 42	225 93	276-23
	1,418 04	507 15	1 19	184-62	111-95
	6,000 00	12,207 30	4,120 18	1,189-23	952-36
	4,700 00	3,002 52	140 71	1 177 88	629 03
			119 98	285 40	188-34
		64 00	960-04	130 50	101 84
		1,716 80		117 29	188 60
					20/85
	644 00	756-00		256-65	68 50
				714-56	268 60
				248 15	9 74
	1,500 00	630-50	100 07	167 43	
		1,125 00	12,149 20		348-07
	2,338 45	2,557 81	2,841 49	125 80	1,619 79
	359-92	437 89	158 85	725 78	6 30
	950 00	5,321 39	214 87	196 99	250 19

DISBURSEMENTS, 1900—Continued.

	PAID DUE	RING THE YEA	ar Ending J	UNE 30, 1900	
COUNTIES	Total Paid Out During Year	Balance in Hauds of County (and District) Treasurer to the Credit of District. June 30, 1900	Amount District Warrants Registered and Unpaid June 30, 1900	Warrants Not Registered and Other Forms of Indebteduess	
Arapahoe	\$ 930.844 59	\$ 61,567 66	\$ 66,427 75		
Archuleta	4,831 92	1,955 67	3,006-28	- 3,000 00	
Baca	3.178 29	1,963 89	3,511 52		
Bent	12,749-73	3,000 35	5,285 81		
Boulder	101,912 84	12,405 22	28,854 57		
Chaffee	27,279 34	13,478 85	15,370 04	129-20	
Cheyenne	4,434 09	597 31	1,066-55		
Clear Creek	39,624 79	12,877 25		100 00	
Conejos	18,896 51	7,427 54	24,897 90		
Costilla	13,815 62	9,884 16	954-35	205 60	
Custer	9,541 99	2,447 31	6,964 74	6,710 00	
Delta	24,450 58	4,142 17	7,805-28		
Dolores	4,536 73	1,112 95	3,159 75		
Douglas	17,411 46	5,905 19	4,041 37		
Eagle	13,991 28	6 830 63			
El Paso	173.567 40	51,179 47	8,745 22	70 00	
Elbert	18.091 01	7,549 48			
Fremont	77,148 93	20,337 74	73,620 20	1.617 01	
Garfield	22,563 00	6,741 47	8,416 42	667-36	
Gilpin	27,230 91	2,698 78	73 00	975-05	
Grand	2,034 60	955-89	811 69		
Gunnison	21,406 76	10,965 37	2,104 97	256-00	
Hinsdale	3,764-71	861 93	3,144 58		
Huerfano	22,193-28	11,014 76	4,578 40		
Jefferson	47,192 11	6,926-98	11,145 90		
Kiowa	6,567 40	2 049 87	3,087 03		
Kit Carson	14 455 28	7,051 04	2,230 25	13-40	
Lake	143.592 21	46,217-88	550-20		
La Plata	42,588-12	7,693 58	246-90	3,077 11	
Larimer	57,220 16	43,676 12	13,260-66		
Las Animas	59,311 08	21,339-98	10,419 54		

DISBURSEMENTS, 1900-Continued.

	PAID DURING THE YEAR ENDING JUNE 30, 1960						
COUNTIES	For Teachers' Salaries	For Fuel, Rent, Insurance and all Current Expenses	For Sites, Buildings, Furniture, Permaneut Improve- ments	For Library Purposes			
Liucoln	\$ 5,441.25	\$ 653-03					
Logau	12,575 35	3,830 12	\$ 1,086-94	\$ 14.85			
Mesa	31,223 89	7,889-60	20,716 76	893-08			
Mineral	4,613-31	569 11	399-08				
Moutezuma	7,532 52	1.134 06	790-68	50-83			
Montrose	12,475-00	6,063-84	1,234 57	25-00			
Morgan	11 605 15	3,122 77	1.848 07				
Otero	30,666 41	9,963 13	3,521 51				
Ouray	13,387 10	3,200 49	549-38	48 00			
Park	11,716 50	3,074 53	507 01				
Phillips	5,930-33	1.175 46	263 85	1 85			
Pitkin	20,837-78	7,295 32	1,895-00	101 85			
Prowers	9,582 89	3,851 30	6,124 95	39 48			
Pueblo	104,299 47	35,945 59	21,638 71	227 56			
Rio Grande	15,910 00	2,925 50	1,340 18				
Rio Blanco	4,782 00	\$81 99	201 40	7 25			
Routt	8,281 03	2,205 04	739-12	35 00			
Saguache	11.254 57	1,741 53	2.149 79				
San Juan	4,536-25	986-15	1,696-08	277 81			
San Miguel	9 955 15	5,103 01	2.048 65	57 50			
Sedgwick	5,591 97	1,704 02	502-81	50 00			
Summit	6,204 25	1,948 65	1				
Teller	74,095 85	30.161 11	87,461 39				
Washington	6,290-26	1,595-64	244 55	61 50			
Weld	61,978-87	16,490 31	12,781-62	102 19			
Yuma	7,061 62	1,782 50	718 00	7 00			
Total	\$1.635,011 35	\$ 485,657 17	\$ 413,033 09	\$ 10,152 11			

DISBURSEMENTS, 1900—Continued.

	PAID DURING THE YEAR					
COUNTIES	Redemption of Bonds	For Interest on Bonds	For Temporary Loans and Interest Thereon	For Interest on Registered Warrants		
Lincoln				\$ 72.91		
Logan	\$ 1,040-00	\$ 951-55		100 21		
Mesa	3,149 50	254 15	\$ 5,001 70			
Mineral		700-00		51		
Montezuma	3,274 42	971 55		198-66		
Montrose	848 10	1,373-70	27 15	70 28		
Morgan	1,535 27			583-83		
Otero	8,214 33			1.243 75		
Ouray	812 72	253 63		253 53		
Park		·····				
Phillips		466-00		163-20		
Pitkin	16,000 00	1,330-67	1,066-36	181 21		
Prowers	1,000 00	675-83		629-78		
Pueblo	7,500-00	8,978-85		6.524-53		
Rio Grande	2,000-00	1,174 53		576-27		
Rio Blanco			23 04	4 20		
Routt		261 00	79-97	26-90		
Saguache	100 00	659-06		122 90		
San Juan						
San Miguel		2,551 00	1,710 34			
Sedgwick		330 00	36 17	353 70		
Summit		220 00				
Teller	6,624 62	6,211 81		6 575 86		
Washington	1,692 03	1,511 02		181-69		
Weld	1.811 21	3,613 69	2,541 70	1,588-55		
Yuma	1,163 18	311-00		37-91		
				4 05 200 05		
Total	\$ 100,685 20	\$ 110,287 63	\$ 76,480 85	\$ 35,699 85		

TABLE XIL

DISBURSEMENTS, 1900-Concluded.

ENDING JUNE 30, 1900

For Abatement and County Treasurers' Collection Fees	batement Total nd County Paid Out 'reasurers' During Collection Year		tement Total County County Paid Out (and District) isurers' During Treasurer ection Year to the Credit		Amount District Wariauts Registered and Unpaid June 30, 1900	Warrants Not Registered and Other Forms of Indebtedness	
	\$ 6,167-19	\$ 2,094-63	\$ 4,168-91				
	19,599-02	6 619 45	1,898-70				
627-64	69,756-32	17.809 43					
55-44	6,381 45	3 358 90	14 542 62				
1 56	13.954 28	4.715 41	8,562 73				
195 86	22,316 50	6,683-59	5,780 37				
	18 695 12	4 383 59	7,968-78				
355 25	53,964-38	9,667-35	17,856-96				
124-45	18,629-30	7,508-07	2,656 75				
	15,598-04	6,549-86	1,507-56	\$ 147.05			
	\$,000-69	4,018-24	2,665 96	l			
146 82	49.155 04	7,764-54	2,760-27	40 60			
63-38	21,967-61	9,432-04	14,215 58	490 42			
4,447 00	189,561 71	24,018 29	104,787 00	439-92			
435-11	24,364 59	6,733 81	7,718 32				
26 45	5,926 33	1.065-96	2,226 13				
5 07	11.633-10	4,383-85	3,441 64				
206-68	16,234 53	5,351 83	3,457-64				
	7,496 29	2,069-29	65 00				
	20,925 65	11,051 41		6 00			
118 23	8,686 90	3,048 83	3,099 11				
57 85	8 430 75	3,351 42	1,066 15				
3,388 72	214 519 36	9,690-36	57,327 25	16 00			
117 33	11,694 62	3 179 27	1,100 45	139 20			
2.179-36	103 087 53	17,721 03	15,198 38	3,280 41			
76 05	11 160 26	3,530 94	780-39	20 00			
\$ 27,326.26	\$ 2,894,333 51	\$ 488,624.99	\$ 598,630 52	\$ 22,726 33			

SCHOOL BOND ACCOUNT, 1899.

	SCHOOL BO	ND ACCOUNT	Assessed	
COUNTIES	Amount School Bonds Issued This Year	Amount School Bonds Outstanding	Valuation of Property in the District	
Arapahoe	\$ 40,000 00	\$ 594.200.00	\$ 69,584,100 00	
Archuleta		3,000 00	356,784 00	
Baca		4,500 00	149,920 00	
Bent		11,000 00	831,091 00	
Boulder	14,000 00	70,800 00	5,369,412 00	
Chaffee		33,300 00	2,149,111 00	
Cheyenne			782,237 00	
Clear Creek		12,720 00	2 081,225 00	
Conejos		18,115 00	1,663,790 00	
Costilla		10,230 00	1,117,010 00	
Custer		6,970-00	637,500-00	
Delta	. 700 00	10,550 00	1,091 454 00	
Dolores		10,000 00	433,880 00	
Douglas		8,000 00	1,772,146 00	
Eagle		7,400 00	1,218 284 00	
Elbert		4.500 00	1,765,121 00	
El Paso	604 40	249,127 00	11,296,080 00	
Fremont		25,220 00	4,129,702 00	
Garfield		40,700 00	1,984,051 00	
Gilpin	800 00	800 00	1,995,886 00	
Grand			253,807-00	
Gunnison		31,430 00	1,919,072 00	
Hinsdale		12,000 00		
Huerfano	3.500 00	. 6,750 00	1,421 205 00	
Jefferson			4,060,463 00	
Kiowa	1		1,016,811 00	
Kit Carson		8,700 00	879,151 00	
Lake			3,860,926 00	
La Plata	1,000 00	29,100 00	2,106 293 00	
Larimer.		91,100 00	5,463,833 00	
Las Animas		40,800 00	4,296,834 00	
Lincoln			1,137,949 00	

SCHOOL BOND ACCOUNT, 1899 - Concluded.

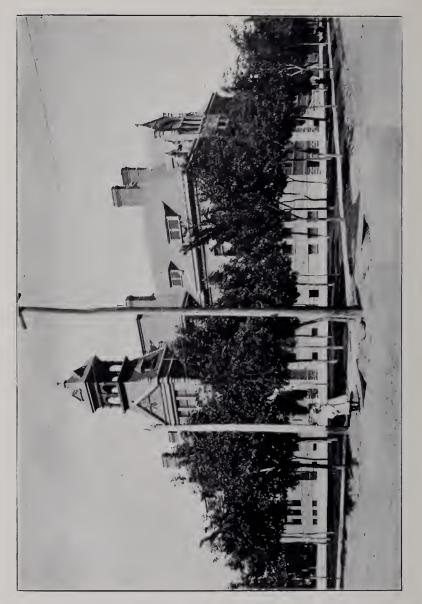
	SCHOOL BO	ND ACCOUNT	Assessed Valuation of Property in the District	
COUNTIES	Amount School Bouds Issned This Year	Amount School Bonds Outstanding		
Logan.		\$ 7,500.00	\$ 1,465,313 00	
Mosa	\$ 1,000.00	44,260 00	2,325,546 00	
Mineral		15,000-00	578,397-00	
Montezunia		12,175 00	689,257 00	
Montrose		17,050 00	1,177,200 00	
Morgan		8,500 00	1,235,993 00	
Otero		47,600 00	2.374,302 00	
Ouray .	7,000 00	33,090-00	1,146,712 00	
Park			1,493,212 00	
Phillips		6 800 00	1,642,614 00	
Pitkin		30,000 00	2,335,45 00	
Prowers		10,250 00	1,278,767 00	
Pueblo	1,200 00	349,785 00	12,842,347 00	
Rio Blanco			771,000 00	
Rio Grande	900 00	18,200 00	1,557,871 00	
Routt	2,700 00		201 956 00	
Saguache			1,945,938 00	
San Juan		7,000 00	1,354,932 00	
San Miguel		29,500 00	1,294,622 00	
Sedgwick		5,000 00	638,254 00	
Summit		2,900 00	930,179 00	
Teller		99,000 00	5,917,512 00	
Washington	6,123 00	6.110 00	630,781 00	
Weld	1,200 00	27,700 00	6,848 535 00	
Yuma		2,750 00	846,569 00	
Total	\$ 80,727 40	\$ 2,124,182 00	\$ 194,347.852 00	

TWELFTH BIENNIAL REPORT

TABLE XIV.

SCHOOL BOND ACCOUNT, 1900.

	SCHOOL BO	ND ACCOUNT	Assessed	
COUNTIES	Amount School Bonds Issued This Year	Amount School Bonds Outstanding	Valuation of Property in the District	
Arapahoe	\$ 1.000 00	\$ 586,600 00	\$ 69,981,165 00	
Archuleta		3,000 00	607,127-00	
Baca		4.250 00	158,291 00	
Bent		10,980-00	919,429-00	
Boulder	2,600-00	65,914 00	5,204.267 00	
Chaffee		29,600 00	2,227,709 00	
Cheyenne			741,869 00	
Clear Creek		7,824 00	2 106,385 00	
Conejos	600-00	16,270 00	1,663,790-00	
Costilla		10,130 00	4,237,854 00	
Custer		6,710 00	618,999-00	
Delta	650 00	7,850 00	1,091,006 00	
Dolores		10,000 00	395,634 00	
Douglas		8,000-00	1,936,857 00	
Eagle		5,800 00	1,218,254 00	
El Paso	35,500 00	502,000 00	17,026 507 00	
Elbert			1,676,001 00	
Fremont		36,520 00	4,129,102 00	
Garfield		31,500 00	2,157.236 00	
Gilpin		800-00	2,088,888-00	
Grand			272,753 00	
Gunnison		31,430 00	2,119,138 00	
Hinsdale		10,000 00	518,317 CO	
Huerfano	1.400 00	16,850-00	2,206,577-00	
Jefferson	1,800 00		2,871,825 00	
Kiowa			997,808-00	
Kit Carson		6,200 00	\$96,034_00	
Lake	45,000 00	15,000 00	1,210,856 00	
La Plata	12,000 00	10,800-00	2,114,835 00	
Larimer		41,300 00	4,366 \$30 00	
Las Animas	646-00	90,726-00	5,432,260 00	
		1		



CENTENNIAL HIGH SCHOOL, PUEBLO.

TABLE XIV.

SCHOOL BOND ACCOUNT, 1900-Concluded.

	SCHOOL BO	ND ACCOUNT	Assessed	
COUNTIES	Amount School Bonds Issued This Year	Amount School Bonds Outstanding	Valnation of Property in the District	
Logan		\$ 5,500.00	\$ 1,512,344 00	
Mesa	\$ 29,200.00	52,350-00	2,457,841 00	
Mineral		1,500 00	611,003-00	
Monteznma		8,400-00	678 006 00	
Montrose.		21,150 00	1.276,450 00	
Morgan		4,000-00	1,238,988-00	
Otero	7,000-00	37,000 00	2,620,729 00	
Ouray		29,730-00	1.257,922 00	
Park			1,656,035 00	
Phillips		6,700-00	628,143 00	
Pitkin		30,000-00	2,215,705 00	
Prowers	1 875 00	7,550-00	142,076 00	
Pueblo		339,810 00	13,072,651 00	
Rio Grande		1,570 00	1,536,567 00	
Rio Blanco		6,000 00	877,141 00	
Routt	2,750 00	2,755 00	1,461,723 00	
Saguache		7,250 00	2,000.000 00	
San Juan		2,000 00	1,344,535 00	
San Miguel	1.600 00	31,100 00	1,417,940 00	
Sedgwick		5,000-00	611,945 00	
Summit		3.000 00	915,054 00	
Teller	65,000 00	101,000 00	10,858,249 00	
Washington		10,100 00	690,140 00	
Weld	13,600 00	41,500 00	7,330,350 00	
Yuma		1.100 00	910,507 00	
Total	\$ 224,621 00	\$ 2,407,849 00	\$ 203,078,230 00	

TABLE XV.

EXAMINATION OF TEACHERS, 1899.

	Fi	irst Grade	2	Sec	ond Gra	de	TI	urd Grad	de
COUNTIES	Male	Female	Total	Male	Feniale	'rotal	Male	Female	Total
Arapahoe	6	37	43	12	100	112	15	79	94
Archuleta	2	4	6		2	2	1	2	3
Baca	3	2	5	1	2	3	1	2	3
Bent		7	7		5	5		1	1
Boulder	7	15	22	1	49	50	5	21	26
Chaffee	2	6	8		13	13	2	14	16
Cheyenne	1		1	2	2	4		3	3
Clear Creek	2	4	6		5	5	******	5	÷,
Conejos	1	3	4	5	13	18	12	4	16
Costilla	3		3	8	6	14	15	19	34
Custer	4	3	7	2	9	11		;	
Delta	1	2	3	5		5	3	6	9
Dolores		1	1	1	1	2	1		1
Douglas	2	4	6	6	13	19	1	9	10
Eagle		2	2		9	9		2	2
Elbert.	2	2	1	2	19	21	7	14	21
El Paso	ō	10	15	8	30	38	3	22	25
Fremont	9	5	14	9	24	33	4	12	16
Garfield	7	28	35	5	30	35		6	6
Gilpin	2	4	6		3	3		4	-4
Grand					1	4		1	1
Gunnison	2	3	5		9	9	5	ī	12
Hinsdale	1	3	4	1	3	4		1	1
Huerfano	1	3	1		8	8	3	9	12
Jefferson	1	4	8	4	22	26	2	16	15
Kiowa	2	2	4	4	3	7	2	2	1
Kit Carson	2	3	5	3	1	7		4	1
Lake	3	13	16	1	5	6	2	7	9
La Plata.)	1	3	3	11	14	2	12	14
Larimer	2	18	20	1	33	37	8	20	25
Las Animas	6	11	17		9	11	14	16	30
Lincolu		7	7		6	6		1	1
Logan	3	4	- 7	1	8	12		8	
nogan				1		-	1		

TABLE XV.

EXAMINATION OF TEACHERS, 1899 Concluded.

1	Fi	rst Grad	le	Seco	nd Gra	de	Th	ird Grad	le
COUNTIES	Male	Female	Total	Male	Female	Total	Male	Female	Total
Mesa	~	15	26	6	24	30	.2	4	6
Mineral		1	1	2	1	3			
Montezuma	4		4	1	5	6	1	5	6
Montrose		2	2	4	6	10	3	~	11
Morgan	1	6	7	1	8	9	2	ī	9
Otero	5	11	19	1	6	10	1	1	2
Ouray	3	1	4	2	~	10		2	2
Park	2	2	4	2	2	10	1	6	7
Phillips	2	2	4	4	7	11		6	6
Pitkin		4	4		18	15		*	8
Prowers	2	5	7	5	8	13	2	6	8
Pueblo	6	15	21	10	19	29	2	12	14
Rio Blanco	1	1	2	4		12		2	2
Rio Grande	2	6)	~	3	9	12	3	1	7
Rontt	1)	3	ŧ	2	16	15		9	9
Saguache	2	ő	7	5		13	2	6	8
San Juan		1	1		1	1			
San Miguel	1	3	4	1	ī	8		2	2
Sedgwick				3	11	14	2	3	5
Summit		4	4	1	2	3		1	1
Teller		4	4		ī	ī		7	ī
Washington	1	5	6	5	12	17		14	14
Weld	3	12	15		16	24	2	11	13
Yuma	1	7	8	2	14	16		7	7

TABLE XVI.

EXAMINATION OF TEACHERS, 1900.

	Fi	rst Grad	le	Sec	ond Gra	de	Th	ird G r ad	le
COUNTIES	Male	Female	Total	Male	Female	Total	Male	Female	Total
Arapahoe	12	56	· 68	17	135	152	2	48	50
Archuleta		4	4	2	1	3		1	1
Baca	1		1	1	2	3	1	1	2
Bent					4	1		2	2
Boulder	3	16	19	4	49	53	2	22	24
Chaffee	4	15	19	2	12	14		10	10
Cheyenne		3	3		1.	1		3	3
Clear Creek	1	7	8		4	4		5	5
Conejos	6	4	10	8	9	17	12	6	18
Costilla	3	8	11	5	4	9	9	8	17
Custer	1	1	2	1	ā	6			
Delta	2	4	6	6	6	12	1	3	4
Dolores	1	1	2		2	2		1	1
Douglas	4	3	7	õ	12	17		5	5
Eagle		6	6		4	-			
Elbert	2	8	10	6	19	25	1	13	14
El Paso	8	11	19	7	28	35	1	15	16
Fremont	7	10	17	6	18	21	1	5	6
Garfield		13	13	5	6	11	1	9	10
Gilpin	3	2	5	1	12	13		8	8
Grand		_			2	•)			
Gunnison				1	12	13		4	4
Hinsdale .					1	1			
Huerfano		12	12	1	7	8		5	5
Jefferson	1	8	12	2	23	25	2	20	22
Kiowa.	4		9	4	3	7	2	7	9
Kit Carson	2	5	7	3	14	17	2	6	8
Lake	1	3	4	2	12	11			
La Plata	2	5	7	1	9	10	i .	4	5
Larimer	4	21	25	7	30	37	10	12	22
Las Animas	12	21	36	5	14	19	14		21
Lincolu	3	3	6		- 14	5		3	3
	3 2	3	5 5		() 	18	1	3	
Logan	2			-		13	1	0	

TABLE XVI.

EXAMINATION OF TEACHERS, 1900-Concluded.

	Fi	rst Grad	le	Sec	ond Gra	de	TI	iird Gra	de
COUNTIES	Male	ŀ'emale	Total	Male	Female	'rotal	Male	Female	Total
Mesa	9	12	21		20	20	1	4	5
Mineral	2	3	5						
Montezuma .	6	6	12	1	4	5			
Montrose		3	3	1	8	9	·····	5	5
Morgan	2	3	5		6	6	1	5	6
Otero	10	13	23	4	9	13		3	3
Ouray	1	5	6	2	4	6		1	1
Park		3	3	1	16	17		7	7
Phillips	3	3	6	1	8	9		2	2
Pitkin		2	2	1	9	10		9	9
Prowers	6	5	11	5	12	17	1	3	4
Pueblo	4	13	17	4	16	20	1	7	8
Rio Blanco		3	3	1	2	3		5	5
Rio Grande	4	ī	11	2	8	10		5	5
Routt	5	7	12	1	8	9	2	2	4
Sagnache	2	6	8	5	9	14		5	5
San Juan		1	1		1	1			
San Miguel	1	1	1	1	3	4			
Sedgwick	1	2	3	1	5	6	1	2	3
Summit	1	1	2		4	4		6	6
Teller		9	9		12	12		12	12
Washington		3	3	3	7	10		7	7
Weld	6	6	12	7	14	21		22	22
Yuma	4	5	9	2	17	19	1	6	7
Total									

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APPORTIONMENT, 1899.

		JANUARY			JULY	
COUNTIES	Amount Apportioned	Deducted for Blanks	Balance Certified to Auditor	Anount Apportioned	Deducted for Blanks	Balance Certified to Auditor
Arapahoe	\$ 12.105 10	\$ 186.95	\$ 11.921 15	\$ 11,031 54	\$ 171 06	\$ 13,860 48
Archuleta	139-57	7.75	131 82	146 28	6 45	136 83
Baca	72 63	24 06	48 57	30 33	8 67	81 66
Bent	225 25	26 17	199 08	274 64	13 09	261 55
Boulder	2,038 65	35 29	2,003 36	2,370 47	60 57	2,309 90
Chaffee	571 67	31 53	540 14	673 25	11 76	618 19
Cheyenne	39 83	6 59	33 24	42 79	1 35	38 24
Clear Creek	663 04	7 50	655 54	728 47	13 48	714 99
Conejos	1,110.53	25 13	1.085 40	$1,260\ 20$	23 60	1,236 60
Costilla	576 67	19 41	357 26	664 11	15 05	649 06
Custer	320 64	18 11	305 53	356 92	8 92	348 00
Delta	568-31	19 95	548 36	642-90	20 69	622 21
Dolores	19 02	3 88	66 73	77 53	4-78	72 75
Douglas	338 38	25 99	312 39	381-05	28/81	352 21
Fagle	201 17	13 24	190-89	211 73 .	12 33	229 40
Elbert	11 CFS	17 31	328 10	407-02	16-16	390-56
Fil Paso	4,197-15	36.36	62 0tl'F	2,815 89	72 74	2,743 15
Fremont .	1,467 33	CL 11	1,422.58	1,613 83	35 16	1,578-67

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TWELFTH BIENNIAL REPORT

Garfield	500-05	26-17	473 88	0 10 102	23 67	530-37
Gilpin	688-84	653-65	679-12	743 17	02 21	11 121
Graud.	67.12	(<u>i</u> .)	10.09	68/02	8.65	50.31
Gunnison	115 03	24 32	3(0) 71	120-56	50 (M)	398-50
Hinsdale	107 77	6 18	67 101	112 27	7 28	101 50
Huerfano	1.003 75	20 55	983-20	1,009-29	32-51	1.005 75
Jefferson	966 26	30 32	035-94	1,090 88	16 36	1,044-52
Kiowa	16-62	10.18	19 73	75 33	9 11	69, 22
Kit Carson	105 08	31 60	134 08	182 85	10.81	172-04
I,ake	01 111	25 42	752 07	1,181 21	35 (4)	1.145 25
I,a Plata	621-22	23 52	600-70	751 ×8	20 87	731 01
I,arimer	1,163 75	51.17	1,109, 58	1,314 31	35-17	1,309-14
L,as Animas	2,002 08	15 95	2,016 13	2,352 35	41 20	2.311 35
I,incolu	71 63	6-93	02 19	81 48	9 75	74 73
I,ogan	287 50	$20^{\circ}60$	266-50	321 82	20 13	301 69
Mesa	837 71	21 86	815 88	86 116	21 33	893 65
Mineral	97 73	8 53	89.20	112 26	3 61	138 65
Montezuma	218-34	8 48	239 %6	306-46	10 14	2546 322
Montrose	186-98	12 30	39 121	369-76	19 07	550 69
Morgan	277 13	11 72	262 11	335 71	S 19	397 200
Otero	910-36	20 54	~89.82	1,116.45	23 52	1,002 (#)
Ouray	316.96	14 65	302 31	361-68	> 13	153 55
Park	252 37	15.41	233 96	261-11	15 (9)	et eta
Phillips	156-97	24 95	132 02	178 N3	15-16	163 67
Pitkin	611 49	01-6	602-00	665 13	19 57	648-26
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SUPERINTENDENT OF PUBLIC INSTRUCTION. 135

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APPORTIONMENT, 1899-Concluded.

		JANUARY			JULY	
COUNTIES	Amount Apportioned	Deducted for Blanks	Balance Certified to Auditor	Amount Apportioued	Deducted for Blanks	Balance Certified to Auditor
Prowers	\$ 279 79	\$ 35 29	\$ 244 50	\$ 376 67	\$ 16 81	\$ 359 86
Pueblo	3,041 09	37 81	3,003 28	3,817 91	109 43	3.708 48
Rio Blanco	136 89	8 08	128 81	170 42	8 86	161 56
Rio Grande	467-91	14 92	452 99	533 19	15 16	518 03
Routt	250 13	20 02	260 11	339-37	12 35	327 02
Saguache	428 08	20 72	407-36	475 41	19 06	456 35
San Juan	97 73	7 18	90.55	109 71	11 31	07 70
San Miguel	227 93	14 61	213 32	267 33	9 27	258 06
Sedgwick	112 46	12 54	99 92	129 82	11 57	118 25
Summit	151 28	9 18	142 10	169 68	10 53	159 15
Teller				1,749 14	46.76	1,702 38
Washington	116 48	12 72	103 76	130 92	12 27	118 65
weld	1,454 94	93 46	1,361 48	1,778 03	109 04	1,668-99
Yuma	171 35	16 20	155 15	200 67	14 23	186 44
Normal School	109 11		109 11	119 22	2 16	117 06
Totals.	\$ 45,297 40	\$ 1,363 93	\$ 43,933 47	\$ 52,424.80	\$ 1,426 95	\$ 50.997 85

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TWELFTH BIENNIAL REPORT

TABLE XVIII. Apportionment, 1900.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

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APPORTIONMENT, 1900-Concluded.

		JANUARY			JULY	
COUNTIES	Amount Apportioned	Deducted for Blanks	Balance Certified to Auditor	Amount Apportioned	Deducted for Blanks	Balance Certified to Auditor
Fremout	\$ 1,807 75	\$ 34.36	\$ 1.773 39	\$ 1,977 93	\$ 68.16	\$ 1,909.77
Garfield	620 22	41 68	578 54	636 22	29 87	606 35
Gilpin	\$33 12	28 03	805 09	816 66	27 05	789-61
Grand	75 89	6 65	69 24	73 32	8 27	65 05
Gunnison	460-50	37 30	123 20	480 63	27 22	453 41
Hinsdale	125 93	9 80	116 13	132 78	7 91	124 87
Huerfano	1,232 65	29 54	1,203 11	1,220 72	38 13	1,182 59
Jefferson	1.213 22	52 88	1,160 34	1,199 13	31 68	1,167 45
Kiowa	54 50	11 11	73 09	85 53	18 22	67 31
Kit Carson	201 25	28 98	175 30	71 122	24 33	196-84
Lake	1,324 95	13 74	1.311 21	1,390 99	25 28	1.365 71
La Plata	842 14	22 06	820 08	11 010	39 48	\$80.23
Larimer	1,502 56	32 90	1,469 66	1,568-17	98 42	1 169 75
Las Animas	2.635 95	70.26	2,565 69	2,786-86	11 72	2,745 14
Lincoln	64 <u>76</u>	62-6	N5 37	99, 38	8 90	81-06
Logan .	360.68	32 90	32% 0S	379-21	23 32	355 89
Mesa	1,025-91	40 CF	980-82	1.122-16	43 11	1.079 05
Mineral	159-57	7 95	151 62	165 77	4 13	161 61

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TWELFTH BIENNIAL REPORT

Montrose	60 689	30.98	608-11	677 77	23-41	654-33
Morgan	375 33	17-36	357-97	20 tot	15 34	3~~ 71
Otero	1,251-93	50.97	1.200 96	1,401-58	51 15	1.377 46
Ouray	<u>1</u> S 101	26 4S	37% 39	420 76	25 01	395 75
Park	291 42	24 65	266 77	24 12	24 74	273 01
Phillips	200-59	36 04	161 55	226-06	32.42	193 64
Pitkin	119-14	60-21	7:32 35	73~ 87	20 33	71× 54
Prowers	422 10	34 60	387 50	472 4N	32.37	11011
Pueblo	1,280-03	110 34	4 169 69	4,713-15	63 89	92 619 F
Rio Blanco	191 15	11 82	179-33	200 00	17.37	152-63
Rio Grande	208.07	37.25	560 79	603-64	18 30	555 34
Routt	380.26	25 04	355 22	415 72	37 12	351 30
Saguache.	531 44	24 61	506 N3	559 65	2.1 67	234 98
San Juan	123 06	6 15	116 91	129 11	4 <u>28</u>	120 ×3
San Miguel	299 ×6	17 72	252 14	249-07	14 98	334 00
Sedgwick	115 62	32 16	113 46	151 52	25.94	125-61
Summit	190 33	15 53	05 121	210-17	9 0*	. 201.09
Teller	1,961-99	61.59	1,940-40	2,810 47	1× 89	2,741 60
Washington	146 85	18 72	128 13	154 37	16 79	82 181
Weld	1.911-12	39-16	1,871 96	1,936.75	22.20	1,550 95
Yuma	223 56	30 04	193 52	233 39	16.58	216 51
Normal School	133 73	21 03	112 70	128 30	5 14	123 16
Totals	\$ 58,656 58	\$ 1,905 00	\$ 56,751.58	\$ 62 577 29	\$ 1.751 05	\$ 60,796.24

SUPERINTENDENT OF PUBLIC INSTRUCTION. 139

TWELFTH BIENNIAL REPORT

		CENSUS		PUI	PILS
YEAR	Bet	ween 6 and	21	Enrolled	Enrolled in Graded
	Male	Female	Total	in High Schools	Schools Below High Schools
1891	52,530	50,490	103,020	2,112	44,126
1892	53,737	52,375	106,112	2,393	45,802
1893			82,645		
1894					
1895	61,136	58,897	120,033	3,994	61,130
1896	63,804	61,795	125,599	4,472	50,351
1897	65,441	63,603	129,044	5,009	64,634
1898	68,260	. 66,747	135,007	5,688	66,992
1899	72,297	70,169	142,466	6,584	69,780
1900	77,557	75,585	153,142	6,744	77,376

COMPARATIVE STATISTICAL TABLES

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FOR THE YEARS 1890 1900.

		PUPH	LS		
Enrolled		e Number Enrol 1 Public Schools	lled	Number Between 8 and 14	Average Daily
Rural Schools	Male	Female	Total	Enrolled in Public Schools	Attend- ance
27.153	37,166	36 225	73,391		43,70
28,452	38,814	37,833	76,647		47,940
					50,96
31,751	46,111	11,451	90,562	48,527	59,14
40,274	48,593	16,093	91,686		62,41
30,958	49,622	.0,979	100,601	56,945	67,093
32,143	52,603	52,130	104.733	70,952	69,97
32,698	54,249	54,567	108,816	62.208	69,54
33,435	58,074	59,481	117,555	61,927	73,29

COMPARATIVE STATISTICAL TABLES

	Valuation of School Houses	Total		SCHOOL BOND ACCOUNT		
YEAR		Receipts for School Purposes from all Sources	Total Paid Out	Amount School Bonds Issued This Year	Amount School Bonds Ont- standing	Assessed Valuation of Property in the District
1891	\$ 5,079,770	\$ 2,803,465	\$ 2,419,513			
1892	5,441,907	2,712,924	2,202,532			••••
1893						
1894		1,691,503	1 452,625			
¢895	6,045,488	2,894,525	2,472,990			
1896.	5,859,477	2,901,613	2,494,401			
1897	5,065,137	2,775,118	2,338,225	101,049	2.280,247	\$210,276,713 76
1898	5,987,703	3,420,173	2,978,207	840,068	2,264,273	184,229,490 50
1899	6,495,855	2,960,178	2.508,748	80,727	2,124,182	194,347,852 00
1900	7,128,240	3,382,958	2,894-333	224,621	2,407,849	203,078,230 00

FOR THE YEARS 1890- 1900- Concluded.

APPORTIONMENT			TEACHERS' CERTIFICATES ISSUED								
Balauce	for Ce	Amount Appor- tioned	Third Grade			First Grade Second Grade					
Certified to Auditor			Total	Female	Male	Total	Female	Male	Total	Female	Male
\$ 97,338	\$ 1.245 95	\$ 98,584-47	739	581	158	719	517	202	419	272	147
108,162	771-50	109,237 45	893	693	200	577	141	136	339	233	106
\$9,434	446-32	89,870-64	981	763	218	922	718	204	425	275	130
75,321	588-64	78,910 31	589	454	135	812	655	187	570	385	185
88,772	\$60-69	\$9,663-56	667	529	138	861	640	221	416	262	154
91,532	4,504 29	96,036 66	600	473	127	887	696	191	356	226	130
94,931	2,790 88	97,722-20	591	460	131	860	689	171	464	329	135
117,547	3,686-05	121,233-89	417	348	69	828	679	149	552	397	155

APPROPRIATION AND EXPENSES, 1899. CONTINGENT FUND.

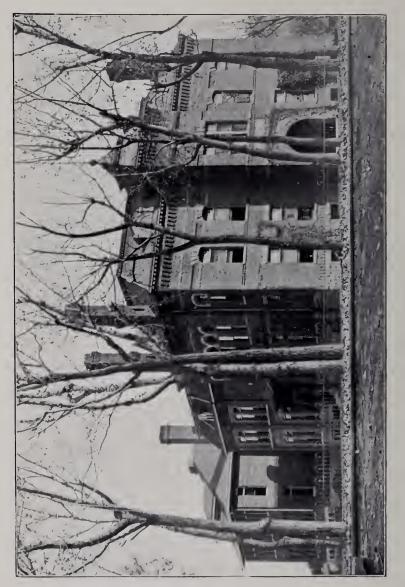
To appropriation	\$ 500 00	By assistance	\$ 48 55
		By binding journals	26 10
		By traveling expenses	335-35
		By balance	70 00
	\$ 500 00	Total	\$ 500 00

APPROPRIATION AND EXPENSES, 1900. CONTINGENT FUND.

To appropriation	\$ 500-00	By traveling expenses By balance	\$ 333 85 166 15
	\$ 500 00	Total	\$ 500 00

APPROPRIATION AND DISBURSEMENTS. CLERICAL FORCE.

To appropriation for deputy, 1899 and 1900	\$3,000-00	By salary of deputy, 1899 and 1900	\$3,000 00
To appropriation for clerk and stenographer, 1899 and 1900	2,000 00	By salary of clerk and stenogra- pher, 1899 and 1900	2,000-00
Total	\$5,000-00	Total	\$5,000-00



FOUNTAIN SCHOOL, PUEBLO.

REPORTS

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COUNTY SUPERINTENDENTS

1899 - 1900.

REPORTS

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COUNTY SUPERINTENDENTS

1899 - 1900.

ARAPAHOE COUNTY-WARREN E. KNAPP-1899.

The schools of the county are in as flourishing condition as the state of their finances will permit, and directors and teachers have shown a commendable disposition to improve them where possible.

There is an encouraging demand from school boards for teachers who have had some experience and some professional training, and for those holding high grade certificates, and a disposition exists among directors to be loyal to our own county teachers, other qualifications being equal, to which loyalty this office has constantly lent its aid.

The very large attendance and support given by our more progressive teachers to the meetings of the County Teachers' Association and the Normal Institute is evidence that they appreciate the need of constant growth, and indicates a desire to avail themselves of these means of improvement. Teachers who will not recognize the spirit of progress now prevailing in the profession, and be induced by its force to higher qualifications, must expect to fall by the wayside.

Good physical qualifications, as well as intellectual and moral, are demanded more earnestly than ever, and I repeat the statement made in my report of last year, "Health seekers must not expect to use the public schools as hospitals for convalescing. The welfare of the many young and healthy pupils is of vastly greater importance than the interests of the one."

With continued low valuations, revenues must of necessity be reduced, unless levies are correspondingly raised, and the schools must suffer in consequence. Many districts have willingly taken such action, but unless the general county levy for schools is considerably increased, the schools of many of the districts will be seriously hindered in their progress, hence my recommendation made to your honorable body that you make the general county levy for support of the public schools, for the ensuing year, five mills, the maximum allowed by law. The number applying for examination is increasing constantly, and entails an immense amount of labor upon this office, especially when so many apply to take the examination here, who have their answerpapers sent to other counties where they expect to teach, and where their certificates must be issued.

ARBOR DAY.

On Arbor Day there were 95 organized school districts in the county. The following is a summary of their reports:

Forty districts reported 295 trees planted, which, added to those already growing on the school grounds, makes about 3,200. The same forty districts reported literary exercises, especially prepared for the occasion. Fifteen districts reported literary exercises only, and 32 districts reported school not in session at this time. Eight districts made no report.

In addition to the planting of trees, there were 224 shrubs planted, and 183 flower beds were made.

KINDERGARTEN SCHOOLS.

Kindergarten schools are maintained in connection with the public schools, in school districts No. 1, East Denver; No. 2, West Denver; No. 4, Harman; No. 44, Montclair.

The law requires no separate report made of the kindergarten schools, hence no such reports have been made to this office. No kindergarten items are included in the foregoing table of statistics.

BOULDER COUNTY-GEORGE L. HARDING-1899.

In a county as large as this, with sixty districts, it is impossible for a superintendent to introduce all lines of work that he could desire: so beyond the necessary part of his work, he must use judgment as to the lines he shall pursue. Visitation I deem most important and I have succeeded in visiting all the schools at least as often as the law requires; and at least once during the school year I write a personal letter to the teacher, discussing what I observed in her work.

The school year of 1898-1899 has been prosperous, little having occurred to mar the successful working of the schools.

W. C. THOMAS-1900.

I find that the schools in this eounty are in fairly good condition. The principal thing I have to complain of is a lack of thoroughness. The result is we have had a large number of failures in our eighth grade examinations. There has been too much of a disposition to attempt to earry the classes through the entire grade in a six or eight months' term. We are attempting to make the work more thorough and practical.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

In a county as large as Boulder it is difficult to do all the work along all lines that the superintendent would desire to do. 1 may not be able to visit all the schools as often as the law contemplates. But I deem it better to keep the work well up in the office and visit those schools most that need it the most.

BACA COUNTY-ANNA WATSON-1900.

There are fourteen districts in the county, all of which maintaining school are ungraded and poorly equipped as to uniform supply of text books, maps, charts, reference books and all the school room apparatus with which to obtain good results. The educational work is progressing very well considering the many difficulties and disadvantages existing.

BENT COUNTY-FLORENCE SARGENT-1900.

Most of the buildings in the county are good and well equipped. Several schools started libraries last year. More will this year. The town school and but very few of the rural schools observe the national holidays. Most of our schools are well attended and most of the teachers progressive and hard working. The two great defects noticed when visiting schools are lack of proper ventilation and lack of decoration.

CHAFFEE COUNTY-GEORGE P. DEWITT-1900.

The majority of the schools of this county opened September 4 under most favorable circumstances and with good attendance. Excellent results are expected during the year. It is intended to have two places of meeting for the Reading Circle this year, the meetings alternating once a month at Salida and Buena Vista. An endeavor will be made to hold three county associations—one at the close of each school term.

CHEYENNE COUNTY-MRS. JULIA TINSLEY-1900.

Every effort is being made for the advancement of education. The teachers are enthusiastic in their work. School boards try to hire the very best teachers. We are going to try to have some high school work this year.

CONEJOS COUNTY-GEORGE W. IRVIN-1899.

We are pleased to report that educational interest is growing in our county. A comparison of reports shows a greater number of high

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grade certificates now than in the past. With increased ability among our teachers has come the adoption of the state course in many of our schools and a much better and thorough gradation of school work. During the past year a uniform system of text books has been adopted by districts, the school population of which aggregates 1,700, or about onehalf of the school population of the county.

To provide for professional training of teachers, we established, in 1896, a county normal, holding a four weeks' session during the summer. The course of study consists of academic and professional work. During the past summer, more than in any previous year, the work of the county normal was so outlined as to harmonize with the work of the Normal Institute. By the adoption of this plan there was secured for the teachers of this county six weeks of normal training.

CLEAR CREEK COUNTY-MRS. M. A. BOWMAN-1900.

The educational work in Clear Creek county has progressed with little hindrance during the past school year. No epidemics have prevailed, no accidents occurred, and few changes were made in the corps of teachers. A new school house has been built at Idaho Springs and fitted with every convenience for first and second grade work. Several pictures and plaster casts were purchased by the various rooms in the district from the proceeds of an art exhibit, and the contributions of teachers and pupils. The laboratory was also refitted. School libraries have been introduced in four rural districts and extensive additions made at Silver Plume and Idaho Springs. Lectures were given in three districts by the State Superintendent and Dr. Dexter, of the Normal School and Drs. Baker and Aylesworth. The Clear Creek Valley Teachers' Association held an interesting and well attended meeting at Idaho Springs. on April 28, 1900.

COSTILLA COUNTY-CHARLES GROENENDYKE-1900.

The educational work in Costilla county is progressing in a favorable manner. The districts generally are virtually out of debt and warrants are paid without discount or unreasonable delay. Another year will see nearly all the outstanding bonded indebtedness cancelled. A stronger push will then be made for higher salaries and more efficient teachers, as well as a greater length of term.

We have no high school, although high school branches are taught in a few of the schools. Our aim is thoroughness, but our teachers' examinations reveal the lamentable fact that many high school graduates aspiring to the posițion of teachers in our public schools are woefully deficient even in the common branches, especially in arithmetic.

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SUPERINTENDENT OF PUBLIC INSTRUCTION.

CUSTER COUNTY-A. P. DICKSON-1900.

Two or three districts have not fully complied with the law in reference to the number of months school shall be taught, but we are still trying to hold them intact. The question of uniformity of text books is a problem. The school boards in districts that are able, have been advised to purchase and own their own text books. A county teachers' association will be attempted this winter,—the first for years. No regular organized teachers' reading circle in the county. A half dozen sets of the books adopted last year have been placed in the county.

DELTA COUNTY-MRS. M. J. BROWNE-1899.

The past year has been one of general improvement throughout the county. More interest has been taken in the annual meetings, betthe attendance at county association meetings, and directors are taking more pains with the school buildings. One new district organized and two substantial brick buildings erected almost entirely from private subscription. The school board in district one has added the twelfth grade, and many old pupils are in school again, with promises of good, large graduating classes for 1900. Thirty-six were graduated from the eighth grade last year, and almost every one is doing high school work this year.

MRS. M. J. BROWNE-1900.

In most of the districts of the county the educational spirit is active. Better school buildings, better directors; hence better teachers are not only expected, but demanded. Our country districts labor under many discouragements owing to the small valuation. In some instances they could have only the legal term, were it not for the interest taken by the patrons. Two good, substantial and modern school houses have been built entirely from the funds raised in the districts by energetic patrons. The number of teachers has increased from thirty to thirtyeight, and libraries have been started in most districts. County associations have been held and the attendance has been.good. More teachers have taken the Reading Circle work than ever before, showing that more professional pride prevails, and better methods will surely follow. On the whole, the outlook is very encouraging.

DOUGLAS COUNTY-FRANK D. BALL-1900.

A favorable vote of the people on the question of a county high school is the only notable event of the year in the educational history of this county. The high school has been organized and will be open in September, 1900, at the county seat.

EAGLE COUNTY-GRANT RULAND-1900.

The people in Eagle county are now paying their bonded indebtedness. They have responded cheerfully and willingly to suggestions made. The boards demand teachers of noble standing who hold high grade certificates. The school houses have been repaired, and the educational sentiment is good, not only with the boards, but also with the people.

ELBERT COUNTY-MRS. ANNIE C. WILLARD-1899.

The work done by the public schools in Elbert county during the past year has, on the whole, been commendable. Among patrons an school boards there is a growing sentiment in favor of the teacher possessing a high grade certificate. The State Course of Study has been adopted in every school. Teachers have evinced the right spirit in classifying and grading their schools. Fourteen pupils from seven different districts this year passed the eighth grade examination and received the common school diploma. Ninth grade work has been done in five districts. Two new districts have been organized. Nine districts have adopted the free text-book system. Five substantial frame school houses have been built. Several of the established districts have enlarged and otherwise improved their buildings. Much interest is shown by the people of the county in educational affairs, and the outlook for the coming year is promising.

FREMONT COUNTY-J. M. HANKS-1900.

I can report progress in all lines of school work in Fremont county. Our graded schools are particularly satisfactory in their work. There are disappointments in the work of rural schools, especially in sparsely settled mountain sections. One of the districts has three schools and only twenty-eight enrolled. We can not expect good work of a teacher having a mixed school in which all grades are represented. There should be some better plan for sustaining normal institutes. The present plan is weak.

GILPIN COUNTY-MISS MINNIE FREY-1899.

The educational work in this county is in a fairly good condition. A healthy educational spirit is abroad. Though we have not yet attained what we desire, we shall endeavor to secure the best school directors and teachers.

Two libraries have been started in districts 7 and 9, giving an educational impulse in those districts. We expect to place good books in every district not having a library.

MISS MINNIE FREY-1900.

Although our school census has slightly decreased, the interest in educational work has increased. The growing desire manifested by school boards to secure teachers properly equipped for successful teaching, is a source of great encouragement. In district No. 1 the following standard has been adopted: For all teachers in the first eight grades, a candidate to be eligible must have a high school education, a first grade certificate, and shall have had at least two years' successful experience in teaching, one year of which must have been in a graded school. For all teachers above the eighth grade, in addition to the above requirements a college education shall be required.

Most of our teachers have availed themselves of every opportunity offered for advancement. The reading circle course was taken by nearly all. A better attendance at the normal institute this summer and the special work taken, show that the teachers endeavor to meet the high standard required.

All but three districts have school libraries, the books numbering 3,735. The free reading room, opened at Central City, is a helpful educational factor in that district. The schools of this district, under the efficient supervision of F. H. Clark, are being graded to a high standard. Two teachers have been added to the corps this year, somewhat relieving the overcrowded condition existing.

The rural schools have improved during the past year; better teachers have been employed; better facilities for education provided; longer terms held. The problem of giving rural pupils more education than they now receive is still a vexed question.

This county contains but two districts to which the new compulsory educational law applies. In one of these districts, No. 1, the law has been enforced with good effects.

GUNNISON COUNTY-MISS MARY E. WILLIAMS-1899.

A great deal of good work has been done in this county during the past year. There has been a demand for trained teachers in many of the districts, and the excellent work that they have done has created a desire for similar training in the untrained teachers.

An active and healthy interest has been taken in library books, in supplementary reading, and in improved text books.

One new school house has been built and the old ones improved.

MISS MARY E. WILLIAMS-1900.

The financial condition of the school districts of this county is improving; better wages are being paid in the rural districts and better teachers employed. New school houses are being built and old ones repaired. Considerable interest is being taken in the improvement of school grounds.

Libraries are needed in almost all our rural schools. A little has been done along this line, but the people do not yet see the need of giving the children the pest thoughts of all ages while their minds are in a plastic condition.

HUERFANO COUNTY-MISS FANNIE QUILLIAN-1899.

The schools of the county as a rule are in good condition. Teachers earnest and progressive. A number last year were members of the State Reading Circle, and we hope for a larger enrollment this year.

WILLIAM H. CLEMENT-1900.

The schools in our county are in a flourishing condition. Four new and commodious school houses have been constructed or are in process of construction this year. The average qualifications of our teachers are improving, and the teachers themselves are manifesting more interest than before in educational matters. There is a demand in the school districts for teachers of higher grade, showing that the directors of the different districts are waking up to the importance and needs of an education and the necessity of not only keeping the child in the school room, but teaching him while there.

As compared with the enumeration, the enrollment in the schools shows an increase over previous years.

GARFIELD COUNTY-MRS. LUCY DE WITT-1900.

The teachers of Garfield, Pitkin and Eagle counties organized a county association, which held a profitable meeting in March at Basalt. Three county association meetings were held during the year. Most of the teachers are engaged in the State Reading Circle work, and a marked increase in interest is evident. One new school district was formed in April.

KIOWA COUNTY-F. H. MAILE-1900.

The sparse settlement of Kiowa county leads to peculiar conditions. Schools are moderate to very small in size. Many families live several miles from school house, and attendance is somewhat irregular in the severe season. Schools are generously supported, however, and a wholesome sentiment in favor of public school advancement exists here.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

KIT CARSON COUNTY-H. E. CARMICHAEL-1899.

The schools and school interests of Kit Carson county are in a healthful and encouraging condition. About half of our teachers have taken the Reading Circle work during the past year, and completed it in a systematic manner. Our teachers' associations and reading circles have met regularly and have been productive of good results, in stimulating investigation and inquiry into methods, arousing a professional spirit and a general broadening of the teachers' mental horizon, thereby securing more efficient work in schools.

G. H. HOBART-1900.

The schools of the county seem to be doing well in most cases. Several districts are financially in bad shape, owing generally to low valuation, and in a few cases to bad management. In these districts but short terms of school can be maintained.

LAKE COUNTY-MRS. NETTIE RENFRO-1900.

The past year has been successful in this county. A fine high school building has been erected at Leadville, and the rural schools have been improved in many respects. One district which had rented for a number of years purchased a building. Two rural districts purchased encyclopædias for the use of the pupils, and one other added 154 volumes to its library. Another purchased an organ.

LA PLATA COUNTY-SEWARD S. MERRY-1900.

We have every reason to believe that the schools of this county are in a healthy and prosperous condition, and also that they will compare favorably with those of other sections of the state. The feeling generally is that the public school must be the preserver of our liberties and the saviour of our country.

Our watchword is "Advancement," and our bright-shining light, "Education,"--may its lustre never grow dim.

LINCOLN COUNTY-E. I. THOMPSON-1899.

The schools of Lincoln county have been run more economically than ever before. All the districts have money in the treasury with the exception of district No. 1. The tendency of the school boards during the past year has been to hire first grade teachers, and by so doing we have had better schools.

There were but four graduating from the eighth grade last year.

The people of the county have been very generous in donations for our school libraries, in some districts subscriptions being made as high as \$130, and in third class districts, seven of the nine districts now have school libraries, in all amounting to 533 volumes.

E. I. THOMPSON-1900.

We may say that considerable progress has been made in the schools of Lincoln county during the year just closing. The teachers employed are as a rule the best obtainable for the salaries paid, which are higher than in most counties in eastern Colorado. Most of our teachers are from other counties, as we have very few resident teachers who wish to teach. For that reason directors hire the best talent they can obtain and teachers are not employed on account of influence with the board. A number of the teachers employed are graduates of Denver high schools or other schools of the state. These students as a rule make a success, but we are unable to keep them longer than one year, as they command a higher salary after experience.

The work of the four eighth grade graduates was very satisfactory.

LOGAN COUNTY-J. C. AIKEN-1899.

School boards are usually alive to secure the best teachers available. The schools are in a very healthy condition. Finances have, with one or two exceptions, been very carefully managed.

MISS L. M. DYER-1900.

The county will vote on the subject of a county high school at the November election.

MESA COUNTY-MISS ELIZABETH A. WALKER-1899.

No new districts have been made in Mesa county this year. Six new school houses have been built. Three country schools have added the ninth grade to their course of study.

Two county teachers' meetings were held, one at Mesa and one at Grand Junction; both were well attended. Thirty-five teachers were members of the State Reading Circle. We have at present a larger per cent. of normal and college graduates than at any previous term in the history of the county. A good number of the teachers hold first grade certificates.

I have given especial attention to the eighth grade work in the country schools; examined one hundred and eight pupils, sixty of whom were promoted to the high school.

The Normal Institute for the twelfth district was held in Grand Junction, July 24 to August 4. There was a large attendance and a good meeting.

Z. B. McCLURE-1900.

Mesa county schools received a diploma of first rank at the Omaha Exposition. The Grand Junction schools have been refitted and four new rooms added, a new heating plant put in and the course thoroughly revised and strengthened. Grand Junction had over 1,000 pupils in attendance last year and will take her place as a first class district in the spring.

Three new rural schools have been built and we are pleased to note two of them are heated, lighted and ventilated according to modern ideas. One district has been abolished and the pupils conveyed at public expense to the adjoining district. This idea seems to be growing, and we hope soon to see fewer districts and larger, better schools.

MONTEZUMA COUNTY-WILLIAM HALLS-1899.

I believe the school interests in this county are advancing. We are moving to introduce a uniformity of text books and to unify our school work, but being so scattered and sparsely populated, it is difficult to get the people together, or to unite them on anything, but we are working and doing the best we can.

A. T. SAMSON-1900.

Montezuma county, having so many natural resources, will soon take her proper place among the wealth-producing counties of the state; and with increased prosperity we naturally look for greater interest along educational lines, which is already being shown in the erection of new school buildings, increase of tax for school purposes, a desire for better teachers and longer terms of school. With added improvement and facilities and a corps of good teachers, we look forward to glorious achievements and grand results.

MONTROSE COUNTY-MISS ALICE M. CATLIN-1899.

The past year has been one of marked progress in the school interests of Montrose county.

The school boards are realizing the wisdom of the law providing for the payment of bonds, and those having bonded districts (except the board of No. 1) have requested the county commissioners to raise their levies to meet the requirements of the law. The school bonds are now being rapidly paid off. Special attention has been given to the condition of the finances of the districts by the people living in them. Their registered warrant debt is known to them, and they have adopted the policy to "get out of debt and keep out of debt." The uniform system of books kept and sold at cost under the auspices of the Directors' Association of Montrose County have furnished a basis for a county course of study, published for the first time during the past year. Its requirements do not vary materially from those of the state and Montrose courses. It has proved a great aid to the teachers, pupils and patrons of the rural schools.

MISS EMMA WILLIS-1900.

Everything seems to be harmonious in the county, and good results are hoped for for the coming year.

OTERO COUNTY-1900.

The educational work in our county has kept pace with the wonderful development in its resources and the great increase in its population. The building of two large sugar factories, one on the Missouri Pacific and the other on the Santa Fe, has wrought wonderful changes. Several hundred children will be educated for whom no provisions have been made,—their parents having moved into the county after the taking of the school census in the spring. During this year we have built several new school houses, refitted and refurnished many school rooms. purchased much needed school apparatus, and a great deal has been done to add to the comfort and advantage of school life. The Liberty High School building.

But one district in the county has had less than seven months of school. All of our graded schools and many of our rural schools have had nine months. Seventeen of the districts are using free text books. The districts have reported satisfactory levies—many of them voting the limit.

We have succeeded reasonably well in grading our rural schools. We have but one Mexican district in our county. The directors have employed for the third time in succession the same American teacher. They have built a large and commodious school house and paid for it without bonds. Every Mexican child of school age has learned to speak English.

The county high school is an institution of which every citizen in the county should be proud. The building is equipped with reference library, laboratory and many other conveniences. The city library of La Junta, with its 9,000 volumes, is at the free disposal of the pupils of the high school. The county high school is upon the list of accredited schools of the State University. The "Otero Student," a paper published by the pupils, reflects great credit upon the work of the school.

All things considered, the outlook is very encouraging.

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PARK COUNTY-LILLIAN K. REMINGTON-1900.

There is not a high school in this county, but in seven schools the ninth grade work is being done, and in one school the tenth grade. Fifteen schools in the county will have an eighth grade class. The State Course of Study is used in all of the schools and followed as nearly as possible. The school houses are in very good condition, and most of them well furnished. Eight districts own their text books. Where the books are not furnished by the district the supply is poor and not uniform. Many of the teachers have Reading Circle books, but do not keep up the circle organization because of distance between schools. The County Teachers' Association is held whenever teachers desire it. Several children from this county are attending high schools in Denver, Greeley, Boulder, Golden and Fort Collins; also, the State Normal. Museums have been started in several of the schools, and have many specimens. Six of the schools have well regulated libraries.

PITKIN COUNTY-E. M. SCANLAN-1900.

In the way of consolidation, two adjoining districts have been added to school district number one, and another district has been apportioned among numbers two, five and six, all of which has brought about a decided improvement. A new school house has been erected at Hot Springs, in district No. 9, and the board of said district made arrangements for a school at Redstone and one at Placita, which schools were necessary because of the recent immigration to the new coal mines just opened in that region on the Crystal river.

In this case the board acted on the suggestion of the county superintendent, and thus avoided the necessity of organizing a new school district. Too often an application for division of a district is made for petty reasons, but should be made only when the interests of the schools of the community make it absolutely necessary. Many of the districts in the county are financially in much better condition than they were two years ago.

School district No. 1. Aspen, has been especially fortunate during the last year; in the past, owing to lack of room in the school buildings of the district, the board was compelled to secure rooms as best it could in various parts of the city, but at the high school commencement last June the citizens of the community were very agreeably surprised when there was formally presented to the school district, by Messrs. D. R. C. Brown, D. M. Hyman, Elmer T. Butler, D. W. Brunton and F. M. Taylor, through their attorney, Mr. J. M. Downing, a block of ground in the residence part of the city, together with the buildings on the same, which consist of two fine residences, one a large, spacious and elegant brick structure formerly the home of Mr. Brown and which has since been remodeled, equipped and used as a high school, known as the Aspen high school and at present occupied by one hundred and forty-nine (149) pupils pursuing the four years' course prescribed for our high school; the other is a frame building, the residence at one time of Mr. Elmer T. Butler, and may in the future be used as a library for the schools.

One of the barns will be fitted for gymnasium use.

The people of the district contributed liberally by private subscription, that this property might be ready for use at the beginning of the school term last September, and great credit is due them for the material aid rendered to this end.

The high school work this year is divided as follows, to wit: Algebra and English literature by the city superintendent, F. J. Bronscombe; Latin and German by the principal, F. J. Dollinger; sciences and mathematics by Prof. I. E. Hill; history and English by Miss Minnie K. Wohlford.

Male principals were employed this year as follows: Washington school, G. D. Whalen; Lincoln school, J. W. Lakin; Garfield school, J. F. Smith, all of whom are thoroughly fitted for their chosen work by education and professional training. In addition to this they have had extensive experience in school work.

The departmental plan is followed in grades above the third, and many who opposed it at first are heartily supporting it now and firmly believe it to be a grand benefit to the schools. There is a supervisor of vocal music for each building, and to assist this department of the work the Mothers' Club has kindly donated one hundred and twenty dollars (\$120.00) to purchase books on vocal music and voice culture, and the club has, by its noble efforts, secured one hundred and three dollars (\$103.00) more to be donated in the near future, where it will do the most good.

Mothers' clubs here and everywhere should be loyally supported by our citizens. We can not calculate the good they do.

The cadet's corps is active, and arrangements are being made to give calisthenics due attention in the near future.

The Roaring Forks Teachers' Association, consisting of the teachers of Eagle, Garfield and Pitkin counties, was organized last March, and from present indications is destined to wield more than an ordinary influence in the educational affairs of this section of our state.

The teachers of the county are faithful, energetic and progressive, and are earnestly striving to merit the approval of all good people in their efforts to mold, shape and direct the thoughts and energies of the youth in proper channels.

While obstacles appear here and there, yet with that hope which nerves the toiler's arm there must be progress when the forces at hand are properly utilized toward a well defined goal.

The press in our county has been most kind and generous in glvlng notices and speaking words of praise, sometimes so fulsome as to cause the writer to think it was too good to be true. However, it has served a noble purpose, for it has inspired confidence, courage, and renewed effort in a work we all like to do.





SUPERINTENDENT OF PUBLIC INSTRUCTION.

The county superintendent's office has met with hearty co-operation from every quarter, yet has, because of lack of will power, perhaps, devoted more time to some phases and less to others than good order would dictate, but in the future an effort will be made to overcome this.

PROWERS COUNTY-DAVID BARNES-1899.

The school year of 1898-99 in Prowers county has been one of both industrial and educational activity. The school census has increased from \$51 to 1,030.

During August, 1898, a successful institute was conducted in Lamar. The attendance was good, and interest lively. The executive committee was able to meet all expenses and pay a back indebtedness of nearly sixty dollars.

One new district was organized during the year, and four new school buildings completed. The contract has been let for a substantial four-room stone and brick school building in Holly, district No. 6, and indications point toward more buildings during the year.

Our teachers are wide-awake and progressive. Five regular sessions of the Prowers County Teachers' Association were held during the winter, all well attended and interesting. The work followed for the year was a study of Sully's Teachers' Hand-book of Psychology, and the journal, Educational Foundations. Twenty-four of our thirty-six teachers took up the work, and others with the patrons attended the sessions. It has been decided without a dissenting voice to enter the State Teachers' Reading Circle for the coming year.

Vertical penmanship is gaining favor with the teachers of the county, and a few schools have introduced the Speer method.

PHILLIPS COUNTY-S. H. JOHNSON-1900.

The schools of Phillips county are in very good shape financially, only two districts being unable to start the fall term clear of debt. The average length of school term for the county is almost six months. There has been one new frame school house built since the school year began. There were two associations held during the past year, and a summer normal in Holyoke, of eight weeks, at which a number of the teachers' received instruction. Many of the schools of the county will begin in September, and we feel enthusiastic in our expectation of great results for the coming year. A petition has been presented to the county commissioners, asking that the matter of having a county high school be presented at the next election. We feel sure that it will carry, as the people desire a chance for better education.

PUEBLO COUNTY-MRS. LOIS J. SHEPHERD-1899.

Educational matters have progressed with us during the year. The showing made by the annual report is satisfactory. The remarkable increase in the enrollment in the two city districts is noted, and the increase in attendance over a year ago is encouraging. Two new districts have been formed in the county. The districts are all in better shape financially. The State Course of Study is followed in all rural schools, and one-half of the districts own their own text books. Many eighth grade pupils were examined and received diplomas. Most of our rural teachers hold first grade certificates and some normal diplomas, and I am glad to say the tendency of all school directors is to secure teachers of professional ability. Our county associations were very successful. The teachers of the county are deeply interested in their work.

RIO GRANDE COUNTY-GEO. A. CARPENTER-1899.

There is a deep interest manifested in the educational work by superintendents, teachers, school boards, patrons and pupils. Many of our districts are poor and small, but most of the school houses are comfortably built and furnished.

There is a growing demand for better qualified teachers. The patrons of the rural schools are waking up to the fact that their children must have proper instruction in order to keep pace with those in the town schools, and every effort is made to keep the course of study as nearly balanced as possible.

GEORGE A. CARPENTER-1900.

During the year last past the schools of this county have been in the hands of fairly well qualified and, for the most part, experienced teachers. The work, especially in the rural schools, has been very satisfactory. There seems to be a tendency in our graded schools to rush the pupils through the seventh and eighth grades and into the high school, before the work assigned to those grades is thoroughly mastered. Graduates from the high schools frequently fail to pass the teachers' examinations in the branches taught in the grades.

The professional spirit seems to actuate nearly all our teachers, and I look forward in anticipation of a successful school year.

RIO BLANCO COUNTY-W. H. CLARK-1900.

The schools of this county are improving in many ways. The tendency is to have longer terms, employ better teachers and pay them better wages. Have secured the adoption of the new Course of Study, and have the rural districts all following a uniform course. The schools are fast adopting a uniform series of text books. This I find to be of great value in a new country like this, from the fact that people are continually moving from district to district.

ROUTT COUNTY-MISS LAURA MONSON-1900.

The teachers of the county as a rule are very good. We have an association which meets at least once a year, and while that is not often enough, we find it a great benefit. This county is so immense that it is quite impossible to oversce the work of the schools in the different districts as thoroughly as it should be done. We need a uniform system of text books, but the primitive state of the schools and their great distance apart seem to make that impossible as yet. Some of our schools are graded very well and compare favorably with those of other small towns in the state.

SAGUACHE COUNTY-J. I. PALMER-1900.

The work in Saguache county is going on very smoothly. We have many of our schools thoroughly graded. Some have short terms and cannot so readily be brought under the graded system. We are making an effort to re-awaken an interest in educational work in Saguache county.

SAN JUAN COUNTY-MRS. ELLEN CARBIS-1900.

Between June 30 and October 1, 1899. a new school house was erected at Howardsville, five miles from Silverton.

The State Course of Study is being used. During the fall term the amount of \$250 was expended for physical apparatus for the use of the pupils in the higher grades. Another teacher has been added, making an eleventh grade possible for next year.

SAN MIGUEL COUNTY-HENRY C. LAY-1899.

It is pleasant to report continued improvement in the schools of this county. There is an increase of seven per cent. in the school population in the last year, and a still larger proportional increase in the total enrollment and average attendance. The standard of teachers is also higher, there having been but two third grade certificates issued, while of the remaining twenty-one teachers, six hold first grades. The number of months of school is larger than before. One school which has been closed for some years for lack of scholars in the neighborhood, has been reopened, and the districts are on a sound financial basis. Every district in the county, with the exception of one of great poverty in resources, has now free text books, and nearly all have been able to abandon the antiquated works which have been so great a clog to school progress.

ADELE F. DARE-1900.

There is a large increase in the valuation of property each year. so that the school districts are in a good condition financially. The people are greatly interested in the schools and willing to do all possible to attain a high degree of excellence in school work throughout the county.

An endeavor will be made to have the State Course of Study adopted and followed as far as can be done in rural schools, which are in need of better organization, and it is hoped that a great deal may be accomplished along that line.

SEDGWICK COUNTY-C. F. PARKER-1900.

The past year has been very satisfactory in the work of this county. New libraries and new organs have been purchased for some of the schools. The indebtedness of the districts has been greatly reduced. The citizens are interested in the welfare of the schools, and do not object to voting a liberal tax. The teachers are earnest in their work and are anxious to advance in their profession. In conjunction with Phillips county two very interesting associations were held last year. A majority of the teachers, as well as many of the school patrons from both counties, attended these meetings.

TELLER COUNTY-THERA H. SATTERLEE-1900.

The financial condition of the schools of the county is improving. In many districts the valuation is low. A five-mill county tax will assist them greatly. School officers and patrons are taking more interest in the work. Many inquiries come to the office concerning juvenile literature. Nearly every district in the county will be supplied with a few such books this year. The new Course of Study has been adopted and is a source of inspiration in many of the rural schools where the interest was small. Three pupils finished the eighth grade work in the rural schools and will enter the Victor high school. One hundred and twenty finished the eighth grade in the graded schools.

WASHINGTON COUNTY-MRS. ELLA E. GARFIELD- 1900.

The schools of Washington county are in a good, healthy condition. School houses are in good repair, and most of the districts are furnished with apparatus. As the districts can afford it, they are furnishing the text books. Our census lists show an increase over last year.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

Our teachers are doing energetic, earnest and thorough work, and our schools are showing good results.

WELD COUNTY-J. E. SNOOK-1899.

We have only one first class district in this county, that of Greeley, which maintains an excellent corps of instructors throughout the grades, and enrolled over 200 pupils in its high school department last year. All other districts are of the third class, but many maintain graded schools with from two to seven teachers each, and in a few cases with ten grades of work. Of the 135 teachers on duty last year, three-fourths were either normal graduates or holders of first grade certificates, while only six taught on unird grades. Salaries have been somewhat increased and a still larger per cent. of trained teachers secured for the coming year.

Since September 1, 1898, five teachers' associations have been held in the county,—at Greeley, Evans, New Windsor, Erie and Grover. In all the discussions were lively and the professional-spirit marked. Membership in the Teachers' Reading Circle has largely increased. A dozen "Local Clubs," to include in their membership all the rural teachers of the county, are now being formed for the purpose of professional study and growth during the ensuing school year. Boards of directors have been unusually active this summer in putting buildings and furnishings in better shape for effective work.

J. E. SNOOK-1900.

Comparison with last year shows a steady gain along all lines. The census is 208 larger. The enrollment has gained 201, of which twenty-seven is in the high schools. The average daily attendance is 107 more than last year. Three fine brick school buildings and one frame have been erected. The rural school term has reached an average of eight months. Teachers' wages have advanced, especially in graded schools. A larger per cent. of professionally trained teachers were employed. More children in the rural schools have completed the common school course and received diplomas than ever before. We "press toward the mark."

YUMA COUNTY-CHARLES E. WARE-1899.

The school work of the past year has been very satisfactory. The various districts are in better financial condition than formerly. Teachers are taking an active interest in whatever tends to improve their work and better the schools. On the whole, the outlook in Yuma county is encouraging.

DECISIONS

RELATING TO

THE SCHOOL LAW

OF THE

STATE OF COLORADO

1899 - 1900.

DECISIONS

BY THE

SUPERINTENDENT OF PUBLIC INSTRUCTION.

APPEALS.

The remedy against unjust orders of the county superintendent is an appeal to the State Board of Education.

An appeal to the Board of Education does not lie when made by any one other than a person or board of directors aggrieved by an order or decision of the county superintendent.

BONDS.

No notice to the electors of a proposed vote on the question of bonding a district is necessary, except the ordinary notice of a special meeting.

It is lawful for the ballot box for voting on the question of bonding the district to be open at the same time as the one for the election of school officers.

On the question of bonding a district, those electors have the right to vote "who have paid a school tax therein in the year next preceding the said meeting." The word "year" is construed to mean the twelve months immediately preceding the meeting or election.

The United States Internal Revenue Law requires a stamp to be affixed to the bond of a school director.

CERTIFICATES.

Certificates from other states are not recognized by the law of Colorado. A person desiring to teach in Colorado must hold a certificate issued by the proper city, county, or state authority. State Normal School diplomas and certificates from other states, or certificates from other counties in this state, may be recognized by the county superintendent only in case of an emergency. "Under this act an emergency may be said to exist whenever there is a vacancy in any school of the county, and there cannot be found in the county a teacher who holds a certificate and who is qualified to teach that particular school, and whose services can be secured."

Such recognition consists of an endorsement by the county superintendent, making the certificate good only until the next examination.

Certificates may be granted only upon examination held at the time and place specified by law. If the superintendent wishes to hold an examination at another place than the county seat, he must appoint a deputy who will hold the examination on the prescribed day.

The year's experience required for a first grade certificate is construed to mean twelve months.

Certificates below the first grade may not be renewed.

The renewal of a first grade certificate is optional with the county superintendent.

An applicant for a teacher's certificate must accept the result of the examination, even though the certificate received be of a lower grade than the unexpired certificate held at the time of taking the examination.

The life of a like grade certificate is concurrent with that of the original in lieu of which it was issued.

A like grade certificate may be issued in lieu of a first grade certificate which has been renewed in the county where issued.

A like grade certificate may be issued in lieu of a first grade, even though the first grade show previous endorsement.

A like grade certificate may be issued only to a person who is to teach in the county where such certificate is issued.

The endorsement or renewal of certificates and the issuing of like grade certificates are in all cases optional with the county superintendent.

The five per cent. credit for attending normal institute may be given at any examination during the year immediately following such attendance.

A county superintendent is under no obligation to add five per cent. to the standing of applicants for teachers' certificates who attended the normal institute of a district other than his own.

A county superintendent may renew his own certificate or the certificate of a former superintendent. The fact that he is teaching in no way affects this right.

There is absolutely no authority in law for a temporary permit or certificate of any nature whatever.

A first grade certificate cannot be renewed after it has expired.

A normal institute certificate need not be endorsed. The certificate is good until revoked by the State Board of Education. The one year's successful teaching required for eligibility to a first grade certificate is not restricted to teaching in Colorado.

The State Superintendent has no authority whatever to waive in any manner the requirements of law for a license to teach, nor to grant a temporary certificate or permit, nor to authorize a county superintendent to grant such certificate or permit.

A like grade certificate may be issued in lieu of a renewed first grade. The renewal of a first grade deprives it of none of its legal force.

COMPULSORY EDUCATION.

It is the duty of the school board to enforce the compulsory law. Complaint of its violation may be made by any elector of the district.

CENSUS.

The names of all persons of school age must be included in the census. The law makes no exception in regard to married persons.

No name can be added to a census list after said list has been filed with the county superintendent.

CONTRACTS.

A contract to teach, made by two members of the board of directors, with a proposed teacher, is valid, provided such contract is ordered at a regular meeting or at a special meeting legally called and of which all the directors had legal notice. (Patton.)

A contract may be legal if not drawn according to the form in the school law, provided that both parties to the contract are aware of the terms contained in the contract, and provided that such contract is made at a regular meeting or at a special meeting legally called and of which all the directors had legal notice. (Patton.)

An oral contract made between a teacher and a school board is as binding as a written one, provided that each party can prove the terms of the contract. (Patton.)

A contract signed by two members of the board of directors is valid if made at a regular meeting or at a special meeting of which each director had due notice. A contract made in any other way is not valid.

If a teacher receives from the secretary of a school board, in pursuance of an order of the board, a letter notifying him of the length of term and salary, such notification would stand in law as a contract should the teacher accept.

COUNTY SUPERINTENDENTS.

The county superintendent is under no obligation to grade papers of applicants under eighteen years of age.

The county superintendent has the right to exercise his own discretion in regard to the annexation of a portion of one district to another.

A county superintendent may employ some one to do the work incidental to his office, the person thus employed to be remunerated by the county superintendent.

The county superintendent is under no obligation to transfer territory from one district to another, even though a petition as prescribed by law has been presented to him asking for such transfer. He will change boundary lines only when in his judgment the educational interests of the districts affected will thus be best promoted.

COURSE OF STUDY.

The directors of third class districts have power to prescribe the course of study and therefore may add such subjects as are deemed desirable without the organization of a high school.

CURRENT YEAR.

The current school year is identical with the fiscal year, beginning December 1st and ending November 30th.

DIRECTORS.

The board of directors of a school district has power to employ or discharge teachers, and the people of the district have nothing whatever to do with this matter. (Patton.)

Every school board has power to suspend or expel pupils from school who refuse to obey the rules thereof. (Patton.)

The school board of a district has the right to forbid the reading of the Bible in the schools of the district, under the provisions of Section 51, School Law, 1887, which provides that the school board shall have power to fix the course of study, the exercises and the text-books to be used in the schools of the district. (Patton.)

It is the duty of the board of directors to see that school children are vaccinated when required to do so by the local board of health.

The length of residence required in Colorado to constitute eligibility to the office of school director is six months. The entire management of the school house is in the hands of the board of directors.

If the actions of the board do not meet the approval of the electors, the latter may have redress only through the courts.

More than one director may be elected from the same family.

The board of directors have the right to use the special fund of their district to pay for the transportation of pupils to and from school.

It is not a part of the duty of the board of directors to decide as to the grade in which a pupil belongs.

The offices of secretary and of treasurer of first class districts are distinct and should be filled by two different persons.

Directors of third class districts have no authority to sell property of the district unless instructed to do so hy the electors. A sale without such direction is illegal.

No member of the board of directors, except the secretary, may lawfully become a creditor of the district.

It is illegal for two members of the board of directors to transact business connected with the district without consulting the third member.

The directors have no right to use, or permit the use of, fuel paid for from school funds for other than school purposes.

The directors of third class districts have no authority either to build a new school house or an addition to an old one unless directed to do so by a vote of the electors.

The directors have full authority to decide how many schools shall be conducted in their respective districts and where such schools shall be held.

The present Internal Revenue Law of the United States requires a 50-cent stamp to be affixed to the bond of the district secretary.

DISCIPLINE.

The board of directors has exclusive jurisdiction in determining the method of discipline to be employed in the schools under its control.

ELECTORS.

Actual residence determines one's voting place. The fact that a person has "taken up" a homestead, but is not at the time he offers to vote, located upon his homestead, does not deprive him of the right to vote in the place of his actual residence.

The fact that an elector is not a taxpayer does not disqualify him from holding office either by election or by appointment.

ELECTIONS.

The result of a school election must stand as announced by the judges until set aside through legal proceedings contesting the election. An election contest is a question for the courts to decide.

A school election at which the polls are not kept open three hours and the voting done by ballot, is illegal.

EXAMINATIONS.

Examinations for teachers' certificates cannot be taken at any time except at those times prescribed by law for public examinations.

It is not allowable for an applicant at a regular county teachers' examination to submit two or more sets of papers for grading in different counties.

The questions issued for the county teachers' examinations are divided into sections, one of which, by direction of the State Superintendent, shall be presented at the beginning of each of four different sessions. The State Superintendent is authorized to prescribe rules for the examination. In order that all applicants may have an equal opportunity, and to avoid the possibility of any being informed in advance of the nature of the examination, the county superintendent is instructed to break the seal of each section at the opening of the session for which it is prescribed, and in the presence of all applicants. Therefore, those presenting themselves for examination will write cach portion at its designated time, beginning on Friday and continuing through Saturday.

FUNDS.

A school district cannot lawfully transfer its apportionment of the general fund or any portion thereof to another district. (Patton.)

If the term of a public school be lengthened by private subscription, the time of such lengthening may be counted toward providing for the length of term required by law.

The amount of the general fund apportioned to a pupil attending a union (not county) high school should be credited to such high school and not to the district in which he resides.

A newly organized district is not cutitled to a share of the general fund (state and county) until a school has actually begun in such district.

The general fund may be used for building, furnishing or creeting additions to school houses, or for improving the school house, sites or lots, only after the expense of maintaining the school for a period of ten months in one year shall actually have been paid. Insurance premiums and attorney's fees are not expenses "incidental to the support of a public school," and therefore must not be paid from the general fund.

HIGH SCHOOLS.

The directors of a third class district have no authority to establish a high school unless such district embraces within itself a county seat.

The County High School Law is entirely independent of the Union High School Law. The latter is in no way affected by the former.

HOLIDAYS.

The twenty days of a school month include such holidays as may occur within that school month.

The time between Christmas and New Year's may be given to the teacher if the school board chooses to do so, but it does not legally belong to him.

A school board has the right to determine the time and duration of vacations.

LOANS.

The constitution of Colorado prohibits the creation of a debt by loan for building purposes in any other way than by a vote of the electors. While a certificate of indebtedness cannot be considered a loan, strictly speaking, the courts would probably construe it to be prohibited by the same constitutional provision when issued to cover a debt incurred by building.

MEETINGS.

A special meeting of the voters of a district is legal only when twenty days' notice of such meeting is given.

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PUNISHMENT.

There is no special enactment concerning corporal punishment. Extreme and unreasonable punishment constitutes assault and battery, and action may be brought against the teacher by the party aggrieved. The court will determine whether the punishment is unreasonable.

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PUPILS.

A resident's objection to the attendance at school of a child from another district is of no effect, provided the board of directors is willing to permit such attendance.

SALARY.

If a school board closes a school during the term on account of the prevalence of a contagious disease, the teacher does not lose his pay, unless he consents to lose it, provided he holds himself in readiness to teach subject to the order of the board. (Patton.)

The school board must pay teachers for the time school has been closed for any reason within the regular term, provided the teacher is ready and willing to fulfill his part of the contract.

A teacher may collect salary for the number of months specified in the contract entered into with the board of directors of the school district where he teaches, provided the directors have not contracted with the teacher to pay wages in excess of the revenues for the year.

If a teacher is ready to begin school at the time specified in his engagement, and owing to neglect of duty on the part of the school board, can not do so, he is not compelled to make up the time thus lost, but is entitled to his salary from the time specified in such engagement.

If a teacher is present at the school house on a stormy day and waits a reasonable length of time for pupils who fail to appear, he is entitled to pay for that day.

If, with the consent of the directors, a teacher holds school on a legal holiday to make up for a day lost, the teacher is entitled to pay for the full month.

If the board of directors closes the term of school before the expiration of the time contracted for, the teacher being ready to fulfill his part of the contract, the board is liable for the teacher's salary for the full term agreed upon.

SCHOOL BUILDINGS.

Other buildings than the school house may be used for school purposes if the board so desires.

The board of directors has a right to authorize the use of the school house for other than school purposes, provided no voter of the district objects.

The school board of a third class district has no right to move school buildings unless directed to do so by vote of the electors of the district.



No petition is necessary to bring the question of selecting a site for a school house before the electors concerned.

The question of moving a school building or erecting a new one may be decided at any regular meeting of the electors. It is not necessary that the question be announced in the notice of a regular meeting.

The location of a school house is for no definite time. A vote may be taken on the question of moving the school house as often as a meeting for the purpose can be legally called.

In building a school house the board of directors must keep within the appropriation of the electors. If it is desired to spend more money than the original appropriation, a meeting of the electors must be held to determine whether they will authorize the additional expenditure.

SCHOOL DISTRICTS.

A school district can not be divided, nor territory taken from it, if by so doing fewer than fifteen persons remain in the district.

Territory belonging to a joint district can not be detached from or attached to an adjoining district without the consent of all the county superintendents interested in such joint district.

In case of a new district formed from one in which text-books are furnished free, the question of supplying free text-books in such new district must be submitted to a vote of the people.

Territory detached from a district which has been bonded is not released from taxation to pay both principal and interest of such bonds. Such detached territory is liable for such taxation until the bonds have been fully discharged, the same as if it had remained a part of the original district.

"Whenever any district shall, for a period of one year fail to maintain a school and keep up its organization of officers and to make its report as required by law, the county superintendent may declare such district annulled and annex the territory to an adjoining district or districts." Therefore the mere fact that school has not been held in a district is not sufficient to warrant the county superintendent in annulling the district.

At the meeting held for the purpose of determining whether or not a new district shall be organized, only those living within the boundaries of the proposed new district have a right to vote. Those living in the district from which the new district is to be formed have no voice in the matter.

It is not necessary that there should be ten persons of school age in territory detached from one district and attached to another, but there must be left fifteen persons of school age in the district from which such territory is taken.

Territory annexed to a school district is liable for the debts of the district from which it was detached to the extent of the tax already levied against such territory at the time of the division of the district.

TEACHERS,

Under a written contract with a school board to teach a stated length of time, a teacher is entitled to compensation for the full time. (Patton.)

A teacher can not be legally dismissed before the expiration of the time for which he is engaged, without good cause shown, unless there is a clause in the contract making provision for such contingency. (Patton.)

A school board may dismiss a teacher for incompetency or immorality. A county superintendent may revoke a certificate of any kind at any time for immorality, incompetency or any just cause. (Patton.)

In order to make good charges of immorality or incompetency, specific acts must be declared and supported by affidavits or witnesses. If satisfied that the charges can be sustained by proof the proper course for the board is to bring the matter to the attention of the county superintendent, with the request that he use the power granted him by law. (Patton.)

A teacher's only recourse against a school board that refuses to issue a warrant for salary is through the courts. (Patton.)

A school board has no right to deduct from a teacher's salary for legal holidays occurring during the school term. (Patton.)

If a school board employs teachers who do not hold legal ccrtificates, such board is liable for the teachers' salaries, since it is a direct violation of the law to pay such teachers from the public funds.

A teacher is under no obligation to make up time lost when school is closed for the purpose of repairing buildings. If a teacher absents himself a day or more from his work, he himself being responsible for the loss of time, he must make good the loss of time or forfeit his pay.

It is not legal for a board of directors before the May election to employ teachers for the following year.

An unlicensed person can not legally be employed as substitute teacher in the public schools of this state. A substitute teacher must be provided with the proper certificate.

It is the duty of the teacher to teach high school studies when such studies are prescribed by the board of directors as a part of the course of study.

TAXES.

After the special tax levy has been certified to the county commissioners it may not be reconsidered.

If the directors fail to certify the amount of the special tax levy the county commissioners may make a levy sufficient to maintain a four months' school, the tax in no case to exceed fifteen mills. When the special tax levy has been certified to the county commissioners, it can not be reconsidered, nor have the commissioners any authority to make another than that certified, except in the case of bonded districts.

The fiftcen-mill limit of special taxation applies only to third class districts.

There is no limit to the special levy in first and second class districts.

The fact that the head of the family pays a tax in a certain school district does not of itself give his children the privileges of the school in that district. Children may attend school free of charge only in the district in which their parents or guardians are bona fide residents.

TEXT-BOOKS.

The board of directors must furnish books for all pupils when instructed to do so by a majority vote of the electors of their district, as expressed at any regular meeting, or special meeting called for that purpose.

TUITION.

A tuition fee may be charged for any person under six or over twenty-one years of age. The time of year at which his birthday occurs has nothing to do with the matter.

WARRANTS.

Two members of a school board can issue warrants, provided such warrants are ordered at a regular meeting or at a special meeting, legally called, of which all the directors had legal notice. (Patton.)

It is the duty of each member of the board of directors to sign all warrants drawn on the county treasurer in favor of parties to whom the district is lawfully indebted. If any member of the board refuses to sign such warrant there is no way to compel him to do so except through regular legal procedure. If, however, the county superintendent be cognizant of the facts and certifies to the county treasurer that the warrant was drawn in payment of a just debt legally incurred, the county treasurer would be justified in paying such warrant bearing the signature of only two members of the board of directors.

"It shall not be lawful for the officers of any district to issue warrants in excess of the tax levy for the current year." The "current year" is identical with the fiscal year, beginning December 1st and ending November 30th.

DECISIONS OF ATTORNEY GENERAL.

IN RE. COUNTY HIGH SCHOOL STATUTE.

In the act of 1899, authorizing counties of the fourth and fifth classes to establish county high schools, the words, "as classified by law with reference to the salaries of district attorneys and county officers," make the act applicable to counties which may be found in those classes at the time when such counties seek to avail themselves of the provisions of the act.

> State of Colorado, Attorney General's Office. Denver, Colo., February 10, 1900.

Hon. Helen L. Grenfell, State Superintendent of

State Superintendent of Public Instruction, Denver, Colorado.

Dear Madam—I am in receipt of your letter of recent date, in which you request an opinion as to the proper construction of the language of section 1 of an act to provide for the establishment and support of high schools in counties of the fourth and fifth classes, and especially of the words, "any county of the fourth or fifth class as classified by law with reference to the salaries of district attorneys and county officers."

In reply thereto I have the honor to state as follows:

The act referred to will be found at page 226 of the Session Laws of 1899. It went into effect on July 7, 1899.

In 1891 the legislature passed an act dividing the counties of the state into five classes, for the purpose of providing for and regulating the compensation of county and other officers. (Session Laws of 1891, page 307.)

In 1899 the act of 1891 was amended. The county of Fremont was removed from the fourth class to the third class, and the county of Larimer was removed from the third class to the fourth class. (Session Laws of 1899, page 331.) By section 14 of the same act, an entirely independent classification, dividing the counties into seven classes, was made, for the purpose of regulating the amount of compensation of county superintendents of schools. (Session Laws of 1899, page 337, section 14.) This act went into effect July 10, 1899. The question submitted by your letter for determination is, which one of these three classifications was referred to by the legislature in the statute under consideration?

The language of the act, so far as the same is relevant to the present purpose, is as follows:

"At any general election subsequent to the passage of this act, the question of organizing any county of the fourth or fifth class as classified by law with reference to the salaries of district attorneys and county officers into one school district for hlgh school purposes shall be submitted. * * *"

It will be noted that the act of 1891 was still in force when the act under consideration went into effect, July 7, 1899. It will also be noted that, strictly speaking, there is no statute which classifies the counties with reference to the salaries of district attorneys. Manifestly the legislature did not refer to the classification made by section 14 of the act of 1899, for the reason that that is not a classification for the purpose of fixing the salaries of county officers, but only of one county officer, namely, that of county superintendent of schools. The question to be determined is, therefore, whether the legislature referred to the classification of counties in force at the time of the passage of the act or to any classification of county superintendents.

The only language in said act which refers to or fixes any time is found in the opening sentence, "At any general election subsequent to the passage of this act." The general rule is that where the legislature, in passing an act, uses the broad terms. "as provided by law," or any similar terms, it will be held to mean the law upon the subject which may be in force at the time when the provisions of such act are to be put into effect, and not the particular provisions of law which were in force at the time of the passage of the act. This construction will prevail unless something can be found in the act itself which indicates a different intent on the part of the legislature.

> Kugler's Appeal, 55 Pa. St., 123, 125. Harris, et al., vs. White, 81 N. Y., 532, 545 Jones, et al., vs. Dexter, 7 Florida, 276, 280-283.

Under this rule, the words, "as classified by law," found in the act under consideration, I think clearly indicate that the counties authorized to take advantage of the act are those which may be found in the fourth and fifth classes as classified with reference to county officers at the time when such counties seek to take advantage of the provisions of the act, and not those which were in the fourth and fifth classes at the time when the act went into effect. If the latter had been the intention of the legislature, such intention could readily have been made manifest by the use of apt words for that purpose. As the law now stands, all the counties in the state come within its provisions, with the exception of Arapahoe, El Paso, Pueblo, Boulder, Fremont, Lake, Pitkin, Las Animas and Weld.

Very truly yours,

D. M. CAMPBELL, Attorney General.

IN RE. SPECIAL MEETING OF ELECTORS OF SCHOOL DISTRICT.

Notice—A notice of a special school district meeting, which is signed and posted by the district treasurer instead of by the secretary, is not for that reason invalid, though the practice is to be condemned.

> State of Colorado, Attorney General's Office. Denver, Colorado, May 25, 1899.

Hon. Helen L. Grenfell, State Superintendent, Denver, Colorado.

Dear Madam—I am in receipt of your favor of the 22d instant, in which you ask for my official opinion as to the legality of a special meeting of the electors of a third-class school district, which meeting was called in the manner stated in your letter, as follows:

"At a regularly called meeting of the school board all members were present and a motion to call a special meeting was carried by a vote of two to one. The secretary of the district refused to post the notices for the special meeting, which were then posted by the treasurer over his own signature. Will the meeting be illegal because the notices were not signed by the secretary?"

In reply thereto I have the honor to submit the following:

The duties imposed by statute upon the school district secretary are in part as follows: "The secretary of each school board shall eause written or printed notice to be posted specifying the day and place or places of such (regular) election." "The general provisions of section 44 * * * shall be applicable to all school elections, whether general or special, or for whatever purpose held." "He shall give the required notice of all regular and special meetings as herein authorized."

> Section 44, School Act (Section 4008, 3 M. A. S.). Section 46, School Act (Section 4010, 3 M. A. S.). Section 56, School Act (Section 4020, 2 M. A. S.).

Section 62 of the School Act (Section 4026, 2 M. A. S.) provides as follows:

"In any district of the third class the board of directors may at any time call a special meeting of the electors of such district, for any of the purposes specified in section sixty-two (sixty-three) of this act, and it shall be their duty to call such meeting if petitioned so to do by ten (10) legal voters of the district. Notices, specifying the time, place and object

SUPERINTENDENT OF PUBLIC INSTRUCTION.

of such meeting shall be posted in three (3) public places, one of which shall be at the place of meeting, at least twenty (20) days prior to the time of holding such meeting."

Clearly it is by law made the duty of the secretary of third-class districts to give the notice required by section 62, above. The question to be determined is, whether or not such meeting can be legally assembled with authority to transact business where the secretary refuses to perform his official duty in the matter of giving notice. The question is one which, so far as I have found, has never been raised or determined. An explanation of this lack of precedent in the matter may be found in the provisions of our school act. [Under these provisions a district secretary failing to perform his official duty is liable therefor upon his official bond under the provisions of section 54 of the school act (section 4019, 2 M. A. S.).] Under the provisions of section 59 of the school act (section 4023, 2 M. A. S.), his neglect or refusal to perform his official duty works a forfeiture of his right to compensation, and such failure or neglect, after being directed to act by a majority of the school board, subjects him to criminal prosecution.

Under the facts stated in your letter, it is apparent that the school board acted regularly under the provisions of section 62, above quoted, in the matter of calling the election, and the only question is as to the sufficiency of the notice.

A special school meeting convened without notice or upon a notice which fails to comply substantially with the statutory requirements, is invalid. For the purposes of this opinion it is assumed that the notice in question is unobjectionable as to form and contents, as well as in the matter of the time and place of posting. The only question is, whether or not the fact that it was signed by the treasurer of the school district, and not by the secretary, makes it invalid. It is quite clear from section 62 of the school act, above set out, when construed with other portions of said act, that the validity of special elections and the business transacted thereat, is made to depend upon the question, whether or not the electors of the district have been properly notified and given an opportunity to be present and participate in such meeting. It will be noted that the statute, section 62 above, does not directly provide that the notice shall be signed by the secretary, but the direction that he shall "give" such notice unquestionably contemplates his signature attached thereto. In my opinion, however, the notice should not be held to be invalid for the irregularity alone which you have stated; certainly not where it appears that no injustice was done by such irregularity.

The method adopted of giving the notice in question is, of course, to be condemned. It would seem that a vigorous enforcement of the laws above referred to relating to delinquent officers would have a decided tendency to prevent this question from arising in future.

Very truly yours,

D. M. CAMPBELL, Attorney General.

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EXAMINATION QUESTIONS.

COUNTY.

. REGULATIONS GOVERNING COUNTY EXAMINATION OF TEACHERS. DIRECTIONS TO APPLICANTS FOR TEACHERS' CERTIFICATES. QUESTIONS FOR THE COUNTY EXAMINATIONS OF TEACHERS, 1898–99 AND 1900.

STATE.

STATEMENT OF CANDIDATES FOR STATE EXAMINATION. QUESTIONS FOR THE EXAMINATION OF APPLICANTS FOR STATE DIPLOMAS, 1899–1900.

KINDERGARTEN WORK.

KINDERGARTEN LAW. STATE KINDERGARTEN EXAMINATION QUESTIONS, 1899-1900.

STATE SUPERINTENDENT'S DEPARTMENT OF COLORADO BAR EXAMINATION.

DIRECTIONS TO APPLICANTS. EXAMINATION QUESTIONS, 1890-1900.

ENTRANCE EXAMINATION COLORADO COLLEGE OF DENTAL SURGERY.

DIRECTIONS TO APPLICANTS. EXAMINATION QUESTIONS, 1900.

COUNTY SUPERINTENDENTS OF SCHOOLS.

1898 1900, 1900-1901.

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EXAMINATION QUESTIONS.

REGULATIONS GOVERNING COUNTY EXAMINATIONS OF TEACHERS.

To County Superintendents:

The following regulations in reference to county examinations for teachers' certificates are hereby prescribed, and should be carefully considered:

1. The questions to be used in these examinations will be forwarded to county superintendents and to deputies appointed by them, in sealed envelopes. These must be opened first in the presence of the applicants, at the time set for the examination. For the protection of the superintendents themselves, this rule should be strictly enforced, and the attention of the applicants directed to the envelopes.

2. County superintendents should give due notice of the date and place of examinations, and the hour at which they will begin. Four halfday sessions should be provided for.

3. Applicants should be instructed to supply themselves with pencil or pen and ink. Paper of uniform size will be furnished by the county superintendents.

4. Applicants shall write on one side of each sheet of paper.

5. At the beginning of the examination, each applicant must be given an envelope with a number, by which he will be known during the examination, the name to be written only on slip furnished, and with other items specified, sealed in said envelope.

6. All answer papers shall be examined and graded by number before the euvelopes which contain the names of the applicants are opened.

7. Applicants shall not be allowed to take any part of the examination excepting at the time designated.

8. Answer papers of applicants that have been examined in any other county shall be accepted only when forwarded by the superintendent of that county, accompanied by a certified statement from the superintendent that the set forwarded is the only one written by the applicant and submitted for grading at that examination. Manuscripts forwarded require first-class postage (full letter postage).

9. Applicants shall not be allowed to leave the room until their work has been completed and handed to the examiner.

10. A written certificate or a statement with references of good character shall be required of the applicant, if the county superintendent deem it necessary; also, one of past success in teaching. Applicants under 18 years of age shall not receive a certificate.

11. The answer papers, arranged and filed in good order, must be collected at the expiration of each session.

12. (a) In grading, allow the same number of credits for each question, unless a number is given in parenthesis at the left of the question. (b) Issue certificates upon the following conditions: *First Grade*—An average of 90 per cent.; no branch below 70 per cent. *Second Grade*—An average of 80 per cent.; no branch below 60 per cent. *Third Grade*—An average of 70 per cent.; no branch below 60 per cent. "Not more than two certificates of the third grade shall be issued to the same person."

13. The standing attained by applicants shall be written in ink upon all answer papers. Papers shall be endorsed in ink by the county superintendent, who shall place them on file in his office for at least three months.

14. Practical experience in teaching shall be considered in issuing a certificate of any grade.

15. Certificates should be dated upon the date of the examination.

16. Applicants for certificates of the first grade shall have taught successfully for at least one year.

17. In addition to the regular certificate blanks, *statement of standing blanks* will be forwarded to the county superintendents, in order that applicants may receive their standing in case of failure.

18. Private examinations shall not be lawful.

19. A report of the result of each examination must be rendered by each county superintendent to the Superintendent of Public Instruction, whether any applicants present themselves or not.

20. If, for attending Normal Institute, 5 per cent. is added, it must be estimated on the average attained, and not on 100 per cent. as a basis.

HELEN L. GRENFELL, Superintendent of Public Instruction.

DIRECTIONS TO APPLICANTS FOR TEACHERS' CERTIFICATES.

1. At the head of every sheet of paper used at this examination, write your number and the subject.

2. Use a separate sheet of paper for each subject; that is, do not write two subjects on the same sheet.

3. Do not fold the papers.

4. Number your answers to correspond with the questions, but do not repeat the questions.

5. Read each question carefully, that you may answer understandingly.

6. Give complete solutions of arithmetical problems; mere answers will not be accepted."

7. Ask no questions. Any doubt as to the meaning of a question may be submitted in writing, and will be considered when your papers are examined.

8. Collusion between applicants, or any other act of dishonesty, will make worthless the examination.

9. In estimating your standing, the general appearance of the papers, as well as the correctness of the work, will be considered.

10. Morning sessions, 9 o'clock to 12. Afternoon sessions, 1:15 to 4:15.

OFFICE OF COUNTY SUPERINFFINDENT.

No.....County, Colorado.

You will be known during the examination, not by your name, but by the number on your envelope.

Answer the following questions, and seal them, together with your written certificates of character and of success in teaching, in the envelope.

Name in full...
P. O. Address...
Age......Born in the state of....
How long have you taught school?.....calendar months....
In how many different districts of Colorado have you taught?...
In what other states have you taught?...
In what schools were you educated?...
Give the date and grade of your last certificate...
By whom was it issued?...
How many teachers' examinations have you taken?...
What educational papers do you read regularly?...
Do you read the daily papers?...
What Normal Institutes or Teachers' Associations have you attended in
this, or any other state, during the past year?....

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QUESTIONS FOR THE COUNTY EXAMINATION OF TEACHERS, DECEMBER 16 AND 17, 1898.

FIRST DAY. A. M.

ARITHMETIC.

1. What will be the cost in United States money of a cylinder of oil whose diameter is 3 feet, and whose length is 4 feet, if oil is worth a franc per gallon?

2. What is the mental effect of the study of arithmetic?

3. Show how the following problem should be solved:

Reduce 4 bushels, 1 peck, 1 pint, to pints.

4. A roof is covered with shingles put 8 inches to the weather; what is the cost at \$12 a thousand if the roof is 80 feet long and each side is 30 feet wide?

5. A has a circular garden 11 feet in diameter and wishes to lay out another 16 times as large; what must be the diameter of the latter?

6. How large a square can be cut out of a circular yard 100 feet in circumference?

7. How many acres in a triangle whose base is 40 chains, and altitude 36 chains?

8. An agent's commission at 2 per cent. is \$320; what sum did he remit to his employer?

9. Define draft, sight draft, exchange.

10. Explain in metric numbers the rate of a train running 30 miles an hour,

THEORY AND PRACTICE.

1. What are the purposes of history?

2. Distinguish between theory and practice in pedagogy.

3. What are a teacher's duties at noons and recesses?

4. What subjects should form the basis for the theory and practice of teaching?

5. Define judgment. Define will.

READING.

1. What are the essentials of good reading?

In order to teach pupils to read poetry well, what points should 9 be made prominent?

3. Define inflection: emphasis.

4. Name five noted American authors, and give title of selection written by each.

5. Why does a child make no mistakes in emphasis or inflection while talking?

FIRST DAY, P. M.

NATURAL SCIENCES.

1. What phenomena does the interior of the earth produce?

2. Upon what are coral islands built?

3. Where is the most remarkable glacier region?

4. Define weight, capillary attraction.

5. What is centrifugal force? To what property of matter is it due?

6. What relative position does the earth occupy in the solar system?

7. What are the equinoxes?

8. Describe the phenomena resulting when a beam of sunlight passes through a prism.

9. Define cohesion: adhesion. Illustrate each.

10. Define gravitation.

CIVIL GOVERNMENT.

1. Why did the framers of the Constitution make no mention of the qualifications of vice-president?

2. What is the object of the various committees in both the Senate and the House?

3. Name all the political divisions.

4. If a person is prosecuted for theft, who is plaintiff?

5. What constitutes the supreme law of the land?

ORTHOGRAPHY.

1. Give five rules for spelling.

2. What are derivatives and how formed?

3. Define a letter; an elementary sound. Distinguish between orthography and orthoepy.

4. What is a diagraph? Give example.

5. What is the use of a spelling book?

6-10. Spelling as shown in all the papers of this examination will count one-half in the marking of orthography.

SECOND DAY, A. M.

GRAMMAR.

1. What modifications have adjectives?

2. Write a sentence having an infinitive used as (a) the subject of a finite verb; (b) the object of a transitive verb.

3. State the difference between the indicative and subjunctive modes.

4. Explain what is meant by, to decline a word. Which parts of speech are declined?

5. Give example of a participle as the object of a transitive verb.

6. To what is an adverb equivalent?

7. What is involved in the expression of a thought?

8. Outline a lesson on nouns.

9. Give the rule for the introduction of technical grammar into the school curriculum.

10. What place should letter writing have in the study of grammar?

GEOGRAPHY.

1. Show by a drawing the meaning of each of the following: lake, isthmus, cape, strait, peninsula.

2. What two places on earth have the greatest difference in latitude?

3. What are geysers? Name two important geyser regions.

4. State the form of government maintained by eight countries of Europe. Define each form.

5. What relative position on the earth's surface do places occupy to have the same length of day?

6. State concisely how geography should be taught to beginners.

7. In what states are the following largely produced? Iron. Lead. Gold. Corn. Cotton.

8. Name five great river basins of North America.

9. Name and locate the most important seaport of England, France, and Germany.

10. Name the states bordering on the Mississippi.

SCHOOL LAW.

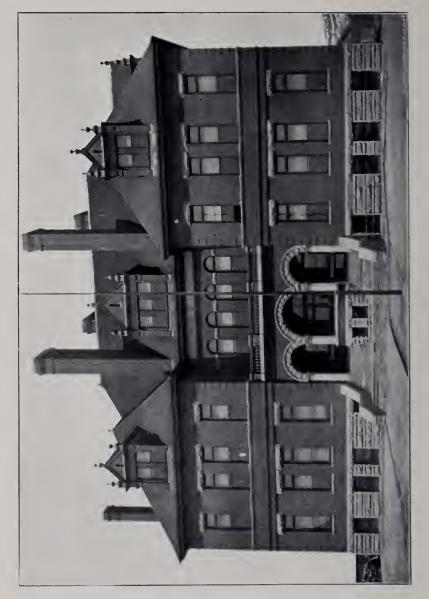
1. Of what does the public school fund of Colorado consist?

2. What is the penalty for a county superintendent's failure to make report to the Superintendent of Public Instruction?

3. How may a Union High School be established?

4. To whom are the public schools of the state open?

5. In districts of the third class, what is the method of procedure in calling a special meeting?



SECOND DAY, P. M.

UNITED STATES HISTORY AND CONSTITUTION.

1. Mention a prominent cause of the rise of New York to the rank of first in population.

2. On what grounds did Patrick Henry oppose the Constitution?

3. What is the Associated Press? Its purpose?

4. What nations took an active part in exploring North America?

5. Under what dominion were the colonies?

6. Who wrote the Declaration of Independence?

7. When were the "Stars and Stripes" adopted as the emblem of our nationality?

8. What was the Gadsden purchase?

9. Who was the most eminent literary, political and scientific writer of the United States?

10. What should constitute the work of history in the seventh and eighth grades?

PHYSIOLOGY.

1. Give the composition of bone, and tell how it changes from infancy to old age.

2. What are the functions of the liver?

3. What is the outer layer of the skin called? Describe its structure.

4. Locate the salivary glands. Give their functions.

5. Locate the following membranes: (a) pericardium; (b) pleura; (c) synovial membrane; (d) mucous membrane.

6. What provision is made by nature for keeping the body at a normal temperature?

7. Mention a poisonous substance excreted by (a) the kidneys; (b) the lungs.

8. How does the nutriment dissolved in the blood reach the cells remote from the capillaries?

9. For what purpose is food cooked?

10. Name three organs of the body that are never at rest.

WRITING.

1. Why is movement necessary to good writing?

2. What work in penmanship should be given second grade pupils?

3. In writing loops, what point should be taken into consideration?

4. How may the position of a loop be tested as to slant?

5-10. The penmanship, as shown in all the papers submitted, will count one-half in the marking of writing.

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QUESTIONS FOR THE COUNTY EXAMINATION OF TEACHERS, MARCH 17 AND 18, 1899.

FIRST DAY, A. M.

ARITHMETIC.

(Place all work on paper, or indicate operation fully. Answers alone not accepted.) Each question valued at 10 per cent.

1. Give model analyses for the following:-

- (a) If one pencil costs 3 cents, how many pencils can be bought for 30 cents?
- (b) Seven oranges cost 35 cents: at the same rate, what would be the cost of twelve oranges?
- (c) If John has 15 apples and Charles has 7 more than John, how many apples have the two boys?

2. A lot 35 feet wide and 140 feet deep has a sidewalk laid along one side and across one end. The walk is four feet wide, made of two-inch plank laid crosswise on two stringers of 4x4 scantling. What is the cost of the lumber at \$24 per M.?

3. A cylindrical tank is 10 feet in diameter and 30 feet long; how many gallons will it hold if filled to two-thirds its capacity?

4. A note given for five years at 8 per cent. for \$3,200, carries 10 per cent. coupons payable annually. What amount is due at the end of the five years if no interest has been paid?

5. A note for a certain amount was discounted (true discount) at a certain rate per cent. and yielded \$4,000. The interest on the discount at the same rate is \$3.60, and the interest on the note at the same rate would be \$123.60; find the face of the note, the rate of discount and the discount.

6. A carpenter working alone can build a house in 28 days. With the help of another man he can build it in 18 days. In how many days can the helper alone build the house?

7. Admiral Dewey takes his dinner at 5 p. m. on Monday: What is the day and hour at Denver, if Manila is 121° 20' East Long., and Denver is 105° West Long.?

8. A horse is lariated to a stake in an open field by a rope 60 feet in length: over how many square rods can he graze?

9. A merchant purchased a bill of goods amounting to \$936, list price, and was given a discount of 33½ per cent, with 25 and 5 off additional. What did the goods actually cost him, and what straight discount is equal to the three discounts given?

10. With exchange at $1\frac{1}{2}$ per cent. premium, what is the cost of a draft for \$903.35? What will the same draft cost with exchange at $1\frac{1}{2}$ per cent. discount?

SCHOOL LAW.

1. When does Arbor Day occur? State the requirements of the law as to its observance by the public schools?

2. What is the purpose of the school census?

3. In the census of what district must a person of school age be listed?

4. In whom is vested the authority to prescribe text-books and course of study for the public schools?

5. When is the annual school election held?

6. Discriminate between the general school tax and the special school tax.

7. What is a joint school district?

8. How many normal institute districts are there in Colorado? Give the number of the one in which you are writing the examination?

9. Explain fully the "like-grade" certificate.

10. Name two powers of directors of first and second class districts not conferred upon directors of third class districts.

FIRST DAY, P. M.

GRAMMAR.

1. Write one sentence containing

(a) A relative pronoun;
 (b) a possessive pronoun;
 (c) an adverb of manner;
 (d) an adjective in the comparative degree.

2. Define and give examples of three different participles.

3. Write four sentences to show the correct use of the past tense and past participles of the verbs lie (to recline) and lay.

4. Show by sentences the different uses of the words "as," "but," "like" and "what."

5. Write the plurals of the following words: Canto, sky, monkey, folio, fife, brigadier-general, mother-in-law, deer, grouse, court-martial.

6. In what way may all words and characters become nouns?

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7 and 8. Analyze or diagram the following:

Sweet is the breath of morn, her rising sweet. With charm of earliest birds; pleasant the sun, When first on this delightful land he spreads His orient beams, on herb, tree, fruit and flower, Glistening with dew.

9. How may it be determined whether a verb is transitive or intransitive?

10. State your method of cultivating correct forms of expression on the part of your pupils?

CIVIL GOVERNMENT.

1. Name three different departments of the president's cabinet. Who are the officials at present?

2. Define resident; citizen. Which of these has legal recognition under the national Constitution?

- 3. What is a census? How often taken?
- 4. Define platform, primary, majority, plurality.
- 5. On what date did our present state legislature convene? How many members in each house? Mention one of the acts of this legislature.

ORTHOGRAPHY.

1. What are diacritical marks? Give five examples.

2. Indicate the correct pronunciation and accent the following words by the use of the proper marks:

bronchitis. enervating. coadjutor. appendicitis. hygiene. Yosemite. Himalaya. Cincinnati. Missouri. Galileo.

3. By what means do you cultivate the habit of using a dictionary?

4 What are primitive, derivative and compound words? Illustrate.

5. Do you prefer the visualizing method of teaching spelling? If so, give an explanation of the use of this method; if not, explain your preferred method.

6 to 10. Fifty words are to be pronounced by the examiners and written by applicants.

PENMANSHIP.

Each question valued at ten per cent.

Fifty credits to be estimated on penmanship of papers submitted.

- 1. (a) Relative value of writing among the common branches.
 - (b) Which is the more important:—formal instruction in writing at regular intervals, or the rigid requirement of good writing in all written work? Support your answer.

2. Value of "movement" in teaching writing. In which grades should movement drills be especially emphasized? Why?

3. What are the essential characteristics of good writing?

4. Classify and illustrate the principles of the system of penmanship you teach.

5. What advantages are claimed for the vertical writing over slant writing? Describe position at desk and position of paper for vertical writing.

SECOND DAY, A. M.

HISTORY.

- 1. (a) What is the conclusion of historians in regard to the voyages of the Northmen. (1) to Greenland, (2) to the continent of North America?
 - (b) Upon what sources are these conclusions based?
- 2. (a) What Indians were most powerful when the white men first appeared in America?
 - (b) What Frenchman incurred their enmity?
 - (c) What Frenchman dealt them the heaviest blows?

3. Give a sketch of the explorations of LaSalle.

4. Write a summary of British acts of aggression leading to the Revolution, and balance this with a summary of retaliatory measures on the part of the colonists.

5. Who were the true heroes of Saratoga, and who was so regarded at the time?

6. In what ways were the colonies helped by the French to obtain their independence?

7. What were the circumstances leading to and attending the Louisiana purchase?

- 8. (a) When was the first gun of the Rebellion fired?
 - (b) What were the closing acts of the war?
- 9. (a) What was the Specie Resumption Act?
 - (b) What is meant by free coinage?

10. What national problems are before the United States to-day?

TWELFTH BIENNIAL REPORT

NATURAL SCIENCES.

1. Define the following: Matter, Force, Inertia, Velocity.

2. Distinguish carefully between the terms, Theory, Law, Experiment, Hypothesis, and show the relation of each to the Inductive method.

3. State two of the three Laws of Kepler. What eminent service has Sir Isaac Newton rendered to science?

4. Define Annual Plants, Biennials and Perennials.

5. Define the following: Cotyledon, bulb, tendril, fruit.

6. Should the potato be classed as a stem or a root? Why?

7. How is dew formed?

8. What conditions of rock formation occur where petroleum is found? Outline the theory of the origin of petroleum.

9. State the conditions which distinguish an *annular* from a *total* eclipse of the sun, and illustrate the same by drawings.

10. What is the primary characteristic distinguishing the Vertebrate from the Invertebrate? Define *rudimentary organs*, and give three illustrations.

THEORY AND PRACTICE.

- 1. Distinguish in general between analytic and synthetic methods?
- 2. What is your method between analytic and synthetic methods?
- 3. What is meant by
 - (a) Speer Method?
 - (b) Herbartian School?
- 4. What branches do you teach without a text book in hand?
- 5. (a) What is the purpose of maintaining order?
 - (b) What degree of strictness is desirable?

(c) By what method enforced?

SECOND DAY, P. M.

GEOGRAPHY.

1. Name the states which border on the great lakes, and their capitals. $^\prime$

2. Name the divisions of Central America and tell what union has recently been attempted among them.

3. Name three canals of the world and tell for what purpose they were made. $\ ,$

4. Define great circle, erosion, watershed, atoll, silva.

5. Give the great industries of the United States due to the natural resources of the country, and give their location.

6. How are deltas formed? Name three important deltas.

7. What is the ruling nation of Asia Minor and what is its religion?

8. Where are the following produced: Cinchona, tapioca, saltpetre, rubber, cocoa.

9. Write briefly of the Philippines in respect to

- (a) Location.
- (b) Size.
- (c) Products.
- (d) Population.

10. Describe the drainage of Colorado. Name and locate the three largest cities.

PHYSIOLOGY.

- 1. (a) Explain the swing of the arm from the shoulder.
 - (b) What kind of joint is involved?
- 2. (a) Name the layers of the skin.
 - (b) Why is friction of the skin invigorating after a cold bath?

3. What does the combination in our teeth, of canines and grinders, suggest as to the character of our food?

- 4. Describe the course of the circulation of the blood.
- 5. (a) What are the dangers of overstudy?
 - (b) What is the influence of idleness upon the brain?

READING.

1. Outline briefly a lesson in beginning reading, using word and sentence method, or outline a reading lesson for Fifth Reader pupils.

2. Give a list of ten books suitable for supplementary reading in the schools.

- 3. Name four of the greatest American historians.
 - Name four of the greatest American novelists.

Name four of the greatest American poets.

- (a) Name five common defects in the reading of pupils, in your own experience.
 - (b) State methods employed for correcting these defects.

5. Of what importance do you consider the teacher's voice? What is your most frequent direction to your pupils regarding their voices?

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QUESTIONS FOR THE COUNTY EXAMINATION OF TEACHERS, AUGUST 18 AND 19, 1899.

FIRST DAY, A. M.

PENMANSHIP.

1. How early in the grades would you insist on the use of the pen?

2. What use should be made of the blackboard for instruction in writing by the teacher and for practice by the pupils?

3. Briefly outline a writing exercise as it should be conducted in the fifth grade or in the second.

4. What system of penmanship do you prefer? State its characteristics; its advantages.

5. State definitely your objection to the following:

(a) Finger movement.

(b) The use of slate writing.

6 to 10. Write the first stanza of "America," or some other patriotic poem. (Penmanship to be marked on scale of 50.)

ARITHMETIC.

1. Give analysis of the following example, as you would teach a child: From 1 bu. of apples I sell 8 qts. How many pecks remain?

2. Divide the L. C. M. of 78, 156 and 390 by their G. C. D.

3. A and B were partners in business; A put in \$5,000 and B \$4,000. Their profits in three years were \$4,500. What was each man's share of the profits?

4. Find the quotient of the sum of 3_{6}^{1} and $2\frac{7}{5}$ by their difference.

5. Reduce $\frac{54}{12}$ to a decimal.

6. Reduce $350.028^{4}/_{\tau}$ to a common fraction.

7. Write a promissory note for \$350, interest at legal rate, dated to-day, and determine the amount and date of maturity ten months and fifteen days hence.

 $8. \ A$ book which cost \$4.00 is sold for \$1.00. What is the loss per cent.?

9. A cubical bin holds 100 bushels. What is the length of one side?

10. If a cone 3 ft. 4 in. long, held upright, casts a shadow 2 ft. 1 in. long, how high is a tree whose shadow at the same time is 25 ft. 9 in.?

FIRST DAY, P. M.

PHYSIOLOGY.

1. Give some idea of proper arrangement of light in the school room, and of the management necessary to prevent diseases of the eye.

- 2. (a) Why is it necessary for animals to partake of food?
 - (b) Why should food be well masticated before it is swallowed?
 - (c) What becomes of the food, i. e., ultimately?
 - (d) Why is a varied diet better than a restricted one?
 - (e) Name two important classes of food, and name articles belonging to each.

3. What is the function of

- (a) the olfactory nerve;
- (b) the radial artery;
- (c) the pericardium?

4. What is animal heat? Why is animal heat better maintained when we breathe pure air, than when we breathe foul air?

5. Name and describe three different membranes, and give one use of each.

GRAMMAR,

- 1. (a) Define analysis.
 - (b) Define synthesis.
 - (c) Define ellipsis.
- 2. Define case. What is the use of the possessive case?
- 3. (a) How may pronouns be classified?
 - (b) What is the antecedent of a pronoun?

4. Define redundant, defective, auxiliary, attributive and impersonal verbs.

- 5. (a) What tenses has the potential mode?
 - (b) What tenses has the subjunctive mode?

6. Write a complex imperative sentence, containing one noun in the nominative case, one in the possessive case and one in the objective case.

7. What may adverbs modify? Illustrate.

8. (a) What is meant by the agreement of words?

(b) What is meant by the government of words?

9. Analyze the following sentence: To cherish joyously the largest hope is to see this world in its radiance.

10. Parse: Cherish, this, is, its and radiance in the foregoing sentence.

ORTHOGRAPHY.

1. (a) Define orthography.

(b) Define orthoepy.

- 2. (a) Use in words and mark diacritically the vowel sounds.
 - (b) Use y and w as vowels; as consonants.

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3. What do you understand by the terms prefix, stem and suffix? Illustrate.

◆ 4. Distinguish between the following synonyms: Convince, persuade; temperanee, abstinence; custom, habit; human, humane; surprised, astonished.

5. Abbreviate: The same, that is, painted, last month, for example, in the year of our Lord, namely, hogshead, debtor, Master of Arts.

6 to 10. Fifty eredits on spelling of papers.

SCHOOL LAW.

1. What officials constitute the State Board of Education? The State Board of Examiners?

2. Enumerate five powers and duties of school boards.

3. How is territory transferred from one district to another?

4. What is the provision concerning a teacher's final report?

5. How are vacancies in school boards filled in first elass districts? In second and third elass? and for how long a period are the appointments made?

SECOND DAY, A. M.

HISTORY.

1. Give an account of the origin of the name of America.

2. What distinctions are indicated in the terms savage, barbarous and semi-civilized, as applied to the natives found in this country?

3. What ean you say of the fate of the earliest Huguenot colony in America? What eity now occupies the site?

4. Distinguish amongst the colonizing methods of Spain, France and England.

5. Give date, names of opposing generals, result and moral effect of the battle of Trenton.

6. Give brief account of the convention which framed the Constitution of the United States.

7. Name five leading generals on each side of the civil war.

8. What is meant by the terms, reconstruction, earpet-baggers?

- 9. (a) When was emancipation of the slaves proclaimed?
 - (b) What does the 15th amendment provide?

10. Give an account of the Peace Congress of 1899.

NATURAL SCIENCE.

(Answer any ten-Do not attempt to answer any more.)

1. Name plants in which the following parts are used for food: ---stem; leaf; bud; flower; seed.

2. Give two differences between a simple and a compound flower.

3. What gives the green color to the leaf?

4. Give two essentials of matter.

5. Gold has a specific gravity of 19.3. What is meant by the statement?

6. What causes dew?

7. Give illustrations of three ways in which heat is conveyed.

8. In what ways does chemical action differ from physical action?

9. What is the so-called "lead" of the ordinary writing pencil?

10. Name six elements (chemical).

11. What causes the changes in the moon from full to new, ctc.?

12. Explain the meaning of the terms conjunction, opposition, transit, asteroid, satcllite.

13. What are the laws of the simple pendulum?

14. Give comparative description of a leaf of maple and one of corn, and name and describe the general divisions to which these plants respectively belong in consequence of differences in methods of growth.

15. What is meant by the term "center of gravity" in a body?

THEORY AND PRACTICE.

1. What is the aim of education?

2. What is meant by Correlation of Studies?

3. What is meant by "Apperception"? Illustrate the application of the term in some lesson, geography, for instance.

4. What are proper incentives to study? Discuss briefly an incentive which you approve; one which you disapprove.

5. Which should precede, rules and definitions or a knowledge of concrete particulars and of processes? Why?

SECOND DAY, P. M.

GEOGRAPHY.

1. In teaching the physical geography of a continent, name the topics that you would consider. Give these topics in the order in which you would consider them and give in general terms a reason for the order of presentation.

2. Philadelphia is near the fortieth parallel of north latitude. Denver, Madrid and Constantinople are in nearly the same latitude; are the climate and products the same? Why?

3. Name ten European countries and name the capital of each.

4. Name ten important rivers of the world and tell into what body of water each flows.

5. Name the chief mineral products of Colorado. What is Colorado's rank in the production of gold for the year 1898? In the production of silver?

6 and 7. Make a rough sketch map of North America, showing location of Cuba and Puerto Rico. Indicate New York City, Boston, San Francisco and seven other important cities. Draw line of direction from San Francisco towards Honolulu and indicate approximately the distance.

8. Give in round numbers the distance from New York to Chicago; from Chicago to Denver; from Denver to San Francisco; from Denver to Kansas City; from Denver to Galveston.

9 and 10. Make a rough sketch map of the east coast of Asia, from Corea to Farther India. Show Australia and the larger islands between Australia and Asia.

CIVIL GOVERNMENT.

1. Name and define the three departments of our government.

2. What change was recently made in President McKinley's cabinet?

3. How are the United States senators and representatives apportioned?

4. In how many ways may a bill become a law?

5. In case of death or resignation of both president and vice-president, who becomes president?

6. When an official is impeached what is the extent of the punishment?

7. In which branch of congress must all bills for raising revenue originate?

8. Explain what is meant by Civil Service.

9. Why is an extra session of our state legislature contemplated and what business only can be transacted?

10. Where is the judicial power of the United States invested?

READING.

1. (a) What can you say of the value of imitation in the teaching of reading?

(b) State the value of the habit of reading aloud.

2. What do you consider the use of supplementary reading in the Public Schools, and what preparation on the part of the teacher is necessary to make such reading of the greatest value?

3. To what extent and in what years should elocution be given prominence in teaching Reading?

4. Indicate the countries and periods about which the following historians wrote: Gibbon, Macaulay, Bancroft, Parkman, Motley.

5. State the name of the author of the stanza following; his nationality; his rank as a writer; names of some of his works:

God of our fathers, known of old-

Lord of our far flung battle line-

Beneath whose awful hand we hold

Dominion over palm and pine-

Lord God of Hosts, be with us yet,

Lest we forget-lest we forget.

QUESTIONS FOR THE COUNTY EXAMINATION OF TEACHERS, DECEMBER 15 AND 16, 1899.

FIRST DAY, A. M.

PENMANSHIP.

1. What are the essentials of good writing?

2. What is the standard for small letters? Illustrate how you would compare other letters with the standard.

3. What are the common errors in writing? Suggest methods for criticizing and correcting the same.

4. What attention do you give to the penmanship of the general written work of your school? Why?

5. What are the hygienic advantages of the vertical writing?

50 credits on penmanship of papers.

ARITHMETIC.

1. A lodge room is 60 ft. long, 42 ft. wide and 15 ft. high. It is to be plastered at 25 cents a sq. yd., and the floor covered with ingrain carpet, at 62^{1}_{2} cents a yard. Find the entire cost.

2. When it is twenty minutes past one P. M. at a city in 84 degrees 30 minutes west longitude, what is the time at a place in 13 degrees 45 minutes east longitude?

3. If an apothecary should sell 10 pounds of drugs by avoirdupois weight instead of by apothecaries' weight, what would be his loss at 5 cents a scruple?

4. Find the amount at simple interest of \$1,375 for 4 years, 4 months. 24 days, at 74.

5. Give complete analysis as you would teach, of the following: What will 13 yards of ribbon cost at 8 cents a foot?

6. Analyze: I own $^{6}/_{7}$ of a farm and sell $^{3}/_{5}$ of my share for \$1,350. What is my remaining interest worth?

7. The diagonal of a square field is 78 rods; what is its area?

8. If 6 carpenters can lay the floors of 10 houses, each containing 7 rooms 16 ft. long and 13.5 ft. wide, in 5 days of 9 hours each, how many

carpenters will it require to lay the floors of 12 houses, each containing eight rooms 15 ft. long and 14 ft. wide, in 4.5 days of 8 hours each?

9. An agent sold flour for \$2,175, receiving a commission of 2%. He then bought sugar with the net proceeds, after reserving his commission of $1\frac{1}{2}\%$. At 5 cents a pound, how many pounds did he buy?

10. The pound sterling is worth \$4.8665. There are 20 shillings in a pound. Find to the nearest mill the value of an English shilling in United States money.

FIRST DAY, P. M.

SCIENCE.

(Answer any 10 questions.)

1. What are the parts of a typical flower? Which parts are essential?

2. Give five ways in which seeds are distributed and illustrate by naming particular plants.

3. What directions would you give pupils for collecting insects that are found abroad only at night?

4. What facts can you learn about an angleworm by observation and without a microscope?

5. What is the lowest form of animal life? What powers does it possess?

6. What is the value of nature study in the grades?

7. Distinguish between mechanical mixtures and chemical compounds. Give examples.

8. How would you prove to a class that oxygen combines with burning substances?

9. How would you determine before a class the specific gravity of some object (as a stone) so that the meaning of the term would be clearly understood?

10. Distinguish between atom and molecule.

11. How would you make clear to a class in about the 8th grade, the action and effects of (a) atmospheric agencies; (b) aqueous agencies; (c) igneous agencies; (d) organic agencies?

12. Give a general classification of rocks. Give examples of each. Tell where each can be found.

13. Explain how, when a piano is struck, we receive the sound.

14. Name the spectrum colors in their order. What are complementary colors?

15. Tell what you can about the November meteor shower.

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GRAMMAR.

1. Write and either analyze or diagram a sentence containing a substantive or noun clause as subject.

2. Same for substantive clause as object or object complement.

3. What is the purpose of the diagram in teaching English grammar?

4. Write a simple sentence containing a transitive verb in the active voice; then transform the sentence to express the same thought by using the same verb in the passive voice.

5. Are the following sentences correct? Give reasons for your answers:

(a) The book was lain on the shelf.

(b) The maid sat the table.

6. Write a paragraph of not more than ten lines, giving the essential grammatical facts about the participle.

- 7. (a) How do compound nouns generally form their plural?
 - (b) How is the possessive of plural nouns formed?
 - (c) Give examples of each.
- (a) How does an adjective pronoun differ from an adjective? Give an example.
 - (b) Give in both ascending and descending comparison, the comparative and superlative forms of *expensive*, wise.
 - (c) Name two adjectives that are compared irregularly.

9. Parse the words *ill. fares, hastening, prey* and *where* in the following:

"Ill fares the land, to hastening ills a prey,

Where wealth accumulates and men decay."

10. Explain the difference between analysis and parsing.

ORTHOGRAPHY.

1. What are the diacritical marks and for what are they used? Write the following words, using the proper diacritical marks and the accent mark: Root, gladiolus, iodine, literature, zoology.

2. Use correctly in sentences: Beach, beech, site, sight, deference, difference, invent, discover.

3. Describe a proper spelling lesson and give your method of conducting it.

4. Write the corresponding plural or singular form of each of the following: Staff, cargo, indices, nebulae, media, criterion.

5. What is the difference between a definition and a synonym? Give a synonym of the word "pupil." Give a definition of the word "pupil."

50 credits on spelling of papers in all subjects.

TWELFTH BIENNIAL REPORT

SCHOOL LAW.

(Answer any 8 questions.)

- 1. (a) How is the general school tax levied?
 - (b) What are its maximum and minimum limits in mills?
- 2. (a) What constitutes the general county school fund?
 - (b) For what purposes may it be used?
- 3. (a) How is the special tax levied?
 - (b) What is its limit in third class districts?
- 4. (a) Who determines the amount of special tax levy in third class districts?
 - (b) In first and second class districts?
- 5. For what purposes may the special tax fund be used?
- 6. (a) What constitutes eligibility to the office of county superintendent?
 - (b) Are any educational qualifications required by law?
 - (c) Any experience in school work?
- (a) Name titles of the different authorities authorized to issue licenses (certificates) to teach in the public schools of Colorado.
 - (b) Does the law delegate to the profession (teachers) any authority in this respect or to pass upon the qualifications of those desiring to enter the profession?
- 8. (a) What is a registered warrant?
 - (b) What interest does it draw?
 - (c) Why this amount of interest?

9. When is a warrant illegal, even though drawn and signed by all members of the school board?

10. What is the law relative to records and reports of teachers? What is the penalty for non-compliance in this respect?

SECOND DAY, A. M.

CIVIL GOVERNMENT.

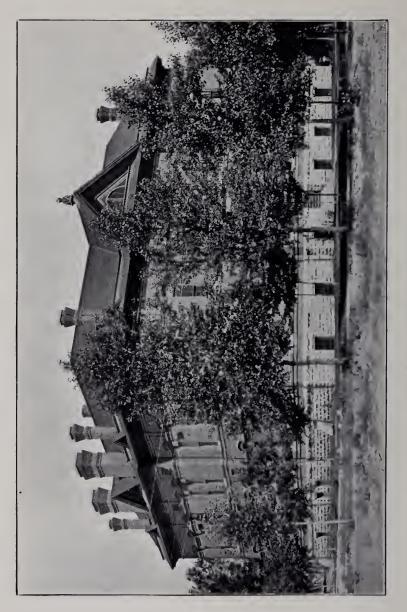
1. Define the following terms: Alien, citizen, resident, voter.

2. Why should judges of the Supreme Court of the United States hold office permanently?

3. Distinguish between direct and indirect taxes and give an example of each.

4. Explain the Australian ballot system and the advantages secured by it.

5. Why does the Constitution of the United States require that bills for raising revenue shall originate in the House of Representatives?



FRANKLIN SCHOOL, FORT COLLINS.

6. What is the least and what Is the greatest penalty which Congress may impose upon an officer who shall have been impeached and convicted?

. 7. State under what cabinet officers the management of each of the following is placed: Penslons, national banks, postoffices and post roads, war vessels.

8. How often does Congress meet? When? Who represent Colorado in the present Congress? How are Congresses numbered? What is the number of the present one? When does each new Congress come into existence?

9. Under how many Constitutions are you living.

10. For what official positions were votes cast in the recent elections in this state?

GEOGRAPHY.

1. Describe fully the coast lines of North America, giving special attention to islands, climate, indentations and projections.

2. If you were to follow down the Mississippl from source to mouth, what changes in climate and products would you notice? What cites would you pass?

- 3. (a) Name the principal sources of the world's supply of cotton.
 - (b) What physical conditions are necessary to the profitable cultivation of the cotton plant?

4. Locate and tell what each of the following is: Honolulu, Havana, Saratoga, Bogota, Genoa, Albert Nyanza, New South Wales, Teheran, Berlin, Mt. Washington.

- 5. (a) Name and locate two races of men that inhabit Asia.
 - (b) Locate five peninsulas of Asia and name the waters they separate.

6. What government has possessions in every continent in the world? Mention and locate the most important of these possessions.

7. Name and describe three important ocean currents.

- 8. (a) Name the great salt lakes of the world.
 - (b) Why are they found only in dry climates?

9. Compare the following in area and population: United States, England, France, Germany and Spain.

10. Suggest ways of giving pupils realistic ideas of a country they have never seen; e. g., China or England.

PHYSIOLOGY.

1. Name and locate ten of the largest bones of the human body.

2. State the number, kinds and functions of the teeth in the adult human being.

3. State the location and function of the salivary glands.

4. State briefly the function of each of the following: Larynx, epiglottis, pylorus, retina, tympanum.

5. State briefly the purpose of each of the following: Perspiration, circulation, mastication, digestion, respiration.

6. In what respect is the function of the skin like that of the kidneys?

7. Describe the effects of (a) morphine, (b) tobacco, (c) cocaine upon the system. How do you teach the pernicious results of alcohol, tobacco, etc., upon the system, to your pupils?

8. What are the following: Motor nerves, optic nerve, cerebellum, medulla, ganglia?

9. Name five nitrogenous or muscle-making foods.

10. Name five carbonaceous or heat-producing foods.

SECOND DAY, P. M.

UNITED STATES HISTORY.

1. Name an early explorer of America. State the object of his expedition and what was accomplished by it.

2. Give a brief history of one of the thirteen colonies from settlement to the Revolution.

3. Write not less than half a page upon the preparation and adoption of our present Constitution.

4. Give an account of the leading events of Lincoln's first administration.

5. Give a brief account of the late war with Spain.

READING.

1. In criticising a new text-book in reading, what points would you take into consideration?

2. What value has the complete classic over the selections found in a good reader?

3. At about what place in a graded school course would you teach the diacritical marks? Give your reason for so doing.

4. If, when beginning work in a new school, you should find the pupils reading with little or poor expression, how would you attempt to overcome the difficulty?

5. What do you consider the chief value of the reading class in the higher grades? Give your reasons in full.

THEORY AND PRACTICE.

1. Do you think corporal punishment ever advisable? Why?

2. Would you teach morals in the school by direct lessons? If so, how? If not, why not?

3. To what extent is correlation advisable in the lower grades?

4. How is the child study movement to benefit teachers and the teaching profession?

5. Why is the study of psychology of value to the teacher?

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QUESTIONS FOR THE COUNTY EXAMINATION OF TEACHERS, MARCH 16 AND 17, 1900.

FIRST DAY, A. M.

PENMANSHIP.

1. How much attention would you give to the practice of letters separate from words? Why?

2. What are the essentials of practical handwriting?

3. Make (a) the small letters, vertical system; (b) the capital letters, vertical system.

4. State briefly your method for cultivating free and easy movement in pupils.

5. As an example of your best writing, copy the following:

"That orbed maiden with white fire laden,

Whom mortals call the moon,

Glides glimmering o'er my fleece-like floor

By midnight breezes strewn;

And wherever the beat of her unseen feet,

Which only the angels hear,

May have broken the woof of my tent's thin roof

The stars peep behind her and peer."

ARITHMETIC.

1. Analyze, as you would in teaching a class, the following: What is the cost of $\frac{5}{5}$ of an acre of land at 32 an acre?

2. A person after spending \$40 more than $\frac{3}{5}$ of his money, had \$60 less than $\frac{3}{7}$ of it left. How much money had he at first?

3. Divide the L. C. M. of 18, 54, 90 and 180 by their G. C. D.

4. New York is 74° 3' west longitude, and Paris is 2° 20' east. How much earlier is it at sunrise in Paris than in New York?

5. I bought cloth at \$2 per yard and lost $\frac{1}{4}$ of it by fire, at what per cent. advance must I sell the remainder to gain 25 per cent. on my investment?

6. A had his house insured at $\frac{5}{6}$ of its value at $1\frac{1}{4}$. His loss over the insurance was \$1,700; what was the value of the house?

7. A field containing 16% acres is $\frac{1}{13}$ longer than wide. Find length and breadth.

8. Express as a decimal: $(\frac{2}{3} - \frac{1}{10}) \times (+\frac{2}{5})$

$$(1\frac{1}{2}+\frac{5}{7})+(3-1\frac{2}{3})\times 5$$

9. Find the interest on a note for \$516.24 for 2 yrs., 1 mo., 13 days, at 12 %.

10. If 3 lbs. of tea are worth 14 lbs. of coffee, and 5 lbs. of coffee are worth 18 lbs. of sugar, and 21 lbs. of sugar are worth 60 lbs. of flour, how many lbs. of flour are equal in value to 7 lbs. of tea?

FIRST DAY, P. M.

NATURAL SCIENCES.

(Answer any eight.)

1. Distinguish between chemical and physical change.

2. What is meant by oxidation? Illustrate.

3. Contrast nitrogen and oxygen.

4. What experiment could you easily perform to prove carbon dioxide and water to be products of exhalation?

5. Define volt; ampere; ohm.

- 6. Can a stand pipe 100 feet high be emptied by a siphon? Why?
- 7. How can you distinguish quartz; calcites; feldspars?

8. How are petrified woods produced?

9. Why has the obelisk in New York City weathered and wasted more during the eight years past than it had in 3,400 years in Egypt?

10. How do glaciers act as dynamic agencies?

11. Name in order from the sun the planets.

12. How may you distinguish, by the use of a telescope, planets from stars?

13. What is the condition of the pistil of a flower when ready for fertilization?

14. What plant economy is shown in the cactus?

15. What part of the plant is the sweet potato? The Irish potato?

GRAMMAR.'

1. How do you determine the part of speech a word is?

2. What do you understand by inflection? agreement? property? synthesis? predicate?

3. Give the principal parts of the following vcrbs: Burst, lay, are, sald, lie, sit, ovcrflow, strow, chidc, hang (to execute).

4. Give examples of

- (a) Nouns that have no plural.
- (b) Nouns that have no singular.
- (c) Nouns that are alike in singular and plural.

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5 and 6. Parse the italicized words in the following:

Manitou *is situated near* Pike's peak. The bird sang all night *long*. John came *tardy*. Cromwell's rule *as protector* was short. Buds make *flowers*. I am *at* liberty now. As many *as* came were ted.

7. Give explicit rules concerning the use of who, which and that when used as relative pronouns. Illustrate by sentences.

8. Distinguish between the use of shall and will. Illustrate.

9. Write the following correctly, giving reasons for any change you may make:

(a) Let John and me sit together.

- (b) Is there any use in me trying?
- (c) Them that honor me I will honor.
- (d) I expect he met with an accident.
- (e) It might have been us.

10. Analyze or diagram:

(a) What a tangled web we weave,

When first we practice to deceive.

(b) Many a word at random spoken, May soothe or wound a heart that's broken.

READING.

(a) What objects are to be kept in view in teaching Reading?
 (b) How important a part does the imagination play in Reading?

2. Of what advantage is it to a child to read the sentence silently before giving it oral expression?

3. State what preparation is necessary by the teacher to conduct properly a lesson in the Third Reader, or one in the Eighth Grade.

4. State some methods that may be employed to arouse in pupils a taste for good literature.

- 5. (a) What can you say of the poem "Evangeline" and its author?
 - (b) Of the poem "Thanatopsis" and its author?
 - (a) Name an American poet, an American novelist and an American historian who were contemporaries.
 - (b) Name a work of each.

SCHOOL LAW.

(Answer any eight questions.)

- 1. What records and reports are required of teachers by law?
- 2. What is meant by "school age?"

3. From what sources are the funds for the support of the public schools derived?

4. Give in full the process by which a new school district may be legally organized.

5. How is the Normal Institute fund raised?

6. What are the "national holidays" designated by the school law?

7. What are the legal qualifications of an elector at a school election?

8. What is the law relative to employing a teacher without a license to teach?

9. Who constitute the State Board of Land Commissioners?

10. Who constitute the State Board of Education?

11. Who has control of the State Normal School?

12. What notice must be given to the county superintendent of the opening of school?

SECOND DAY, A. M.

CIVIL GOVERNMENT.

1. What is the constitutional requirement as to residence of senators and representatives?

2. Each organized territory may send to the House of Representatives one delegate.

(a) Name one of his rights.

(b) What is he denied?

3. What does the Constitution say in regard to powers not delegated to the United States?

4. Of what does the Supreme Court of the United States consist?

5. Where must revenue bills originate?

6. Why does the Vice-President have no vote except in cases of a tie?

7. Has the Governor of Colorado the veto power?

8. Name two ways in which Congress borrows money.

9. Write the substance of the fifteenth amendment to the Constitution.

10. Name three objections to the "Spoils System."

GEOGRAPHY.

1. Draw an outline map of Africa, indicating the chief English, Dutch and French possessions.

2. What circles are located by the yearly movement of the earth?

3. What countries have obtained spheres of influence in China, and where are these portions respectively located?

4. Enumerate the circumstances which influence the climate of a country.

5. Name the countries, their capitals and forms of government in South America.

6. Locate the following rivers: Thames, Clyde, Shannon, Garonne, Guadalquiver, Tagus, Po, Don, Oder, Dwina.

7. Locate the great lumbering sections of the world and tell why the northern product is more valuable for shipbuilding.

- 8. (a) Name and locate the capital of Kentucky.
 - (b) What is the nature of the surface, the industries and the products of Kentucky?

9. In going from San Francisco to Manila, at what ports would you touch?

- 10. (a) Name and locate three of the highest mountain peaks in Colorado.
 - (b) To what mountain range does each belong?
 - (c) To what mountain system do they belong and what is its extent?

PHYSIOLOGY.

(Answer any eight questions.)

1. Describe the human skeleton and name its uses.

2. Describe the nervous system, giving functions of nerve centers and nerve trunks.

- 3. Describe the greater and lesser circulation.
- 4. Describe the processes of digestion
- 5. Describe the lymphatic system and its use.
- 6. Describe the eye as a sensory apparatus.
- 7. Write what you can about the portal circulation.

S. Should an artery be severed and the immediate aid of a physician could not be secured, what might be done to prevent the flow of blood?

9. Name five senses and an organ of each.

10. Name the organs of respiration.

11. Describe the different effects produced by drinking a glass of milk and by drinking a glass of alcoholic liquid.

- 12. (a) What difference is there in the sides of the walls of the heart?
 - (b) What adaptability to purpose is there in this construction?

SECOND DAY, P. M.

UNITED STATES HISTORY.

(Answer any eight.)

- 1. (a) When was Andrew Jackson President of the United States?
 - (b) Name five important events that marked his administration.

- 2. (a) What was the Missouri Compromise?
 - (b) When was it adopted by Congress, and under whose administration?
- 3. (a) When and where was the battle of Antietam fought?
 - (b) Which side won?
 - (c) How did the result of this battle influence President Lincoln?
- 4. (a) Who was President at the time of the Louisiana purchase?
 - (b) From whom purchased?
 - (c) Name the seven states wholly formed from this territory.
- 5. Give a synopsis of the life of Lincoln.
- 6. (a) Where was the treaty of peace framed that closed the late war between Spain and the United States?
 - (b) Give some of the stipulations of that treaty.
- 7. (a) About what time and by whom was the reaping machine invented?
 - (b) In what way did this and other inventions lead to the settling up of the West?
- 8. (a) What political doctrine has been declared by the Kentucky and Virginia Resolutions of 1798?
 - (b) What great national event dealt a death blow to that doctrine?
- 9. (a) When was the Northwest Territory organized?
 - (b) Name two leading provisions of the ordinance under which it was organized.
- 10. (a) What occasioned the war between the United States and Mexico?
 - (b) Name four Americans who fought in this war that afterwards became famous through their connection with the Civil War.

ORTHOGRAPHY.

- 1. Write four synonyms of durable.
- 2. Write ten Auglo-Saxon words.

3. Use the following words correctly in sentences: Sesame, sinecure, talisman, mendacious, matriculate.

4. What do the following signify: i. e., mss., idem, ibid, ergo.

5. Indicate by the proper marks the correct pronunclation of the following words: Frontier, onyx, gratis, alias, acclimated, manlacal, borealis, contractor, carbine, misconstrue, legendary.

6. What do the following prefixes and suffixes denote: bl? post? be? supr? un? con? re? ing? in? super?

7. How do you determine the number of syllables there are ln a word?

8. Correctly divide the words which follow into syllables: Fictitious, financier, forensic, island, fingered, indecorous.

9. Indicate and give the names of the principal diacritical marks.

10. Spell the following words correctly: Accordion, collectible, exhilerate, rythm, teetotaler, cantiloupe, consensus, bimetalism, indelible, deleble, nickel, seperate, tipify, supercede, bivouacked, conscientious, ghingham, dlphtheria, picnicing, recieve, coquetish.

THEORY AND PRACTICE,

1. What principles guide you in forming a daily program of recitations?

2. Tell what you consider good busy work for the first primary grade. What are the objects of "busy work"?

3. What do you consider about the proper length of recitations ln (a) primary, (b) intermediate, (c) grammar, (d) high school grades?

4. Should algebra be taught below the high school? If so, why and to what extent? If not, why not?

5. Do you believe that any other so-called secondary studies, such as German, ancient history or physical geography, should be pushed down into the grammar grades? State your reasons for your answer.

QUESTIONS FOR THE COUNTY EXAMINATION OF V TEACHERS, AUGUST 17 AND 18, 1900.

FIRST DAY, A. M.

ORTHOGRAPHY.

1. Define prefix, suffix. Write five of each.

2. Indicate by markings three sounds each of a, e, i, o and u, and two each of e, g and s. Illustrate in words.

3. Give two uses of the hyphen; three uses of the apostrophe.

4. Use these words correctly in sentences: Gait, gate, grate, tale, athleté, economic, recommend, during, in, into.

5. Outline a general plan for teaching orthography in the third grade.

6-10. Will be graded from manuscripts in history and grammar.

ARITHMETIC.

1. Are the dividend and divisor always similar numbers, or may one be concrete and the other abstract? Explain your answer. Is the quotient abstract or concrete? Explain your answer.

2. (a) Simplify $(8\frac{1}{5} - \frac{3}{4}) \times \frac{8}{5} - \frac{1}{5} \times \frac{8}{5} + \frac{1}{5} \times \frac{8}{5} + \frac{1}{5} \times \frac{1}{5} \times \frac{1}{5} + \frac{1}{5} \times \frac{1}{5} \times \frac{1}{5} = \frac{1}{5} \times \frac{1}{5} \times \frac{1}{5} \times \frac{1}{5} = \frac{1}{5} \times \frac{1}{5} \times \frac{1}{5} \times \frac{1}{5} \times \frac{1}{5} = \frac{1}{5} \times \frac{1}{$

3. What prime factors compose the greatest common divisor? The least common multiple? Factor the following numbers, and select the factors that form the greatest common divisor and those that form the least common multiple: 216, 408, 740.

4. A miller sold $\frac{4}{5}$ of all his wheat, and the next day bought 200 bushels; he then found that he had $\frac{2}{5}$ as much as at first; how much had he at first? Give full analysis.

5. The surface of a cube is equal to six square inches. What is the difference between the diagonal of the cube and the diagonal of one of its faces? Carry your work out to five decimal places.

6. A man buys 250 pounds of tea, and, after selling 150 pounds, finds he has sold it at a loss of 5 per cent. What rate per cent, must he increase his selling price on the remainder in order that he may make 10 per cent. on the transaction? 7. A owns $^{0}/_{v}$ of a manufacturing establishment. The plant is valued at \$48,870. A sells a part of his interest for \$10,860. (a) What per cent. of his interest does he sell? (b) What part of the entire plant?

8. A four-months' note for \$1,200, drawing 9 per cent. interest, is discounted at 4 per cent. three months before maturity, without days of grace. Required the proceeds.

9. I picket my horse with a rope 90 feet long. Over how many square rods can he graze?

10. 75 per cent. of a farm is arable; of the remainder, 80 per cent. is pasture, and the remainder, 3 A, 20 square rods, is waste. How many acres in the farm?

FIRST DAY, P. M.

UNITED STATES HISTORY AND CONSTITUTION.

1. Write briefly of the settlement of Pennsylvania.

2. Describe the extent of the United States at the close of the Revolution, and state three defects existing in its form of government at that time.

3. How was Florida acquired? In what administration?

4. What was the doctrine of "nullification?" Describe briefly an attempt to carry out this doctrine when Jackson was president.

5. Name two great internal improvements within the past century, with approximate date of each, and give the effect of each upon the settlement of our country.

6. Name five American inventions that have powerfully affected industries or bettered business conditions. Give effect of each.

7. What was the principal duty of the United States navy in the civil war? Name two places where the navy rendered important service in that war.

8. What were the effects of slavery on the industrial development of the South? On education? On social life?

9. Identify the following persons with the history of our country (one sentence each): Roger Williams, John Hancock, Tecumseh, John C. Calhoun, Cyrus W. Field, David Farragut.

10. What are three great political issues of to-day? Give their history briefly.

WRITING.

1. What time of day would you advise for the writing exercise? Why?

2. What care should be taken in selecting the following materials: Penholders, pens, copybook?

3. Discuss (a) form of letters, (b) position, (c) height of desk, (d) height of seat.

4. What system of writing do you use and why do you prefer it?

5. What plan would you follow in teaching beginners in writing?

6-10. The remaining credits will be based upon writing of applicants as shown in papers presented.

THEORY AND PRACTICE.

1. Define mind, faculty, knowledge, percept, concept, ideal, memory.

2. State ten objects to be gained by a well-conducted recitation.

3-4. What place have fairy tales and pioneer stories in the education of children? Why?

5. Give ten suggestions in regard to making out a program.

NATURAL SCIENCE.

(Answer any eight.)

1. Suggest twenty terms which should be introduced into an elementary course in physics and define ten of them.

2. Explain clearly, with diagrams, if possible, some electrical appliance.

3. What does this mean: "All dicotyledenous plants are net-veined?" Make four general statements concerning plants.

4. Suggest a number of ways in which plants store food for future development, and illustrate each case.

5. State the essential differences between animals and plants.

6. Explain earthquakes and volcanoes.

7. State the causes and conditions that go to make a storm of wind and rain, and explain matters.

8. Describe the digestion of a ruminant.

9. Describe the digestion of a bird.

10. Explain acid and base and give the essential points of the atomic theory.

11. After a student is thoroughly and properly drilled in botany and zoölogy by the laboratory method, in what way is he superior to one who has not received this culture?

12. Suggest a list of ten or more interesting topics in physiography which should be presented to classes below the high school.

SECOND DAY, A. M.

PHYSIOLOGY.

1. Name the divisions of the alimentary canal from above downward. Locate the stomach and describe the digestion that takes place there.

2. Name the orifice at the lower end of the stomach. Into what does it open? What name is given to the food when ready to leave the stomach? Its color?

3. What is the digestive fluid of the stomach? Where is it secreted? What digestlve fluids act in the small intestine? Where is each secreted?

4.5. Describe the lacteals and the thoracle duct. Give the function (use) of each.

6. What is the name of the largest artery in the body and why does it not have valves?

7. From what do the glands of the body derive their fluids?

8. Name the divisions of the brain. Name and describe that part of the brain which is supposed to be the seat of the mind.

9. What Is reflex action, and of what service or use to us in life?

10. Show how the sense of pain is a benefactor?

GRAMMAR.

1. Decline the following: Who, lady, woman, hero, lt.

2. State clearly the distinguishing differences between a verb and a participle.

3. I lost the knife which you gave me. Analyze and parse "which" and "me."

4. Mention four uses of the infinitive phrase, and illustrate each by a sentence.

5. What is a copulative verb? Explain its use by illustrative sentences.

"A little weeping would ease my heart;

But in their briny bed

My tears must stop, for every drop

Hinders needle and thread."-Hood.

Analyze.

6-7.

8. I saw the chrysalis become a butterfly. Parse "butterfly," and give reason for case.

9. Give the first person singular of the verb "see" through all the tenses of the indicative mode, passive voice.

10. Upon what does the case of a relative pronoun depend? Illustrate your answer.

GEOGRAPHY.

1. State definitely the uses of geography as a means of culture.

2. Show how the geography of some country has influenced that country commercially and historically. Be sure of the points made. Do not deal in glittering generalities.

3. What do you know of the physical features of India, and why do they have famines there?

4. Describe fully two regions that are becoming rivals of our country in the production of wheat.

5. Suggest ten commercial trade routes, naming their terminal eities.

6. Make statements concerning each of the following: Transvaal, Siberia, China, Philippines, Hawaii, Danube Valley, Po Valley, Argentina, Cape Nome, Australia.

 $\ensuremath{\mathbf{7.}}$ Mention twenty products of commercial importance from Colorado.

8. What difference will the direction of a mountain chain make in the climate of a place? Illustrate.

9. What are the following and where are they found: Tapioca, jute, sago, copal, copra.

10. What are bayous, jetties, friths, keys and buttes? Locate one of each.

SECOND DAY, P. M.

CIVIL GOVERNMENT.

(Answer any eight.)

1. Name six county offices filled by election, and state one duty pertaining to each office.

2. State three duties of the president of the United States; three duties of the speaker of the House of Representatives.

3. What executive power is possessed by the Senate of the United States? When does the Senate act as a court?

4. Define the following terms, as used in civil government: Citizen, alien, resident, elector, ex-officio

5. Name five powers of Congress.

6. Describe the method of electing a president of the United States.

7. What qualifications are necessary for one to be a voter in Colorado?

8. How often does the General Assembly of Colorado meet? When will its next regular meeting occur, and how long may it remain in session?

9. Name three powers of a city council in this state.

10. State three classes of civil suits that must be tried in the United States courts.

SCHOOL LAW.

1. What notice of opening school must be given the county superintendent?

2. May a teacher continue in charge of a school after the expiration of his certificate?

3. What is the law relative to non-resident pupils?

4. How does a creditor of a school district obtain his money?

5. What provision concerning text books is made by the Constitution of Colorado?

6. What is the penalty for teaching without a proper license?

7. What is the maximum limit of the special tax in third-class districts?

8. What is the maximum limit of the special tax in second and first-class districts?

9. Distinguish between the general school fund and the special school fund, and state the proper uses of each.

10. In what counties and upon what authority may a county high school be established?

READING.

1. In what does a pupil's preparation of a reading lesson consist?

2. Are pictures helpful in teaching younger children^{*} to read? Why?

3. Ask five questions best adapted to bring out the meaning of the following:

"Here rest the great and good. Here they repose After their generous toil. A sacred band, They take their sleep together, while the year Comes with its early flowers to deck their graves And gathers them again as Winter frowns. Theirs no vulgar sepulchre—green sods Are all their monument, and yet it tells

A nobler history than pillared piles or the eternal pyramids."

4. What is meant by inflection? Enunciation? Quality of voice? Pitch?

5. Name three American historians, two poets, three novelists, two writers of juvenile books, and a work of each.

STATEMENT OF CANDIDATE FOR STATE EXAMINA-TION.

STATE EXAMINATION HELD AT DENVER, COLORADO, AUGUST -----,

Name
Age
Address
Unexpired first grade certificate was issued where?
When?
Where educated?
Years of experience as a teacher
No. of years' experience as a teacher outside of Colorado?
Where?
No. of years' experience as a teacher in Colorado?
Where?
References as to successful teaching?
References as to personal character?

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QUESTIONS FOR THE EXAMINATION OF APPLI-CANTS FOR STATE DIPLOMAS, AUGUST 24, 25 AND 26, 1899.

FIRST DAY, A. M.

ALGEBRA.

(Solve five of these questions, taking one from each pair, viz: 1, 2-3, 4-9, 10.)

1. Factor: x^{12} — y^{12} into as many factors as possible.

- 2. Find the least common multiple of the two polynoms: $2x^3 - x^2 - 7x + 6$ and $2x^2 - x - 3$.
- Extract the square root of: 9a⁴-6a³b+13a²b²-4ab³+4b⁴.

4. Give definition of n_1 a in words, commencing as follows:

" "] a is any number which"

5. Solve the following equation for x:

$$3x+1 = 3+1 = x-4$$

6. The difference between two consecutive terms of an arithmetical series is 1_2 ; the sum of 20 terms is 135; find the first term.

7. "n" consecutive terms of a geometrical series have the form:

a, ar. ar²,....arⁿ⁻¹

Demonstrate that the sum of these n terms is equal to:

$$s = a \frac{r^n}{r-1}$$

8. The common logarithm of 3 is: log (3)=0.477121; find from this the following three common logarithms: log (0.003), log (270) and log $\begin{pmatrix} 5 \\ 1 & 0.3 \end{pmatrix}$.

9. Find the equation which has the following four numbers as roots: $+1, -2, +3, -\frac{1}{2}$.

10. Find the equation, the roots of which are the reciprocals of the roots of the following equation: $5x^3+2x^2-x-3=0$.

TWELFTH BIENNIAL REPORT

CIVICS.

1. Name the state and the United States courts.

2. What powers under the national Constitution are reserved to the states?

3. How are committees in each house of congress appointed?

4. Describe our diplomatic service and give some duties of each class.

5. What are the sources of our national revenue?

6. Give the thirteenth amendment.

7. What is the course of procedure when one has a claim against the United States?

8. Describe the duties of the Secretary of War.

9. Describe the business of the Department of the Interior.

10. What provisions in our state Constitution with reference to grand juries?

BOTANY.

(Select ten questions.)

1. Name the functions of each of the parts of a plant.

2. Make a diagram of a typical flower, naming all organs and giving the terms for the various collections of floral organs.

3. Describe the structure of a dicotyledonous seed, stating the function of each part.

4. Make drawings or diagrams of ten kinds of flower clusters. Show how they differ from the nearest allied form of flower clusters.

5. Give examples of hermaphrodite, monoecious, and of dioecious plants. Which kind of plant is best adapted to secure the greatest number of healthful offspring? Why?

6. Of what benefit to the plant are the colors and odors of its flowers?

7. Describe the arrangement of parcnchyma and prosenchyma in stems of acrogenous, moncotyledonous and dicotyledonous plants.

8. Give the characteristics and some typical examples of the following: Spermophytes (Authophytes) Thallophytes, Bryophytes and Pteridophytes.

9. Into what classes would you divide the branch Thatlophyta?

10. Give the life history of the mushroom.

11. What part of the plant forms the greater portion of the following vegetables? Cabbage? Beet? Cauliflower? Onion? lrish potato? Sweet potato? Turnip?

12. What kind of fruit is each of the following: Tomato? Strawbcrry? Grape? Lemon? Cucumber? Pineapple? Apple?

13. Describe the structure and formation of the scientific names of plants.

14. Give the common and the scientific names of ten species of Colorado plants.

15. Give the most prominent characteristic of five orders of flowering plants, with five examples of each of these orders.

FIRST DAY, P. M.

PHYSICS.

(Answer any five.)

1. How is motion in a curved line produced? How many forces are acting now upon the moon to keep it moving in its orbit?

2. How is the principle of the conservation of energy illustrated in a falling body?

3. Describe the behavior of a single molecule of a gas (remember that some heat is always present). What is the difference between the behavior of a molecule of gas under the influence of heat, and that of a single molecule of a solid?

4. Explain cooling by evaporation. How is the energy conserved in this case?

5. Describe the behavior of a single molecule of gas when affected by sound. What do you mean by sound waves?

6. Give examples of the vibration numbers of tones in the diatonic scale. How long are these waves?

7. Give your conception of the motions involved in a light wave. What substance is moving? What is a ray?

8. Describe the transformation of energy in the electric battery.

9. What determines the electrical conductivity of wires or bars?

10. Discuss the relations between volume, pressure and temperature of gases.

RHETORIC AND ENGLISH LITERATURE.

(Answer first four and any six of remainder.)

1. Distinguish between a plain question and a question used as a figure of speech. Give examples.

2. Write a line in the metre oftenest used by Shakespeare and Milton. Mark the scansion. What is the history of this metre in England? Can you give any further history of it?

3. Show how rhetoric may be used to develop a student's invention and style.

4. Has rhetoric anything to do with the culture of the imagination?

5. Distinguish three poets, living between 1350 and 1400.

6. Name three contributors to the English prose style of the Bible-translators.

7. Write about Surrey, Sir Thomas Malory, Sir Thomas More, and Caxton.

8. Shakespeare's predecessors in the English drama.

9. What great changes in language date from 1066?

10. What change in the drama dates from 1660?

11. Characterize the poetry of the first half of the eighteenth century.

12. What antecedent poets may be ranked with Tennyson as forming the "Art School?"

ZOOLOGY.

(Select ten questions.)

1. Give the essential characteristics of each branch of the animal kingdom, with typical examples of each branch.

2. Give characteristics and examples of divisions of the true insects (Hexapoda).

 $\ensuremath{\mathcal{S}}$. Describe the mouth parts of the grasshopper (locust) and of the butterfly.

4. Give the characteristics and examples of each order of the class Reptilia.

5. Describe the plan on which the vertebrates are formed.

6. Explain the process of natural selection, illustrating by examples, in the plumage of birds.

7. How did the male birds acquire their more brilliant plumage and better song?

8. Describe the various methods employed by bivalve mollusks in opening and closing their shells.

9. Give the life history of the jelly-fish.

10. Name in order and describe the appendages of the lobster or of the cray-fish.

11. Describe the more remarkable features of the skeleton of a bird.

12. Describe the dental system of the rabbit, the cat, the horse and the elephant.

13. What is remarkable about the reproduction of the opossum and of the duckbill?

14. What are the most important differences between man and the higher apes?

15. Topic: The differences between plants and animals.

SECOND DAY, A. M.

TRIGONOMETRY.

(Answer five, no more. Omit any two.)

1. Define "sine" and "cosine" for all angles from 0° to 360°.

2. Derive the five independent equations connecting the six goniometrical functions.

3. State what is necessary for the solution of any right triangle numerically.

4. Derive a formula expressing the sine and cosine of twice an angle in terms of functions of the angle.

5. Prove that in any plane triangle the sum of two sides is to their difference as the tangent of half the sum of the opposite angles is to the tangent of half their difference.

6. Discuss the method of solution to be used when there is given two angles and a side opposite one of them, in any plane triangle.

7. Show that $\frac{\sin a + \sin b}{\sin a - \sin b} = \frac{tg\frac{a+b}{2}}{tg\frac{a-b}{2}}$

GERMAN.

1. Decline one relative pronoun, singular and plural.

2. Decline dieses schöne Buch.

3. Write the present, future and perfect of a verb in the passive voice.

4. Give principal parts of German verbs meaning: to see, to go, to throw, to succeed, to sit.

5. Synopsis of a reflexive verb.

6. Five prepositions used only with the accusative.

7. Translate: Das Herz that ihm weh, und vergeblich bemühten sich seine Freunde ihn zu trösten. Durch schaden wird man klug.

8. Into German: I have received and read your letter. May we go to-day?

9. I have forgotten who said it. We should like this house.

10. Ye made a mistake. Ye ran into the garden.

FRENCH.

1. Write the principal parts of: avoir, aller, être, choisir, rompre; and conjugate one of these verbs in the subjunctive mood.

2. Give the rules for the variation of the French past participle, and illustrate with sentences.

3. Translate: "On dit qu'il y a ici un *oiseau* tres *curieux* qu'on appelle *rossignol*," dit l'empereur, "et que c'est la chose la plus belle

dans toute l'etendue de mon empire. Pour quoi personne ne m' en a-t-il parle'?"

- 4. Indicate the pronunciation of words underlined in above.
- 5. Write forty words of connected French prose composition.

LOGIC.

(Answer any six questions.)

1. Define logic, proposition, induction and deduction.

2. Define syllogism and give an example.

3. Give an example of an "undistributed middle."

4. Criticise the following: Socrates is poor. Socrates is wise. Some poor men are wise.

- 5. Explain and illustrate extension and intension of terms.
- 6. Show how induction is involved in all deductive reasoning.
- 7. Explain the chief source of error in inductive reasoning.

SECOND DAY, P. M.

GEOMETRY.

Of the first six, omit three. Omit either 7 or 8. Omit, either 9 or 10. This leaves five questions for solution, i. e., three in plane, one in solid, one in spherical. Do not deviate from these directions, do not attempt more than five.

1. The three perpendiculars erected at the middle points of the sides of any triangle, meet in the same point.

2. In any quadrilateral, join the middle points of each side with the middle points of each adjacent side, prove that the interior figure is a parallelogram.

3. In a circle whose center is "O," draw diameter "A B." Take any point "P," between the center O and the point B in the circumference (the point P lying in the diameter "A B"). Prove that P A is the longest line that can be drawn from P to the circumference, and that P B is the shortest.

4. The bisector of the vertical angle of any triangle divides the base into segments which are proportional to the adjacent sides.

5. The area of a regular inscribed dodecagon is equal to three times the square of the radius.

6. Two triangles having an angle of the one equal to an angle of the other, are to each other as the products of the sides including the equal angles.

7. From a point, P, outside of a given plane, drop perpendicular, P D, to the plane, also any oblique line, "P A." Join A D. Now prove that the angle P A D is the least angle which can be formed by any line of the plane (passing through A) with the line P A.

8. A triangular prism may be divided into three triangular pyramids, all equivalent in volume.

9. In two polar triangles, each angle of one is measured by the supplement of the side lying opposite to it in the other.

10. If we call the right angle the unit of angular measurement, and the tri-rectangular triangle the unit of area, show that the area of a spherical triangle is equal to its spherical excess.

CHEMISTRY.

Five of these questions constitute the examination, and not over five are to be answered. Of those selected, however, one at least must be taken from the first four, one at least from (5, 6, 7), and one at least from (8, 9, 10).

1. What fundamental principle or fact constitutes the foundation of the modern science of chemistry?

2. Name the elements necessary to fertility in soils. (Not less than three.)

3. $C_2 H_6 O+3 O_2=2CO_2+3H_2 O$. If each term be considered as a gas, what is the ratio of change in gas volume from the first to the second member of this equation?

4. The atomic weight of iron being 56, and of oxygen 16, find the ehemical formula of an oxide of iron, which contains seventy per cent. of iron and thirty of oxygen.

5. Give a brief sketch of the Periodic Law, illustrating, if you can, by the first fourteen elements.

6. Write chemical formulae for the following compounds: (1.) Nitrie acid. (2.) Zine oxide. (3.) Calcium sulphate. (4.) Ammonia. (5.) Marsh gas.

7. Write names corresponding to the following formulae: (1,) H_2S . (2,) KHSO₄. (3.) NaCl. (4.) H_3PO_4 . (5.) KOH.

8. Choose for yourself a compound, of some importance, describe its composition, uses, production, and such other points as occur to you in connection with it.

9. In the same way, select a non-metallic element, describe its oceurrence in nature, chemical and physical properties, uses, etc.

10. In the same way, select a metal, discuss after the same fashion.

GENERAL HISTORY.

1. What do you mean by the words ancient, mediaeval and modern, as applied to history? Divide history by the use of these terms, and give reasons for your division.

2. Discuss events leading to the assassination of Julius Caesar.

3. Give the historical importance of the following dates: 31 B. C.; 622 A. D.; 800; 1453.

4. Discuss the state of the world at the birth of Christ, with reference

- (a) To the Jews,
- (b) To the Greeks,
- (c) To the Roman Empire.

5. Show in what respects the period of the Renaissance was a turning point in history.

6. Give the situation in France in the year 1789,

7. Discuss the leading events of the reign of Queen Elizabeth.

8. Give the causes of the English Revolution of 1688.

9. In what respects did the first colonies in the north of North America differ from those in the south, and what bearing did the differences have upon subsequent American history?

10. Was the czar's recent call for a peace conference consistent with the traditional policy of Russia? What is likely to be the bearing of the peace conference upon current history?

THIRD DAY, A. M.

PHYSICAL GEOGRAPHY.

1. Explain the assorting power of water. Show the action of this process in sedimentation.

2. How are flood-plains formed along streams which cut their channels lower?

3. Give the origin and structure of waterfalls of three different kinds. Use diagrams of each.

4. Give examples of regions which have been mountainous and have since been base-leveled. What topography exists in these regions now?

5. Describe a sand dune topography and give examples.

6. What are some of the theories for the cause of treeless prairies? Give reasons for preferring the one which you favor.

7. Explain and illustrate "Sensible Temperature" as used by the Weather Bureau.

8. Illustrate by a sketch the distribution of rain in North America. Give reasons for the distribution.

9. Describe the typical cyclone, storm centre, or area of low pressure, as shown on the weather map.

10. What books are your principal sources of authority on the subjects mentioned in this paper?

LATIN.

1. Translate into idiomatic English: Nunc, patres conscripti, ego mea video quid intersit. Si eritis secuti sententiam C. Caesaris, quoniam hanc is in re publica viam, quae popularis habetur, secutus est, fortasse minus ernnt hoc anctore et cognitors huiusce scntentiae milii populares impetus pertimescendi; sin illam alteram, nescio an amplius mihi negoti contrahatur. Sed tamen meonrum periculorum rationes utilitas rei publicae vincat.

Parse: Intersit, auctore, negoti, vincat. Account for difference of tenses in critis, secuti and erunt.

State very briefly the part played by Cicero in the suppression of the conspiracy.

2. Translate into idiomatic English:

Excudent alii spirantia mollius aera, credo, equidem, vivos ducent de marmore voltus, orabunt causas melius, caelique meatus, describent radio, et surgentia sidera dicent: tu regere imperio populos, Romane, memenio; hae tibi erunt artes; pacisqueu imponere morem, parcere subiectis, et debellare superbos.

Who are the alii of line 1? Give concise reasons for believing that Virgil's judgment was right or wrong.

3. Translate into idiomatic Latin: Having come to the river, the general ordered the army to halt. After examining the locality, he said to his staff (legati), that inasmuch as there was no shallow place they must build a bridge. Some of the staff thought he had made a mistake, but nobody hesitated to obey his orders.

GENERAL FEDAGOGY.

(Nine questions. Answer any eight.)

1. What results to the average child from all good teaching? What frequently prevents the securing of such results?

2. What place in our educational system of work will the "Speer Method" take, as compared with former prevailing methods?

3. What are the principal centres of correlation during the first three years of school work. Outline a brief lesson illustrating the practical application of your idea of correlation.

4. What are the five formal steps essential to pedagogically scientific instruction?

5. Give arguments for and against the elimination of recesses. What substitutions are suggested by the advocates of the movement?

6. What ethical training, formal or informal, is possible and advisable in the common schools? How do you secure it?

7. Discuss the importance and value of the study of individual temperaments of children. What are the physical characteristics of each of the three most common temperaments.

8. What signal services has Colonel Parker rendered to the cause of better public school work?

9. What are the present tendencies of our educational leaders along pedagogical lines? Are they safe leaders? Give reasons for your answer to this last.

PSYCHOLOGY.

(Nine questions. Answer any eight.)

1. What is physiological-psychology? What senses, other than the five special senses, are known in physiological-psychology?

2. Trace the physiological and psychological processes from the reception of a blow given in anger to the delivery of a return blow in revenge.

3. Does mental effort produce physical fatigue? Explain. What is the effect of mental exertion upon the brain blood supply?

4. State and explain the elements of likeness and unlikeness of a concept and an apperception.

5. Which of the faculties are most active from 5 to 8 years of age? From 9 to 12? What lines of work should receive special attention during each of the periods mentioned?

6. Distinguish between the processes and between the products of memory and imagination. Mention three abnormal forms of imagination.

7. What recent discoveries and theories in the localization of motor and sensor areas of the brain do you deem of special value to you in your work?

8. Discuss briefly: (a) The number and location of brain nerve cells. (b) Location, function and number of projectional, associative, and commissural fibres of the brain. (c) What is the physiological effect of education and training upon the nerve cells of the brain; upon the fibres of the brain?

9. What specific mental development results from a course in Drawing? What other benefits ensue?

THIRD DAY, P. M.

PHYSIOLOGY.

1. What is the skeleton? Of what is it composed?

2. Describe the mechanical processes of inhalation.

3. Give the relative composition of air as inhaled, and as exhaled from the lungs.

4. Trace that part of the air which is taken up in the lungs (a) to the point where it is used—e. g. to the muscles of the arm—and (b) tell where and in what forms it is expelled from the system.

5. What are the functions of the white blood-corpuscles? Of the red corpuscles? Of the blood-serum?

6. Describe the processes and changes undergone by a monthful of bread and milk, from the time it is taken into the mouth until it is built up into the tissues. 7. Locate and tell the function of each of the following: Liver; spleen; kidney; pancreas; thymus; retina.

8. By what indications could you discover that the air of a crowded school-room was becoming unfit for respiration, and what means would you take to correct the evil?

9. Why is direct sunlight shining on a book likely to injure the eyesight? Should the light come from in front? Why? What is the best arrangement of the light?

10. What is the sympathetic nervous system, and what are its principal functions?

GEOLOGY.

(Select ten questions.)

1. Give the chemical composition of ten common ores.

2. Name and describe ten prominent varieties of silica.

3. What uses are made of the calcined products of gypsum and of linestone?

4. State briefly the important theories of vein formation.

5. How do you classify the igneous rocks?

6. What causes the disintegration of rocks?

7. Explain the formation of deposits of bog-iron ore.

8. Explain the formation of coral islands.

9. What do we know of the interior condition of the earth?

10. What conditions are necessary for the formation of saline lakes? Of glaciers?

11. State all of the phenomena that indicate the former glaciation of a country.

12. Give the age of the formations in Colorado that have been especially productive of coal, gypsum, petroleum and limestone.

13. What notable fossils were first discovered in this state?

14. Topic: The evolution of the mammalian type of vertebrates.

15. Of what division of geological time were the following animals characteristic: Megatherium? Plesiosaurus? Orthoceratite? Pterochthys? Pterodactyl? Dinorius? Dinoceras?. Labyrinthodont? Trilobites? Sigillaria?

ASTRONOMY.

1. If you lived in ten degrees of north latitude, how many degrees would there be in the angle which the plane of your horizon made with the plane of the earth's equator?

2. A star is seen by an observer in Denver to rise at the northeast point of the horizon. At what point of the horizon will it set?

3. What proof have we that the sun rotates on its axis?

4. What are solar prominences or protuberances?

5. Why do mean solar days differ in length from sidereal days?

6. If the moon be full, at about what time of day does it rise?

- 7. Define superior and inferior planets.
- 8. Describe the telescopic appearance of Saturn.
- 9. Why does a meteor flash up and then disappear?

10. State three arguments in favor of the truth of the nebular hypothesis of the origin of the solar system.

QUESTIONS FOR THE EXAMINATION OF APPLI-CANTS FOR STATE DIPLOMAS, AUGUST 22, 23 AND 24, 1900.

FIRST DAY, A. M.

ALGEBRA.

1. Find the prime factors of:

- (a) $27x^3 + 81y^6$.
- (b) $m^{a} + n^{a}$.
- (c) $a^9 b^9$.
- (d) $12x^2 52xy 9y^2$

3

2. Find the highest common divisor of $2x^3 - 3x^2 - 11x + 6$ and $7x^4 + 31x^3 + 38x^2 + 4x - 8$.

3. A man and a boy agree to plant a patch of corn for \$10. If the boy can drop as fast as the man can cover, but can cover only one-half as fast as the latter can drop, how shall the wages be divided between them?

4. Name three methods of elimination, and illustrate each of them in the solution of ax + by = c and mx + ny = p.

5. Separate - into three partial fractions. $x^4 - 1$

6. Find all the values of x and y in $x^4 + y^4 = 97$ and x + y = 5.

7. Find the ordinary formula for the sum of an arithmetic progression; and also of a geometric progression.

CIVICS.

1. Discuss fully the various courts—state and United States—and show their respective relations.

2. How are states admitted to the Union?

3. What are the methods by which the United States has acquired territory? Give instances of each.

4. Name the executive officers of a state; of the United States.

5. Describe the leading functions of the Department of the Interior.

BOTANY.

(Answer any eight questions.)

1. What external conditions are necessary to the germination of seeds?

2. Name the parts of a bean plant one week after germination. Of what use is each part?

3. What are the uses of the xylem or wood portions of plants?

4. Describe the respiration and transpiration of common vascular plants.

5. Describe the elaboration and assimilation of the food of plants.

6. Describe a cross-section of a large, exogenous, woody stem.

7. Distinguish between vegetative and sexual reproduction of plants, giving two examples of each.

8. Name the essential parts of flowers; the accessory parts.

9. Explain the meaning of the terms antoecious, monecious, dioecious and hermaphrodite.

10. Discuss briefly the pollination of plants and the means of the accomplishment thereof.

11. What are the principal kinds of inflorescence, and what different kinds of each?

12. Name different places in the tissues of plants in which cambium and meristematic tissues occur, and explain the utility of each in each ease.

13. Name the distinguishing characteristics of five orders of flowering plants.

FIRST DAY, P. M.

PHYSICS.

(Answer any eight questions.)

1. Discuss motion.

2. Give the formulae for momentum and for velocity; make a problem applying each formula.

3. What do you understand by the conservation of energy? What has been the effect of the discovery of this principle upon civilization.

4. Apply the principle of the conservation of energy in the transmutation of the energies,—mechanical, heat, light and electricity.

5. Give an illustrated explanation of the parallelogram of forces.

- 6. Give an explanation of the conservation of momentum.
- 7. Give examples of potential and kinetic energy and explain.
- 8. What is work? Illustrate.
- 9. What do you understand by difference of potential?

10. Discuss the lever.

RHETORIC AND ENGLISH LITERATURE.

1. Name the periods of English literature, and name two leading writers in each.

2. Locate in time, Marlowe, Sterne, Prescott, Shelley and Locke. Name the class of literature to which each contributed.

3. Name five men of letters who were prominent in public life.

4. Name the kinds of prose composition and cite an example of each.

5. Name the kinds of poetry and cite an example of each.

6. Characterize Macaulay as a historian.

7. Characterize the American poets.

S. Discuss the essay.

9. Give three principles of paragraph construction.

10. Outline any one of Shakespeare's plays.

ZOOLOGY.

(Answer any eight questions.)

1. Give the characters of the Protozoa. Name and describe three forms.

2. Compare the bones of the shoulder girdle of the horse, turtle, bird and man.

3. Give the entire classification of the following: House-fly, elephant, cow, sea-urchin and horned toad.

4. Describe the internal anatomy of the star fish.

5. Give the life history of the tape worm or of the sheep liver fluke.

6. Name the classes into which the vertebrates are divided, and give the essential characters of each class.

7. Compare the bones of a horse's fore leg with those of the human arm.

8. Define: Analogy, homology, oviparous, parthenogenesis and peritoneum.

9. What are the fundamental characters that distinguish the vertebrates from the invertebrates? Draw a cross-section of a typical vertebrate form, naming the parts and cavities.

10. Describe the digestive system of the clam.

11. Name and locate the parts and appendages of a grasshopper's head and thorax.

SECOND DAY, A. M.

TRIGONOMETRY.

1. Derive the formula $\sin (x+y) = \sin x \cos y + \cos x \sin y$.

2. Prove that the sine of twice an angle can not be equal to twice the sine of the angle. 3. If a, b, c are the sides of a triangle, and A, B, C are the opposite angles, prove that

$$a+b: a-b=\tan \frac{A+B}{2}: \tan \frac{A-B}{2}$$

4. If there is given two sides of a triangle and the angle opposite one of them, explain the general method of solution, and discuss the different cases that might occur.

5. Given the three sides of a triangle, derive formulae from which the angles could be calculated.

GERMAN.

1. Mention ten words which show a close relation to the English.

2. Name three nouns of the strong and three of the weak declension in the genitive singular.

3. Which part of a compound noun decides the article; mention one for each gender.

4. Give rules on the declension of the adjective (a) with def. article; (b) with indef. article; (c) without article.

5. Give participle parts of verbs: to eat, to flow, to hold, to begin, to go out, to remember.

6. When is the subjunctive mood required? Translate: A servant was asked by his master what o'clock it was. He answered that he did not know, as he had no watch with him; but he would go into the garden and fetch the sun-dial, so that his master might see for himself.

7. Give the position of the verb in the normal, in the inverted and in the transposed order, and translate: The child plays in the yard. An hour ago the child was playing in the yard. The mother knew that the child was playing in the yard.

8. Which prepositions rule the dative and the accusative?

9. Form sentences with the following prepositions: anstatt, mit, durch, für, vor, gegenüber.

10. Answer the following questions: (1) Welche Werke von Schiller und Goethe kennen Sie? (2) Haben Sie das Lied von der Glocke gelesen?(3) Welche deutschen Lieder kennen Sie? (4) Finden Sie diese Fragen klar und nicht zu schwer?

FRENCII.

1. How do nouns and adjectives form their plural, and which are the exceptions from the general rule?

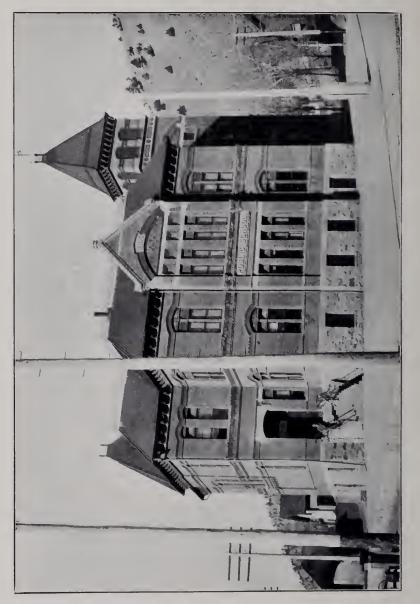
2. Form the adverbs of heureux, actif, sec, franc, complet, bc

3. Explain the use of mil, mille, milles.

4. Mention some past participles which, contrary to the English, are used with to be, instead of to have.

5. When is the indicative, when the subjunctive mood used?

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6. Translate: I do not believe that you have lent us the books of which you are speaking. I doubt that she will succeed. She hopes that you will be pleased with your questions. We fear they are not difficult enough. I am not afraid that you will make mistakes.

7. Give the rules on the past participle conjugated with être and avoir.

8. Translate: My sister has cut herself; she has cut her finger. Melba, whom 1 have heard sing, is no doubt, one of the greatest singers of our time.

9. Give the present and past participle of the verbs: boire, connâitre, croire, écrire, ouvrir.

10. Translate: The largest painting of the Louvre and one of the most admired is "The Wedding of Cana," by Paul Veronese, a Venetian painter of the sixteenth century.

LOGIC.

(Answer any five questions.)

1. Name the three parts of a proposition.

2. Give three rules governing the syllogism.

3. Explain "begging the question" as used in reasoning.

4. Give some of the sources of fallacy in deductive reasoning.

5. Explain the reasoning that gives this conclusion: The sun will rise to-morrow morning.

6. Explain inductive reasoning.

7. About half a century ago tomatoes were regarded as poisonous. What process of the mind has brought it about that they are now so generally used as food?

SECOND DAY, P. M.

GEOMETRY.

(Plane, Solid and Spherical.)

(Answer any five questions.)

1. Two parallelograms having two sides and the included angle of the one equal to the corresponding sides and angles of the other, are equal throughout.

2. Of any two unequal chords in a circle the one more remote from the center is the less.

3. Construct a circle on a given chord, such that the segment cut off by the chord will contain a given angle.

4. The areas of two similar triangles are as the squares of any two homologous sides.

5. Two triangular pyramids with equivalent bases and altitudes are equivalent.

6. Prove the ordinary formula for the volume of a sphere in terms of the radius.

CHEMISTRY.

1. Explain the terms "atom" and "molecule." Explain the relation between symbols and gas volumes. In the equation: $CO + Cl^2 = COCl^2$ what is the relation in volume between the first and second members? What is the relation as to density?

2. Explain the use and significance of symbols. Also explain the meaning of a chemical equation, giving an illustration.

3. Give a description of water and of its more important properties. Also discuss its formula in full.

- 4. Give some idea of the periodic law.
- 5. Choose an element and write about it.

Note—The answers should take about one hundred lines of letter sheet.

Mere definitions are of little value, unless accompanied by illustrations or explanations sufficiently full to indicate scientific apprehension of the topic.

GENERAL HISTORY.

1. Discuss the downfall of Greece and her influence upon her conquerors and upon the world.

2. Describe the first Roman Triumvirate.

3. Sketch modern civilization as the blending of those historic elements; the classical, the Hebrew and the Teutonic.

4. Give a brief account of the Norman conquest of England and its results to the English people.

5. Describe the Elizabethan period of English history.

THIRD DAY, A. M.

PHYSICAL GEOGRAPHY.

(Answer any five questions.)

1. Explain latitude and longitude. Denver is in long. 105° W., Manila in long. 120° E. When it is five P. M. Sunday in Denver, what time of day and what day of the week in Manila?

2. Name the chief lines of volcanic disturbance, i. e., geographical distribution of active volcanoes.

3. What are isotherms? In which hemisphere do isotherms show the greater divergence from parallels of latitude? Give reason for this; also explain why two places on the same annual isotherm may greatly differ in climate.

4. Describe the chief "basins" which carry the water flow of the United States. (Not less than five.)

5. Explain the influence of erosion upon topography. Illustrate by an actual case.

6. Illustrate the annual distribution of rain in the United States by a sketch. Give reasons for the distribution.

7. What are the "Trade Winds?" How and why do they move? Where are they best developed?

Note—Brief answers without correct reasons for them are not acceptable.

LATIN.

1. Translate into idiomatic English:

Quod si non hic tantus fructus, his studiis delectatio sola perteretur, tamen, ut opinor, hanc animi adversionem humanissiman ad liberalissimam iudicaretis. Nam ceterae neque temporum sunt neque aetatum omnium neque locorum: haec studia adulescentiam alunt, senectutem oblectant, secundas res ornant, adversis perfugium ac solacium praebent, delectant domi, non impediunt foris, pernoctant nobiscum, peregrinantur, rusticantur.

2. Give construction to italicised words.

3. Translate into idiomatic Latin:

But this I ask: Who thinks that it is a crime to have been in Africa? To be sure, he who wished to be in that same Africa himself, and complains that he has been debarred by Legarius, and in arms struggled against Caesarem himself. For what was that sword of thine, O Tubero, aiming at when it was drawn (participle) in the battle of Pharsalia? Whose side did that dagger strive to get at?

Discuss briefly various uses of the ablative absolute.

GENERAL PEDAGOGY AND PSYCHOLOGY.

1. Define "method" in teaching, and distinguish between method and device.

2. Discuss this principle of oral teaching: The pupil should not be told what he may readily be led to see for himself.

3. Define the recitation and give the objects and aims.

4. What do you understand by mental reaction? What is its application in teaching?

5. What is physiological psychology?

6. What do you understand by the cerebral localization of function? What has it to do with teaching?

7. What do you understand by the Herbartian doctrine of ideas? What is his conception of the will?

8. What is the difference between old and new psychology?

9. Give the psychological interpretation of the association of ideas.

10. Upon what is the law of activity in childhood based?

THIRD DAY, P. M.

PHYSIOLOGY.

(Answer any eight questions.)

1. Name and describe all the parts of the eyeball. Explain the sensation of sight as the result of the action of the light rays.

2. Name the bones of the skull and face and discuss the difference in the origin of the two types of bones.

3. Explain the structure of the kidneys in detail and give the function of each part.

4. Name and describe briefly all the parts of the alimentary canal. Name all the secretions that are mixed with the food in the process of digestion, and tell where they are elaborated.

5. What is meant by a gland? Describe the structure of a complex gland in detail and show how it may be developed from a simple one.

6. Describe (or draw) the microscopic structure of a bone as seen in cross-section.

7. Trace the course of a given sensation through the nervous system back to the corresponding action. What class of actions have their origin in the forebrain?

8. Describe the structure of the lungs and trace the pulmonary circulation.

9. Describe in detail the structure of the spinal cord, and explain the co-ordination of impulses so as to produce definite action.

10. What is tuberculosis, typhoid fever, Bright's disease, the plague, rheumatism?

11. Explain the action of respiration on the circulation of blood and lymph.

GEOLOGY AND MINERALOGY.

(Answer any five questions.)

1. Define and give the mineral components of gneiss; mica-schist; basalt.

2. Distinguish between the cleavage of slate, shale, schist and galena.

3. Give the kinds of material composing a volcano. Describe at some length the successive phenomena of a volcanic eruption.

4. State in what forms or kinds of crystals the following minerals occur: Quartz; feldspar; calcite; fluor spar.

5. Define a river terrace and describe its origin. Give the method of forming an ox-bow.

6. Describe the method of occurrence of coal, gold, zinc and copper.

ASTRONOMY.

(Answer any eight questions.)

- 1. (a) What is the celestial sphere?
 - (b) Denver is 39° 45' N. Lat. Show by diagram (1) the portion of the celestial sphere that is above the horizon all the time; (2) the portion that is above the horizon more than half the time; (3) the portion above the horizon less than half the time; (4) the portion that is always below the horizon.
- 2. (a) Explain clearly how the tides are produced.
 - (b) Why does the sun, which exerts a greater attraction than the moon, produce a smaller tide?
 - (c) What is the spring tide?
- 3. (a) What is the solar corona and to what changes is it subject?
 - (b) What terrestrial and solar phenomena vary in the same period and are therefore connected with each other?

4. Briefly describe three most remarkable phenomena of three separate planets.

- 5. (a) Trace the connection between comets and meteoroids (meteor swarms floating in space).
 - (b) How many meteoroids become meteors?
 - (c) Distinguish between meteors and meteorites.
 - (d) Why are fewer meteors to be observed before midnight than after?
- 6. (a) What are the angular limits at which the orbits of comets cut the plane of the ecliptic?
 - (b) How many hyperbolic and parabolic orbits become elliptical?

7. What are nebulae and what stages may be observed in their evolution?

8. What are the limits of the sun's temperature and how is it maintained?

- 9. (a) What are the asteroids?
 - (b) Where are they? What law was verified by their discovery? State it.
 - (c) How would you explain the formation of the asteroids by the development hypothesis?
- 10. (a) Name five fixed stars and the constellations in which they are located.
 - (b) Compare the total light of planets and stars with that of the full moon.

KINDERGARTEN LAW.

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. Approved and in force March 14, 1893. [L. '93, p. 436.

FREE KINDERGARTENS MAY BE ESTABLISHED-COST.

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 the state; Provided, further, That 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. [L. '93, p. 436, Sec. 1; 3 Mills' Ann. St., Sec. 4015 g.

1. See Constitution, Art. IX., Sec. 11.

QUESTIONS FOR THE EXAMINATION OF APPLI-CANTS FOR STATE KINDERGARTEN DIPLOMAS, AUGUST 25, 26, 1899.

FIRST SESSION.

MISCELLANEOUS QUESTIONS.

1. What is your name and address?

2. How old are you?

3. What Kindergarten have you attended?

4. Have you taught Kindergarten?

5. Have you taught any school?

6. What schools have you attended and how long?

HISTORY OF EDUCATION.

1. Who were the founders of the Kindergarten?

2. Give an account of Pestalozzi.

3. Compare and contrast Froebel and Herbart.

4. Give an account of the Kindergarten movement.

PHILOSOPHY OF PEDAGOGY.

1. What does the phrase "Philosophy of Pedagogy" mean?

2. What are the natures of the individual that should receive attention in education?

3. How has the doctrine of evolution affected education?

4. What do you understand by Dietetics? Why should teachers make a study of it?

5. What is Play? Work? Rest?

SECOND SESSION.

KINDERGARTEN PRACTICE.

1. What about games and occupation in Kindergarten work? Which is the more valuable?

- 2. Discuss the gifts.
- 3. How would you manage a stubborn child?
- 4. How would you manage a bashful child?
- 5. What is the relation of the Kindergarten to the Primary School?
- 6. What is the equipment of a Kindergarten room?

PHILOSOPHY OF KINDERGARTEN.

- 1. Discuss child-life.
- 2. Give the philosophy of the games.
- 3. What is the relation of Nature to the Kindergarten?
- 4. What is the value of the movement plays in the Kindergarten?

PSYCHOLOGY.

- 1. Explain the difference between sensory and motor ideas.
- 2. What do you understand by apperception?
- 3. Give an analysis of an act of the will.
- 4. What do you understand by brain centers?
- 5. What do you understand by an Education of the Feelings?

QUESTIONS FOR THE EXAMINATION OF APPLI-CANTS FOR STATE KINDERGARTEN DIPLOMAS, AUGUST 23, 24, 1900.

FIRST SESSION.

MISCELLANEOUS QUESTIONS.

1. Name and address.

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 and where have you taught Kindergarten?

10. Did you ever do any other teaching?

11. Are you a musician?

12. Do you sing?

HISTORY OF EDUCATION.

1. Give the distinguishing feature of the work of Comenius, of Locke, of Mann.

2. What can you say of the life and educational work of Pestalozzi? Name his chief literary work.

3. (a) Describe the Mutter and Kose Lieder.

(b) Tell why Froebel wrote the book.

4. Give an outline of the history of the introduction of the Kindergarten into America.

5. Write not more than fifteen lines distinguishing between the "Old" and the "New" education.

PHILOSOPHY OF PEDAGOGY.

1. What relation does physical training bear to the mental and moral training?

2. Dividing children's literature into two classes,—realistic and imaginative,—what can you say of each as regards child culture?

- 3. (a) Do you believe in fairy stories for children, and why?
 - (b) Recommend some stories for children under seven years of age.

4. How may garden work be made the basis for science work with the children?

5. How may the science work be closely connected with the gifts and occupations, the songs and games in the daily Kindergarten work?

SECOND SESSION.

KINDERGARTEN PRACTICE.

- 1. What are the duties of a director?
- 2. What are the duties of an assistant?
- 3. Give an outline of a year's work in Kindergarten.
- 4. (a) What is the value of a program?
 - (b) What is the danger of a program?
- 5. Explain your ideas of discipline in a model Kindergarten.

6. How may one Kindergarten successfully deal with twenty children of two grades in Gift and Occupation work?

PHILOSOPHY OF KINDERGARTEN.

- 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, and how carried out in the Kindergarten?

PSYCHOLOGY.

1. What is the value of Psychology to the teacher?

2. What do you understand by Child Study? Should it be encouraged?

- 3. Define the three great functions of the mind.
- 4. Illustrate the difference between a concept and a percept.
- 5. What can you say of the laws that govern attention?
- 6. What is meant by reflex movements? By instinctive movements?
 - 7. Discuss the sense of touch.
 - 8. What is your method of dealing with a dull child?

STATE SUPERINTENDENT'S DEPARTMENT OF COLORADO BAR EXAMINATION.

BAR EXAMINATION.

The rules governing admission to the bar of Colorado, adopted by the Supreme Court September 13, 1897, and amended May 4, 1898, make the following provision:

"(c) Applicants who are not members of the bar, as above prescribed, shall present a thirty count certificate from the regents of the University of the State of New York, or shall satisfy said committee that they graduated from a high school or preparatory school whose standing shall be approved by the committee, or were admitted as regular students to some college or university, approved as aforesaid, or before entering upon said clerkship or attendance at a law school, or within one year thereafter, or before September 13, 1899, they passed an examination before the State Superintendent of Public Instruction, in the following subjects: English literature, civil government, algebra to quadratic equations, plane geometry, general history, history of England, history of the United States, and the written answers to the questions in the above named subjects shall be examined as to spelling, grammar, composition and rhetoric. The said examinations shall be conducted in connection with the regular county examinations of teachers."

DIRECTIONS TO APPLICANTS.

1. At the head of every sheet of paper used in this examination write your number and the subject.

- 2. Use a separate sheet of paper for each subject.
- 3. Do not fold papers.
- 4. Number your answers to correspond with the questions.

5. Collusion between applicants, or any other act of dishonesty, will make worthless the examination.

•

6. The written answers to the questions in English literature, civil government, general history, history of England and history of the United States will be examined and marked as to spelling, grammar, composition and rhetoric.

OFFICE OF COUNTY SUPERINTENDENT.

No	County, Colorado.
You will be known during the	examination, not by your name, but
by the number on your envelope.	

Answer the following questions and seal them in the envelope:									
Name in full									
P. O. Address									
Age									
Born in the state of									

QUESTIONS FOR BAR EXAMINATIONS, DECEMBER 15 AND 16, 1899.

Note to Applicants—The written answers to the questions in English Literature, Civil Government, General History, History of England and History of the United States will be examined and marked as to Spelling, Grammar, Composition and Rhetoric.

FIRST SESSION.

ALGEBRA,

1. Find the value of $x - \sqrt{x+1} + 2 - \frac{x - \sqrt{x}}{\sqrt{x-4}}$, when x = 8. 2. Simplify $\frac{a^4 - x^4}{a + 3} \times \frac{1}{a^2 - 2x - a(a + 2)} \times \frac{a^2 + 5a + 6}{(a^2 + x^2)(a + x)}$ 3. Expand $\left(\frac{2a - \frac{3}{x}}{x}\right)^3$. 4. Extract the square root of $x^4 - x^3 + \frac{5x^2}{4} - \frac{x + 1}{2}$ 5. Simplify $\frac{1}{x + \frac{1}{1 + \frac{x + 1}{3 - x}}}$

6. A man has six hours for an excursion. How far can he ride out in a carriage at the rate of eight miles an hour, so as to return in time, walking back at the rate of four miles an hour?

7. A gentleman hired a man for 12 months at the wages of \$90.00 and a suit of clothes. At the end of seven months the man quit his service and received \$33.75 and the suit of clothes. What was the price of the suit of clothes?

8. A is twice as old as B, and four years older than C. The sum of the ages of A, B and C is 96 years. Find B's age?

- 9. Factor $a^4 + a^2 + 1$.
- 10. Factor $\frac{x^2}{a^2} \times \frac{a^2}{x^2} 2$.

UNITED STATES HISTORY.

1. Name the principal political parties of the United States and give their principles.

2. Give the dates of the following inventions and names of the inventors: The telegraph, the steamboat, the cotton gin, the sewing machine.

3. Name the thirteen original colonies.

4. Give the states, parts of states and territories formed from the territory of Louisiana.

5. Name all the wars in which the United States has been engaged.

6. Explain the difference between tariff for revenue only and protective tariff.

7. What disputes and treaties have we had with England about our boundaries?

8. Give the area and population of the original territory of the United States when they became independent; also give area and population now.

9. To what do articles 13, 14 and 15, respectively, of the amendments to the Constitution refer?

10. Where is Mason & Dixon's line and why is it called so?

SECOND SESSION.

GENERAL HISTORY.

1. Name five battles that resulted in the change of the world's history.

2. Name five Grecian statesmen.

3. Name five Roman generals.

4. Give the date of the fall of the Roman empire.

5. When was Spain at its greatest power, and what caused its decline?

6. Name the great leaders in England, France, Germany and Russia in the last fifty years.

7. Why have not the governments of South America made the progress that the United States has?

8. What countries are controlled by the Anglo-Saxon race?

9. Name the countries controlled by the Latin races.

10. Give the cause of the French Revolution.

ENGLISHI LITERATURE.

(Answer the first four and any two of the remaining questions.)

1. When did Chaucer live and write? Name his most famous work.

2. Select any one of Shakespeare's plays and make some critical comments upon it.

3. Who was the chief author of the Constitution of the United States? Who was its chief interpreter?

4. What is considered the masterpiece of Lincoln? Of Webster? Quote something from one or the other.

- 5. (a) Name two poets and two novelists of the Victorian Age, and give two works of each.
 - (b) Name four American novels written during the age of Emerson, and give author of each.
- 6. (a) Who is regarded as the greatest orator Ireland has produced?
 - (b) Who was the "Wizard of the North?" Name two of his works.

7. Write three quotations from noted English authors, and two from noted American authors.

8. Name three of the most noted American writers now exclusively engaged in writing. Make brief statements of the reason for your choice.

CIVIL GOVERNMENT.

1. May a woman be elected to Congress, to the United States Senate, or to be president of the United States? On what do you base your answer?

2. Describe the electoral college, how and when it elects the president of the United States.

3. To what department at Washington does the meteorological bureau belong?

4. On what grounds is citizenship denied to Chinese?

5. What determines the number of congressmen from each state?

6. What department at Washington supervises the construction of postoffices, mints, etc.?

7. State clearly the difference between the duties of diplomats and consuls.

8. What is the court of claims?

9. What is the duty of the commissioners of the circuit court of the United States?

10. What is meant by a direct tax? Has there ever been an instance of its use in the United States, and when?

THIRD SESSION.

GEOMETRY.

(Answer any five.)

1. Prove that the sum of the interior angles of a polygon is equal to two right angles, taken as many times less two as the figure has sides.

2. Prove that a tangent to a circle is perpendicular to the radius at the point of contact.

3. Prove that an inscribed angle is measured by one-half the arc intercepted between its sides.

4. Prove that if any chord is drawn through a fixed point within a circle, the product of its segments is constant in whatever direction drawn.

5. Prove that two straight lines which are parallel to a third straight line are parallel to each other.

6. Prove that if two parallel lines are cut by a third straight line, the exterior-interior angles are equal.

7. Prove that if one straight line intersects another straight line, the vertical angles are equal.

8. Prove that the bisectors of two vertical angles form one straight line.

9. Prove the sum of the three angles of a triangle are equal to two right angles.

10. Prove the exterior angle of a triangle is equal to the sum of the two opposite interior angles.

ENGLISH HISTORY.

(Answer any ten.)

1. Give the history of the Republic of South Africa in connection with England.

2. Give an account of the battle of Hastings and its effect on England.

3. Describe the Spanish Armada and its destruction.

4. Give a short outline of the career of Oliver Cromwell.

5. Who was king of England during the war of the revolution in America?

6. Can the queen of England veto a bill that has been passed by parliament?

7. Give a general history of the Magna Charta and its contents.

8. What duties and powers belong to the sovereign of England?

9. Who may vote in England?

10. Has England a system of common schools?

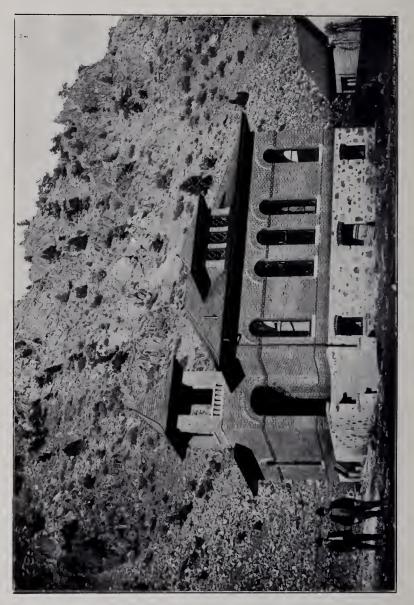
11. What was the War of the Roses?

12. How is the sovereign of England paid?

13. Tell about the Gunpowder Plot?

14. Tell what you can of the Battle of Crecy.

15. Tell what you can of the feudal system.



QUESTIONS FOR BAR EXAMINATION, MARCH 16-17, 1900.

Note to Applicants—The written answers to the questions in English Literature, Civil Government, General History, History of England and History of the United States will be examined and marked as to Spelling, Grammar, Composition and Rhetoric.

FIRST SESSION.

ALGEBRA.

1. Solve $\frac{1}{x+y} = m$, $\frac{1}{x+z} = n$, $\frac{1}{y+z} = p$.

2. The sum of two numbers is 210, and their sum is to the first as 7:4. Find the numbers.

3. Factor (a) $x^2 + 8x + 7$, (b) $\frac{x^2}{a^2} + \frac{a^2}{x^2} = 2$, (c) $x^4 x^2 y^2 + y^4$, (d) $x^4 - 11x^2 + 1$, (e) $(x + 1)^6 - 1$.

4. Two steamboats move in the same direction, one behind the other.

The first goes m yards per minute, and the second n yards. At the end of what distance separates them when m > n? When n > m?

5. Expand
$$\left(\frac{x}{2} - \frac{x^2}{3} + \frac{x^3}{4}\right)^2$$
.

6. Divide a by 1 + x. Find quotient to 5 places.

7. Simplify
$$11x - \begin{cases} 7x - [8x - (9x - (12a - 6 \times))] \end{cases}$$

8. Simplify
$$\frac{x+y}{x-y} - \frac{x-y}{x+y}$$

 $\frac{x-y}{x+y} + \frac{x+y}{x-y}$
9. Solve $\underline{m+n}$
 $\frac{x}{1} = \frac{p}{q}$

m

10. An express train, which travels 42 miles per hour, starts 50 minutes after a freight train, which it overtakes in 2 hours and 5 minutes. What is the velocity of the freight train?

U. S. HISTORY,

(Answer any ten questions.)

1. Tell when the Eric canal was built, by whom, where it begins and ends, its importance, etc.

2. Describe the National, or Cumberland road, when built and for what purpose.

3. What causes induced immigration to the United States?

4. What minister of the Gospel was largely instrumental in saving the territory of Oregon for the United States? Give details.

5. What were the effects of the discovery of gold in California?

6. Name in the order of their importance five of the principal inventions by men of the United States.

7. Give a history of the Dred Scott decision.

8. When and where was silver first discovered in the United States?

9. Give a history of the Lincoln-Douglas campaign.

10. Give the history of the proclamation that forever abolished slavery in the United States.

11. If the United States has ever had a bimetallic standard of money, tell when.

12. Give your reasons for thinking the United States should build an isthmian canal between the Atlantic and Pacific.

SECOND SESSION.

CIVIL GOVERNMENT,

1. What constitutes a citizen? An elector?

2. Give the salary and term of office of a Senator of the United States? A Congressman.

3. Name the divisions of the federal courts, the number of each, and the term of service of each judge.

4. State the cabinet officers and the duties of each.

5. Give the difference between a patent and a copyright, and the life of each.

6. To what department would you apply for a pension?

7. What is meant by state rights?

8. How is it women may vote for president in Colorado and not in other states?

9. Name the principal standing committee in the House of Representatives.

10. Who makes the treaties of the United States?

SUPERINTENDENT OF PUBLIC INSTRUCTION.

GENERAL HISTORY.

(Answer any eight questions.)

1. Give the periods into which general history is divided.

2. What was the original home of the Aryan peoples and what were the countries they afterward occupied?

3. What was the seat of the Chaldean empire?

4. Give the cause and result of the Trojan war.

5. Give the policy adopted by Fabius in his campaign against Hannibal.

6. What is meant by the "Dark Ages?"

(a) What peoples belong to the Celtic branch of the race?(b) To the Teutonic?

8. What and when were the Crusades?

- 9. Give an account of Joan of Arc.
- 10. Describe the Thirty Years' War.

ENGLISH LITERATURE.

(Select any ten.)

1. What can you say of the influence of the Norman Conquest upon the language and literature of England?

2. What was the Domesday Book?

3. From what sources did Shakespeare borrow? Quote from one of his notable tragedies, and one of the comedies.

4. Who was the blind poet of England? What religious and political affinity had he? Quote one or more lines from his greatest work.

5. At what period did Bunyan and Dryden write? What was the character of the productions of each?

6. What was the nature of the association of Beaumont and Fletcher? When did they flourish?

- 7. (a) Give some account of the establishment of newspapers and serials;
 - (b) Famous group in Queen Anne's time?

8. Name the distinctive feature of the works of

- (a) Gibbon.
- (b) Burns.
- (c) Burke.
- (d) Scott.

9. Who has been the chief poet of the Victorian era? Name five of his works.

10. Name five early American writers and a work of each.

11. Name five living American writers and a work of each.

12. State the kind of composition and name the author of each of the following:

Tales from the Alhambra. The Last of the Mohicans. Prue and I. The Marble Faun. Thanatopsis. The Tent on the Beach. The Bigelow Papers. The Chambered Nautilus. Pioneers of New France. The Conquest of Mexico.

THIRD SESSION.

GEOMETRY.

(Answer any five.)

1. Prove that a straight line which bisects one side of a triangle, and is parallel to another side, bisects the third side.

2. Prove that if two angles of a triangle are equal, the opposite sides are equal.

3. Define a locus, a tangent, a chord, a circle, a line.

4. If the angle at the vertex of an isosceles triangle is 50° , find the exterior angle formed by producing the base.

5. Prove that the perpendiculars erected at the middle points of the sides of a triangle meet in one point.

6. How many degrees in the arc between two parallel enords of which one is a diameter and the other equal to the radius?

7. Prove that if the bisector of an angle bisects the opposite side, the triangle is isosceles.

8. Prove that if two sides of a triangle are unequal the opposite angles are unequal and the greater angle lies opposite the greater side.

9. Prove that the altitudes of a triangle meet in a point.

10. Construct a rectangle having given one side and a diagonal.

ENGLISH HISTORY.

(Answer any eight, including the last two.)

1. How long did the Romans hold Britain?

- 2. Give an account of the feudal system.
- 3. Who was King of England when America was discovered?
- 4. Give a short history of the Puritans.
- 5. What is meant by the divine right of kings?
- 6. What was the South Sea Bubble?

7. Tell of the impeachment of Warren Hastings.

8. Describe the battle of Waterloo.

9. Name some of the leading scientists of England.

10. Give an account of the present war between England and the South African republics up to this time.

PERSONS WHO PASSED THE BAR EXAMINATION IN 1899.

Highberger, D. A., Pueblo. Schrleber, Francis F., Colorado City. Stephan, George, Delta. Tipton, Charles F., Trinidad.

PERSONS WHO PASSED THE BAR EXAMINATION IN 1900.

Hanes, Horace W., Montrose. Pacheco, Manuel C., Walsenburg.

1.1

ENTRANCE EXAMINATION COLORADO COLLEGE OF DENTAL SURGERY.

DIRECTIONS TO APPLICANTS.

1. At the head of every sheet of paper used in this examination write your number and the subject.

2. Use a separate sheet of paper for each subject.

3. Do not fold papers.

4. Number your answers to correspond with the questions.

5. Collusion between applicants, or any other act of dishonesty, will make worthless the examination.

6. The written answers to the questions in Grammar and Composition will be examined and marked in connection with the examination in Orthography.

> OFFICE OF STATE SUPERINTENDENT, DENVER, COLORADO.

You will be known during the examination, not by your name, but by the number on your envelope.

Answer the following questions and seal them in the envelope:

Name	\mathbf{in}	full	• • • •	• • •	 •••	• •	•					 •	 	• •	 	•			 		 •
P. O.	add	lress		• • •									 		 	 •			 	• •	
Age .						• •					 		 		 •			 		• •	
Born	in s	state	of.										 		 					• •	

QUESTIONS FOR DENTAL COLLEGE ENTRANCE EXAMINATION, DENVER, COLO., OCTOBER 1-2, 1900.

FIRST SESSION.

ARITHMETIC.

(Answer any eight.)

1. What is a decimal scale? What advantage in practical use has Arabic over Roman notation?

2. Write with proper symbols or abbreviations (a) nine degrees, ten minutes and thirty seconds; (b) five days, twelve hours, nineteen minutes; (c) the ratio of one-third to five equals the ratio of two-fifths to six; (d) the cube root of seven hundred and twenty-nine equals the second power of three.

3. (a) 40 rods, 11 feet is what part of a mile?

90 degrees is what part of a circle?

4. If $^{2}/_{0}$ of A's money equals $^{0}/_{z}$ of B's, and both together have \$340, how much has each?

5. Make a receipted bill for the following pieces of lumber at \$12 per M.: Twelve boards 16 feet long and 9 inches wide; eight 2x4 scantling 16 feet long; fifteen 8x10 joists 14 feet long; three 8x14 timbers 24 feet long.

6. Find the length of a fence required to inclose a square ten-acre field.

7. What sum of money must I put at 8 per cent. interest, that in 7 months 6 days it may earn \$15.24?

8. New York is 74° 3' west; Paris, France, is 2° 20' east. Find the difference of time.

9. Find the interest on \$342 at 6 per cent. from January 12, 1884, to August 22, 1897.

10. What distance will be saved by traveling diagonally across a square mile, instead of around the two sides?

SECOND SESSION.

GEOGRAPHY.

(Answer any eight.)

1. What is the leading country of Europe in the production of (a) cotton and woolen goods; (b) wheat; (c) wine; (d) petroleum?

2. What is the form of government in Mexico? Name its capital; its chief mineral product; its chief seaport on the gulf; its chief seaport on the Pacific coast.

3. Compare the basin of the Mississippi river with that of the Amazon river as regards (a) size, (b) rainfall, (c) climate, (d) vegetation.

4. State principal exports received from each of the following countries: Brazil, Holland, Sweden, Sicily, India, Japan.

5. In which of the United States is (a) national park; (b) the largest swamp; (c) the most famous cave; (d) the largest area not drained into any ocean?

6. (a) Describe the waterways of New York. (b) Which of the great lakes border it? (c) What mountains in the northern part of the state? (d) What four causes contribute most to the remarkable growth of New York city?

7. Locate five places connected with our recent war with Spain.

8. Compare the industries of Colorado with those of Massachusetts, giving causes of differences.

9. Describe the surface of Cuba.

10. (a) What different peoples inhabit the Philippines? (b) What are the products of the islands?

HISTORY.

1. (a) Which of the presidents have come into office by right of succession and not of election? (b) Who would be president in case of the death of the president and vice-president?

2. Name some of the leading inventions of Americans, and give a brief account of each.

3. Nome five battles of the civil war; locate them and tell something of interest about each of them.

4. What leading political issues have divided the American people since the civil war? What new issues are now coming forward?

5. What is the declared attitude of congress toward the future government of Cuba?

ORTHOGRAPHY.

1. Accent, syllabify, and mark diacritically, the following words: Advertisement, financier, horizon, nutritious, illustrate.

2. Give meaning of the following abbreviations: e.g.; i.e.; M. P.; A. D.; prox.; ult.; M. A.; et al.; et seq.; D. D. 3. Spell correctly: Privalige, Mediteranean, dissiplin, italisize, ficticious, admissable, seperate, preseed, analasis, Deleware.

4. Use in sentences the following: Rite, precedents, their, lain, gait.

5. Give rule for changing final "y" into "i" upon the addition of a suffix.

6-10. Marked on spelling of all papers in this examination.

THIRD SESSION.

ALGEBRA.

(Answer any eight.)

1. Write a polynomial of the fifth degree, containing six terms.

2. Simplify: $x^5 + 5a^4 b - 7ab - 2x^5 + 10 ab + 3 a^4 b$.

3. Two men are 150 miles apart, and approach each other, one at the rate of x miles an hour, the other at the rate of y miles an hour. How far apart will they be at the end of seven hours?

4. Divide $x^4 - 6x^3y + 12x^2y^2 - 4y^4$ by $x^2 - 3xy + 2y^2$.

5. Find the square root of $x^{6} - 6x^{3} - 4x + 1 + 6x^{2} - 2x^{3} + 5x^{4}$.

6. A merchant mixes a pound of tea worth x cents a pound with b pounds worth y cents a pound. How much is the mixture worth a pound?

7. Find the value of
$$\frac{2b+x}{3x} + \frac{5b-4x}{9x}$$

8. Solve $\frac{2}{5x^2} - \frac{1}{3x^2} = \frac{4}{15}$

9. Divide \$2,142 between two men so that one shall receive six times as much as the other.

10. $\sqrt{\frac{4x^2 + 12xy + 9y^2}{16x^4y^8}}$ Find the value.

CIVIL GOVERNMENT.

(Answer any five.)

1. What first distinguished two great political parties in America, and who were the leaders?

2. Name four ordinary functions of the governor of a state.

3. Mention some things among us that are controlled by United States laws, some by state laws, and some by town or city laws. Is it allowable for these three classes of laws to conflict with one another?

4. What do you understand by legal tender, and what is legal tender in the United States?

5. Tell who presides over the branches of congress, what are their duties, and what their influence over legislation.

6. Who can vote in Colorado? (b) How is the right to vote for president determined? (c) What is naturalization, and to whom does it

apply? (d) What is the justification of the legal provision which permits some persons to vote, but not others? (e) Is there any such thing as a natural right to participate in the government of a state?

7. What is the relation of the "primary" to the district, state and national conventions? Why is it the duty of the voter to attend the primary?

8. What do you understand by arbitration? Mention some question that has been settled by arbitration.

FOURTH SESSION.

PHYSIOLOGY.

(Answer any six.)

1. Give the arrangement of the gray and the white matter in each division of the brain.

2. What is the function or use of the following: (a) the capillaries, (b) the valves of the heart, (c) the red blood corpuscles, (d) the portal vein?

3. How are the auditory cells made to vibrate?

4. What are bacteria and what is their relation to human welfare?

5. Name the different classes of food required, and give an example of each.

6. Describe the salivary glands.

7. What are the functions of the spinal cord? How is the eye related to the nervous system?

8. What is the mucous membrane? What are tissues?

9. What is the function of a gland?

10. How is the average temperature of a body maintained?

PHYSICAL GEOGRAPHY.

(Answer any six.)

1. What motions has the earth and what is the effect of each?

2. What is climate? How and in what way is it affected? Why is the climate of northern Europe warmer than that of North America in the same latitude?

3. Give the characteristics of the plant and animal life of the Arctic regions.

4. Account for the luxuriant vcgetation in California.

5. Explain the influence of the Rocky Mountains upon contiguous regions.

6. Locate some place having a great rainfall and explain the reason for the same; some place having no rain, and explain why.

7. What causes winds? Name some of the chief uses of winds.

8. Why are the days longer than the nights south of the equator during our winter months?

9. Why are there so few large rivers flowing into the Pacific ocean?

10. Name some great ocean currents, and their effects.

GRAMMAR AND COMPOSITION

1. Define (a) substantive clause, (b) prepositional phrase.

2. As what different parts of speech may "that" be used? Give an example of each in a sentence.

3. Analyze the following: Men of strong minds, who think for themselves, should not be discouraged on finding occasionally that some of their best ideas have been anticipated by former writers.

4. Give the syntax (case and reason) of (a) minds, (b) ideas, (c) writers.

5. Correct the following:

He that made the last speech the audience cheered.

The committee were unanimous in its action.

I shall not change my course of action whether you do or no. I knew it to be he.

If any of you have aught to say against this man, let them speak now.

Three months' probation are enough to decide it.

The Indians, before they declare war, they hold a solemn council.

San Francisco is the largest of any city west of the Rocky Mountains.

They were not fortunate in choosing a day like we were.

I meant to have told you the meeting was postponed.

6-10. Write about 100 words upon one of the following topics, with a view to its being marked in spelling, capitalization, punctuation, grammatical construction:

The War in the Philippines. The Purpose Novel. Art in America.

The Mining and Agricultural Development of Colorado.

PERSONS WHO PASSED THE DENTAL COLLEGE EXAMINATION IN 1899.

Bashor, Harry C., Longmont. Coleman, W. M., Berthoud. Ground, Alice M., Denver. Snider, Louis, Pueblo. Wheeler, Lester. Whiting, Mrs. A. L., Denver.

The following candidates were passed on certificates of scholarship, held by them and issued by high schools, normal schools, etc.:

Hannahs, J. M., Denver. O'Neil, John J., Denver. Scott, J. C., Greeley. Wortman, Herman, Denver.

PERSONS WHO PASSED THE DENTAL COLLEGE EXAMINATION IN 1900.

Chamberlain, W. H., Denver. Connor, James H., Denver. Hutchison, J. S., Denver. Ward, Frederick E., Denver.

The following candidates were passed on certificates of scholarship, held by them and issued by high schools, normal schools, etc.:

Catlett, A. M., Denver. Hedges, Edwina, Denver. Smith, William, Greeley.

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COUNTY SUPERINTENDENT OF SCHOOLS.

1898-1900.

Arapahoe-Warren E. Knapp, Denver. Archuleta-Barzillai Price, Pagosa Springs. Baca-Mrs. E. R. Shannon, Springfield. Bent-George E. McCauley, Las Animas. Boulder-George L. Harding, Boulder. Chaffee-John S. Kilgore, Buena Vista. Cheyenne-J. W. Tulles, Cheyenne Wells. Clear Creek-Mrs. Martha A. Bowman, Georgetown. Conejos-George W. Irvin, Conejos. Costilla-Charles Groenendyke, San Luis. Custer-A. P. Dickson, Westcliffe. Delta-Mrs. M. J. Browne, Delta. Dolores-Percy S. Rider, Rico. Douglas-Frank D. Ball, Castle Rock. Eagle-Mrs. Eva Booco, Red Cliff. Elbert-Mrs. Anna C. Willard, kiowa. El Paso-Miss Lucretia M. Allen, Colorado Springs. Fremont-James Woods, Canon City. Carfield-Mrs. Aradell White, Glenwood Springs, Gilpin-Miss Minnie Frey, Central City. Grand-Miss Lizzie Sullivan, Hot Sulphur Springs. Gunnison-Miss Mary E. Williams, Gunnison. Hinsdale-Frank G. Folsom, Lake City. Huerfano-Miss Fannie Quillian, Walsenburg. Jefferson-Clyde O. Secrest, Golden. Kiowa-Horace A. Long, Sheridan Lake, Kit Carson-H. E. Carmichael, Burlington, Lake-Mrs. Lizzie W. Jones. Leadville. La Plata-James R. Durnell, Durango.

Larimer-Miss Henrietta Wilson, Fort Collins. Las Animas-Dr. Michael Beshoar, Trinidad. Lincoln-Emmett I. Thompson, Hugo. Logan-John C. Aiken, Sterling. Mesa-Miss Elizabeth Walker, Grand Junction. Mineral-Mrs. Laura Pollock, Amethyst. Montezuma-William Halls, Cortez. Montrose-Miss Alice M. Catlin, Montrose. Morgan-Fay E. Williams, Fort Morgan. Otero-Mrs. Mary J. Anderson, La Junta. Ouray-Mrs. Isabel L. Moore, Ouray. Park-Mrs. Sadie H. Maxey, Fairplay. Fhillips-S. H. Johnson, Holyoke. Pitkin-Edward M. Scanlan, Aspen. Prowers-David Barnes, Lamar. Pueblo-Mrs. Lois J. Shepherd, Pueblo. Rio Blanco-W. H. Young, Meeker. Rio Grande-George A. Carpenter, Del Norte. Routt-Mrs. Adelia S. F. Barnard, Hahn's Peak. Saguache-D. S. Jones, Saguache. San Juan-Mrs. Ellen Carbis, Silverton. San Miguel-H. C. Lay, Telluride. Sedgwick-Cuthbert F. Parker, Julesburg. Summit-Mrs. Lilian Colcord, Breckenridge. Teller-Mrs. Mary Hangs. Washington-Mrs. Ella E. Garfield, Akron. Weld-J. E. Snook, Greeley. Yuma-C. E. Ware, Yuma.

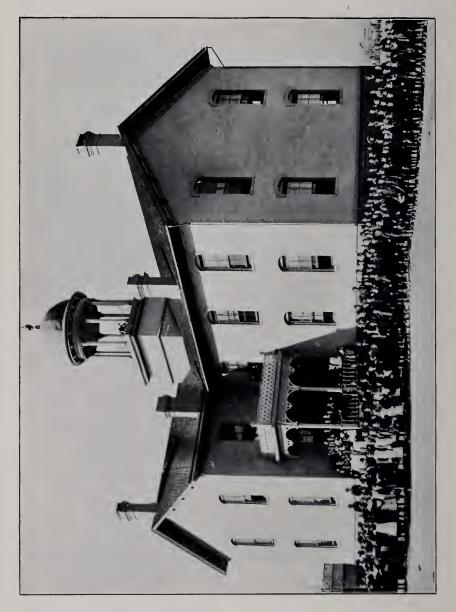
1900-1901.

Arapahoe—Miss Emma M. Herey, Denver.
Archuleta—F. A. Byrne, Pagosa Springs.
Baca—Miss Anna Watson, Springfield.
Bent—Miss Florence Sargent, Las Animas.
Boulder—W. C. Thomas, Boulder.
Chaffee—Geo. P. DeWitt, Buena Vista.
Cheyenne—Mrs. Julia Tinsley, Cheyenne Wells.
Clear Creek—Mrs. M. A. Bowman, Idaho Springs.
Conejos—G. W. Irvin, Sanford.

Costilla-Charles Groenendyke, San Luis. Custer-A. P. Dickson, Westcliffe. Delta-Mrs. M. J. Browne, Delta. Dolores-Charles Engel, Rico. Douglas-Frank D. Ball, Castle Rock. Eagle-Grant Ruland, Red Cliff. El Paso-E. M. Collins, Colorado Springs. Elbert-Mrs. Anna C. Willard, Kiowa. Fremont-J. M. Hanks, Canon City. Garfield-Mrs. Lucy E. DeWitt, Glenwood Springs. Gilpin-Miss Minnie Frey, Central City. Grand-Miss Lizzie A. Sullivan, Sulphur Springs. Gunnison-Miss Mary E. Williams, Gunnison. Hinsdale-Miss Alice Harrington, Lake City. Huerfano-William H. Clement, Walsenburg. Jefferson-C. O. Secrest, Golden. Kiowa-F. H. Maile, Galatea. Kit Carson-G. H. Hobart, Burlington. Lake-Mrs. Nettie Renfro, Leadville. La Plata-Seward S. Merry, Durango. Larimer-Miss Mary Gill, Fort Collins. Las Animas-J. W. Douthitt, Trinidad. Lincoln-E. I. Thompson, Hugo. Logan-Miss L. M. Dyer, Sterling. Mesa-Z. B. McClure, Grand Junction. Mineral-Mrs. L. D. Pollock, Amethyst. Montezuma-A. T. Sampson, Cortez. Montrose-Miss Emma Willis, Montrose. Morgan-Mrs. M. A. Clifford, Ft. Morgan. Otero-Mrs. Mary J. Anderson, La Junta. Ouray-Miss Minnie M. Holaday, Ouray. Park-Miss L. K. Remington, Fairplay. Phillips-S. H. Johnson, Holyoke. Pitkin-E. M. Scanlan, Aspen. Prowers-Miss M. H. Exline, Lamar. Pueblo-Mrs. Lois J. Shepherd, Pueblo. Rio Grande-G. A. Carpenter, Del Norte. Rio Blanco-W. H. Clark, Meeker. Routt-Miss Laura Monson, Steamboat Springs. Saguache-J. I. Palmer, Saguache. San Juan-Mrs. Ellen Carbis, Silverton.

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San Miguel—Mrs. A. F. Dare, Telluride.
Sedgwick—C. F. Parker, Julesburg.
Summit—Miss Lulu Buffington, Breckenridge.
Teller—Mrs. Thera Satterlee, Cripple Creek.
Washington—Mrs. Ella E. Garfield, Akron.
Weld—J. E. Snook, Greeley.
Yuma—Miss Minnie Cunningham, Yuma.



NORMAL DISTRICT INSTITUTES.

NORMAL DISTRICT INSTITUTES AND EXECUTIVE COMMITTEES, 1899-1900.

NORMAL INSTITUTE CERTIFICATES ISSUED IN 1899-1900. DISTRICT NORMAL INSTITUTE REPORTS, 1899-1900.

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NORMAL DISTRICT INSTITUTES.

EXECUTIVE COMMITTEES, NORMAL DISTRICTS.

1899.

No. 1-Fay E. Williams, Fort Morgan, Morgan county; C. F. Parker, Julesburg, Sedgwick County; Ella E. Garfield, Akron, Washington county.

No. 2-J. E. Snook, Greeley, Weld county; George L. Harding, Boulder, Boulder county; Henrietta Wilson, Fort Collins, Larimer county.

No. 3-Warren E. Knapp, Denver, Arapahoe county.

No. 4—Martha A. Bowman, Idaho Springs, Clear Creek county; Minnie Frey, Central City, Gilpin county; C. O. Secrest, Golden, Jefferson county.

No. 5—Lucretia M. Allen, Colorado Springs, El Paso county; Anna C. Willard, Kiowa, Elbert county; Frank D. Ball, Castle Rock, Douglas county.

No. 6-J. W. Tulles, Cheyenne Wells, Cheyenne county; H. E. Carmichael, Burlington, Kit Carson county; E. I. Thompson, Hugo, Lincoln county.

No. 7-A. P. Dickson, Westcliffe, Custer county; James Woods, Canon City, Fremont county; Lois J. Shepherd, Pueblo, Pueblo county.

No. 8—David Barnes, Lamar, Prowers county; Horace A. Long, Sheridan Lake, Kiowa county; Mary J. Anderson, La Junta, Otero county.

No. 9—Michael Beshoar, Trinidad, Las Animas county; Fannie Quillian, Walsenburg, Huerfano county.

No. 10—George W. Irvin, Conejos, Conejos county; D. S. Jones, Saguache, Saguache county; Geo. A. Carpenter, Del Norte, Rio Grande county.

No. 11—James R. Durnell, Durango, La Plata county; Mrs. Ellen Carbis, Silverton, San Juan county; William Halls, Cortez, Montezuma county.

No. 12-Mrs. M. J. Browne, Delta, Delta county; Mary E. Williams, Gunnison, Gunnison county; Elizabeth Walker, Grand Junction, Mesa county.

No. 13—John S. Kilgore, Buena Vista, Chaffee county; Sadie H. Maxcy, Fairplay, Park county; E. M. Scanlan, Aspen, Pitkin county.

1900.

No. 1—Louise M. Dyer, Sterling, Logan county; Minnie Cunningham, Yuma, Yuma county; Mattie A. Clifford, Fort Morgan, Morgan county.

No. 2-W. C. Thomas, Boulder, Boulder county; Mary E. Gill, Fort Collins, Larimer county; J. E. Snook, Greeley, Weld county.

No. 3-Emma M. Herey, Denver, Arapahoe county.

No. 4-Martha A. Bowman, Idaho Springs, Clear Creek county; Minnie Frey, Central City, Gilpin county.

No. 5—Frank D. Ball, Castle Rock, Douglas county; Annie C. Willard, Kiowa, Elbert county; E. M. Collins, Colorado Springs, El Paso county.

No. 6-G. H. Hobart, Burlington, Kit Carson county; Julia Tinsley, Cheyenne Wells, Cheyenne county; E. 1. Thompson, Hugo, Lincoln county.

No. 7-A. P. Dickson, Westcliffe, Custer county; Lois J. Shepherd, Pueblo, Pueblo county; J. M. Hanks, Canon City, Fremont county.

No. 8-F. H. Maile, Galatea, Kiowa county; Florence Sargent, Las Animas, Bent county; Mary J. Anderson, La Junta, Otero county.

No. 9—J. W. Douthitt, Trinidad, Las Animas county; John H. Fox, county treasurer, Trinidad; William H. Clement, Walsenburg, Huerfano county.

No. 10—George W. Irvin, Sanford, Conejos county; J. 1. Palmer, Saguache, Saguache county; G. W. Carpenter, Del Norte, Rio Grande county.

No. 11—Seward S. Merry, Durango, La Plata county; Ellen Carbis, Silverton, San Juan county; A. T. Samson, Cortez, Montezuma county.

No. 12-Mrs. M. J. Browne, Delta, Delta county; Minnie Holaday, Ouray, Ouray county; Emma Willis, Montrose, Montrose county.

No. 13-E. M. Scanlan, Aspen, Pitkin county; Nettie Reufro, Leadville, Lake county; L. R. Remington, Fairplay, Park county.

NORMAL INSTITUTE CERTIFICATES ISSUED.

1899.

Bennett, Arthur E. Brookover, Charles. Bullock, Royal W. Carson, Mary G. Cramer, Mary K. Coleman, G. B. Coney, Clara J. Fidler, W. A. Fisher, E. T. Hanna, Luan. Hisey, J. C. Holloway, M. Isabel. Howe, J. S. Kane, James E. Long, H. A. Mack, Mary S. McCall, Minnie L. Peabody, Caroline Mae. Phillips, D. E. Rollins, Mrs. E. G. Scovill, Anna. Smith, Frank W. Stratton, Ella. Thomas, W. C. Tupper, Luella. Wells, Myrtie J. Westhaver, J. B.

1900.

Barnes, Lula. Bethel, Ellsworth. Brotherton, S. H. Churchill, Isabel. Clark, C. E. Clarke, P. L. Condit, Adella. Gormley, Mabel. Griggs, Herbert. Hitchcock, R. W. Lamb, Adda. McChesney, C. D. A. Nelson, Gilbert. Newland, Lillian L. Osenbaugh, C. M. Parker, C. V. Patrick, Lura D. Phillips, H. S. Ragan, J. R. Squier, Harriet. Woodruff, Mabel. Wyatt, G. W.

DISTRICT NORMAL INSTITUTE REPORTS.

1900.

FIRST DISTRICT.

Logan, Morgan, Phillips, Sedgwick, Washington and Yuma counties. Held at Akron, July 31-August 11.

Conductor-W. W. Remington.

Instructors-J. S. Howe, Anna Scoville.

Enrollment-73.

Financial statement-

Receipts— From counties	73.00	
Total		\$ 218.50
Disbursements-		
Paid conductor\$	50.00	
Paid instructors	\$0.00	
Paid incidentals	21.70	
	151.70	
Balance on hand	66.SO	
– Total		\$ 218.50

INSTITUTE AT AKRON.

Lectures were given by Superintendent Grenfell, President Aylesworth and President Snyder. The faculty consisted of Miss Anna Scoville, Mr. J. S. Howe and Mr. W. W. Remington. Seventy-five teachers were in attendance, equaling about one-third of the total number of positions in the six counties. The district is so large that many came by wagon more than one hundred miles. Several came one hundred and fifty miles by rail. The expense incurred in traveling so far, together with low wages and the short term of the institute, tends to make the attendance less than normal. The rotation of an annual institute through six counties detracts much from local enthusiasm. A generation of teachers disappears in a term of six years. A division of the district is advocated. Many teachers attend summer schools in Denver and elsewhere, and several attended the Arapahoe County Institute. To the writer it seems clear that the normal institute in such districts as the first should partake very much more of the nature of the six weeks' summer school. If the income could be increased by the attendance of those who go elsewhere, or by making the instruction academic rather than strictly professional, or by state support, greater good might result from the longer term thus made possible.

SECOND DISTRICT.

Boulder, Larimer and Weld counties. Held at Fort Collins, August 7-17. Conductor-James H. Hayes. Instructors-W. C. Thomas, C. P. Gillette, Eleanor M. Phillips. Enrollment—117. Financial statement-Receipts-From counties\$ 234,00 From registration fees..... 117.00 From other sources..... \$ 351.00 Total Disbursements-Paid conductor\$ 125.00 Paid instructors 190.00 Paid incidentals 16.25 Total\$ 331.25 Balance on hand..... 19.75 Total \$ 351.00

OUTLINES OF WORK.

GRAMMAR-JAMES H. HAYS.

- 1. Grammar as applied to the English language.
- 2. The value of its study.
- 3. When to study. How to study.
- 4. Study of the verb.
 - (a) Transitive.
 - (b) Intransitive.
 - (c) Copulative.
- 5. Study of the participle and infinitive.
- 6. Use and abuse of parsing and analysis.

READING-JAMES 11. HAYS.

- 1. Reading as related to other studies.
- 2. Processes involved in reading.
 - (a) Mental.
 - (b) Mechanical.

- 3. Means of maintaining interest in the reading classes.
- 4. Illustrative lessons in reading.

PEDAGOGY-JAMES H. HAYS.

- 1. The child and the world.
 - (a) Conscious mind and unconscious matter.
 - (b) Their interrelation and interaction.
- 2. The functioning of nerve cells.
- 3. Character of nervous activity in children.
 - (a) Inaccurate thinking.
 - (b) Inaccurate bodily movements.
- 4. Attention.
 - (a) Nature.
 - (b) Factors.
 - (c) Laws.
- 5. Memory.
 - (a) Cultivation.
 - (b) Laws governing.
- 6. Association of ideas.
 - (a) Laws.
- 7. Educating the entire child.
 - (a) The body.
 - (b) The mind.
 - (c) The soul.
- 8. Is the present curriculum adequate?
- 9. Adaptation of curriculum to the child.
 - (a) His mental development.
 - (b) His age.
 - (c) His interests.
- 10. Final aim in education.

HISTORY-JAMES H. HAYS.

- 1. The form and content of history.
- 2. Historical facts two-fold.
 - (a) Acts. (b) Ideas.
- 3. The phases of all historical study.
 - (a) Political.
 - (b) Religious.
 - (c) Educational.
 - (d) Industrial.
 - (e) Social.

4. These phases not all equally dominant, but all move toward the same goal.

5. Historical study the proper interpretation of individual facts not a study of, or about, facts.

6. Application of these principles.

MUSIC-JAMES H. HAYS.

- 1. Its place in our schools.
 - (a) Who may learn it.
 - (b) Who may teach it.
- 2. Tones. The scale. The staff.
- 3. Exercises in scales.
- 4. Exercises in transposition.
- 5. Part singing.

CIVICS AND SCHOOL LAW-W. C. THOMAS.

- 1. History and necessity of government.
- 2. The civil unit.
- 3. School districts in Colorado.
 - (a) Organization.
 - (b) Classification.
 - (c) Officers-Election, duties, etc.
 - (d) The teacher.
 - (e) School funds.
- 4. Municipal government.
- 5. The county.
 - (a) How created.
 - (b) Classification of.
 - (c) Departments of government.
 - (d) Officers-Election, duties, etc.
- 6. The state.
 - (a) How created.
 - (b) Departments.
 - (c) Officers-Election, duties, etc.
 - (d) School system of Colorado.
- 7. United States.
 - (a) Departments of government.
 - (b) Officers-Election, duties, etc.
 - (c) The administration of justice.
- 8. International relations.

ARITHMETIC-W. C. THOMAS.

1. The arithmetical concept. Difficulty in seeing the relation of numbers.

- 2. Fundamental operations.
 - (a) Methods.
 - (b) Combinations.
- 3. Classification and properties of numbers.
 - (a) Factoring.
 - (b) Cancellation.
 - (c) Divisors and multiples.
- 4. Fractions-Common. Decimal.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

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- 5. Denominate numbers.
- 6. Longitude and time.
- 7. Percentage.
 - (a) Profit and loss.
 - (b) Discount.
 - (c) Stocks and bonds.
 - (d) Interest.
 - (e) Illustrative problems.
- 8. Ratio and proportion.
- 9. Powers and roots.
- 10. Mensuration-Surfaces. Solids.

GEOGRAPHIY-W. C. THOMAS.

- 1. Geographical study.
 - 1. Scope.
 - 2. Methods.
- 2. The primary work.
 - 1. Direction.
 - 2. Distance.
 - 3. Forming correct concepts of the world as a whole.
 - 4. Learning the use of globe, maps, etc.
 - 5. Observation on products.
 - (a) Plants.
 - (b) Minerals.
 - (c) Animals.
 - 6. Natural divisions by actual excursions.
 - 7. Develop latitude, longitude, zones, etc.
 - 8. Notions of government.
- 3. Advanced work.
 - 1. Departments.
 - (a) Relative time and importance of each branch.
 - (b) Mathematical.
 - (c) Physical.
 - (d) Political.
 - 2. How to study a country. (Illustrative examples.)
 - 3. Some pertinent questions.

PHYSIOLOGY-C. P. GILLETTE.

- 1. The blood and circulatory system.
- 2. Glands and their secretions.
- 3. The eye.
- 4. Anatomy of nervous system.
- 5. Physiology of nervous system.

PRIMARY METHODS-ELEANOR M. PHILLIPS.

The material to be given in the first four grades, and the method of teaching the same, will be discussed; especial attention being given to beginning work. The following subjects will be taken up:

Literature. Reading. Nature study. Writing. Written language. Number work. Drawing. Busy work.

Several illustrative lessons will be given. After observing these the teachers will discuss them, showing wherein pedagogical principles were observed or violated.

Theory and practice will be as closely related as possible.

THIRD DISTRICT.

Arapahoe county.

Held at Denver, July 31 to August 11,—repeated at Idalia, August 13-26.

Conductor-Warren E. Knapp.

Instructors—Ed F. Hermanns, Geo. L. Cannon, Homer S. Philips, Emma J. Harris, Mrs. J. C. Hisey, Wilberforce J. Whiteman. Fordyce P. Cleaves.

Enrollment—512. Financial statement—

Receipts— From balance, 1898	
Total	\$1,659.50
Disbursements-	
Paid conductor\$	
Paid instructors 1,100.00	
Paid incidentals	
Total\$1,494.30	
Balance on hand 165.20	
 Total	\$1,659.50

FOURTH DISTRICT.

Clear Creck, Gilpin and Jefferson counties. Held at Golden, Angust 7-17. Conductor—Ira M. DeLong. Instructors—J. W. Ellison, Mary S. Mack.

285

Financial statement-

Receipts— Balance on hand	59.41 144.00 98.00 52.00		
		\$	353.41
Disbursements-			
Paid conductor\$	110.00		
Pald instructors	150.00		
Paid incidentais	39.25		
Total	299.25 54.16		
		2	353.41

The following daily program was closely followed:

- 8:45 Opening.
- 9:00 Arithmetic-DeLong.
- 9:35 History and Cicics-Ellison.
- 10:10 The Speer System-Mack
- 10:45 Recess.
- 10:55 Penmanship-Mack. Grammar-DeLong.
- 11:25 Science-Ellison. Astronomy-DeLong.
- 12:00 Noon intermission.
- 1:30 Primary Work-Mack. School Law- Ellison.
- 2:05 Reading and Literature-Ellison. Psychology-DeLong.
- 2:35 Lecture.
- 3:10 Dismission.

Excellent lectures were given by State Superintendent Helen L. Grenfell, Dr. J. H. Merritt, President B. O. Aylesworth, Principal Ed. F. Hermanns, Mary S. Mack and Ira M. DeLong.

A strong effort, ably seconded by the instructors, was made by the executive committee to give to the institute a high professional tone. The enrollment reached 110, the daily attendance was excellent, and the interest seemed to increase to the last, the session being pronounced one of the most helpful in the history of the district.

FIFTH DISTRICT.

Douglas, Elbert and El Paso counties. Held at Colorado Springs, August 7-18. Conductor—Frank D. Ball.

TWELFTH BIENNIAL REPORT

Instructors-Charles Brookover, Eva B. Crowe, W. D. Hall, W. H. Miller, Julia M. Patton, Agnes Wiley. Enrollment-182. Financial statement-Receipts-From counties\$ 282.00 From registration fees..... 182.00 From other sources..... 35.98 Total \$ 499.98 Disbursements---Paid conductor\$ 50.00 Paid instructors 430.00 Paid incidentals 19.20 Total\$ 499.20 Balance on hand..... .78 Total \$ 499.98

OUTLINE OF WORK PRESENTED AT THE INSTITUTE AT COLORADO SPRINGS, BY W. H. MILLER, 1899.

ARITHMETIC.

Lecture—Arithmetic as adapted to mental culture. The basic principles of teaching it. Discussions of fundamental operations. Division. Common and decimal fractions. Factoring. Ratio. Proportion. Compound numbers. Percentage. Involution. Evolution. Cube root. Mensuration.

TECHNICAL GRAMMAR.

Study of a simple sentence. Copula. Case. Subject. Predicate. Modifiers. Conjunctions, nouns, adjectives, pronouns, adverbs and prepositions. Verbs. Participles and infinitives. Construction of various parts of speech. Grammatical definitions. Grammatical rules or laws constructed. Application of these to false syntax. Idiomatic forms discussed. General analysis. Diagraming at each step.

GEOGRAPHY.

Chalk Talks—The earth as a planet. The earth's surface and interior structure. Geological forces. The habitable world. Climate. Products. Inhabitants. Descriptive geography. Mathematical. Natural features. Nations. Commercial geography. Maps, diagrams, objects and pictures at every step.

HISTORY.

Lecture—Condition of the old world at the time of the birth of the new.

Discussions—Columbus. Spanish activity. Portuguese activity. Line of demarkation. Great voyages. English activity. French activity. Dutch activity. Results then and now. Maps at every step. Lecture-The colonlal period.

Discussions—The colonies and their life. Northern. Middle. Southern. Physical features. Manners and customs. Relation to later results. List of great men. Wars and results. English absorption and expansion.

Lecture-The spirit of '76, and what led to it.

Discussions—Revolutionary war. Great men. Great acts. Critical period. Administrations. Political parties. Drift toward union. Epochmaking events. Union. Development. Expansion. Slavery questions. Mexican war. Compromises. Civil war. Reconstruction. Present events.

PHYSIOLOGY.

Bones. Muscles. Skin. Digestive organs. Circulation. Nervous system. Hygiene: Cooking. Bathing. Exercise. Breathing. Disease. Ventilation. Special organs. Development (physically and mentally) of children.

PEDAGOGY.

Lecture-General characteristics of the human mind.

Studies—Sense perception. Self-perception. Intuitive perception. Memory imagination. Phantasy. Conception. Judgment. Reason.

Special Studies—Association. Conception. Judgment. Reason. Mental processes.

Deducing Laws of Culture-General. Specific.

The pedagogy of language—of science—of art—of mathematics—of morals and manners—of government—of study—of recitation. The bearing of mental powers on after life. Mistakes liable to be made. Objects to be attained in teaching. Specific cases.

Lecture—The teacher as related to the child's afterlife.

SIXTH DISTRICT.

Cheyenne, Kit Carson and Lincoln counties. Held at Cheyenne Wells, August 21 to September 1. Conductor—Tilman Jenkins. Instructor—M. Isabel Holloway.

Enrollment-39.

Financial statement-

Balance on hand, from 1898\$	81.96
From counties	
From registration fees	
Balance unpaid	47.63
 Total	

Disbursements—		
Paid conductor\$	71.50	
Paid instructor	50.50	
Paid incidentals	12.50	
Interest on warrants 64, 70, 69	9.09	
Registered warrant, 64, from 1898	100.00	
Total	:	5

INSTITUTE AT CHEVENNE WELLS.

243.59

The work of the normal institute was based on the following principles:

1. The normal institute should be an ideal normal school, which should be an ideal public school, so far as conditions permit. The principles and methods of the normal school should be adopted in the normal institute.

2. The work of the normal institute should be, principally, professional training. Other schools should do the academic work. The limited time given to the institute will not permit thorough academic instruction.

3. The professional instruction should be based on academic work so far as practicable. So much of the academic teaching should be introduced as is necessary to present the professional instruction in a concrete form.

4. The best approved methods and principles should be presented in such a concrete form that they can be understood by the teachers. Teachers teach as they have been taught. The teaching should be professional model school training.

5. Many important questions present themselves to thinking and progressive teachers, such as: What should be taught? When should it be taught? How? etc. The normal institute should discuss, answer and illustrate such problems, so far as practicable.

6. The instruction should be adapted to the varied needs of the members. The institute is to help the teachers, to give them that which they need most.

7. A close acquaintance of the instructors with the members and the positions they are to fill should exist, so that the instruction can be adapted to conditions in a practical manner.

8. All the branches of immediate importance to the teachers should be presented in the institute.

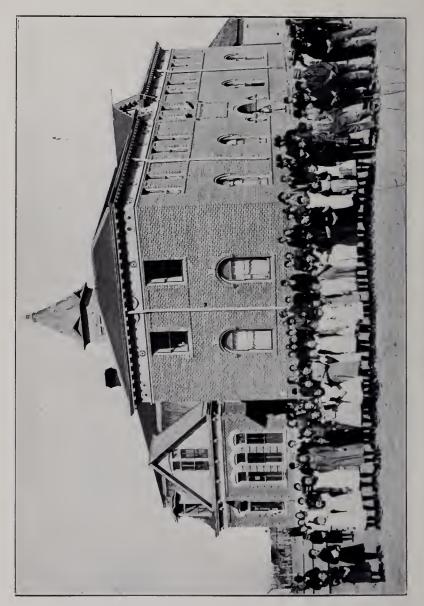
SEVENTH DISTRICT.

Custer, Fremont and Pueblo counties.

Held at Pneblo, August 7-18.

Conductor-J. F. Keating.

Instructors-N. M. Fenneman, E. A. Kenyon, Adelaide E. Jordan, Enrollment-112.



Financial statement-

Receipts-		
Balance on hand	92.00	
From counties	224.00	
From registration fees	112.00	
		\$ 428,70
Disbursements-		
Paid conductor\$	125.00	
Paid instructors	225.00	
Paid incidentals	11.00	
Total		
Total		\$ 428.70

EIGHTH DISTRICT.

Bent, Kiowa and Otero counties.		
Held at La Junta, July 31-August 11.		
Conductor—E. R. Jones.		
Instructors—E. E. Cole, Ruby M. Clark, H. A. Long	g.	
Enrollment—112.		
Financial statement-		
Receipts-		
From counties\$	238.55	
From registration fees	112.00	
Due from Baca county	40.00	
- Total		\$ 354.55
Disbursements		
Paid conductor\$	100.00	
Paid instructors	174.00	
Paid incidentals	41.43	
- Total\$	315.43	
Warrant not cashed	39.00	
Cash on hand	.12	
- Total		\$ 354.55

TWELFTH BIENNIAL REPORT

PROGRAM-MORNING.

8:30 to 9:00—Arithmetic.

9:00 to 9:25-Announcements and music.

9:25 to 10:10-Primary methods.

10:10 to 10:35-Science.

10:35 to 10:45-Recess.

10:45 to 11:25-Physiology and hygiene.

11:25 to 11:55-Civil government or school law.

AFTERNOON.

1:30 to 2:00—Geography.
2:00 to 2:25—Psychology or theory and practice.
2:25 to 2:35—Recess.
2:35 to 3:15—Penmanship and history.
3:15 to 4:00—Grammar.

NINTH DISTRICT.

Huerfano and Las Animas counties.

Held at Walsenburg, July 24-August 4, repeated at Trinidad. August 7-18.

Conductor-J. W. Hamer.

Instructors—James H. Hayes, J. E. Kane, L. E. De Haven, Alice W. Myers.

Enrollment-113.

Dessints

Financial statement—

necenpts-			
From counties\$	154.00		
From registration fees	113,00		
From other sources	.50		
		16	267.50
Disbursements-			
Paid conductor\$	150,00		
Paid instructors	220,00		
Paid incidentals	13.50		
– Total		%	383,50

OUTLINE OF WORK PRESENTED AT THE INSTITUTE AT WALSENBURG BY J. W. HAMER.

THE GENERAL AIM—The idea that I held constantly in mind in the daily management and in the preparation of the lecture and recitation was to widen the vision of the teachers, to arouse their interest in the current educational thought so deeply that the momentum generated would induce to permanent professional investigation and study, and to self-improvement in teaching scholarship and character.

ARITHMETIC.

Aim—To present the most approved methods and to add to their knowledge and skill. A few problems, never more than five, were placed on the blackboard the day before. These were carefully selected for the principle they embodied, with a view to their discussion.

Subject of each lesson-

- 1. The recitation and general hints.
- 2. Reduction.
- 3. A development of longitude and time.
- 4. Application of longitude and time.
- 5. Evolution and involution.
- 6. Percentage and its application.
- 7. Ratio and proportion.
- 8. Logical development of area from quadrilateral to sphere.
- 9. Outline of work for grades.
- 10. Outline of work for grades.

SCIENCE.

Aim-A development from sense impressions to abstract ideas.

Subject of each lesson-

1. Nature studies. Their importance. Do as much work in the concrete as possible.

2. Pestalozzi's method. It is a method which simply follows the path of nature, or, in other words, which leads the child slowly and by his own efforts from sense impressions to abstract.

3. An outline of work for four years.

4. A model lesson in Geography, according to Dr. Rein's method.

5. Dr. Wm. Rein's contribution to the Herbartian Doctrine. Permanent interest. What is concentration? How far should this concentration be followed?

6. Physics. Method of teaching. The teacher the guide, and nature the teacher.

7. Experiments illustrating divisibility, explasibility, adhesion. Teachers requested to make notes of their observations.

8. Continuation of lesson seven. Discussion of notes made by teachers. Definitions drawn from observation of experiments.

9. Discussion of air in same manner.

10. A logical development of the laws of falling bodies.

PHYSIOLOGY.

Aim—To present clearly the most important facts of Physiology; to point out the dangers of excessive fatigue and interference with the laws of health. How teachers may keep well and strong.

Subject and outline, in part, of each lesson-

1. Introduction. The value of physiological knowledge. What physiology should teach. Terms defined.

2. Tissues. The process of life. Use of microscope.

3. The skeleton. Composition and structure of bone; their functions, articulations.

4. The hygiene of bones, in infancy and childhood; position at school; dislocations, breaks, etc.

5. The vertebra. Importance of each vertebra being in place. The spinal cord. Functions.

6. The muscles. Motion. Kinds of muscles. Properties of muscles. Arrangement and mechanism of movement. Hygiene.

7. Physical exercise. Importance of; muscular activity; effect of exercise upon muscles; upon important organs; upon personal appearance and upon the brain.

8. Physical exercise continued. The psychology of exercise; localization of function.

9. Fatigue. Expenditure of energy; fatigue affects the material stored at any one time. Fatigue substance. Fatigue a function of the central system. School room fatigue.

10. The brain. Structure, functions, and a map of the brain; the motor and the sensory region; the centers of sight, hearing, smell, etc.

TENTH DISTRICT.

Conejos, Costilla, Mineral, Rio Grande and Saguache counties. Held at Del Norte, August 7-19,

Conductor-M, F. Miller.

Instructors—R. W. Bullock, G. A. Carpenter, Charles Groenendyke, Myrtie J. Wells.

Enrollment-95.

Financial statement-

Receipts			
From counties	\$	186,00	
From registration fees		95.00	
From other sources		75,00	
Total			\$ 359,00
Disbursements			
Paid conductor	. \$	100.00	
Paid instructors		120.00	
Paid lecturer		40,00	
Paid incidentals		53.80	
Total	\$	313,50	
Balance on hand		45.20	
Total	_		\$ 359.00

OUTLINE OF WORK PRESENTED AT THE INSTITUTE AT DEL NORTE-BY M. F. MILLER.

PURPOSE.—As announced in the circular the primary object of this institute was "to broaden educational ideas, instruct in methods, and inspire enthusiasm." For this reason much of the work was planned along professional lines.

SUBJECT MATTER.—The work in psychology was partly by lectures and partly by discussions. It included a study of the brain, its relation to the mind, the importance of sense training, the development of the mental powers, fatigue, rest, nutrition, the critical period of youth, and the most important educational principles to be derived therefrom.

The advanced arithmetic was based largely upon the Speer method, as was also the number work for the primary grades. The work in primary methods is well designated by the name.

The work in United States history was confined to the origin and growth of the political parties and the principles of each. The attitude of each regarding the adoption of the Constitution, the inauguration of the constitutional period, and the important events of this period and the attitude of the parties to each, was also taken.

In vocal music daily instruction was given in the staff notation. By continuing this work through succeeding institutes all the teachers may soon be prepared to introduce this valuable study into the schools. Sixty copies of a suitable book were purchased from the institute fund, thus providing material for some years. The work in physical culture was based upon the Preece system, which has been so favorably received in many of the leading eastern cities.

The work in civil government, grammar, phonics, reading and school law was with a view to broaden the knowledge of the members, as well as to illustrate proper methods of presentation.

Pedagogy included the organization and practical management of schools, attention, discipline, general exercises, the state course of study, and last, but not least, a question box, in which were placed the questions that so many teachers feel that they wish to have considered, with a view to better school room work.

FINANCES.—I do not feel that I should close this report without mention of the business features. For several years the institute fund had been considerably in debt. It was the ambition of those in charge to extinguish this, and at the same time have a strictly first-class institute. The people of Del Norte had enjoyed having the institute meet there the previous summer, so did not feel that they were entitled to the meeting. But they realized the great impetus to educational matters to be derived from the presence of a live institute. So at their own suggestion they raised a purse of about one hundred dollars for the institute fund.

This enabled all expenses to be met, all debts to be paid, and Dr. Lancaster to be secured for a free course of popular lectures. This course, with the lectures by Dr. Aylesworth of the Agricultural college, Dr. Callahan of the State Preparatory school, and the conductor, proved a most valuable feature.

ELEVENTH DISTRICT.

Archuleta, Dolores, La Plata, Montezuma and San Juan counties.

Held at Durango, August 21-September 1.

Conductor-F. H. Clarke.

Instructors—J. R. Durnell, C. E. Chadsey, Mary G. Carson, J. R. Meek.

Enrollment—72. Financial statement—

Receipts-

Balance on hand	\$ 9.56	
From counties	142.00	
From registration fees	72.00	
-		000
Total		\$ 22

SUPERINTENDENT OF PUBLIC INSTRUCTION.

295

Disbursements-			
Paid conductor\$	100.00		
Paid instructors .	50.00		
Pald incidentals	24.00		
-			
Total\$	184.00		
Due from San Juan county	4.00		
Balance on hand	35.56		
-			
Total		\$ 223.56	

TWELFTH DISTRICT.

Delta, Gunnison, Hinsdale, Mesa, Montrose, Ouray and San Miguel counties.

Held at Grand Junction, July 24-August 4. Conductor—J. F. Keating. Instructors—Mary G. Carson. E. T. Fisher. EnroHment—107. Financial statement—

Receipts-

From counties\$	324.00
From registration fees	107.00
From other sources	12.00
Total	\$ 443.00

Disbursements-

Paid conductor\$	150.00	
Paid instructors	130.00	
Paid incidentals	6.00	
		\$ 443.00

TEACHERS' NORMAL INSTITUTE. GRAND JUNCTION, COLO., JULY 24 10 AUGUST 4. PROGRAM.

8:30 a. m.—Opening exercises.
8:45—Pedagogy, J. F. Keating.
9:05—Speer Work, Miss Mary Carson.
Recess.

9:40—Science, E. T. Fisher.
10:05—Arithmetic, J. F. Keating.
10:50—Delsarte, Miss Helen Smith.
11:00—Civics or school law.
11:30—History.
Noon.
1:30 p. m.—Geography, E. T. Fisher.
2:00—Grammar, J. F. Keating.
2:30—Delsarte, Miss Smith.

2:40—Primary methods, Miss Carson.

3:10—Orthography, J. F. Keating.

Executive Committee—President, Mrs. M. J. Brown, Delta county; secretary, Miss Elizabeth Walker, Mesa county; treasurer, Miss Mary Williams, Gunnison county.

Lecturers-Dr. Snyder, Superintendent Grenfell, B. O. Aylesworth.

THIRTEENTH DISTRICT.

Chaffee, Eagle, Garfield, Grand, Lake, Pitkin, Park, Rio Blanco, Routt and Summit counties.

Held at Buena Vista, August 7-19.

Conductor-F. H. Clarke.

Instructors-Mary K. Cramer, Ella Stratton.

Enrollment—70.

Financial statement-

Receipts-		
From counties\$	140.00	
From registration fees	65.00	
– Total		\$ 205.00
Disbursements-		
Paid conductor\$	100.00	
Paid instructors	100.00	
Paid incidentals	4.75	
	204.75	
Total		\$ 205.00

1900.

FIRST DISTRICT.

Logan, Morgan, Phillips, Sedgwick, Washington and Yuma counties. Held at Fort Morgan, July 16-August 1.

Conductor-R. M. Streeter.

Instructors—Lulu Barnes, A. M. Cunningham, Gilbert Nelson. Enrollment—45.

Financial statement-

Receipts-			
From Morgan county\$	22.00		
From registration fees	45.00		
– Total		\$ 67.00	
Disbursements-			
Paid conductor\$	100,00		
Paid instructors	130.00		
-			
Total		\$ 230.00	
Amount of indebtedness, \$163.00.			

SECOND DISTRICT.

Boulder, Larimer and Weld counties— Held at Greeley, August 6-16. Conductor—J. F. Keating. Instructors—Isabella Churchill, R. W. Hitchcock, Eleanor M. Phillips,

J. R. Whiteman.

- Enrollment—132. Financial statement—
 - Receipts-

Balance on hand	\$ 149.06	
From counties	264.00	
From registration fees	132.00	
Total		\$ 545.06

Disbursements-			
Paid conductor	125.00		
Paid instructors	250.00		
Paid incidentals	38.00		
-			
Total\$	413.00		
Balance on hand	132.06		
-			
Total		Ş	545.06

OUTLINE OF WORK-SECOND DISTRICT.

J. F. KEATING.

GRAMMAR- ~

A science.

Distinguished from rhetoric, logic and language lessons.

Function of words in discourse.

Inflection.

Basis of moods.

Discussion of the pronoun, of the adjective, participles, infinitives and gerunds.

Pedagogy-

" "The central nervous system." Causes of brain fatigue in children.

Causes of brain fatigue in children.

Daily program. Habit. Attention.

The recitation.

Sense training.

Value of psychology to the teacher. Suggestion.

Geography-

Nature study as a basis.

Study of relief forms.

Drainage.

Relation of geography to history.

Commercial geography.

CIVIL GOVERNMENT-

The township and the county. The Constitution a growth.

The Constitution of Colorado.

The constitution of colorado

Government by congress.

R. W. IIITCHCOCK.

ARITHMETIC-

Study of general methods.An ideal course in arithmetic.Outline lessons in primary arithmetic.Methods of presenting advanced arithmetic.Co-ordination of subjects.Method of the recitation.The place of algebraic and geometric principles.

READING-

Outline course in reading. Plan for supplementary home reading. Hints on methods. Relation to other subjects. "Supplementary" reading.

UNITED STATES HISTORY-

Relative value in a course of study.

General scheme of teaching.

Equipment of school and teacher.

Methods in different grades.

Critical study of pivotal points in American history.

PHYSIOLOGY-

Limitations in an elementary school. Status as a legal requirement for schools. Relation to natural science teaching. What subjects should be taught. Outline typical lessons.

ELEANOR M. PHILLIPS.

PRIMARY METHODS-

The material to be given in the first four grades, and the method of teaching the same, will be discussed: especial attention being given to beginning work.

The following subjects will be taken up:

Literature. Reading. Nature study. Writing. Written language. Number work. Drawing. Busy work. ' Several illustrative lectures will be given. After observing these the teachers will discuss them, showing wherein pedagogical principles were observed or violated.

Theory and practice will be as closely related as possible.

J. R. WIIITEMAN.

MUSIC-

One period daily devoted to school music.

Special classes in methods as teachers desire.

MRS. 1SABELLA CHURCHILL.

ART COURSE-

Exercise with "action lines" as a means of expression and as an introduction to the study of type forms.

Objective, memory and dictation drawing of type forms.

Nature study the basis of art.

Illustrative drawing embodying practical knowledge gained in preceding lessons.

Suggestive skeleton and silhouette sketches in ink, crayon and charcoal, using character pose and dramatization.

Principles of landscape painting.

Practical points in landscape painting.

How to study pictures.

Exhibit of art work done^{*} in the Chicago public schools. Exhibit of art work done in the Colorado Normal Training school. Exhibit of Mrs. Churchill's own studio work.

J. E. SNOOK.

SCHOOL LAW-

Special class after 4 p. m. for those who desire to prepare for examination. Copies of the school law will be distributed for study. Printed topical outlines will be used.

AN ABSTRACT OF THE ART COURSE.

1SABELLA CHURCHILL.

I.

Evolution of the mechanic arts.

Function and scope of art-

lts spirit ennobles life. Its product reveals ideals. Art as a means of expression.

Objective, memory and dictation drawing necessary to develop knowledge, power and skill.

Co-relation of illustrative drawing with other studies.

Exercise with "action lines" as a means of expression and as an introduction to the study of type forms.

П.

Analysis of some famous paintings to illustrate value of action lines. First principles of composition.

Illustration of these principles.

Objective, memory and dictation drawing of type forms.

III.

Creative power in child developed through art instruction.

The necessity of overcoming technical difficulties as they arise.

Vegetable forms expressed in mass-working for size, position and proportion.

IV.

Nature study the basis of art.

Pestalozzi's philosophy accepted by advanced educators.

How to study nature.

Memory and objective drawing of trees, making it a comparative study, so that opposite characteristics of one will serve to accentuate the characteristics of the other.

V.

Illustrative drawing embodying practical knowledge gained in preceding lessons.

Suggestive skeleton and silhouette sketches in ink, crayon and charcoal, using character pose and dramatization.

VI.

Foliage-mass-drawing. Sprays of leaves, fruit and berries. Express growth and movement.

VII., VIII., IX.

 Principles of landscape painting— Show how relations between earth and sky may vary. Color relations. Effect of distance. Size relations of objects in a picture.

- Practical points in landscape work— Thought. Spirit. Primary and secondary object. Placing. Unity. Composition—Opposition, contract, balance. Rhythm.
- 3. Illustrative lessons.

Χ.

BIBLIOGRAPHY.

Prang's Manuals; Arthur Dow—Composition; M. S. Emery—How to Enjoy a Picture; The Perry Magazine; Bailey—A First Year in Drawing; Radcliff's History of Painting; Jameson's Legends of the Madonna; Morton's Chalk Illustrations for Geography Classes; "Popular Educator Library," published quarterly by Educational Publishing Company.

THIRD DISTRICT.

Arapahoe county.

Held at Denver, July 31-August 10.

Conductor-Emma M. Herey.

Instructors—Ellsworth Bethel, Adella Condit, A. J. Fynn, Herbert Griggs, Lillian L. Newland, C. M. Osenbaugh, Harriet Squier.

Enrollment-428.

Branch at Idalia, August 6-17.

Conductor-George W. Wyatt.

Instructors—Catherine McChesney, Emma B. Mitchell.

Enrollment-56.

Total enrollment-484.

OUTLINE OF WORK.

The main object of the institute will be to improve teachers professionally and give such academic instruction as may be demanded by those in attendance.

In American literature a careful survey of the whole field will be made, but special attention will be given to the illustrious group of great authors who have done so much toward directing the current of our national thought.

The mechanism of literary products will be carefully studied, and the kind, quality and texture of verse will receive minute attention. Poems suited to the school room will be examined, analyzed and compared. In psychology, the work as far as possible will be confined to the plain and practical side of the subject. Mere abstractions and disputed theories will be kept in the background, and only those leading truths which have proved to be helpful to teachers in general, will be consid cred.

PEDAGOGY.

The study of pedagogy will be correlated with that of psychology and based upon it. Those principles, which experience has established as the fundamentals of all good teaching, will receive close attention.

BOTANY.

Study of the plan of a simple flower, organs and uses, food, assimilation, respiration, etc. Typical families and simple classification. Plant ecology (plant relationships and changes due to environment). Economic plants. Non-flowering plants. Beneficial and injurious effects of fungi and fresh-water algae. One lesson each on our state flower and state tree.

ZOOLOGY,

Comparative anatomy of the vertebrates. Study of a few types especially with reference to homologous parts. Colorado mammals, birds and reptiles. Invertebrates. General ideas concerning amoeba and other low organisms. Elementary study of a few common insects. Ants and aphides. Beneficial and injurious insects and aphides.

PHYSIOGRAPHY.

This work will be introduced by two lessons on mathematical geography. Physical forces which have modified the shape of the earth and which are still in operation. Tides, oceanic currents, trade winds and their causes. Elementary principles of meteorology and various atmospheric phenomena. Mountain forming. Aqueous, atmospheric and igneous agencies. Zonal and altitudinal distribution of plants and animals.

ORTHOGRAPHLY AND ORTHOEPY.

Special rules and exercises in spelling. Diacritical marks. Use of dictionary. Exercises in articulation and pronunciation. Geographical nomenclature. New words. Proper names.

HISTORY.

- 1. Discovery of America.
- 2. English colonization.
- 3. Colonial institutions.
- 4. The Revolution.
- 5. The Constitution.
- 6. Organization of the government.
- 7. Political organizations and parties.
- 8. The slavery struggle.
- 9. The Civil war.
- 10. The reconstruction of the Union.

TWELFTH BIENNIAL REPORT

GRAMMAR.

Etymology and syntax. Diagrams. Teachers will be provided with a collection of classical sentences for daily instruction.

PHYSIOLOGY-FIVE LESSONS.

- 1. The skeleton.
- 2. Digestion.
- 3. Circulation.
- 4. Respiration.
- 5. Hygiene.

PRIMARY METHODS.

Reading (including language, spelling and writing) to be given daily. Numbers, busy work and nature study, first week; drawing, second week. The work of first week will bear upon first grade, that of second week on the work of second and third grades. A class will be present to illustrate second grade work.

READING.

The object of these lessons is to establish criteria of vocal expression, to develop imagination and concentration and love and appreciation of good literature.

CRITERIA.

The elements of time, pitch, inflection, emphasis, quality and rhythm will be studied. Exercises will be used as illustrations.

VOCAL EXPRESSION.

Fundamentals of delivery especially directed toward acquiring a conversational manner as opposed to rant and declamation. Cultivation of the ear for all shades of natural melody.

VOCAL TRAINING.

Exercises for improving the voice, removing disagreeable qualities. developing weak voices, increasing range, resonance and carrying power and training for distinct and correct enunciation.

SELECTIONS.

Longfellow's King Robert of Sicily will be used to show the method of instruction in (1) Grouping, (2) Values, (3) Emotion, (4) Contrasts. (5) Climaxcs. Other selections as examples of literary interpretation to assist the teacher to a deeper insight into llterature that he may become a better reader and teacher of reading.

PHYSICAL CULTURE.

Embracing the various system of gymnastics, from the Swedish movements of Ling to the aesthetic exercises of Delsarte, combined, to give the highest results in health, strength and grace. Practice in cor-



PUBLIC SCHOOL, JULESBURG.

rect breathing, standing, walking, poising, relaxing and energizing. A group of twenty-five series to be used in the class room marching exercises.

The study of the music section of the County Normal Institute will be devoted to the practical study of music as presented in the regular school room by the regular teacher. Mr. Griggs will try to present the study of methods and theory of music from the first grade to the eighth grade, inclusive, presenting every difficulty that may be met with in the teaching of music in each grade, and overcoming it in the simplest possible manner illustrated by exercises and songs. It is hoped and urged that the teachers will feel at liberty to ask such questions as may be suggested, and that the results will be of great value to all of our teachers.

FOURTH DISTRICT.

Clear Creek, Gilpin and Jefferson counties. Session was held at Golden, Colo., August 6 to 1*i*, 1900. Conductor—W. H. Miller.

Instructors—James Hays, Mary Carson, Minnie Hand. Enrollment—106.

Financial statement-

- 12	00	61	nt	s

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Balance on hand\$	54.16		
From registration fees	106.00		
From counties	226.00		
- Total		\$:	386.16
Disbursements—			
Paid conductor\$	100.00		
Paid instructors	150.00		
Paid incidentals	59,85		
- Total\$	309.85		
Balance on hand	76.31		
- Total		\$	386.1 6

FIFTH DISTRICT.

Douglas, Elbert, El Paso and Teller counties. Held at Colorado Springs, July 30-August 13. Conductor—Ira M. DeLong.

TWELFTH BIENNIAL REPORT

Instructors—Frank D. Ball, Charles Brookover, Dr. Hisey, Mary S Mack, Miss Shinn. Enrollment—184. Financial statement—
Receipts-
Balance on hand \$ 27.82
From counties
From registration fees
Total \$ 605.82
Disbursements-
Paid conductor\$ 125.00
Paid instructors
Paid incidentals
Total
Balance on hand 90.47
Total
PROGRAM.
Section 1—
8:15 to 8:55—Arithmetic (DeLong). 8:55 to 9:00—Opening and announcements.
9:00 to 9:45—Primary Methods (Mack).
9:45 to 10:25—Grammar (DeLong).
10:25 to 10:35—Recess.
10:35 to 11:15—Primary Methods (Mack).
11:15 to 11:55—Psychology (DeLong).
11:55 to 12:30—Science (Brookover).
Section 2—
8:15 to 8:55—Primary Methods.
8:55 to 9:00Opening and announcements.
9:00 to 9:45—Arithmetic (DeLong).
9:45 to 10:25—Science (Brookover).
10:25 to 10:35-Recess.
10:35 to 11:15-School management, first week (Dietrich): Liter
ature in grades, second week (Palmer).
11:15 to 11:55-School Law or Civil Government (Ball).
11:55 to 12:30—Grammar (DeLong).

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Section 3-

8:55 to 9:00-Opening and announcements.

9:45 to 10:25-Drawing (Shinn).

10:25 to 10:35-Recess.

10:35 to 11:15-Drawing (Shinn).

11:15 to 11:55-Drawing (Shinn).

In districts 5 and 7 we taught matter and method, we drilled and we lectured; we encouraged questions from the teachers, we held experience meetings. We recommended good books by name and a few periodicals. We sought to instruct, to inspire, and to encourage regular study hereafter.

SIXTH DISTRICT.

Cheyenne, Kit Carson and Lincoln counties.

Held at Burlington, August 20-31.

Conductor-A. J. Fynn.

Instructor-Myrtie J. Wells.

Enrollment-54.

Financial statement-

Receipts-

Balance on hand	7.33	
From counties	104.00	
From registration fees	48.00	
– Total		\$ 159.33
Disbursements		
Paid conductor\$	75.00	
Paid instructor	50.0 0	
Paid incidentals	20.00	
-		
Total\$	145.00	
Balance on hand	14.33	

Total \$ 159.33

PROGRAM.

8:15 to 8:30-Opening exercises.

8:30 to 9:00-Psychology and Pedagogy.

9:00 to 9:30-Primary Methods.

9:30 to 10:00-Superintendent's period.

10:00 to 10:10-Recess.

10:10 to 10:35—Literature.

10:35 to 11:00—Arithmetic.

11:00 to 11:25—Geography.

11:25 to 11:35—Recess.

11:35 to 12:00-History and Civics.

12:00 to 12:20-General Lessons, Music and Gymnastics.

12:20 to 12:45—Grammar.

SEVENTH DISTRICT.

Custer, Fremont and Pueblo counties. Held at Florence, August 6-17. Conductor—Ira M. DeLong. Instructors—George A. Colgate, D. M. Hatch, E. A. Kenyon. Enrollment—104. Financial statement—

Receipts-

Balance on hand\$	66.70		
From counties	208.00		
From registration fees	92.00		
Total		\$ 366.70	
Disbursements-			
Paid conductor\$	125.00		
Paid instructors	200.00		
Paid incidentals	9.00		
	334.00		
Balance on hand	32.7 0		
– Total		\$ 366.70	

EIGHTH DISTRICT.

Baca, Bent, Kiowa, Otero and Prowers counties. Held at Rocky Ford, August 20 to September 1. Conductor—J. F. Keating. Instructors—Mary G. Carson, E. E. Cole. Enrollment—100.

Financial statement-

From counties		**	300.00
•	00,00	44	300.00
		\$	300.00
		\$	300.00
Disbursements-			
Paid conductor\$ 1	25.(8)		
Paid instructors 1	50,00		
Paid incidentals	25.00		

NINTH DISTRICT.

Huerfano and Las Animas counties.			
Held at Trinidad, August 6-17.			
Conductor-C. V. Parker.			
Instructors-J. W. Hamer, L. E. DeHaven.			
Enrollment-87			
Financial statement—			
Receipts-			
From counties	167.00		
From registration fees	\$7.00		
– Total		\$	254.00
Disbursements-			
Paid conductor\$	90,00		
Paid instructors	110.00		
Paid incidentals	27.59		
– Total\$	227.50		
Balance on hand	26.50		
		s	254.00

NINTH NORMAL DISTRICT INSTITUTE.

C. V. Parker, conductor.

From the first, unusual interest was manifested on the part of the teachers present, nearly all of whom were teachers of experience.

The success of the institute may be attributed to that fact largely. Another factor that contributed to its success, was the recognition, on the part of the management, of the ability of the teachers in attendance, some of whom were asked to conduct class exercises, or explain their method of attaining certain desirable ends in school work.

Ex-County Superintendent R. W. Smethers, principal of the schools at Sopris, gave a valuable lesson to the teachers regarding the best way to open and conduct a school among the Spanish-American speaking people. As nearly eighty per cent. of the schools in this district belong to that class, it was deemed timely and very helpful.

Senor J. M. Madrid, a very successful Spanish-American teacher, gave a lesson on Spanish pronunciation as it obtains among the Mexicans of this district. At great pains he prepared a chart indicating the sounds of the letters, and showing the accent in a number of words. Some little time was spent in drill upon this work as outlined, after which the chart was copied by those who cared to do so.

While our reading exercises partook largely of normal methods, a number of excellent class exercises were given by different teachers present. Miss Lelia Lail, a reader and elocutionist of no little note, attended the institute quite regularly, and occasionally gave lessons in voice culture, and instruction as to methods in the recitation. The Spanish-American teachers joined in the discussions, and gave the methods in vogue among them in teaching beginners to read and to learn to speak the American language.

Throughout the entire institute the most friendly relations existed between the instructors and the teachers. It was marked by the absence of formality. Frequently the teachers asked what topics ought to be emphasized and the best methods of teaching certain subjects.

Another feature of the institute was the Round Table discussions, which occurred every day after the regular institute work closed. It was supposed, at first, that only a few would remain to take part in the discussions. It proved to be one of the most valuable exercises of the institute. It was no unusual thing to have the entire institute remain, and from ten to fifteen citizens present to listen and take part in the discussions.

Lectures were delivered before the institute by the following persons:

Dr. Barton O. Aylesworth, President of the State Agricultural College.

Mrs. Helen L. Grenfell, Superintendent of Public Instruction.

Dr. Arthur Allin, Professor of Pedagogy in the State University at Boulder.

Dr. Z. X. Snyder, President of the State Normal School at Greeley.

The accompanying program will give an outline of the work covered. The number of subjects studied was purposely limited:

PROGRAM.

8:50 Opening exercises.

- 9:00 Advanced Arithmetic, Hamer; Geography, DeHaven.
- 9:45 History, Parker; Science, * Hamer.
- 10:30 Civil Government, Parker; Elementary Arithmetic, Hamer.

11:15 School Law, Parker; Psychology, Hamer. Recess.

1:30 Grammar, DeHaven.

- 2:15 Reading, Parker; Pedagogy, Hamer.
- 3:00 Orthography, entire institute.
- 3:30 Round Table discussions follow the close of the daily session.

4:00 Round Table meetings.

Topics—1, School discipline. 2. Grading county schools. 3. County teachers' association. 4. Language lessons, primary. 5. Composition and rhetorical work in the county schools. 6. Quarterly examination of county_schools by the county superintendent. 7. Failures in teaching arithmetic. 8. Methods in United States history, and topics to be emphasized. 9. Importance of English grammar. 10. Civics in the country schools.

TENTH DISTRICT.

Conejos, Costilla, Mineral, Rio Grande, Saguache counties.

Held at Monte Vista, August 6-17

Conductor-M. F. Miller.

Instructors-George A. Carpenter, Charles Groenendyke, J. I. Palmer, Anna Scovill, H. H. Wilson.

Enrollment-81.

Financial statement-

Receipts-

Balance on hand\$	28.60
From counties	162.00
From registration fees	\$1.00
From other sources	76.50
-	
Total	\$ 348.10

*Topics for the day following will be announced daily.

Disbursements-

Paid conductor\$	100.00	
Paid two instructors	120.00	
Paid incidentals	16.50	
-		
Total\$	226.50	
Balance on hand	111.60	
Total		\$ 348.10

REPORT OF INSTITUTE AT MONTE VISTA-BY W. H. MILLER.

This district is to be congratulated upon its having several progressive and exemplary county superintendents. Three of the five were present at almost every session, ready to render any assistance, and two conducted regular classes; one other had planned to be present throughout, but was prevented by illness.

THE PLAN OF WORK.

Instead of commencing a series of new lines of work it was deemed best to continue the work of the preceding session, which had proved so helpful to the teachers. Thus it was largely along professional instead of academic lines. This change is heartily approved by the best teachers of this district.

The principal new subject was drawing, the Tadd system being presented. For outline of the others, see the previous report.

The course of twelve lectures given in connection with the institute was unusually interesting and valuable. The outside speakers were: Hon. Helen L. Grenfell; Dr. Z. X. Snyder, of Greeley; Dr. Aylesworth, of Fort Collins; Dr. Phillips, of University Park; Dr. Hellems, of Boulder; Dr. Spencer, president of the normal school at Aztec, N. M.; Rev. Mr. Baum, of Monte Vista, and H. M. Barrett, editor of the Colorado School Journal.

One of the new features was the holding of grade conferences, which were greatly enjoyed.

PROGRAM.

8:30-8:45 Opening exercises.

- 9:20 Psychology, Miller.
- 9:50 Arithmetic, Carpenter. History, Wilson.
- 10:15 Physical Culture, Miller.
- 10:45 Primary Methods, Miss Scovill.
- 11:00 Recess.
- 11:30 Civil Government, Miller. Speer Method, Miss Scovill.
- 12:00 Science, Palmer.
- 2:00-2:25 Music, Groenendyke.

SUPERINTENDENT OF PUBLIC INSTRUCTION. 313

- 2:50 Grammar, Palmer. Geography, Wilson.
- 3:15 Drawing, Miss Seovill.
- 3:25 Recess.
- 3:50 Literature, Wilson.
- 4:20 Pedagogy, Miller.

ELEVENTH DISTRICT.

Archuleta, Dolores, La Plata, Montezuma and San Juan counties. Held at Durango, August 20-September 1.

Conductor-S. D. Williams.

Instructors—Lura D. Patrick, D. E. Phillips, James T. Hicks. Enrollment—65.

Financial statement-

Receipts-

Balance on hand	35.35	
From registration fees	65,00	
From counties 12	20.00	
Total	20.35	
Balance unpaid	4.40	
Total		\$ 224.75
Disbursements-		
Paid conductor\$	75.00	
Paid instructors	. 5.00	
Paid incidentals	74.75	
Total		\$ 224.75

TWELFTH DISTRICT.

Delta, Gunnison, Hinsdale, Mesa, Montrose, Ouray and San Miguel counties.

Held at Montrose, July 30-August 10. Conductor—F. H. Clark. Instructors—W. P. Rhodes, Ella Stratton. Enrollment—109.

Receipts-			
Balance on hand\$	63.70		
From counties	218.00		
From registration fees	109, 00		
– Total		*	390.70
Disbursements-			
Paid conductor\$	136.50		
Paid instructors	115.00		
Paid incidentals	5.00		
	256.5 0		
Balance on hand	134.20		
Total		\$	390.70

Financial statement-

INSTITUTE AT MONTROSE-REPORTED BY F. H. CLARK, CONDUCTOR.

Realizing the importance of many varied lines of work in an institute, and feeling the impossibility of presenting all at one session, I felt the necessity of selecting and presenting that which would count most for a positive uplift (in every possible way, but particularly) in the way of inspiring teachers with a sense of the great opportunities which were ever open before them, the wonderful possibilities latent in the child, and the responsibility resting upon us to properly prepare the child for the broadest possible citizenship. With these thoughts in view, the following line of work was planned for and carried into execution with what success may never be known:

1. Methods in the development of the child, presented in connection with a series of lessons on the Speer Method, and another series of lessons in primary work—Miss Stratton.

2. Methods best suited for the grammar grades, presented in connection with series of lessons in history, grammar, arithmetic, and civics. Also in science, as a preparation of the teachers for the better presentation of nature study work in all grades.—Rhodes and Clark.

3. A series of talks on pedagogy, with the thought of bringing the teachers into line with sound and well-recognized, and generally accepted, pedagogical principles; the Herbartian school being the basis of this line or series of talks,—Clark.

4. A series of talks on psychology—old and new—seeking to lead to an understanding of the child mind, as far as such understanding had been secured and as far as it was deemed wise to give it to the class of teachers found in the institute. This certainly broadens the view, and inspires the true teacher, as she catches the real idea of a teacher's work and opportunity.—Clark.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

5. Parallel with the above, and seeking to correlate the same, was a constant effort to render the points clear, their relations unmistakable, and their definite application to daily work a probability on the part of the majority, at least, of those in attendance.

6. An effort to make the work helpful from a professional standpoint. With slight exception there was very little calculated to prepare the teachers for the examination. We endeavored to be practical, in methods and underlying principles, rather than in details of *book knowledge* in the *common branches*.

THIRTEENTH DISTRICT.

Chaffee, Eagle, Garfield, Grand, Lake, Park, Pitkin, Rio Blanco, Routt and Summit counties.

Held at Glenwood Springs, August 6-17.

Conductor-P. L. Clark.

Instructors-Superintendent Grant Ruland, Mabel Woodruff.

Enrollment-64.

Financial statement-

Receipts	F	5	e	c	e	i	р	t	s	-
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From Garfield county\$	64.00	
From registration fees	64.00	
	128.00	
Balance due	42.00	
– Total		\$ 170.00
Disbursements-		
Paid conductor\$	\$5.00	
Paid instructors	75.00	
Paid incidentals	10.00	
 Total		170.00

OUTLINE.

The work of the institute of the Thirteenth Normal District covered the following subjects. viz: Arithmetic, grammar, history, reading, civics. natural sciences, music, drawing and physical culture.

In the advance circular of the institute it was noted that "normal institutes are designed primarily to teach methods, and not to prepare candidates for examination; but as there are always in every institute a large number who value the review work more highly than they do the presentation of methods, the instructors of this institute will endeavor to conduct the classes in such a way as to give both methods and review work.

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"Teachers will do well to bring text books, as such will be needed for reference. In the reading work, "The Courtship of Miles Standish," by Longfellow, will be used as a text. No. 2 Riverside Literature Series is recommended for cheapness and convenience. The book can be obtained at the institute. History will be discussed with the idea of showing the relation of cause and effect in the growth and the development of the United States. In arithmetic attention will be given to factoring, divisors and multiples, fractions and percentage; but other topics may be taken up if the institute so desires. Grammar will be treated in a way calculated to harmonize the differences of the various text books, and to develop the best methods of presenting the subject to pupils."

The work was carried out along the above lines.

No work in civics had been planned previous to the institute, but so many of the teachers desired to review the subject that a class was organized. The same was true of work in the natural sciences.

REPORTS OF STATE EDUCATIONAL INSTITUTIONS.

AGRICULTURAL COLLEGE. NORMAL SCHOOL. SCHOOL OF MINES. UNIVERSITY OF COLORADO. SCHOOL FOR DEAF AND BLIND. INDUSTRIAL SCHOOL FOR BOYS.

REPORT SECRETARY STATE BOARD OF CHARITIES AND CORRECTIONS.

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REPORTS

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STATE EDUCATIONAL INSTITUTIONS.

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 in 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 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 the lands which may be vested in the college by state or national legislation, and of all the appropriations made by the state for the support of the same. The board shall have plenary power to adopt all such ordinances, by-laws 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 science 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 mechanic arts:

PURPOSE OF GOVERNMENT AID.

"The leading object shall be, without excluding other sciences and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in such manner as the legislatures of the states may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life." (Section 4, Morrill act, July 2, 1862.)

ADDITIONAL ENDOWMENT BY THE GENERAL 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 accordance with an act of congress approved July 2, 1862, the sum of \$15,000 for the year ending June 30, 1890, and an annual 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 tc 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.

Hon. James L. Chatfield, Gypsum, term expires 1901.
Hon. A. Lindsley Kellogg, Rocky Ford, term expires 1901.
Hon. B. F. Rockafellow, Canon City, term expires 1903.
Hon. Eliza F. Routt, Denver, term expires 1903.
Hon. Jesse Harris, Fort Collins. term expires 1905.
Hon. P. F. Sharp, Pueblo, term expires 1905.
Hon. Harlan Thomas, Denver, term expires 1907.
Hon. P. A. Amiss, Pruden, term expires 1907.
Governor Charles S. Thomas, ex officio.
President Barton O. Aylesworth, ex officio.

OFFICERS.

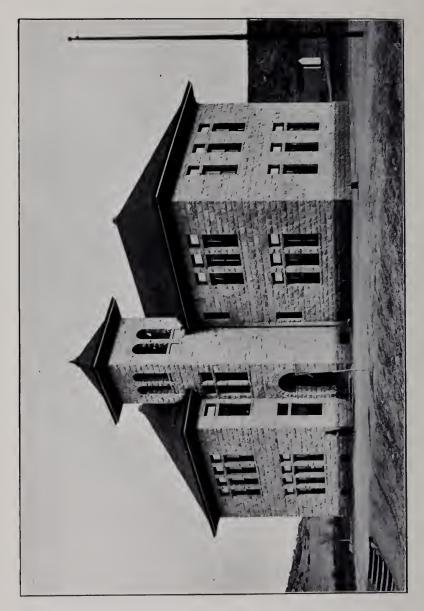
P. F. Sharp, President.

A. M. Hawley, Secretary.

J. H. Fesler (State Treasurer, Denver Colorado), Treasurer.

G. A. Webb. Local Treasurer.

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COURSES OF STUDY.

The courses of study are four, each requiring four years in addition to one year of preparatory work, and each leading to the degree of B. S.: the agricultural course, the mechanical engineering course, the civil engineering eourse, and the ladies' eourse. Provision is made for post graduate work. The degrees of C. E. and M. E. are conferred on those worthy of holding them by faculty action, approved by the governing board. A commercial course, eovering a period of two years, is established, entrance to which requires the same qualifications as for admission to the freshman class; no degree is given.

NAMES OF INSTRUCTORS AND REGULAR EMPLOYES, WITH THEIR ANNUAL SALARIES—ALSO A STATEMENT OF THE FUND OR FUNDS WHENCE SUCH SALARIES ARE

DRAWN.	College	Station
Faculty	Fund.	Fund.
Barton O. Aylesworth, A. M., LL. D., President and		
Professor of Logic and Political Economy	\$ 5,000-00	
James W. Lawrence, B. S., Professor of Mechanical		
Engineering	2,000-00	
Louis G. Carpenter, M. S., Professor of Civil and Irriga-		
tion Engineering	2,000-00	\$ 900.00
Clarence P. Gillette, M. S., Professor of Zoology and		
Entomology	1,500-00	200-00
William P. Headden, A. M., Ph. D., Professor of Chem-		
istry and Geology	1,500 00	500-00
Theodosia G. Ammons, Professor of Domestic Science	1,500 00	
. Edward B. House, B. S., E. E., Professor of Mathe-		
matics	1,590 00	
Edward M. Traber, A. B., Professor of Rhetoric and		
Philosophy	1,500 00	
Alfred M. Hawley, Secretary of the Faculty	1,000 00	500-00
Charles J. Gilkison, B. S., Principal Commercial De-		
partment	1,500 00	
Burt C. Buffum, M. S., Professor of Agriculture	1,500 00	500-00
Virginia H. Corbett, B. L., Professor of History and		
Literature	1,500 00	
Wendell Paddock, M. S., Professor of Botany and Hor-		
ticulture	1,500 00	200,00
Richard A. Maxfield, E. S., Major Cadet Battalion, Pro-		
fessor Military Science and Tactics, and Assistant		
in Mathematics	$700 \ 00$	•••••

TWELFTH BIENNIAL REPORT

Stenographers-		
Frank H. Thompson, B. S	1,000 00	
William R. Headden, B. S		600 00
Librarian-		
Marguerite E. Stratton, E. S	700 00	=
Amintonta		
Assistants-	1 000 00	,
James A. Stump, B. S., Physics and Civil Engineering.	1,000 00	
Robert E. Trimble, B. S., Meteorology and Irrigation		1.000.00
Engineering	••••	1,000 00
L. D. Crain, B. M. E., Mechanical Engineering and	1 000 00	
Drawing		
Allen P. Greenacre, B. S., Forge-Room Work	600 00	
William F. Garbe, Foundry Practice	720 00	
Frank L. Watrous, Agriculture		1.000 00
Edward S. G. Titus, B. S., Entomology	204 00 •	396 00
Carl H. Potter, B. S., Botany and Horticulture	400 00	600-00
Charles F. Mergelman, Floriculture and Landscape		
Gardening	900 00	
Louis A. Test, B. M. E., A. C., Chemistry	600 00	400 00
Fred Alford, B. S., Chemistry		600-00
Joseph Lownes, B. S., Chemistry		600-00
Lathrop M. Taylor, B. S., Stenography and Type-		
writing	1,000 00	
Charles Golding-Dwyre, Jr., Bookkceping	750 00	
Sarah T. Sutherland, Domestic Science	750 00	
Ralph H. Hess, B. S., Mathematics	750 00	
Amos Jones, B. S., Field Work in Engincering	600 00	
C. J. Griffith, B. S., Dairying	800 00	
Sub-station Superintendents-		
Harvey H. Griffin, B. S., Arkansas Valley, Rocky		
Ford, Colorado		900-000
J. E. Payne, M. S., Rainbelt, Cheyenne Wells, Colorado		800-00
Engineers and Janitors—		
William Kelly	780-00	
John H. Cameron, Sr	600 00	
James L. Veazey	600 00	
	600 00	
Isaae N. Chatfield	000 00	

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La	aborers Regularly Employed	
	J. H. Cameron, Jr 500 0)	
	Alvin Fry 540.0)	
	Frank Matthews	
	N. C. Strayer 540 00	
	Robert Walker	
	Y Total	\$10,296 00
Ge	eneral	
	Station labor	2,436 00
	College labor	
	Student labor 1,702/00	
	Total	\$ 2,436 00
	SUMMARY.	
	Salaries	\$10,296_00
	Labor	2,436 00
	Grand total	\$12,732 00

THE AGRICULTURAL EXPERIMENT STATION. FORT COLLINS, COLO.

Board of Control: The State Board of Agriculture.

EXECUTIVE COMMITTEE IN CHARGE.

P. F. Sharp, chairman; B. F. Rockafellow, J. L. Chatfield, P. A. Amiss. Jesse Harris.

STATION STAFF.

L. G. Carpenter, M. S., meteorologist and irrigation engineer.

C. P. Gillette, M. S., entomologist.

W. P. Headden, A. M., Ph. D., chemist.

B. C. Buffum, M. S., agriculturist.

Wendell Paddock, M. S., horticulturist and botanist.

R. E. Trimble, B. S., assistant meteorologist and irrigation engineer.

F. L. Watrous, assistant agriculturist.

L. A. Test, B. M. E., A. C., assistant chemist.

E. D. Ball. M. S., assistant entomologist.

C. H. Potter, M. S., assistant horticulturist.

Joseph Lownes, B. S., assistant chemist.

F. C. Alford, B. S., assistant chemist.

E. S. G. Titus, B. S., assistant entomologist.

H. H. Griffin, B. S., superintendent Arkansas Valley sub-station, Rocky Ford, Colorado.

J. E. Payne, M. S., superintendent Plains sub-station. Cheyenne Wells, Colorado.

OFFICERS.

President, B. O. Aylesworth, A. M., LL. D.

L. G. Carpenter, M. S., Director.

A. M. Hawley, Secretary.

W. R. Headden, B. S., Stenographer and Clerk.

SUMMARY OF COLLEGE INVENTORIES.

NOVEMBER 30, 1900.

Lands and Adjuncts-

Two hundred and forty (240) acres of land at an average

Two number and forty (240) acres of fand at an average			
value of \$100 per acre	\$24,000	00	
Trunk sewer to the Poudre river	6,000	00	
Pipe-line for water supply	2,900	00	
		_	*\$ 32,900-00
Buildings, Including Permanent Fixtures-			
Main College Building	36,000	00	
Mechanical Engineering Building	23,000	00	
Agricultural Hall and Creamery	10,500	00	
Horticultural Hall	15,100	00	
Civil Engineering Building	9,000	00	
Commercial College Building	6,000	00	
Chemical Laboratory	27,000	00	
Building for Department Domestic Science	1,650	00	
Greenhouses (\$3,000) and Forcinghouse (\$1,500)	4,500	00	
Barns, Tooliiouse, and sheds on Horticultural grounds	2,299	00	
Barn on College Farm	4,000	00	
Sheep barn and paddocks (\$600); implement house and			
shed (\$450); pigpens (\$300); other stock pens (\$350);			
root-celiar and silo (\$250); fencing (\$1,450) on College			
Farm	3,400	00	
Farm Dweiling House	2,700	00	
Depot, Hosehouse and Apiary	700	00	
			\$148,849-00

*This estimate includes numerous sewer laterais and water connections; a reservoir for storage of water; all other improvements of the College grounds; and ditch stock worth \$2,000.

Department Inventorles-
History and Literature
Rhetoric and Philosophy 365 54
Mathematics
Military Science and Tactics
Zoology and Entomology 5,858-55
Mechanical Engineering and Drawing
Agriculture
Botany and Hbrticulture 6,893 02
Engineering and Physics
Chemistry
· Domestic Science
Commercial Department
Miscellaneous-
President's office, No. 1
President's office, No. 2
Secretary's office
Library
Total value of College property \$261,502 43
Total value of college property, 1895 \$207,411 83
Total value of college property, 1896 212,699 52
Total value of college property, 1896
Total value of college property, 1897

EXPERIMENT STATION INVENTORIES.

NOVEMBER 30, 1900.

Director's Office-

TWELFTH BIENNIAL REPORT

Entomological Section-			
Laboratory supplies\$	73	95	
Entomological supplies	70		
Insecticides and insecticide apparatus	86		
Apiary	152		
In charge (microscope, etc.)	310		
-			692 95
Horticultural Section-			
Glassware\$	6	74	
Photographic apparatus and supplies	84	95	
Instruments	43	00	
Trees and nursery stock	294	10	
Herbarium	1,560	00	
Miscellaneous	1	25	
-			1,990-04
Meteorological and Irrigation Engineering Section-			
Meteorological instruments	545	15	
Office fixtures	34	00	
Stationery, books, maps, etc	32	60	
Irrigation and hydraulic apparatus	236	35	
Photographic supplies and negatives	146	95	
Miscellaneous	146	31	
			1,141 36
Library			1,100 00
Total Main Station			\$ 6,684 25
Arkansas Valley Sub-station, Rocky Ford, Colo			
Water rights and apparatus\$	1,826	00	
Fences, gates and bridges	338	30	
Buildings and improvements	2,010	00	
Livestock	181	00	
Implements and tools	393	15	
Miscellaneous	54	50	
Farm produce on haud	1,068	7.5	
		. <u>.</u>	5,881 70
Plains Sub-station, Cheyenne Wells, Colo.			
Dwelling, barn, fencing, etc\$	930	00	
Livestock and implements	355	05	
Supplies and farm produce on hand	73	50	
			1,358 55

SUPERINTENDENT OF PUBLIC INSTRUCTION. 327

Sub-station, Monte Vista, Colo	
160 acres of land \$ 2,110 00	
Buildings, fencing, etc	
One (1) team horses 150 00	
Farm implements and appliances 232 15	
	3,989-15
Sub-station, Monument, Colo,-	
40 acres of land \$ 200.00	
Buildings	
	929 00
Total Sub-station property	\$12,158 40
Total Main Station property	6,684 25
Total Experiment Station property	\$18,842 65
In addition, the station has the use and control of other as long as used for experiment station purposes, as follows:	property,

160 acres of land at Cheyenne Wells	.\$	160 00
200 acres of land at Rocky Ford	. 11	,000 00

This inventory does not represent the value of the property which is not used for experiment station purposes. The station extends certain duties laid on the college by law, and thus has the use of considerable college property. The inventory is intended to show only such property as has been purchased from the Hatch fund appropriated by congress.

\$11.160 00

ENROLLMENT STATISTICS.

The following statements show the student enrollment and classification for the college years, 1898-99 and 1899-00.

SUMMARY FOR 1898-1899.

Ма	le.	Female.	Total.
Seniors	17	1	18
Juniors	24	10	34
Sophomores	28	2	30
Freshmen	30	20	50
Sub-Freshmen	62	18	80
Preparatory	31	14	45
Commercial Course-Seniors	5	1	6
Commercial Course-Juniors	43	16	59
Unclassified	10	13	23
	_		
Total	50	95	345

TWELFTH BIENNIAL REPORT

The students represent fifteen states, one territory, and two foreign countries, as follows: Arkansas, 1; Colorado, 293; Georgia, 1; Illinois, 3; Iowa, 3; Kansas, 5; Massachusetts, 2; Minnesota, 1; Missouri, 1; Montana, 1; Nebraska, 6; New Mexico, 7; New York, 1; Ohio, 1; South Dakota, 1; Wyoming, 16; Mexico, 1; Armenia, Turkey, 1. Total, 345.

SUMMARY FOR 1899-1900.

М	ale.	Female.	Total.
Postgraduates	6	1	ī
Seniors	20	10	30
Juniors	24	4	28
Sophomores	22	10	32
Freshmen	48	16	64
Sub-Freshmen	53	25	78
Preparatory	21	9	30
Commercial Course-Seniors	6	9	15
Commercial Course-Juniors	36	20	56
Unclassified students	8	15	23
-			
Total	244	119	363

The enrollment for the first term of the college year—the fall term of thirteen weeks, which usually closes about December 1—is a fair index of what the enrollment of one year will show in the way of increase over that of the preceding year. Below are given the figures that represent the student registration of this term for a number of years.

Year.	•	No. Students.
1892		
1893		
1894		
1895		
1896		
1897		
1898		
1899		
*1900		

³²⁸

^{*}About two-thirds of the fall term

The enrollment for the present college year, 1900-1901, as before shown, is classified as follows:

Postgraduat	es
Seniors	
Juniors	
Sophomores	
Freshmen	
Sub-Freshme	en
Commercial	Course-Senfor 11
Commercial	Course Juniors
Unclassified	students 14

The graduates from the college, who completed one of its regular courses, now number one hundred and forty-eight. The first class to graduate from the commercial department was in 1898, and the total number graduated from that department of college work is now twentyfive. The positions in the working world held by these representatives testify to what it is doing in giving the industrial classes that liberal and practical education that will best fit them for the several pursuits and professions of life.

It will be observed from the above lists of registration that the gain of 1899 over 1898 in enrollment is considerable; in fact, it is the largest for a number of years. The registration has been fairly well apportioned among the five courses: Agricultural, mechanical, civil and irrigation engineering, ladies' and commercial.

It was thought best by the board, the entire faculty concurring, to drop the preparatory year from the course of study. There are various reasons for this action. Since it did the work of the eighth grade it was in reality a duplication of work already done at public expense in every portion of the state. Then, too, the law prescribing the qualifications for admission seem very clearly to prohibit work below the present subfreshman class.

There may have been a slight fear as to the effect this loss would have upon the enrollment. Such fear, however, entirely disappears in the light of the registration of this fall term. The loss resulting from the dropping of the preparatory year has been made good and above that a greater gain made than the entire gain of last year over 1898.

But something more than numbers appears here. Numbers, after all, is a minor per cent. as indicating the growth of an institution. The increase in the average age of the students, the general bearing of the student body, the more serious work, and the finer spirit manifest at the daily task are surer marks of growth.

In the list of the faculty appear four new names. These new workers came to us at the beginning of the present college year. Their predecessors

resigned to accept other positions-two of them to go into government employ in scientific research-with the best of good will towards board, faculty and students. In filling their positions a most thorough canvass was made of all the available material. None were considered but those in closest sympathy with agricultural and mechanical education. It is gratifying to state that the results have proved entirely satisfactory. Professor B. C. Buffum was called to the chair of agriculture so long occupied by Professor W. W. Cooke. Professor Buffum was director of the station and agriculturist in the Wyoming university for nine years. Professor Wendell Paddock, an alumnus of the Agricultural College of Michigan, and eight years assistant horticulturist at the station at Geneva, New York, was called to succeed Professor C. S. Crandall as botanist and horticulturist. Miss Virginia Corbett, a graduate of the State Agricultural College of lowa, was called to the chair of history and literature. Miss Corbett held similar positions in Iowa and Montana. Mr. James A. Stump succeeds Mr. Jay D. Stannard as first assistant in the department of civil engineering.

Two successes in particular mark the year 1899. The increased service and efficiency of the Experiment Station under the directorship of Professor L. G. Carpenter, and the revival of interest in farmers' institutes throughout the state. Still better things are to be done in the line of institute work during the coming season.

The Experiment Station has added largely to its mailing list, has put itself in touch with similar work throughout the world, and has taken an exalted place among the experiment stations of the nation. It sees its unparallelled opportunity.

Under the leadership of Professor B. C. Buffum the agricultural side of the college has received the attention due it. The board and faculty have a fixed purpose to make this department increasingly the master department of the college. The agricultural department has been reinstated in its own building, the agricultural hall. The building has been renovated, beautified and made ready for increased work.

The stock yards are being rebuilt upon modern plans.

The fine herd of Durham cattle purchased last spring are but the beginning of a larger educational stock enterprise for the premotion of the stock industry of the state.

Last year the college buildings were repainted and put in general repair. This year general improvements are being made upon and around the grounds. Much needed stone walks are being laid, fences are being builded, and the drives about the buildings are being graveled.

Not one dollar, however, has been or is being expended except as it is absolutely needed for the preservation of property and the comfort of teachers and students.

Much of the excellent spirit of the school is due to the sympathetic control of college athletics. No innovations have been introduced. An honest effort has been made to have the Colorado Agricultural College a modern school in method, work and spirit. A fruitless orchard—long condemned by the State Board of Agriculture, a constant shame to all those connected with the school—was ordered removed by the board. This has been converted into an athletic field which is one of the best in the West. Here, with the same honor, obedience and spirit with which all the college work is done, young men under faculty control take such physical exercise as health, hard study and modern college ideas demand.

Aside from the requirements of athletics, such a field was absolutely necessary for drilling purposes. On account of its advantage, the instructor in military tactics has been able to put his battalion in such condition as to make it the pride of the state.

By close economy the State Board of Agriculture has kept the college running during the past two years without special appropriation and without incurring any indebtedness. But so rapidly are the stock, agricultural and horticultural interests of the state growing, that as soon as possible special appropriations should be voted by the legislature for at least one new building, for a better equipment in the civil engineering department, and for a barn adequate to the needs of a great agricultural school in a great state.

A small appropriation for the extension of farmers' institutes in the state would be an exceedingly wise and timely action.

Neither the library nor museum is properly housed. The auditorium is too small for the number of students enrolled.

The board and faculty ask merely that as the state grows in num-Lers, wealth, and industries, its educational institutions be permitted to grow in the same ratio.

COLLEGE FINANCES.

The source of college revenue has been frequently explained. The financial support the college receives from Colorado has been growing less of late years. The mill-tax fund—one-fifth mill on the dollar—for college support is levied upon the assessed value of the property of Colorado. The following figures will show the assessed valuation for several years past:

Year.	Assessed Value of Property.
1892	\$236,884,449 48
1893	238,722,417 05
1894	208,905,379 15
1895	201,308,969 10
1896	206,598,561 00
1897	197,276,446 00
1898	187,000,000 00
1899	203,486,692 00

The last compilation of assessments, that for 1900, shows that the total taxable property of the state is assessed, in round numbers, at \$215,000,000.00. Within the last eight years the assessed valuation of property subject to taxation has fallen off more than forty-five million dollars. This means an annual loss of state revenue, for college support, of more than \$9,000.00. In June, 1892, the enrollment of students was 146, a little more than one-third that reported for June, 1900. Thus, while student enrollment is increasing rapidly, state revenue for college maintenance is becoming less every year.

The summary of receipts for college support, within the last two years, is as follows:

The government appropriations, under the provisions of the "Hatch Act," 1887, for the exclusive support of the experiment station within the same two-year period, have been \$30,000. No part of this fund is available for college support.

Respectfully submitted,

BARTON O. AYLESWORTH,

President,

The State Agricultural College, Fort Collins, Colorado, November 30, 1900.

REPORT OF THE PRESIDENT OF THE BOARD OF TRUSTEES OF THE COLORADO STATE NORMAL SCHOOL.

ANNUAL STATEMENT FOR THE YEAR ENDING JULY 31, 1900.

To the State Board of Education, Denver, Colorado:

Below please find report of the board of trustees of the State Normal School for the year ending July 31, 1900.

I. NUMBER OF STUDENTS, NAMES, RESIDENCE. ETC.

The whole number of students enrolled during the year:

Males		
Females		
_		
Total in Normal Department	312	
Model School	172	
Kindergarten	62	
Total enrollment		546

Their sex, residence, etc., being shown fully on pages 163-175, inclusive, in catalogue of 1899-1900, hereto attached, and marked "Exhibit A," and is a part of this report.

II. THE ATTENDANCE.

The average daily attendance first term (estimate))6 <i>4</i>
The average daily attendance second term (estimate)	354
The average daily attendance third term (estimate)	954
The average daily attendance for entire year (estimate)	954
Number of days in session during year	90

III. CURRICULUM, CLASSIFICATION AND DEPARTMENTS.

For branches taught, and time devoted to each, text books, etc., we refer you to pages 19 to 145 of Normal School catalogue of 1899-1900.

APPARATUS.

The apparatus of the school consists of physiological models and apparatus, physical, chemical, geographical, biological and psychological apparatus with new and complete laboratories for work and study. Art and domestic economy departments have been added the past year.

LIBRARY.

The library numbers, including text books, books of reference, educational reports, etc., about 15,000 volumes.

IV. NUMBER OF STUDENTS IN EACH DEPARTMENT CLASS.

.

Senior	70		
Junior	144		
Sophomore	59		
Special	39		
		312	
Kindergarten		62	
Model School		172	
Total			546

DIPLOMAS.

There were seventy (70) diplomas granted, as follows:

Albee, EmmaPlatteville, Colo.
Ashback, Mrs. MargaretDurango, Colo.
Bliss, Nellie MGreeley, Colo.
Bresee, MinnieMattoon, 111.
Brown, L. EIlamersville, Ohio.
Calder, HenrlettaCanon Clty, Colo.
Churchill, Mrs. IsabellaGreeley, Colo.
Clonch, MayAspen, Colo.
Collins, C. BCedarville, Ohio.
Cooper, Theda ADenver, Colo.
Cooperrider, A. OTrenton, Neb.
Cornell, HattleDenver, Colo.
Danielson, CoraTexas Creek, Colo.
DeVIne, Elsle F. (Mrs.)Greeley, Colo.

Doyle, MabelSaguache, Colo.
Evans, Emma
Ellis, Adda La Salle, Colo.
Ellis, EstherLa Salie, Colo.
Fagan, JennieBerthoud, Colo.
Fowler, Ruby
Frink, Margnerite R
Gibson, MildredGreeley, Colo,
Goodale, Nellie
Grout, Lizzie M Abbey, Colo.
Hughes, AdellaTrinidad, Colo.
Hughes, IdaDenver, Colo.
Imboden, J. WPitzer, Iowa.
Jamison, ReaPueblo, Colo.
Jones, JennieMontrose, Colo.
Kendel, AliceGreeley, Colo.
Kenwell, Joseph CNevadaville, Colo.
Kersey, MargaretLeadville, Colo.
Ketner, SarahGolden, Colo.
Latson, ElmerWebster, Mich.
Lewis, W. ALa Junta, Colo.
Lowe, Elizabeth FDenver, Colo.
Lowther, LauraCauon City, Colo.
Markusen, MarthaCorrectionville, Iowa.
Mayne, FannieGreeley, Colo,
McKelvey, EvaNew Windsor, Colo.
McNee, ElizabethBlairsburgh, Iowa.
Melville, Bessie LBellvue, Colo.
Mulnix, Sadie SPueblo, Colo.
Neel, OraGreeley, Colo,
Nutting, DrusillaCanon City, Colo,
O'Boyle, LilaGrand Junction, Colo.
O'Connell, MamieCheyenne, Wyo,
Olson, MamieGeorgetown, Colo.
Orr, IrmaGreeley, Colo.
Poland, BellePueblo, Colo.
Probst, RoseDenver, Colo.
Resor, VirginiaPueblo, Colo,
Riek, MetaRico, Colo.
Robbins, W. FDetroit, Texas.

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Romans, Ab. HSalida,	Colo.
arell, JessieGolden,	Colo.
chmidt, KariDenver,	Colo.
earles, NinaEaton,	Colo.
eybold, BerthaDurango,	Colo.
tockdale, MarthaColorado Springs,	Colo.
mith, FrancesCanon Clty,	Colo.
mith, OliveDenver,	Colo.
Caylor, HazelDurango,	Colo.
eniere, CeciliaDenver,	Colo.
Varning, G. ALa Junta.	Colo.
Vaters, EvaGreeley,	Colo.
Villiams, S. DClarkson,	Neb.
Villiamson, LucySterling,	Kan.
Vilson, MarieCanon City,	Colo.
Vood, CarolynGreeley,	Colo.

V. THE NAMES AND NUMBER OF TEACHERS.

Names and Department.	Time of Service.	Annual Salary.
Z. X. Snyder, President, Philosophy and Practice of	Dervice.	Datas 3.
) roore	\$4,500.00
Pedagogy		
James H. Hays, Vice President, Latin and Pedagogy	years	1,800 00
Louise M. Hannum, Preceptress, History, Literature and		
English	1 year	1,500 00
N. M. Fenneman, Physical Science, Physics and Chemistry.	years	1,500 00
A. E. Beardsley, Biology, Zoology and Botany	years	1,630-00
C. T. Work, Sloyd and Mathematics	years	1,450 (0)
E. G. Dexter, Experimental Psychology and Physiology 3	years	1,600-00
J. W. Hall, Principal Training School	2 years	1,800 (0)
Anna M. Helleman, Reading, Oratory and Physical Culture.	l year	1,000-00
Harriet Day, Drawing and Art	l year	(it) (it)
Gertrude Smlth, Domestic Economy	l year	\$00.00
L. C. Butscher, Modern Languages	l year	600-00
M. Nora Boylan, Critic, Trainlng Department	6 years	1,000 00
Lizzie H. Kendel, Critic, Training Department	4 years	1,000-00
Eleanor M. Phillips, Critic, Training Department 3	3-2-3 years	1,000-00
Mrs. S. A. Fenneman, Crltic, Training Department	3 years	1,000-00
Bertha M. Andrews, Director of Kindergarten	l year	1,200 00
Joseph F. Daniels, Librarian	years	1,250 00



COUNTY HIGH SCHOOL, SAGUACHE, COLO.

VI. OTHER EMPLOYES.

A. J. Park, Secretary Board of Trustees	. \$34	£() (00
Chas. H. Wheeler, Treasurer Board of Trustees.	. 10	ю (00
Vernon McKelvey, Secretary to President	. 90	00 (00
A. L. Evans, Gardener	. 91	00 (00
Benj. Stephens, Janitor and Engineer	. 84	40 ((H)

VII. For statement of financial affairs of the school, see attached statement marked "Exhibit B."

VIII. The amount required for the ensuing year for the maintenance of the school is \$45,000. There should be an appropriation of at least \$15,000 for the purpose of putting in a better heating plant and moving the boilers from under the school building, and \$35,000 for the west wing.

> R. BROAD, JR., President Board of Trustees.

Attest:

A. J. PARK, Secretary.

STATE OF COLORADO, COUNTY OF JEFFEESON, 88.

I, R. Broad, Jr., 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.

R. BROAD, JR.

Subscribed and sworn to before me this 26th day of November, 1900. My commission expires September 26, 1904.

JOHN W. BARNES, Notary Public.

(Seal)

TWELFTH BIENNIAL REPORT

"EXHIBIT B."

FINANCIAL STATEMENT OF THE STATE NORMAL SCHOOL OF COLORADO FOR THE YEAR ENDING JULY 31, 1900.

Receipts.

Balance on hand July 31, 1899\$	952	41
Received from taxes	8,574	13
Received from Public School Fund	235	86
Received from fees	1,800	00

\$41,562 40

Disbursements.

Faculty	25,482	96
Other employes	3,769	84
Library	1,295	13
Laboratory—Chemical	85	48
Laboratory-Art	17.0	98
Laboratory-Domestic Economy	655	39
Reading room	372	05
Sloyd-supplies	170	99
Model School-supplies	26	$\theta 2$
Kindergarten-supplies	60	88
Apparatus	318	44
Furniture	307	80
Building	1,261	46
Grounds	284	64

\$31,267_06

SUPERINTENDENT OF PUBLIC INSTRUCTION.

ę.)

Expense Account.

Fuel	724	00
Trustees, account expense and per diem	498	25
Institute expense	822	12
Commencement expense	158	50
Office supplies	69	11
Secretary supplies-expense	25	20
Water taxes	422	50
Postage	413	20
Freight and express	416	55
Catalogue	621	82
Repairs	259	04
Labor . A	91	40
Advertising	182	70
Stationery	118	12
Printing	29	55
Lumber	42	86
Plumblng	72	92
Telephone	-1-1	46
Hack (Model School and Kindergarten)	135	00
Livery	-4	50
Tuning pianos	20	00
Laundry	22	00
Lawn mower	12	00
Lawn dressing	30	50
Toilet paper	10	70
Repairs—Art Room	7	80
Photographs (account catalogue)	10	50
Plants, etc	40	63
Robie & McCutcheon, merchandise	107	25
Merchandise-sundry	61	52
General expense-Library sundries	113	38
Supplies	114	72

\$ 5,703 10

To balance 1,592 24

-

\$41,562 40

REPORT OF THE PRESIDENT OF THE COLORADO STATE NORMAL SCHOOL.

Greeley, Colo., December 1, 1900.

To the Hon, Helen L. Grenfell, State Superintendent of Public Instruction, Denver, Colorado.

Dear Madam—I have the honor to submit the fifth biennial report of the State Normal School of Colorado for the period ending November 31, 1900.

HISTORY OF THE SCHOOL.

The Colorado State Normal School was established by an act of the legislature in 1889. The first school year began October 9, 1890, and closed June 4, 1891.

At the beginning of the second year the school was reorganized somewhat and the course extended to four years. This course admitted grammar school graduates to its freshman year, and others to such classes as their ability and attainment would allow.

At a meeting of the board of trustees June 2, 1897, a resolution was passed admitting only high school graduates or those who have an equivalent preparation, and practical teachers to the regular course. This policy makes the institution a professional school in the strictest sense.

1. Under this policy the growth of the school has been very gratifying. The students are more mature; they have a higher scholastic training, being much better prepared to grasp the principles which underlie the science and art of teaching.

2. From an economic standpoint it was a move in the right direction. When we were doing work suited to a grammar grade graduate, we were duplicating work done in all the high schools in the state. The work we do now is strictly normal school work and is unique in itself.

3. The change met the unanimous approval of the educational people of the state. All are in hearty sympathy with what we are doing. The school is now truly the "Heart of the public school system of the state." The school has been in operation ten years. In that time 2,000 different students have been in attendance. The great majority of these are teaching in the public schools of Colorado.

The school has graduated 398. These are engaged in the public school service of the state.

There are at present about 300 in the normal department, and 90 per cent, of them are from outside of Greeley. Most of the counties of the state are represented in the school.

NEEDS OF THE SCHOOL.

There are no funds for the natural development of the school in the way of buildings. The one-fifth of a mill is used for the maintenance of the school. The growth and development of the State Normal School lies very close to the hearts of the people, and when they recognize its wants they will be prompt in coming to its relief.

It is the people's institution. Its influence is felt in every school house in the state, whether it be in the city, in the hamlet, on the plain, in the valley or on the mountain.

Summing up the needs of the institution:

Heating plant, \$15,000.

West wing to main building, \$35,000.

The building for the training school, \$25,000.

THE FUNCTION OF THE SCHOOL.

The function of the normal school is to make teachers. To do this it must not only keep abreast of the times, but it must lead the educational van. It 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. They must possess a scholarship consisting not in an accumulation of knowledge, but in the 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 normal school 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.

There being no antecedents to fetter the development of the institution, the management has, from the beginning, aimed to make it progressive and formidable in the educational movements of the state and country. It is dominated by the most progressive spirit. It is not a slave to any man, method or philosophy. It seeks to select the best from all and use it in its own investigations and operations. The basis of all work is experiment and research. Nature, books and a living teacher beget a living pupil.

COURSE OF STUDY.

There are four immediate agencies involved in education. The teacher, the child, nature and man. A classification of the facts, the principles, and the laws which are embraced in their "inner connection" constitutes the science of pedagogics. This "inner connection" exists among objects of nature, among the various processes of the mind, among people, and between nature and mind. That a teacher may understand this inner law he must have a knowledge of nature, mind, people and their relations. Out of it arises an understanding of the training necessary for his preparation. It suggests a course of study.

The central agency is the child; it is a living, mental, spiritual entity. It has a body, a mind, a soul. The body requires food, exercise and training that it may grow, strengthen and become skilled—that it may develop. The mind requires knowledge, thinking and training that it may grow, strengthen and become cultured—that it may develop. The soul requires piety, devotion and worship that it may grow, strengthen and become spiritual—that it may develop.

A knowledge of body, mind and soul embraces:

1. A knowledge of the body as a whole, its organs, their functions, and the laws which regulate physical growth and development.

2. A knowledge of the mind as a whole, its nature, its powers, their functions, and the laws which regulate mental growth, discipline and culture.

3. A knowledge of the soul, its nature, its powers, and the laws which regulate moral growth and spiritual development.

The teacher must have a kcen insight into the triple nature of this reality—the child—that he may work intelligently and efficiently in his profound mission. He should recognize the body as a phenomenon of life, and mind as a phenomenon of spirit. Such a preparation as indicated above is the result of the three-fold nature of development. It is training of the hand, the head and the heart.

In accordance with the above analysis, the following course of study is outlined:

A teacher should know the relation of food to growth, of exercise to health and strength, and of training to physical culture. This implies an understanding of physiology, hygiene and gymnastics.

lle should know the relation of nerve, mind and muscle to speech and manual dexterity. This implies a knowledge of language, manual training and physiological psychology.

He should know the relation of a child's development to nature or its surroundings. He should recognize that the mind is quickened through the senses, that there must be action and reaction of the forces without and within the child. He should be able to lead a child to interpret its surroundings. A child must see the sparkling minerals and flowering plants: it must hear and see the bnzzing insects and the singing birds; it must smell the fragrance of the rose that it may know, admire and act. This embraces a knowledge of science.

He should recognize that the decds, sayings, feelings, thoughts and aspirations of the race and age quicken the intellectual and moral natures, and, while they serve no particular end, they belong to culture in its universal character by giving the stage on which the drama of the world's life is revealed. This embraces a knowledge of history and literature.

He should know the relation of knowledge, of mental growth, of thinking, to mental power and culture. This implies a knowledge of psychology.

He should know the relation of example, precept and principle to moral growth, of moral action to moral power and righteous living. This implies a knowledge of ethics.

Out of a study of nature arises the notion of number and space relations—hence a knowledge of mathematics.

God touches a human soul through the true, the beautiful and the good—the true for the understanding, the good for the will, and the beautiful for the imagination. Through the imagination we have the work of art, having its foundation in the senses, as in color, form and sound. Color is the unit concept of painting, form of sculpture and sound of music. To some extent these should form a part of every liberal education; as in modeling and moulding and leading up to work in color. Again, music should have a place in the course of study which aims to prepare teachers. It is the most profound form of expressing the feelings of the depths of the human soul. It inspires us with hope and faith. It lifts us nearer to God. It should have a place in every course of study involving the education of the young and of those preparing to teach. We then include art in our curriculum of study, not as embraced in literature, but as found in drawing and painting, modeling, construction and music.

A teacher should understand his relation to society and to the government under which he lives. This implies a knowledge of civics and economics.

Summarizing the above it would seem that those who are preparing to teach should receive pedagogical training in the following lines or centers of physical, mental and ethical activity:

TWELFTH BIENNIAL REPORT

MAN IN HIMSELF.

Embracing physiology, psychology, ethics, religion.

MAN IN THE RACE.

Embracing history, anthropology, literature.

MAN IN NATURE,

Embracing biology, physics, chemistry, physiography, astronomy.

MAN IN SOCIETY.

Embracing economics, government, home, sociology.

MAN IN EXPRESSION.

Embracing language, drawing, construction, music, painting, art.

MAN IN SCHOOL.

Embracing school economy, history of education, philosophy of education, science of education, art of teaching, art of management.

DETAILED COURSES OF STUDY.

INTRODUCTION AND EXPLANATIONS.

This is an age of specialists. In the profession, in the industries, there is a determined tendency to a differentiation of labor. The underlying stimulus is a more thorough preparation for a more narrow line of work. This stimulus has its potency in the fact that better results follow from such specific training—the greatest product for the least expenditure of energy. With this end in view, the course of study has been revised so that the student has an opportunity to elect'some of the work, thus enabling him to specially prepare himself in some particular subject along the line of his tastes.

1. A school year is divided into two semesters of eighteen (18) weeks each.

2. A term hour, or point, is one recitation a week for a semester or eighteen (18) recitations.

3. A norm for school work is twenty-five recitations a week. A student who wishes to take more than this must have special permission. Some may be required to take less.

4. Fifty term hours, or 900 recitations, are a year's work.

5. A laboratory period must be measured in terms of a recitation period in making term hours.

6. The course is divided into requisites and electives.

OUTLINE OF WORK.

SOPHOMORE.

Requisites-44 Term Hours.

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Algebra	5	periods	10 T. H.*
Geometry	5 - 5	periods	10 T. 11.
English	4	periods	8 T. H.
Reading and Gymnastics	3	periods	6 T. H.
Physics and Biology	õ	periods	10 T. H.

JUNIOR.

Requisites-40 Term Hours. Training School-

1.	Observation	weeks	1	period	2 T.	H.
2.	Seminar	weeks	1	period	2 T.	H.
3.	Arithmetic	weeks	$1^{1}z$	period	3 T.	H.
4.	Nature Study	weeks	1^{1}_{2}	period	3 T.	H.
5,	Reading and Physical Culture	weeks	2	periods	4 T.	H.
6.	Public School Art	weeks	2	periods	4 T.	H.
	Psychology	weeks	3	periods	6 T.	łł.
	English and Literature	weeks	4	periods	8 T.	H.
	Sloyd, Domestic Economy	weeks	2	periods	4 T.	H.
	Biology	weeks	2	periods	4 T.	H.

SENIOR.

Requisites-40 Term Hours. Training School-

1.	Practice in Teaching	weeks)	periods	10 T.	H.
2.	Seminar	weeks	1	period	2 T.	H.
3.	Geography	weeks	112	period	3 T.	H.
4.	History and Literature	weeks 2	2	periods	4 T.	H.
5.	Music	weeks	I	period	2 T.	H.
	Philosophy and History of Education36 v	weeks 3	5	periods	10 T.	H.
	English and Literature36 v	weeks 3	}	periods	6 T.	H.
	Reading and Physical Culture	weeks	12	period	3 T.	H.

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ELECTIVES.

Junior-10 Term Hours. Senior-10 Term Hours-

Electives may be selected from the following subjects, or groups. The first numbers following the groups designate the number of recitations per week in each subject, the second designate the term hours.

Group I-Latin, German, French, Spanish, English and Literature5	10
Group II-Anthropology, Sociology, History, Government	10
Group III-Physiology, Psychology, Pedagogy	10
Group IV-Physics, Chemistry, Physiology, Biology	10
Group V-Trigonometry, Analytical Geometry	10
Group VI-Art	10
Group VII-Sloyd, Cooking and Sewing, Library Handicraft5	10
Group VIII-Reading and Physical Culture5	10
Group IX-Kindergarten	10

BOARD OF TRUSTEES.

Hon. John M. B. Petrikin, Greeley, Colo., term expires 1903.

Hon. Richard Broad, Jr., Golden, Colo., term expires 1903.

Hon. Jesse Stephenson, Monte Vista, Colo., term expires 1995.

Mrs. Frances Belford, Denver, Colo., term expires 1905.

Dr. R. W. Corwin, Pueblo, Colo., term expires 1901.

Hon. N. B. Coy, Colorado Springs, Colo., term expires 1901.

Mrs. Helen L. Grenfell, State Superintendent of Public Instruction, Denver, Colo., term expires 1901.

FACULTY-1899-1900.

Z. X. Snyder, Ph.D., president; philosophy and practice of pedagogy. James H. Hays, A. M, vice president; Latin and pedagogy.

Louise M. Hannum, Ph.D., preceptress; history, llterature and English.

*N. M. Fenneman, A. B., A. M., physical science, physics, chemistry and physiography.

[†]Franklin L. Abbott, B. E., physical science and physiography.

A. E. Beardsley, M. S., biology, zoology and botany.

*C. T. Work, M. E., Sloyd and mathematics.

†Samuel M. Hadden, Ph.B., manual work, Sloyd, carving.

*E. G. Dexter, A. M., Ph.D., experimental psychology and physiology.

[†]Douglas D. Hugh, A. M., psychology and anthropology.

[†]Grace H. Sproull, Ph.B., associate in English, history and literature.

*John W. Hall, principal training school and applied pedagogy.

†John A. Kleinsorge, Ph.D., principal training school and pedagogy.

Anna M. Heilman, reading, oratory and physical culture.

Harriet Day, drawing and fine art.

Gertrude Smith, domestic economy.

*L. C. Butscher, Ph.B., modern languages.

[†]John T. Lister, A. B., modern languages and athletics.

M. Nora Boylan, critic in training, upper primary and music.

Lizzie H. Kendel, Pd.M., critic in training, lower grammar.

*Eleanor Phillips, Pd.M., critic in training, lower primary.

[†]Bella B. Sibley, Pd.B., critic teacher, lower primary.

*Mrs. Sarah A. Fenneman, Pd.M., critic in training. upper grammar and high school.

[†]Royal W. Bulloek, assistant principal training school, grammar grade.

Bertha M. Andrews, kindergarten training teacher.

Joseph F. Daniels, librarian and library handicraft.

Vernon McKelvey, president's secretary. A. L. Evans, landscape gardener. Benjamin Stephens, engineer.

*Resigned, September 1, 1900.

[†]Assumed duties, September 1, 1900.

TWELFTH BIENNIAL REPORT

EXAMINING BOARD, 1899.

Helen L. Grenfell, State Superintendent Public Instruction.Mrs. M. J. Browne, County Superintendent, Delta county, Colorado.Z. X. Snyder, President School.

EXAMINING BOARD, 1900.

Helen L. Grenfell, State Superintendent Public Instruction. James E. Snook, County Superintendent, Weld county, Colorado. Z. X. Snyder, President School.

Thanking the educational people of the state for their interest, the faculty for its kindly support, the department for aid and encouragement, the board of trustees for their fidelity and liberality, 1 am.

Yours truly,

Z. X. SNYDER, President of School.

REPORT OF STATE SCHOOL OF MINES.

. November 10, 1900.

Mrs. Helen L. Greufell,

Superintendent Public Instruction:

Madam—In sending this brief report of the condition of the School of Mines, I wish it understood that the financial report is entirely excluded. The trustees of the school do not make their report until the close of their fiscal year, November 30.

The event of most importance during the past year, for the progress of the institution, was the gift of twenty-five thousand dollars by Mr. W. S. Stratton, of Colorado Springs, to the "building fund." M. Guggenheim's sons have contributed one thousand dollars to the same fund. The expenditures from the fund have so far been devoted to the erection of a building for fire assaying, and the reconstruction of the chemical laboratory. The "assay building," with sixteen furnaces and thirty-two muffles, places the appliances of this department far in advance of those of any other technical school in the country. The new chemical laboratories will accommodate over one hundred and fifty workers at one time.

Although it was not found possible to admit a greater number to the freshman class than in the previous year, owing to lack of space and appliances, yet the number of students rose slightly, due chiefly to admissions to advanced standing. Registrations last year were two hundred and twenty; this year two hundred and thirty-four. The percentage of students from outside of Colorado drops from forty per cent. to thirtyfive per cent., owing to the enforced refusal of twenty-four applicants from accredited schools outside of Colorado.

Owing to the excess of applications over accommodations, newcomers now apply long in advance of the fall opening. Over fifty applications for admission in September, 1901, are now on file.

Of the one hundred and seventy graduates of the school, one is in general business and one is practicing law. One hundred and sixtyeight are in professional lines cognate to their degrees.

No changes of importance have been introduced in the courses during the past two years. It is only by degrees that a technical school of strict requirements in its courses and standards of work can impress upon applicants, or upon their parents, the necessity for really thorough preparation. Hence the somewhat disastrous records of the freshman classes at the School of Mines. Not one of these has yet succeeded in sending fifty per cent. of its members to sophomore standing at the close of the school year. The impression, however, that the courses are extraordinarily rigorous, is erroneous. It would be far nearer the truth to say that the training of a very great majority of our students, prior to their admission, has been extraordinarily lax. The most serious defect in preparation is in English, a poor command of which language (since it is the one in which our texts are written and our lectures delivered), constitutes, contrary to the evident impression of many, a serious handicap, even in a technical school.

It is hoped that this statement, and the additional one that geometry is rarely presented in good form by applicants, may meet the eyes of many teachers and principals now engaged in preparing young men for the School of Mines, or for any other professional school.

Respectfully yours,

REGIS CHAUVENET,

 $\label{eq:president.} President.$

TWELFTH ANNUAL REPORT OF THE REGENTS OF THE UNIVERSITY OF COLORADO, 1898-1900.

To the State Superintendent of Public Instruction, and the Thirteenth General Assembly:

The twelfth biennial report, from October 1, 1898, to October 1, 1900, is herewith presented by the Regents.

We call attention to these points in the report: The number of master's degrees conferred in 1900; the growth in numbers; the improved quality of preparation for the University; revision of requirements for admission, with the co-operation of the high schools of the state; the privilege extended to college seniors, aiming at the study of medicine, of electing one year's work in the school of medicine; graduation of the first class in medicine since the reorganization of this school; the advanced standard of admission to the schools of law and medicine; gifts; co-operation with state universities. Special attention is invited to the history of the citizens' loan, and the subject of needs of the University.

DEPARTMENTS.*

The departments of instruction in the University of Colorado are comprehended under the following divisions:

I. College of Liberal Arts:

Classical course, leading to the degree B. A. Philosophical course, leading to the degree B. Ph. Scientific course, leading to the degree B. S.

- II. Graduate courses, leading to the degrees M. A., M. S., and Ph. D.
- III. Colorado School of Applied Science:

Civil engineering, leading to the degree B. S. (C. E.). Electrical engineering, leading to the degree B. S. (E. E.).

^{*}The Colorado College of Dental Surgery, and the Colorado School of Music, described in the catalogue, have only a friendly and helpful relation to the University. Their students are not listed or enumerated in the University records. For full statement, see the University catalogue.

IV. Colorado School of Medicine.

V. Colorado School of Law.

Colorado State Preparatory School. (Separate organization, grounds and buildings. Conducted by the University.)

ATTENDANCE.

The subjoined table shows the growth in attendance during the past few years:

Years.	Univ. Students.	Prep. Students.	Total.
1891-2	66	103	169
1892-3	129	158	257
1893-4	159	146	305
1894-5	204	192	396
1895-6	267	242	т. "Э
1896-7	324	276	6 10
1897-8	337	273	610
1898-9	390	310	- 00
1899-00	433	356	759
1900-1	475 (estimated)) 375 (estimated)	570

GRADUATES.

The register of the graduates now shows the following figures

College of Liberal Arts	17.1	
Graduate Courses	-	
Colorado School of Applied Science	11	
Colorado School of Medicine	85	
Colorado School of Law	-56	
Honorary Degrees	11	
		374
Colorado State Preparatory School		314



353

GRADUATE COURSES.

A new rule in the graduate department draws a sharper distinction between the graduate courses, and courses which may be elected by undergraduates. Another new rule requires the candidate for the master's degree to deposit a larger number of bound copies of his thesis with the librarian of the University. In other respects the rules adopted at the organization of the department remain substantially unchanged.

The aim of the graduate department is a standard that will be recognized by the best universities, hence the higher degrees are carefully safeguarded. It may be noted, however, that the number of candidates for the master's degree has steadily increased. A more important fact is the noticeable improvement in the quality of the theses submitted by the candidates for this degree.

The graduate students last year numbered twenty-two. Of these Miss Jessie Pell Brown was awarded a fellowship in Latin, in the University of Pennsylvania, and Mr. Homer Curtis Newton was awarded a fellowship in Latin, Cornell University.

In 1899, the degree of Ph. D. was conferred on Mr. Calvin Smith Brown: subject of thesis: "The Later English Drama." Mr. Arthur John Fynn: subject of thesis: "The Pueblo Indian as a Product of Environment." The degree of M. A. was conferred on Miss Jessie Pell Brown; subject of thesis: "Conditional Sentences in the Latin Lyric Poets." Miss May Virginia Henry; subject of thesis: "Some Phases of Poetical Ornament in the De Rerum Natura of Lucretius." The degree of M. S. was conferred on Mr. Robert Stanley Breen; subject of thesis: "The Sunset Trachyte."

In 1900 the degree of M. A. was conferred on Miss Annette E. Ferris; subject of thesis: "The Jesuit Missions among the Hurons." Mr. Frank Albee Giffin; subject of thesis: "Nine Definitions of the Real Logarithm of a Real Positive Number, together with an Introductory Digression on the Reversion of Series." Mr. Harry McGinnis; subject of thesis: "Sequence of Tenses in Horace." Mr. Homer Curtis Newton; subject of thesis: "Epigraphical Evidence at Rome for the Reign of Vespasian." Mr. Chester Earl Smedley; subject of thesis: "Relation of Milton's Poetry to Italian Renaissance." Mr. Homer William Zirkle; subject of thesis: "Medical Inspection of Schools." The degree of M. S. was conferred on Mr. Milton Clarence Whitaker; subject of thesis: 1. "An Olivinite Dike of the Magnolia District and the Associated Picrotitanite." 2. "The Separation of Iron and Titanium."

The secretary of the department who is responsible for organizing the work and recording the progress of the students is Professor Charles S. Palmer, Ph. D.

COLLEGE OF LIBERAL ARTS.

College seniors, who have fulfilled their basic and characteristic requirements and declare their intention of proceeding to the degree of M. D. in the University of Colorado, may be allowed to elect subjects catalogued in the first year of the medical course. This plan was adopted for the medical school in 1899, and a like plan for the law school in 1898.

The University has to regret the loss of a number of gifted men. Professor John Gardiner, on account of ill health, retired from active service in the University, November, 1898. On grounds of ill health and the necessity of residing in the East, Professor Maurice E. Dunham resigned in June, 1899. Professor James A. MacLean has recently accepted the presidency of the University of Idaho. Charles H. Farnsworth, instructor in music, has accepted the directorship of music instruction in Teachers' College, Columbia. Francis Ramaley, Ph. D. (Minn.), assistant professor of biology, was promoted to Professor Gardiner's chair. George Norlin, Ph. D. (Chicago), was appointed in place of Professor Dunham. Walter H. Nichols, who has taken his graduate work in Michigan, Chicago, Colorado and Columbia universities, has accepted the chair of history and political science, made vacant by Professor MacLean's resignation. Assistant Professor Kennedy was last year promoted to a full professorship. Arnold Emch, Ph. D., has been appointed assistant professor of pure and applied mathematics.

At a "State University and High-School Conference," held in Boulder, December 2 and 3, 1898, a revision of the requirements for admission was fully discussed. Previous to this conference a circular of inquiry had been sent to all the Colorado high schools, and a printed report upon the returns had been placed in the hands of high school superintendents, principals and teachers. The recommendations of the conference were adopted by the faculty, January, 1899, and the new requirements appeared in the catalogue for 1898-9. Such meetings of the University with the high schools promote the usefulness of the University, and we believe much good has come from the two conferences already held.

The professors note with pleasure the constantly improving quality of preparation for the University, as shown by the matriculates from the various high schools of the state.

SCHOOL OF APPLIED SCIENCE.

As in other departments, the engineering school this year, 1900-1901, records the largest attendance in its history. The plan of visiting commercial plants and works of engineering skill has been more fully developed. Theses, the result of investigation in practical problems of engineering, are required of all students before graduation.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

This year Assistant Professor Arnold Emch divides his time between the college mathematics and the department of civil engineering. Professor George H. Rowe is granted leave of absence for the current year. His place is filled by Arthur H. Ford, E. E. (Wisconsin and Columbia).

SCHOOL OF MEDICINE.

In 1899-1900 the full four years' course was given in the medical school and a class was graduated. The school is now thoroughly organized, with well equipped general and special laboratories and excellent instruction. Students have the advantage of the hospital clinics, and the dispensary clinics held in the medical building. Each senior class arranges for additional clinical work in Denver.

The University hospital was dedicated November 19, 1898, and opened to patients near the same date. In all ways the hospital has proven a great success. Already during some of the months it has more than paid expenses. The management hope that soon it will be made to clear all expenses.

Beginning September, 1900, a complete course of study in a recognized high school or its equivalent is required for admission to the medical school.

By removal of the freshman chemical laboratory to the chemistry building, the entire medical building is now at the service of the school of medicine.

SCHOOL OF LAW.

In consequence of the change in the prescribed course of study from two to three years, which took effect in September, 1898, no class was graduated in 1900. Beginning September, 1900, applicants for admission must present certificates of graduation from an approved four-year high school or show an equivalent preparation.

The system of study remains a conservative combination of lectures and text-book with the "case method." More attention is devoted to the teaching of practice, especially in the third year. Courses have been introduced which cover substantially the entire code of civil procedure and the leading cases. A practice court has been instituted, modelled on the district courts of Colorado, presided over by a former district judge and district clerk. The sessions of the court are held twice each week, from the second Monday in October to the last Thursday in March. Student counsel are taught to conduct causes in all stages of procedure.

An additional room in the Hale building has been given to the law school.

PREPARATORY SCHOOL.

The preparatory school is still conducted on the plan inaugurated several years ago. It remains the preparatory department of the University, as when it was accommodated in the University buildings. By joint agreement the University pays one-third of the annual expenses and Boulder two-thirds.

The modified course of study arranged two years ago is now in effect. The school grows yearly in numbers and efficiency. The Regents note with pleasure the spirit of enthusiasm and hard work which pervades the school.

The present quarters are too crowded for convenience and comfort, and more room will soon be a necessity.

BUILDINGS AND GROUNDS.

The University hospital was dedicated November 19, 1898. The following program was presented:

Invocation, Rev. Frederick F. Johnson.

Music, University Glee Club.

Brief addresses: Governor Alva Adams; President James H. Baker: Dean Luman M. Giffin; Hon. H. H. Burch, chairman Boulder county commissioners; Hon. C. Ricketts, mayor of Boulder.

Music, University Glee Club.

Address, "The Hospital—Whom It Helps and Who Help It," Wm. P. Munun, M. D.

Music, University Glee Club.

Benediction, Rev. Henry H. Walker.

Inspection of hospital.

Only the absolutely necessary improvements of buildings and grounds have been made. The sewerage has been connected with the city system at a cost of \$800,00, the frontage charged by the city, and in several places sewers and drains have been repaired and extended. Some changes were made in the chemistry building last summer to accommodate all the students in chemistry, and the entire medical building was turned over to the school of medicine. The necessary changes and repairs in the medical building included a new heater and increased radiation. In July, 1899, the library was removed from the third story of the main building to the basement. This was done by advice of the architect for the safety of the building. The change was made at considerable expense. The rooms on the third floor were turned into class rooms. At the same time the statuary was transferred to the third floor and the former statuary room was made a reception room for lady students. In the fall of 1899. a gallery was built in the chapel to accommodate the increased number of students.

CO-OPERATION WITH STATE UNIVERSITIES.

At different times the University of Colorado has published literature relating to the subject of co-operation. Some recent developments in other states are worthy of note.

The following plan is proposed by the Lutherans in Nebraska:

"First—It is proposed to construct within easy walking distance of the state university a church dormitory or home containing rooms for students, boarding hall, library and reading rooms, rooms for lectures, recitations and religious services—a building carefully plauned and adapted to the peculiar use for which it would be intended.

"Second—This building is to be in charge of chosen and appointed representatives of the church, whose duty it would be to protect and direct and instruct all students who would apply for admission into, this church educational home.

"Third—The instruction is to comprehend all subjects which our pastors and people would desire to have presented to the youth of our church, except those freely furnished by the thoroughly equipped state university. This instruction might, or it might not, include a complete theological course.

"Fourth—The students are to be brought into this, as into any other Lutheran school, by the influence and direction of the management and pastors and parents and friends—and are to be subject to the rules established for their government, and to pay a reasonable price for their accommodations, and to take advantage of the privileges of the state university precisely as if living at the homes of their parents in the same vicinity.

"Among the good results to come to our people from the establishment of the Lutheran annex to the state university, then, are the following:

"First—Greater opportunities offered to our students. These would consist, on the one hand, of the undisputed and undiminished privileges of the thoroughly manned and equipped and endowed state university; and, on the other, of the most undisturbed religious and denominational influences of the Lutheran home.

"Second—Less cost to our students. This principally because of the free tuition in the state university and sometimes because of the reduced traveling expenses.

"Third—Greater opportunities for church work. This because, relieved of the enormous burden of general recitation room work, the management would be free to give their best effort to specific service.

"Fourth—Greatly increased number of students on whom to operate. Whether the reasons for it are satisfactory to us or not, the fact remains that a large majority of our western students, in the correct education of whom we are interested, and for the correct education of whom we are largely responsible, are now in institutions of learning in which our church, as such, has small part and takes little interest. To no other church school could so many of these be so successfully directed as to the church annex to the state university.

"Fifth—Greatly reduced cost to the church. This because a smaller force would be competent to perform the necessary work efficiently, and because of the diminished cost of buildings and library, and because of the absolute relief from investment in expensive but useful apparatus. Thus the church, not altogether released, but greatly relieved, would enjoy the stimulus of a good prospect of meeting financially and in a business like manner her educational engagements."

A committee of Baptists in the state of Washington, officially appointed, makes the following report:

"The Baptists of Washington have no institution of learning doing collegiate work. The University of Washington (state institution) is permanently established. Its resources are ample and growing. It is proposed to establish by the side of the university a Christian institution, federated with it, and under the auspices of the Baptist denomination; to equip it as a dormitory, on the model of a Christian home, and with a thoroughly competent man as head or president. The immediate equipment to represent an investment of \$10,000; ultimately to be \$250,000.

"The scope of the institution to be as follows:

"1. Open its doors, as a dormitory, to Baptist and all other students wishing to avail themselves of such a home while they are pursuing their studies in the university.

"2. Provide religious services for the Lord's day and courses of sermons by representative ministers.

"3. Strengthen and develop Christian character and conduct.

"4. Provide lecture courses to be filled by the most eminent talent available.

"5. The president, with other instructors, as the situation may require, to teach those branches of learning essential to a finished education upon which the state does not enter, or enters in an incomplete way.

"6. To enlarge the curriculum until every gap in full university work—occasioned by the secular nature of the state university—is filled.

"7. To found scholarships and fellowships."

President Patton, of Princeton University, in his sermon at the Princeton Sesquicentennial, used the following language:

"I sometimes wonder whether more use might not be wisely made of the state universities; whether a wise economy of resources, as in the newer states, might not suggest such an affiliation of various educational interests as would serve to throw around young men a distinctly Christian influence, and at the same time open to them the opportunities of a wide range of study which only a large institution can offer."

A residence and Christian home for young ladies attending the University of Wyoming has been erected by the Episcopalians in Wyoming.

The home is situated in a favorable part of the town of Laramie at a five minutes' walk from the university. With the well equipped state university almost at the door, students have the great advantage of combining a university education with residence in a well conducted Christian home.

President Benjamin lde Wheeler, of the University of California, Berkeley, writes as follows:

"There is a strong sentiment in favor of establishing the theological seminaries in the town of Berkeley in order that the men who are preparing themselves for the ministry may at the same time pursue work in the University of California. The Christian church is the only denomination which has as yet taken this step, but the Pacific Theological Seminary of the Congregational church is about to erect a fine building in Berkeley, close to the university grounds, and to remove to these new quarters from its present home in Oakland."

President James B. Angell, of the University of Michigan, has recently written:

"Three of the religious denominations have established guilds here and two of them have erected buildings which serve as a sort of club houses for their students, and provide courses of lectures for them during the year. Another denomination has a foundation here for the partial support of lecturers on religious themes who are expected primarily to reach the students of their own denomination in their own buildings, or in the rooms of our Students' Christian Association."

The University of Missouri reports as follows:

"The Christian church (Disciples) has a Bible college in the vicinity of the university. The Northern and Southern Presbyterians are discussing now the advisability of establishing some institution in the vicinity of the university. The Episcopalians have by a unanimous vote determined that it was advisable for them to establish a guild here."

The regents and faculty of the University of Colorado are favorable to the development in Colorado of some such plan of co-operation. It remains for the denominations themselves to take further positive action.

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NEEDS.

The regents submitted to the Twelfth General Assembly the following statement of needs:

\$177.000

The legislature voted \$110,000, \$80,000 for additional support and \$30,000 to begin a library building. Owing to the financial condition of the state not a single dollar of this special appropriation has been received.

During the summer of 1899, the Regents, seeing that the university would be obliged to close its doors, unless heroic measures were adopted, held a special meeting in Denver, July 31, and, after an extended discussion of the whole problem in all its aspects, passed the following resolution:

"In considering the problem now facing the University of Colorado. arising from failure in the state's revenues to meet the appropriations for the various institutions, it appears that the members of the Twelfth General Assembly, representing the people of Colorado, almost unanimously by word and by act of appropriation showed, not only their appreciation of the present work of the university, but a desire and purpose to increase its usefulness; that closing of the university would be a calamity that would injure the state, directly or indirectly, in its every interest; that the sentiment of the state, as shown by the attitude of the press and by the public and private utterances of many influential citizens, is solidly against closing or even crippling the university; that the deficit in the state's revenue affects so many interests that it seems evident the whole question must at an early day come before a special session of the legislature and ample provision be made to support our institutions and preserve the credit and good name of Colorado; that a number of public spirited citizens are offering to take the risk of advancing funds for immediate needs in opening the university.

"In view of these facts, we, the Regents of the University of Colorado, hereby resolve to accept the aid proffered, and direct that the university open on September 11th, as regularly announced. In accepting the funds advanced by citizens, we hereby agree to repay the same with interest at six per cent. per annum, if the appropriation made by the last General Assembly is realized, or, at such time as the General Assembly may make specific and adequate provision for the purpose.

"(Signed) The Board of Regents of the University of Colorado."

The Boulder committee, which raised a loan of \$20,000 to warrant the opening of the university in September, 1899, was made up of the following gentlemen:

Mr. Albert A. Reed, chairman.

Mr. George M. McClure.

Mr. John H. Nicholson.

Mr. Isaac Berlin.

Dr. William B. Stoddard.

Mr. Robert T. Fulton.

Judge Sylvester S. Downer.

Mr. Lucius C. Paddock.

Mr. John W. Day.

Mr. Jay B. Hiskey.

Mr. William H. Allison.

Mr. Charles C. Bromley.

Hon. Edwin J. Temple.

Hon. Richard H. Whiteley.

Mr. Neil D. McKenzie.

Mr. James Cowie.

Mr. Warren C. Dyer.

Mr. Thomas V. Wilson.

At a meeting of some prominent citizens held in Denver, September 20, 1899, "to consider matters of vital interest to the State University," it was voted unanimously to endeavor to secure an additional loan of \$50,000 for the support of the University during the remainder of the biennial period. The following citizens' committee to solicit funds was appointed:

General Irving Hale, chairman. Mr. William H. Bryant. Hon. Hugh Butler. Hon. Willard Teller. Governor Alva Adams. President Frank Trumbull. Judge Owen E. LeFevre. Mr. Joseph K. Choate. John Chase, M. D. Mr. Gustave C. Bartels. Mr. Joel F. Vaile. Mr. James H. Blood.

The persevering and successful work done by both of these committees merits the highest appreciation.

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The list of subscribers to the loan appears in the appendix on page 24, and reference is made to that list. Never in the annals of Colorado has a more public spirited and generous act been recorded. It will go down in history that these subscribers saved the University of Colorado in a crisis of its affairs, brought about by no fault in the remotest way connected with the university, and incidentally saved Colorado from loss in material interest, credit and honor. It would be a lasting disgrace to the state, were there any failure to promptly repay the sums advanced.

Each subscriber to the loan, as the money is paid to the treasurer, receives the following certificate of indebtedness:

THE UNIVERSITY OF COLORADO.

CERTIFICATE OF INDEBTEDNESS.

Boulder, Colorado,.....1900.

\$....

No....

This is to Certify. That there is due to......, or his legal representatives or assigns, the sum of.....dollars, for moneys advanced to the University of Colorado, for the support and maintenance of the same during the remainder of the pending biennial period.

This certificate is one of a series of certificates of indebtedness, amounting in the aggregate to the sum of seventy thousand dollars, issued under and by authority of the following executive order given on the seventeenth day of November, A. D. 1899, and is payable, with interest at the rate of six per centum per annum, from the date hereof until paid, upon eall of the treasurer of the University of Colorado, at such time as the General Assembly of the state of Colorado may make specifie and adequate provision for the payment of the same and funds under such provision become available.

.....of the University of Colorado.

By.....President.

EXECUTIVE ORDER.

Whereas, The Twelfth General Assembly, by an act, approved April 19, 1899, appropriated the sum of one hundred and ten thousand dollars for the maintenance, and the payment of the salaries of, the officers and employes of the University of Colorado, for the years 1899 and 1900, which said appropriation belongs to what is known as appropriations of the third class, and for the payment of which there are at present no funds available in the hands of the treasurer; and,

Whereas, The needs of said University of Colorado are of great consequent urgency, so that the said institution may not be compelled to suspend and close for the want of available funds to maintain the same,

Now unerefore, it is declared that an emergency concerning said institution exists, as is contemplated in and by Section 4112, Mills' Annotated Statutes; Wherefore, I, Charles S. Thomas, governor of the state of Colorado, by virtue of the authority vested in me, do hereby authorize the contraction of an indebtedness for the remainder of the pending fiscal period, not to exceed the sum of \$70,000 which, in my judgment, is absolutely necessary for the maintenance and support of the sald University of Colorado until such time as the general assembly shall meet, and 1 do further declare this executive order to be in force as of the first day of September, 1899.

Witness my hand and the seal of this office at Denver, this 17th day of November, A. D., 1899.

CHARLES S. THOMAS, Governor.

RESOLUTION OF THE REGENTS OF THE UNIVERSITY OF COLORADO.

In accepting the funds advanced by citizens, we hereby agree to repay the same with interest at six per cent. per annum, if the appropriation made by the last general assembly is realized, or, at such time as the general assembly may make specific and adequate provision for the purpose.

For eight years the University has repeatedly been in danger of losing part of its appropriation. In 1894 it failed to seeure some \$23,000 voted for its support and use, and in 1899-1900, \$110,000. In lieu of this last sum eitizens have advanced nearly \$70,000, but in any event the University loses \$40,000.

Many educated business men who know universities and their problems, who have noted the struggle, growth and need of our University and understand its value to the youth of Colorado and to the reputation and general interests of the state, repeatedly express the opinion that \$100,000 per year is necessary to properly perform the work of such a university as Colorado demands. Eastern educators express surprise that the University of Colorado ean do the kind and amount of work required of it with resources so limited.

The professors and all connected with the University have eheerfully met the conditions of the last two years; but the kind of economy. which the Regents have been forced to employ, would dwarf and soon ruin any institution of higher learning. A growing university must have books and apparatus and sufficient instructors and adequate quarters for its various departments. It should be able to pay fair prices for all services rendered. The Regents feel that for the future the University should be placed on a secure foundation, and be given funds adequate to its genuine needs.

The demand for a library building is again strongly urged. On this point, see page 6.

The Regents can only point to the condition and needs of the University and carnestly request the generous consideration of the Thirteenth General Assembly. Here follows an estimate for the biennial period, from December 1, 1900, to December 1, 1802:

To repay Citizens' Loan.....\$ 70,000

TWELFTH BIENNIAL REPORT

Increase of mill rate from one-fifth to two-fifths, or for additional sup-

port, December 1, 1900, to December 1, 1902	80,000
For Library Building	50,000
To restore to Permanent Land Fund money taken therefrom to provide	
necessary room for students	37,000
-	

\$167,000

GIFTS.

The tenth biennial report, dated October 1, 1896, showed gifts to the University at various times since it was founded, estimated in value at \$27,207. The eleventh biennial report records additional gifts valued at \$11,556. The gifts during the past two years are as follows:

Mrs. Jean Sherwood, Chicago, two casts: Victory Tying

Sandal (bas-relief); Hermes of Praxiteles (bust).

(Art Collection)\$	\$ 00
Miss Matilda Van der Poel, Chicago, two casts: Dona-	
tello's Angel Blowing Trumpet (bas-relief); Head	
of John the Baptist. (Art Collection)	2 00
Mrs. Blanche Curtis, Boulder, seven mounted photo-	
graphs. (Art Collection)	7 00
Luther C. Bragg, Boulder, four stuffed birds. (Biology).	20/00
Dr. John Gardiner, Boulder, microscopic preparations.	
(Biology)	20 00
Dr. John Gardiner, Boulder, one Zeiss microscope.	
(Biology)	300 00
Students, specimens of plants and animals. (Biology)	
Dr. Frank C. Spencer, New York City, Bones of Cliff	
Dweller. (Biology)	
Edward Williams, Boulder, fossil plants. (Biology)	
Dr. Carl F. Wolfer, Louisville, fossil plants. (Biology)	
Anonymous, for books. (ChemIstry)	$50 \ 00$
Anonymous, for books. (Chemistry	5.00
Phillp Argall, Denver, box of minerals and other spec-	
lmens. (Chemistry)	25 00
Luther C. Bragg, Boulder, box of mInerals. (ChemIstry)	15 00
The Cramp Company, Phlladelphia, specimen of man-	
ganese bronzc. (Chemistry)	50
Thomas D. West, Cleveland, books and speelmens.	
(Chemlstry)	10 00

John B. Annear, Silverton; Ralph Morris, Cripple Creek;	
Richard Morrison, Boulder; Edward Williams, Boul-	
der; spechmens. (Chemistry)	25 00
Anonymous, for laboratory. (Physics)	130 00
Anonymous, for books and map. (Romance Languages)	35 00
Anonymous, for books. (Greek)	40 00
Anonymous, Corpus Inscriptionum Latinarum, 31 vols.;	
Ephemeris Epigraphica, 8 vols.—as a memorial to	
Professor Carl W. Belser, Ph. D. (Latin)	450 00
Anonymous, for books. (English)	25 00
Anonymous, for books and apparatus. (Electrical En-	
gineering)	40 00
Anonymous, for books and apparatus. (Bacteriological	
and Pathological laboratories of School of Medicine)	35 00
Mrs. J. H. Harbeck, Boulder, for Hospital	100 00
A citizen	5,000 00
Library gifts as reported on page 30-	
Books, Pamp. Maps.	
American Bar Association 19	
Dr. W. W. Bulette, Pueblo	
(School of Medicine) 213	
Bureau of South American re-	
public 20	
V. Butsch, Boulder	
Colorado Secretary of State 62 20	
Colorado Superintendent of Mines 2	
Colorado Superintendent of	
Schools 3 2	•
Anonymous, Corpus Inscriptio-	
num Latinarum; Ephemeris	
Epigraphica—as a memorial	
to Professor Carl W. Belser,	
Ph. D. (Latin) 39	
Dr. John Gardiner 280	
Dr. John Gardiner, wall map of	
Europe1	
Dr. John Gardiner, annual sub-	
scription to "Annals of Bot-	
any;" annual subscription to	
"Revue General de Bota-	
nique.''	

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TWELFTH BIENNIAL REPORT

Massachusetts Board of Insa Massachusetts Railroad Com						
sioners						
Massachusetts Board of Ed						
tion	22					
Michigan Superintendent	of					
Schools	13					
Smithsonian Institution	17	14				
Dr. William B. Stoddard, an	nual					
subscription to "Journal	of					
Society of Chemical In	dus-					
try."						
United States Superintenden	t of					
Documents	1,360	399	14			
Joseph Wolff	14					
Miscellaneous	129	962	3			
	2.307	1,418	18			
Total value of Library gifts				1,300 00		
Summary					\$7,642 50	
Values duplicated					600 00	
						\$7,042 50

Total	\$45,805 00
Gifts, 1898-1900	7,042 00
Gifts, 1896-1898	11,556 00
Gifts, previous to 1896	27,207 00

Probably in the measure of good to be accomplished and for perpetuating an honorable name, a gift to the State University is one of the best possible benefactions. Gifts may be made for any of the following purposes:

Building for Christian Associations. Chapel. Ladies' dormitory. New University building. Library building. Building for law school. Astronomical observatory. Funds for needy students. Endowment of chairs. Art collections. Library. Apparatus. Improvement of grounds.

REPORTS SUBMITTED.

We submit herewith the pay roll of the University, report of the University secretary, report of the treasurer of the medical school, report on the building fund, report on citizens' boan fund, treasurer's report, secretary's report, librarian's report, inventory of property.

Respectfully submitted,

THE BOARD OF REGENTS OF THE UNIVERSITY OF COLORADO.

JAMES H. BAKER, President,

EDWARD J. MORATH, Secretary.

TWELFTH BIENNIAL REPORT

APPENDIX.

PAY ROLL OF THE STATE UNIVERSITY.

(Including fixed appropriations for the law and medical schools.)

James H. Baker, M. A., LL. D., President\$	4,500 00	
Edward J. Morath, Secretary Board of Regents	300-00	

COLLEGE OF LIBERAL ARTS.

Fred B. R. Heliems, Ph. D., Dean; Professor of Latin	1,900 00
Mary Rippon, Professor of the German Language and Litera-	
ture	1,600 00
J. Raymond Brackett, Ph. D., Professor of Comparative and	
English Literature	2,000 00
Charles Skeele Paimer, Ph. D., Secretary of the Graduate Fac-	
ulty; Professor of Chemistry	2,000 00
Ira M. DeLong, M. A., Professor of Mathematics	2,000 00
John Gardiner, B. Sc., LL. D., Professor (retired) of Biology	
Arthur Allin, Ph. D., Professor of Psychology and Education.	2,000 00
Charles C. Ayer, Ph. D., Professor of Romance Languages	1,800 00
William Duane, Ph. D., Professor of Physics	1,800 00
George Noriin, Ph. D., Professor of Greek	1,700-00
Francis Ramaley, Ph. D., Professor of Biology	1,700-00
Francis Kennedy, Ph. D., Professor of Philosophy	1,700 00
Waiter H. Nichols, M. A., Professor of History and Political	
Science	1,600-00
W. R. Smith, M. A., Acting Professor of History and Political	
Science	
Arnold Emch, Ph. D., Assistant Professor of Pure and Applied	
Mathematics	500 00
George C. Taylor, M. A., Instructor in English	800-00
Fordyce P. Cleaves, M. A., Instructor in Oratory and Physical	
Training	500-00
James M. Wilson, D. D., Instructor in Applied Ethics	
Henry Houseley, Instructor in Music	600-00
William F. Tambiyn, Ph. D., Assistant in Latin	200 00
Harry M. Varrell, M. A., Assistant in German	200 00
Ethel M. Wright, Assistant in Comparative and English Lit-	
erature	100 00
Join C. Biakc, Assistant in Chemistry	300 00
Harvey A. Carr, Assistant in Pedagogy	200-00

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CENTRAL SCHOOL HOUSE, DELTA.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

William W. Hall, Ph. B., Assistant in French and Spanish	100 00
Charles A. Lory, B. Ped., Assistant in Physics	200 00
Gertrude E. Upton, Assistant In Greek	100.00
Jennie M. Archibald, Assistant In Blology	150 00
Ora S. Fowler, B. Ped., Assistant in Biology	150 00
Benjamin J. Fitz, M. A., Assistant In History	200/00

Alfred E. Whitaker, M. A., Librarlan	1,500 00
Will C. Adams, Assistant in Library	200-00
Omar E. Garwood, Secretary	600 00
J. Vaughan Sickman, B. A., Assistant Secretary	135 00
Harold G. Garwood, B. S., Director of Gymnasium	135 00
Mary R. Savory, Matron Cottage No. 1	
Margaret A. Doolittle, B. A., Matron Cottage No. 2	135 00

\$33,605 00

SCHOOL OF APPLIED SCIENCE.

Henry Fulton, M. S., Dean; Professor of Civil Engineering \$2,000 (0
*George H. Rowe, B. S., Professor of Electrical Engineering 2,000 (0
Arthur H. Ford, B. S., E. E., Acting Professor of Electrical	
Engineering	
Arnold Emch, Ph. D., Assistant Professor of Pure and Ap-	
plied Mathematics (salary noted elsewhere)	
Benedict Georgenberger, Assistant in Electrical Engineering 200 (90
George R. Moore, Assistant in Electrical Engineering Shop	
(Salary noted elsewhere)	
The remaining work of the School of Applied Science is done	
by professors in the College of Liberal Arts.	

\$4,200 00

SCHOOL OF MEDICINE.

(The Hospital employes are not included in the following list.)

Appropriation for expenses of Medical School, including salaries.........\$4,500 00 Luman M. Giffin, M. D., Dean; Professor of Anatomy and Physical Diagnosis.

- Charles Skeele Palmer, Ph. D., Professor of Chemistry.
- A. Stewart Lobingier, B. A., M. D., Professor of the Principles of Surgery and Clinical Surgery.

Emley B. Queal, M. D., Professor of Physiology.

Eugene H. Robertson, Ph. M., M. D., Professor of Pathology and Bacteriology.

*On leave of absence for one year. Place filled ad interim by Mr. Ford.

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John Chase, B. A., M. D., Professor of Ophthalmology and Otology.

- Thomas E. Taylor, B. A., M. D., Professor of Obstetrics.
- William H. Riley, M. S., M. D., Professor of Mental and Nervous Diseases.
- William B. Craig, M. D., Professor of the Principles of Surgery and Pelvio-Abdominal Surgery.
- George H. Cattermole, M. D., Professor of Diseases of Children and Clinical Medicine.
- Frank E. Waxham, M. D., Professor of Medicine, Clinical Medicine, Laryngology and Rhinology.

Francis Ramaley, Ph. D., Professor of Histology.

- Charles Fisher Andrew, M. D., Professor of Materia Medica and Therapeutics.
- James R. Dickson, L. D. S., D. D. S., Professor of Operative and Prosthetic Dental Technics.

Lafayette Z. Coman, M. D., Lecturer on Bandaging and Minor Surgery.

- Charles S. Elder, M. D., Lecturer on Gynecology and Abdominal Surgery.
- Willard J. White, M. A., M. D., Lecturer on Hygiene and Medical Jurisprudence.
- George O'Brien, M. D., Demonstrator of Anatomy and Assistant to the Chair of Anatomy.
- Oscar M. Gilbert, M. D., Laboratory Instructor in Minor Surgery, Bandaging, Use of Ophthalmoscope, etc.

Newton Wiest, M. D., Assistant to the Chair of Medicine.

Mary L. Ambrook, M. D., Assistant to the Chair of Obstetrics.

John C. Bailar, Assistant to the Chair of Chemistry.

Dessie B. Robertson, D. D. S., D. D. Sc., Assistant in Bacteriology and Pathology.

SCHOOL OF LAW.

Moscs Hallett, LL. D., Dean; Professor of American Constitutional Law.

William L. Murfree, i.L. B., Secretary; Professor of Law.

Charles M. Campbell, P. B., B. C. L., Professor of Law.

Albert A. Reed, LL. B., Professor of Law.

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Calvin E. Reed, LL. B., Professor of Law.

Walter H. Nichols, M. A., Professor of History and Political Science.

William C. Kingsley, Professor of Law.

William 11. Bryant, B. S., LL. B., Professor of Law.

Robert Given, B. A., Professor of Law.

Thomas M. Robinson, Professor of Practice and Judge of Practice Court.

- John A. Riner, LL. B., Lecturer on International Law.
- Hugh Butler, Lecturer on Common Law Pleading.
- Platt Rogers, LL. B., Lecturer on Criminal Procedure and History of Criminal Law.
- Luther M. Goddard, LL. B., Lecturer on Law of Patents, Copyrights and Trademarks.
- Robert S. Morrison, Lecturer on Law of Mines and Mining.
- John Campbell, M. A., LL. B., Lecturer on Law of Private and Municipal Corporations.
- Charles S. 'Thomas, LL. B., Lecturer on Law of Evidence.
- Henry T. Rogers, M. A., Lecturer on Law of Wills, Executors and Administrators.
- John D. Fleming, B. A., LL. B., Lecturer on Law of Insurance.
- Luclus M. Cuthbert, M. A., LL. B., Lecturer on Conflict of Laws.
- Frank E. Gove, B. A., I.L. B., Lecturer on Code Pleading.
- John H. Denison, B. A., Lecturer on Equity Jurisprudence. Pleading and Practice.
- Ralph Talbot, B. A., Lecturer on Criminal Law and Procedure.
- Charles D. Hayt, Lecturer on Law of Taxatlon.
- Caesar A. Roberts, M. A., Lecturer on Colorado Civil Code.
- Edward C. Mason, B. A., LL. B., Lecturer on Colorado Civil Code.
- Eugene Wilder, Clerk of Practice Court.
- Howard S. Robertson, Librarian.
- Harry T. O'Connor, Librarian.
- John W. Cummings, Secretary's Assistant.

TWELFTH BIENNIAL REPORT

PREPARATORY SCHOOL.

(One-third paid by University.)

Henry White Callahan, Ph. D., Headmaster; Instructor in His-	
tory and Latin (Plus \$250.00)\$	916 66
Horace C. Hall, B. A., First Assistant and Instructor in Mathe-	
matics	333 3 3
Arthur L. Patton, B. S., Instructor in Physics and Chemistry	266 66
Edward W. Lazell, Instructor in Biology	100.00
Henry Houseley, Instructor in Music	64 98
Hermann Emch, Instructor in Drawing	100 00
George A. Carlson, B. Ped., Instructor in English	66 66
M. Hortense Whiteley, B. A., Instructor in Greek	266 66
Mary L. Stewart, B. A., Instructor in Latin and German	200 00
Margaret A. Doolittle, B. A., Instructor in History	66-66
Mary E. Elwell, Instructor in English	66 66
Bernice E. Autrey, Instructor in Algebra	33 33
R. T. Marshall, Janitor	184 00

\$2,665 60

OTHER EMPLOYES.

Silas A. Crandall, Steward\$	480-00
George R. Moore, Engineer	840-00
William W. McCarter, Fireman	540-00
Celso Espinosa, Employe on grounds	480 00
Eleven student janitors	931 50
Stock room assistant, clerical work of Dean, and attendance	
committee, etc., estimated	300-00
Mrs. Mary C. Larson, care of rooms in Woodbury Hall and in	
Cottage No. 2	184 50

\$3,756-00

SUMMARY.

College of Liberal Arts (including officers of the University)\$	33,605-0	63
School of Applied Science	4,200 0	0
School of Medicine	4,500 0	0
School of Law	3,000 0	0
Preparatory School	2,665 6	6
Other employes	3,756 0	0

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\$51,726_60

SUPERINTENDENT OF PUBLIC INSTRUCTION.

REPORT OF UNIVERSITY SECRETARY.

From September 1, 1898, to October 1, 1900.

Receipts.

Balance on hand,	Septemb	per 1,	1898		\$ 517	48	
Tuitions, fees and	sundry	small	receipts,	1898-1899	5,462	24	
Tuitions, fees and	sundry	small	receipts,	1899-1900	10,893	89	
							91 <i>C</i> S

- \$16,873-61

Disbursements.

By cash to J. H. Nicholson, Treasurer, in September, 1898	\$ 2,500	00		
By cash to J. H. Nicholson, Treasurer, 1898-1899	2,500	00		
By cash to J. H. Nicholson, Treasurer, 1899-1900	10,900	00		
By fees returned to students	492	95		
Cash on hand, October 1, 1900	480	66		
			\$16,873	61

* By changing date of report from September 1 to October 1, the September fees for 1900 are included in this report.

Respectfully submitted,

OMAR E. GARWOOD,

Secretary.

REPORT OF TREASURER OF SCHOOL OF MEDICINE. From October 1, 1898, to October 1, 1900.

Receipts.

Balance on hand October 1, 1898\$	482	72	
Fees collected from October 1, 1898, to October 1, 1900	3,943	67	
Collected balance due on dental apparatus	350	00	
Collected one year's interest on same	28	00	
Receipts from Hospital from Feb. 1, 1899, to Oct. 1, 1900	7,234	59	

\$12,038 98

Disbursements.

Paid Treasurer of the Board of Regents\$11	,253	05
Due from University for bills paid	395	85
Balance on hand October 1, 1900	3 90	08

---- \$12,038 98

Respectfully submitted,

L. M. GIFFIN, Treasurer.

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TWELFTH BIENNIAL REPORT

REPORT ON BUILDING FUND.

From October 7, 1898, to October 1, 1900.

Balance on hand October 7, 1898\$	3,000-00)
City of Boulder	1,000 0)
Proceeds of Notes	3,999-20)
Boulder County	4,000 0)
		- \$11,999 20
Warrants paid\$	7,776 0	3
Notes and interest paid	4,141 5	4
Balance transferred to General Fund	81 6	3
-		- \$11,999 20

Entire amount	drawn fron	i Permanent La	and Fund fo	or build-		
ings					36,658 81	
Entire amount	received f	rom Boulder C	ounty and	City of		
Boulder for	Hospital H	Building			8,000-00	
				-		\$44,658 S1
Entire amount	evnended	for Chemistry	Building	Medical		

Entre amount expended for enemoty subming, meaned	
Building, Engineering Building and Gymnasium\$31,392 64	
Entire amount expended for Hospital Building 13,042 20	
Interest on notes, and balance transferred to General Fund 223 97	
	\$44,658 81

Respectfully submitted,

J. H. NICHOLSON,

Treasurer.

SUPERINTENDENT OF PUBLIC INSTRUCTION. 375

REPORT ON CITIZENS' LOAN FUND.

To October 1, 1900.

BOULDER SUBSCRIPTIONS PAID.

	Average		
Name.	1899		Amount.
Henry Llppoldt	sept.	9	\$ 100 00
Fred Burger, Sr		16	100-00
H. C. Holstein	Sept.	20	200_00
Joseph Bergheim	Sept.	22	300-00
Bromley & Williamson	Sept.	25	100-00
Mrs. L. A. S. Durward	Sept.	25	100-00
James H. Baker	Sept.	28	1,000-00
J. D. Mason	Sept.	28	59-00
Bliss & Holbrook	Sept.	30	100.00
W. W. Wolf	Sept.	30	100 00
Boulder Pub. Co	Oet.	1	100-00
S. A. Giffin	Oet.	1	500-00
E. C. Lewis	0et.	1	500-00
N. D. McKenzie	Oct,	1	200 00
George R. Williamson	Oet.	1	1,000-00
D. L. Wise	Oct.	1	100 00
Helen Beardsley	Oct.	2	100-00
John Gardiner	Oct.	2	500-00
W. B. Keeler & Sons	Oct.	2	200 00
John Leahy	Oct.	2	50 00
W. S. Lee	Oct.	2	100 00
John McInnis	Oct.	2	250 00
Mrs. A. St. Julian	Oct.	2	100 00
Fred White	Oct.	2	200 00
William Babcock	Oct.	3	100 00
Ed. Monroe	Oct.	3	100 00
W. L. Seely	Oct.	3	300 00
Adam Weber	Oet.	3	100 00
Isaac T. Earl	Oet.	5	250 00
C. S. Palmer	Oct.	5	200 00
T. H. Fitzpatrick	Oct.	6	200 00
F. Jordinelli		6	100 00
J. T. Atwood		ī	50 00
			00 00

Albert A. ReedOct.	7	1,000 00
William DuaneOct. '	8	250 00
John H. HarbeckOct.	15	500 00
H. D. HarlowOct.	15	200 00
W. H. AllisonOct.	16	500 00
A. J. MackyOct.	16	500 00
C. C. AyerOct.	18	150 00
Ira M. DeLongOct.	18	400 00
H. O. DodgeOct.	18	250 00
J. A. MacLeanOct.	18	250 00
McClure-White Mercantile CoOct.	18	500 00
Francis RamaleyOct.	18	160 00
Maxwell & GreenmanOct.	19	250 00
J. H. NicholsonOct.	25	300 00
Kate W. PoleyOct.	26	100 00
Geo. W. TealOct.	29	100 00
S. S. DownerNov.	3	250 00
J. R. BrackettNov.	4	250 00
Mary RipponNov.	4	250 00
W. B. StoddardNov.	4	250 00
Hannah C. BarkerNov.	7	500 00
Hiskey & McNaughtonNov.	12	500-00
Henry FultonNov.	14	250 00
John W. DayNov.	15	100 00
P. J. WerleyNov.	16	200 00
Francis KennedyNov.	18	300-00
D. K. SternbergNov.	20	100 00
O. H. WangelinNov.	24	250 00
George H. RoweNov.	25	100 00
Danforth & WardNov.	28	250 00
Geo. F. FondaNov.	29	500 00
Woollett-Brown Lumber CoNov.	29	100.00
Charles T. GilbertDec.	1	50-00
Elbert GreenmanDec.	1	100-00
J. G. TreziseDec.	2	100 00
Cowie & MoorheadDee.	4	50 00
D. E. DobbinsDec.	5	100-00
Meyer BrosDcc.	5	50 00
G. G. O'BrienDec.	15	25 00

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)0.

L. M. GliffinJan.	15	$250_{-}00$	
E. B. QuealJan.	18	100-00	
F. B. R. HellemsFeb.	1	$250 \ 00$	
Henry White Callahan	14	249-98	
George H. CattermoleSept.	25	100 00	
Total paid			\$18,434 98
Boulder subscriptions unpaid			1,925 00

Total Boulder subscriptions...... \$20,359.98

STATE SUBSCRIPTIONS PAID.

Pueblo Savings Bank March	31	\$ 1,000 00		
Moses HallettApril	3	1,000-00		
National State Bank, BoulderApril	4	2,125 00		
W. Byrd Page April	5	500-00		
First National Bank, PuebloApril	ĩ	3,000-00		
D. R. GreenApril	10	250 00		
A. E. ReynoldsApril	13	500 00		
O. E. LeFevreApril	19	500-00		
Geo. W. BaxterApril	27	500 00		
First National Bank, BoulderApril	27	2,125 (0)		
Eben SmithMay	2	10,000 00		
Western National Bank, PuebloMay	2	1,000 00		
Colorado National Bank, DenverMay	8	4,000 00		
Denver National Bank May	8	4,000 00		
First National Bank, DenverMay	8	4,000 00		
Mercantile National Bank, PuebloJune	4	1,000 00		
J. F. CampionJune	8	2,500-00		
J. W. GrahamJuly	6	1,000 00		
"A Citizen"		5,000-00)	
Total paid	• • • • •		\$44,000 00	
State subscriptions unpaid			6,000 00	
Total state subscriptions				\$50,000 00
	_			
Total subscriptions			\$70,359-98	
Total paid			62,434-98	
Total unpaid	• • • • • •			\$ 7,925 00
Respectfully submitted		J. H. N	CHOLSO	N

Respectfully submitted, J. H. N1CHOLSON, Treasurer.

TWELFTH BIENNIAL REPORT

TREASURER'S REPORT.

From October 1, 1898, to October 1, 1900.

Receipts.

Cash on hand October 1, 1898\$	5,729	48
State Treasurer, General Fund, one-fifth mill tax	72,954	60
State Treasurer, Special Appropriation, 1897-1898	23,483	27
State Treasurer, Land Income	3,886	19
State Treasurer, Special Tax, one-tenth mill, 1893-1894	132	54
Receipts from Medical School and Hospital (due from E. J.		
Temple, former Secretary of Board, \$400)	10,853	05
Receipts from University Secretary	13,400	00
Premium on State Warrants	43	80
Proceeds of note	4,940	18
Balance from Building Fund	81	63
Citizens' Loan	62,434	98

- \$197,939 72

Disbursements.

Warrants outstanding October 1, 1898	18,723	79
Paid on note	2,538	38
Warrants paid from October 1, 1898 to October 1, 1900	159,284	45
Balance October 1, 1900	17,393	10

\$197,939 72

Respectfully submitted,

J. H. NICHOLSON.

Treasurer.

SECRETARY'S REPORT.

From October 1, 1898, to October 1, 1900.

Warrants issued in payment of expenses of the several departments of the University during the biennial period, October 1, 1898—October 1, 1900:

College and School of Applied Science, instruction.......\$ 74,983-40 School of Medicine, instruction, ibrary, apparatus, hospital,

ctc. (Largely reimbursed by Medleal tultions and Hos-

pitai recelpts)	20,140-01
School of Law, instruction, library, etc. (Partly reimbursed	
by tultions)	7,628-09
Preparatory School, instruction and other expenses	8,261-40
Library, books, periodicals and supplies	2,290 69

SUPERINTENDENT OF PUBLIC INSTRUCTION. 379

Blology, books, apparatus and supplies	374 44	
Chemistry, books, apparatus and supplies. (Largely reim-		
bursed by fees)	1,533-58	
English, books	94-90	
French, books	231 18	
German, books	39-42	
Greek, books	207 30	
History and Polltical Science, books	348-84	
Latln, books	142 22	
Llterature, books, etc	99-47	
Mathematics, books	S9 81	
Music, books	92 35	
Philosophy, books	206 85	
Psychology and Education, books, etc	278 75	
Physics, books, apparatus and supplies	370 80	
Clvil Engineering, books, apparatus and supplies	473 02	
Electrical Engineering, books, apparatus and supplies	847 73	
Regents, service and mileage	2,576 05	
Buildings and Grounds, repairs, improvements, salaries of		
janitors, insurance, etc	16,469 88	
Furniture and Supplies	600 21	
Printing, Stationery and Postage	3,701 26	
Fuel and Light	6,984 71	
Advertising (including visitation of schools and institutes,		
and lectures)		
Unclassified	7,413 78	
- Total expenses for Period, except warrants drawn on		
Building Fund		\$159,388 04
		Q100,000 01
Warrants issued, not paid by October 1, 1898\$	4 991 96	
Warrants issued, not paid by October 1, 1900		
\$	103 59	
Warrants issued from Oct. 1, 1898, to Oct. 1, 1900	159,388-04	
-		
Warrants paid by Treasurer from Oct. 1, 1898, to Oct. 1, 1900		\$159,284 45
Warrants drawn on Building Fund from Oct. 7, 1898, to Oct.		
1, 1900		\$ 7,776 03
Respectfully submitted, EDWARD J. Secretary of Boa		·

LIBRARIAN'S REPORT.

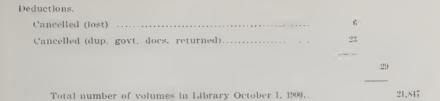
James H. Baker, President of the Board of Regents, University of Colorado:

Dear Sir—I have the honor to present herewith my report on the library, covering the period from October 1, 1898, to October 1, 1900.

ADDITIONS.

The total number of volumes accessioned and placed in the library during the two years, is 3,381, derived from the following sources:

Gifts (public documents)		
Gifts (miscellaneous),1,031		
	1,566	
Binding	485	
Purchased	1,330	
-		
Total accessions		3,381
DONATIONS.		
Books	2,307	
Pamphlets, College catalogues, etc	1,418	
Maps, etc	18	
Total		3,743
BINDING.		
Periodicals (completed volumes)	549	
New books (issued in paper)	221	
Dissertations, etc. (linen binding)	204	
Rebound		
Newspapers (July, 1898, to June, 1900)		
Total		1,129
SUMMARY.		
Number of volumes reported October 1, 1898		18,495
Additions.		
By gifts (Government documents)		
By glits (miscellaneous)		
by girts (miscenarieous)		
1,566		
By binding		
By purchase		
	3,381	
Total		21,876



DONATIONS.

(Detailed Statement.)

130	ooks.	Pamp.	Maps.
American Bar Association	19		
Bulette, Dr. W. W., Pueblo (Medlcal School)	231		
Bureau of South American Republics	20		
Butsch, V., Boulder	57		
Colorado Secretary of State	62	20	
Colorado Superintendent of Mines	2		
Colorado Superintendent of Schools	3	2	
Anonymous, Corpus Inscriptionum Latinarum; Ephemeris			
Epigraphica-as a Memorial to Prof. Carl W. Belser,			
Ph. D. (Latin)	39		
Gardiner, Dr. John	280		
Gardiner, Dr. John, wall map of Europe			1
Gardiner, Dr. John, annual subscription to "Annals of			
Botany;" "Revue General de Botanique"			
Farnsworth, Charles H	11	12	
Massachusetts Bureau of Labor	24	9	
Massachusetts Board of Insanity	1		
Massachusetts Railroad Commissioners	3		
Massachusetts Board of Education	22		
Michigan Superintendent of Schools	13		
Smithsonian Institution	17	14	
Stoddard, Dr. William B., annual subscription to "Jour-			
nal of Society of Chemical Industry"			
United States (Superintendent of Documents)	1,360	399	14
Wolff, Joseph	14		
Miscellaneous	129	962	3
			_
Total	2,307	1,418	18

Respectfully submitted,

ALFRED E. WHITAKER, Librarian.

INVENTORY OF UNIVERSITY PROPERTY.

The following estimates, taken from inventories recently made, are presented as fair approximations:

GROUNDS.

Campus,	fifty-two	acres	(estimated	present	value	unim-		
prove	1)					\$	26,800	00
Improver	nents, as	fences	, grading,	roads,	walks,	pipes,		
drains	s, trees, la	ike, bri	idges		• • • • • • • • • • •	•••••	11,800	00

\$ 38,600.00

BUILDINGS.

(Approximate cost of each.)

University Cottage.6,600 00Medical Building.8,800 00Cottage No. 1.8,400 00Cottage No. 2.3,800 00Anatomy Building.2,500 00Woodbury Hall.24,500 00Hale Scientific Building.47,500 00Engineering Building and heating plant.17,100 00Heating plant, boilers, pipes in ground, fan house.6,000 00Observatory200 00Ice House200 00Stables and sheds.1,200 00Gymnasium Building.5,700 00Hospital, furnished.15,000 00	Main Building\$	36,500	00
Cottage No. 1	University Cottage	6,600	00
Cottage No. 23,800 00Anatomy Building.2,500 00Woodbury Hall.24,500 00Hale Scientific Building.47,500 00Engineering Building and heating plant.17,100 00Heating plant, boilers, pipes in ground, fan house.6,000 00Observatory200 00Ice House200 00Stables and sheds.1,200 00Chemistry Building.9,700 00Gymnasium Building.5,700 00	Medical Building	8,800	00
Anatomy Building.2,500 00Woodbury Hall.24,500 00Hale Scientific Building.47,500 00Engineering Building and heating plant.17,100 00Heating plant, boilers, pipes in ground, fan house.6,000 00Observatory200 00Ice House200 00Stables and sheds.1,200 00Chemistry Building.9,700 00Gymnasium Building.5,700 00	Cottage No. 1	8,400	00
Woodbury Hail.24,500 00Hale Scientific Building.47,500 00Engineering Building and heating plant.17,100 00Heating plant, boilers, pipes in ground, fan house.6,000 00Observatory200 00Ice House200 00Stables and sheds.1,200 00Chemistry Building.9,700 00Gymnasium Building.5,700 00	Cottage No. 2	3,800	00
Hale Scientific Building.47,500 00Engineering Building and heating plant.17,100 00Heating plant, boilers, pipes in ground, fan house.6,000 00Observatory200 00Ice House200 00Stables and sheds.1,200 00Chemistry Building.9,700 00Gymnasium Building.5,700 00	Anatomy Building	2,500	00
Engineering Building and heating plant.17,100 00Heating plant, boilers, pipes in ground, fan house.6,000 00Observatory200 00Ice House200 00Stables and sheds.1,200 00Chemistry Building.9,700 00Gymnasium Building.5,700 00	Woodbury Hall	24,500	00
Heating plant, boilers, pipes in ground, fan house6,000 00Observatory	Hale Scientific Building	47,500	00
Observatory200 00Ice House200 00Stables and sheds.1,200 00Chemistry Building.9,700 00Gymnasium Building.5,700 00	Engineering Building and heating plant	17,100	00
Ice House200 00Stables and sheds.1,200 00Chemistry Building.9,700 00Gymnasium Building.5,700 00	Heating plant, boilers, pipes in ground, fan house	6,000	00
Stables and sheds1,200 00Chemistry Building9,700 00Gymnasium Building5,700 00	Observatory	200	00
Chemistry Building. 9,700 00 Gymnasium Building. 5,700 00	Ice House	200	00
Gymnasium Building	Stables and sheds	1,200	00
Gymnasium Dundnig	Chemistry Building	9,700	00
Hospital, furnished 15,000 00	Gymnasium Building	5,700	00
	Hospital, furnished	15,000	00

\$193,700-00

FURNITURE, ETC.

Team, implements, tools, engineer's and carpenter's supplies

(value)\$	1,211 00
Gymnasium apparatus (cost)	500-00
Room furniture, as chairs, settees, desks, tables, movable	
cases, pictures, office furniture, dormitory and dining	
hall equipment, shades and janitor's supplies (value)	9,128-00

\$ 10,839 00

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LIBRARY.

Library (value)..... \$ 37,000 00

APPARATUS.

Biology\$	2,269	00
Chemistry	2,918	00
Civil Engineering	2,214	00
Comparative and English Literature.	524	00
Electrical Engineering	4,154	00
German	30	00
Greek	336	00
History and Political Science	20	00
Hospital (furniture and instruments)	2,363	00
Latin	20	00
Mathematics	351	00
Medicine	4,271	00
Physics	6,929	00
Psychology	297	00

\$ 26,696 00

COLLECTIONS.

Geological	and	Mineralogical	(value)\$	2,460 00
Art (cost).				1,800 00

\$ 4,260 00

SUMMARY.

Grounds	.\$ 38,600	00
Buildings	. 193,700	00
Furniture, etc	. 10,839	00
Library	. 37,000	00
Apparatus	. 26,696	00
Collections	. 4,260	00

\$311,095 00

REQUIREMENTS FOR ADMISSION TO STATE UNIVERSITY.

Students are admitted to the College of Liberal Arts on the certificate of the State Preparatory School or upon satisfactory examination in each of the required subjects.

Blank forms of application have been prepared for those high schools desiring to be placed on the accredited list of the State University. These will be furnished upon request. All applications will be considered in full meeting of the faculty.

Students will be received from accredited schools upon certificate of the principal, provided that the work done covers the requirements for the course elected. Certificates from schools not accredited may be considered as the merits of each case may warrant. Certificates of good character may be required of all students.

The following schools are accredited—for course leading to B.A. (C.); to B.Ph. (L.Sc.); to B.S. (S.):

Denver High School, District No. 1	С.	L.Sc.	S.
Denver High School, District No. 2	C.	L.Sc.	S.
Colorado Springs High School	С.	L.Sc.	S.
Greeley High School			S.
Pueblo High School, District No. 1	С.	L.Sc.	s.
Pueblo High School, District No. 20	С.	L.Sc.	S.
North Denver High School	С.	L.Sc.	S.
Georgetown High School		L.Sc.	
Canon City High School	С.	L.Sc.	S.
Durango High School		L.Sc.	S.
Aspen High School		L.Sc.	
Jarvis Hall Military Academy	С.	L.Sc.	S.
Fort Collins High School		L.Sc.	S.
Golden Hlgh School		L.Sc.	S.
Grand Junction High School		L.Sc.	$\mathbf{S}.$
Trinidad High School		L.Sc.	s.
Cheyenne (Wyo.) High School		L.Sc.	s.
College of the Southwest	С.	L.Sc.	
Denver Manual Training lligh School		L.Sc.	s.
La Junta High School		L.Sc.	
Central City High School		L.Se.	
Idaho Springs High School			S.
Longmont Hlgh School			S.
Montclalr High School		L.Sc.	S.
Fort Morgan High School		L.Sc.	s.
Crlpple Creck Hlgh School		L.Sc	s.



Candidates for admission to courses leading to the degrees B.A., B.Ph. and B.S. will be examined on the subjects outlined below.

FOR ADMISSION TO COURSES LEADING TO B.A.

Mathematics-Algebra, through quadratics; plane geometry.

Latin—Latin lessons with grammar; Cæsar's Commentaries, 4 books; Virgil's "Eneid, 6 books; Cicero, 7 orations; prose composition.

Greek—Greek lessons with grammar; Xenophon's Anabasis, 4 books; Homer's Iliad, 3 books; prose composition.

Modern Languages-German or French, one year (German preferred).

Science-Physics, or chemistry or biology, one year.

History—Time recommended equal to about four hours per week for two years. Courses suggested: (1) Greek and Roman history; (2) English, French or German history; (3) United States history and civil government.

English—Grammar, rhetoric and the equivalent of the requirements of the New England Association of Colleges. Time recommended equal to about four hours per week for two years. (See below.)

FOR ADMISSION TO COURSES LEADING TO B.PH.

Mathematics-Algebra, through quadratics; plane geometry.

Latin-Latin lessons with grammar: Cæsar's Commentaries, 4 books; Virgil's .Eneid, 6 books: Cicero, 7 orations; prose composition.

Modern Languages-German or French, one year (German preferred).

Science—Physics, one year; chemistry, one year; biology, one year; (or any one of the three alternative requirements in the schedule below.)

In place of the last year of science, an additional year of English may be substituted.

History—Time recommended equal to at least four hours per week for two years. Courses suggested: (1) Greek and Roman history; (2) English, French or German history; (3) United States history and civil government.

English—Grammar, rhetoric and the equivalent of the requirements of the New England Association of Colleges. Time recommended equal to at least four hours per week for two years. (See below.)

Drawing-Free-hand and mechanical.

FOR ADMISSION TO COURSES LEADING TO B.S.

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

Foreign Languages—Three years of Latin and one of German or French (German preferred); or acceptable equivalents in foreign languages. Science—Physics, one year; chemistry, one year; biology, one year; (or any one of the three alternative requirements in the schedule below).

History—Time recommended equal to at least four hours per week for two years. Courses suggested: (1) Greek and Roman history; (2) English, French or German history; (3) United States history and civil government.

English—Grammar, rhetoric and the equivalent of the requirements of the New England Association of Colleges. Time recommended equal to at least four hours per week for two years. (See below.)

Drawing-Free-hand and mechanical.

REQUIREMENTS IN ENGLISH-ALL COURSES.

The requirements in English include grammar, rhetoric and the reading of standard authors.

The first half of the required English includes grammar, spelling, punctuation, paragraphing and good use. Satisfactory preparation in rhetoric may be gained by a mastery of such a text as Hill's "Foundations of Rhetoric."

The second half of the required English includes figures of speech, poetic use, metre and classification of prose and verse according to form and content.

For study and reading, the requirements of the New England Association of Colleges, or the equivalent.

For 1899: Dryden's Palamon and Arcite; Pope's Iliad, books I., Vl., XXII, and XXIV.; the Sir Roger de Coverley Papers in the Spectator; Goldsmith's The Vicar of Wakefield; Coleridge's The Ancient Mariner; De Quincey's The Flight of a Tartar Tribe; Cooper's The Last of the Mohicans; Lowell's The Vision of Sir Launfal; Hawthorne's The House of Seven Gables; Shakespeare's Macbeth; Milton's Paradise Lost, books I. and H.; Burke's Speech on Conciliation with America; Carlyle's Essay on Burns.

For 1900: Dryden's Palamon and Arcite; Pope's Iliad, books L. VI., XXII. and XXIV.; the Sir Roger de Coverley Papers in the Spectator; Goldsmith's The Vicar of Wakefield; Scott's Ivanhoe; De Quincey's The Flight of a Tartar Tribe; Cooper's The Last of the Mohicans; Tennysou's The Princess; Lowell's The Vision of Sir Launfal; Shakespeare's Macbeth; Milton's Paradise Lost, books I. and H.; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

For 1901 and 1902: Shakespeare's Macbeth; Milton's Lycidas, Comms, L'Allegro and ll Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

SCHEDULE OF ALTERNATIVE REQUIREMENTS IN SCIENCE. B.PH. COURSE AND B.S. COURSE.

Physics---

Ninth grade—First term—Physical Geography (Tarr)—I. Second term—Same, continued—1.

Tenth grade—First term—Elementary Physics (Gage)—4. Second term—El. Chemistry (Remsen)—4.

Eleventh grade—First term—Physics (Carhart and Chute)—5. Second term—Same, continued—5.

Twelfth grade—First term—Physics (Sabine or Deschanel)—5. Second term—Human Physiology—5.

Chemistry-

Ninth grade—First term—Physical Geography (Tarr)—1. Second term—Same, continued—1.

Tenth grade—First term—Elementary Physics (Gage)—4. Second term—El. Chemistry (Remsen)—4.

Eleventh grade—First term—Chemistry lnorganic—5. Second term —Org., Lab. and Qual. Anal.—5.

Twelfth grade--First term-Lab. Org. and El. Quant. Anal.-5. Second term-Human Physiology-5.

Biology-

Ninth grade—First term—Physical Geography (Tarr)-1. Second term—Same, continued—1.

Tenth grade—First term—Elementary Physics (Gage)—4. Second term—El. Chemistry (Remsen)—4.

Eleventh grade—First term—General Biology—5. Second term—General Biology—5.

Twelfth grade—First term—Plant or Animal Physiology, Morphology and Ecology—5. Second Term—Human Physiology—5.

Note—These courses are identical in the first two years and in the last term of the last year.

ADVANCED STANDING.

Students coming from institutions of like grade should bring certificates definitely stating the amount of work done in each subject. Real equivalents will be accepted. Graduation depends not upon the time spent, but upon the work actually accomplished.

Candidates for advanced standing who do not come from some other university or college will be subject to an examination not only in the subjects preparatory to admission to the university, but also in such undergraduate studies as they may ask to be credited with.

REPORT OF THE TRUSTEES OF THE COLORADO SCHOOL FOR THE DEAF AND THE BLIND.

To His Excellency, Charles S. Thomas, Governor of Colorado.

Dear Sir—In behalf of the board of trustees of the Colorado School for the Deaf and the Blind, I submit herewith the thirteenth biennial report of that institution covering the two years ending November 30, 1900:

The changes in the board since the last report have been the appointment of Mr. W. G. Rice of Colorado Springs to succeed Mrs. Ella C. Dwinell, whose term expired April, 1899, and Mr. S. I. Hallett of Aspen to fill out the unexpired term of Mr. Jos. A. Davis of Westcliffe, who died at Canon City, June 3, while on the way to attend the regular meeting of the board.

For all detail as to the working of the school, you are respectfully referred to the accompanying reports of the superintendent, treasurer and other officers, all of which meet our approval. We wish, however, to call your especial attention to a brief statement of the existing conditions, the causes of these conditions, and, in our opinion, the remedy, together with such suggestions as occur to us for the future betterment of the school.

Reference to the report made in 1896, four years ago, shows a deficit of \$3364.19, which in 1898 had increased to \$5919.02, and at the present time amounts to \$8047.34. This deficit is due on the one hand to a diminished revenue from the fifth mill tax, owing to the low rate of assessment the past few years, a matter with which you are fully conversant, and on the other to the steady increase in the size of the school, with its consequent demand for larger expenditures.

At no time within the past ten years has the income been sufficient to meet the legitimate expense and relief has been sought from time to time through the legislature. The last General Assembly, recognizing the needs of the school, appropriated the sum of \$22569 for the payment of the deficit and making such repairs and improvements as were deemed imperative, but not one cent of this has been realized. In the meantime the board has endeavored to preserve the property, keep up the insurance and give to the state and to her unfortunate children the very best possible under the circumstances, waiting and hoping that the coming legislature might find a way out of the trouble. Up to this date nothing has

SUPERINTENDENT OF PUBLIC INSTRUCTION.

been done to impair the efficiency of the school, either by lowering the high standard which we have in the past striven to maintain, or by curtailing the length of the session, which we feel is short enough at best. The present policy, however, cannot be continued indefinitely, and unless there is some assurance of permanent relief at some time soon, the diminished income must be met by a decrease in the number of teachers, or the employment of cheaper people, and the shortening of the school session. Such a course would necessarily result in the lowering of the standard of excellence which we have hitherto enjoyed and would certainly meet the disapproval of the public, but we can see nothing else in store for us unless such measures are adopted by our lawmakers as may increase the revenues of the state and put her institutions on a solid basis.

A careful estimate of the amount necessary to pay off the deficit, to complete the unfinished buildings and properly repair, paint and furnish all of them, to purchase an electric plant, etc., the items of which will be found in the superintendent's report under the head of "Needs." is \$39140.34.

In addition to the above the state should purchase the piece of land lying just east of the present grounds, which will be out of reach, should it be built upon, as is likely to be the case within the next two years. This property, which now includes four residences, can be purchased and made ready for use for about \$15000, and as the school is already in need of more room, it can be utilized at once. The total sum, therefore, needed by the school is \$54140.34. Could we secure this within the next two years, and once get the buildings and grounds in perfect condition, we believe the school could thereafter live upon the fifth mill tax and be, in all respects, the equal of any similar institution in the land.

All of which is

Respectfully submitted,

W. H. TROUT, President.

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SUPERINTENDENT'S REPORT.

To the Board of Trustees of the Colorado School for the Deaf and the Blind:

Colorado, always well to the front in educational matters. early recognized her obligation to her unfortunate deaf children and the "Colorado Institute for Deaf Mutes" was established in 1874, while the state was yet a territory, the blind department being added in 1883. Beginning with only six pupils, in one small frame building, the school has grown until the enrollment the present session has already reached 140, and some 437 persons in all have availed themselves of the advantages offered, the buildings now numbering six, with a valuation, including equipment, of more than \$200,000.

And yet, despite all these years of usefulness, and the thousands upon thousands of circulars and reports sent out explaining the aims and purposes of the institution, comparatively few of the people of the state fully understand its character and its mission, the majority looking upon it more as a "home" for the care and treatment of the dependent deaf and blind than as a school for their education and training. The act of establishment declares "That there shall be organized and established at the town of Colorado Springs, El Paso county, territory of Colorado, an institution, the recognized object of which shall be (1) The provision of a school wherein the deaf mutes of the territory shall receive an education; (2) The provision of a home wherein the said deaf mutes shall receive necessary care and protection while pupils in said school."

While provision is made for the protection and care of the children during their pupilage, nothing is said here or elsewhere implying that an "asylum," in any sense of the word, was meant, and such was not in the minds of the originators of the bill. The state, guaranteeing to every child within its boundary an opportunity to acquire a public school education, finds it cheaper and more satisfactory to group the deaf and blind together at one place with a first class equipment, than to provide instructors and appliances at their homes. The deaf and blind children do not need a "home" furnished by the state, and were the educational feature of the institution abolished to-day, not a child would be found in attendance within the week. The work, while of necessity elementary, compared with that of the university, is just as distinctively educational and is not one whit more charitable in the true meaning of the word. The school for the deaf and blind should therefore be classed among the educational rather than with the electrosynary and penal institutions, as is so often done by those who know better. We are glad to say that in a number of the states the proper classification has been made and we trust that Colorado may soon be counted among the number.

ATTENDANCE.

One would naturally suppose that the parents of the deaf and blind would be quick to avail themselves of the opportunities offered by a school so generously supported and so well equipped, realizing fully as they must the deprivation and helplessness that a lack of education would entail upon their unfortunate children, but, strange to say, such is not the fact. In some instances the mistaken idea of the purposes of the school, already alluded to, cause the parents to hesitate in sending the child to us, but in far more the real trouble is the unwillingness of the parent to bear the pain of separation from the afflicted one for so long a time as a school session. We may love our children equally, but the unfortunate one requires more of our care and is therefore nearer to us than those in a measure independent of us. Then, too, there is the not unreasonable fear that the child may not get proper care at the hands of persons paid to render the service, and there is also a feeling that the child may grieve and fret to the detriment of its physical welfare. Older people forget that a child's tears, like April showers, are quickly gone, and the younger the child the sooner it becomes interested in new faces and new surroundings. No mentally normal deaf or blind child can possibly remain dissatisfied long at a school where he finds so many like himself and where he discovers that he may do what he has so often envied in his hearing and seeing brothers and sisters as they got together their books and slates for the school term.

Every effort is made through county school superintendents, teachers, postmasters, etc., to locate the deaf and blind of school age, and circulars of information are sent out regularly, but experience has shown that in mauy instances the only effective means of securing attendance is a personal visit of the parent to the school or of some one from the school to the parent.

TWELFTH BIENNIAL REPORT

	Deaf.	Blind.	Total.
Present November 30, 1898	. 77	39	116
New pupils admitted since	31	26	57
Former pupils returned	. 11	3	14
	—		
Total attendance during the two years	.119	68	187
Accounted for as follows:			
Graduated	. 3	อ้	S
Removed from state	. 6	1	7
Honorably discharged.		1	1
Dismissed as ineligible	. 2	3	5
Suspended indefinitely		1	1
Time expired		2	2
Voluntarily remaining at home	. 21	5	26
	—		
	32	18	50
Present November 30, 1900	. 87	50	137
Deaf boys, 53; deaf girls, 34; blind boys, 27; blind girls	. 23.		

The following gives attendance in detail:

Deaf boys, 53; deaf girls, 34; blind boys, 27; blind girls, 23.

The number in attendance during the two years has been 187, while the enrollment the present session to this date is 140 (88 deaf and 52 blind) which is the largest in the history of the school so early in the year. This is due partly to a small amount of personal canvassing done last summer and partly to the large increase in the population of the state the past year. As the wonderful resources of Colorado become more widely known we may expect a greater influx of people, and just as surely a larger number applying for admission to the school. The building of new roads and the extension of our railway systems, making it easier to reach Colorado Springs from remote parts of the state, will also tend to increase our numbers, hence we may confidently expect two hundred children before very long, which will necessitate provision of additional bed room. The main building, the capacity of which would be reduced if properly overhauled for ventilation and light, is already crowded with boys, and the girls' hall has very little unoccupied space. The purchase of the property lying east of our grounds, suggested elsewhere under the head of "Needs," would afford relief as cheaply as lt could be had in any other way and at the same time secure to the school additional area which will be out of reach a few years later.

GRADUATES.

At the closing exercises in June, 1899, diplomas were granted to Eddy McGowan, of Denver, and Fred Bailey, of Gunnison, from the deaf department, and a certificate of honorable dismission and proficiency as a piano tuner to Elmer Francis, of Moscow, Idaho, from the blind depart-

SUPERINTENDENT OF PUBLIC INSTRUCTION.

ment. Those graduating last June were, from the blind department, Daisy Brunk of Denver, John Myers of Denver. Pearl Hawes of Boise. Idaho; Ella Lesher of Fort Collins, and Elizabeth B. Rudd of Boulder: from the deaf department, Agnes Winters of Gunnison. The chapel was filled to overflowing on both occasions, and all of these had the honor of receiving their diplomas directly from the hands of his excellency, Governor Charles S. Thomas, who accompanied the presentation with short addresses both elegant and appropriate.

HEALTH.

Considering that we have passed through epidemics of both measles and mumps since the last report, the health record has been remarkably good, there having been but two cases of anything like serious illness, one following measles and the other a case of typhoid fever which developed a few days after the opening of the present session, the child having contracted the disease at her home. In both instances there was perfect recovery, thanks to the•skill of our physician, Dr. Anderson, and at this writing there is not a child ailing.

We attribute this excellent showing at least partly to the fact that the children have taken more out of door exercise during the last two years than ever before, it being made particularly attractive by the purchase of a number of swings, see-saws, and football suits, made possible by a donation from some of our generous-hearted citizens. I must not omit to mention, also, our most potent inducement to exercise as well as most efficient means of discipline with the little folks, three of the most patient of patient burros.

CHANGES.

There have been two changes in the board of trustees since the last report. Mrs. Ella C. Dwinell of Colorado Springs, whose term of office expired in April, 1898, was succeeded by W. G. Rice, also of this city, and Mr. S. I. Hallett of Aspen was appointed to the vacancy caused by the death of Mr. Jos. A. Davis of Westcliffe, which occurred last June. The death of Mr. Davis was a peculiarly sad one. While on his way to the school to attend the regular meeting of the board and the closing exercises, accompanied by his little daughter, he became ill and died at Canon City in less than an hour after being taken from the train. He had served on the board almost two full terms, and had proven himself a faithful and conscientious conservator of the state's interests.

The vacancy caused by the resignation of Mr. Dudley, spoken of elsewhere in this report, was filled by the appointment of the writer, who had been a teacher in the school for five years, after fourteen years' experience in the Kentucky School for the Deaf as teacher and superintendent.

Miss Eliza Reed gave up the position of girls' matron in February, 1899, to return to South America as missionary, a work in which she had been engaged previous to coming to us, her place being filled by Mrs. Elizabeth Osgood of Denver, at one time a teacher here.

In June, 1899, Mr. Max Kestner severed his connection with the school, and at the close of last session we lost Misses Sparrow, Chapin. Powell and Kneringer, the first two to accept more lucrative positions elsewhere, Miss Powell to get married, and Miss Kneringer because of some changes in the music department which enabled us to dispense with the services of one resident teacher and reduce the expense somewhat. These vacancies have been filled by the appointment of Miss M. E. Griffin of the Minnesota school, Miss Elizabeth H. Rice of Fulton. Mo.. Miss Hermine Haupt of the Kentucky school, Miss Alice W. Ely of the Alabama school, and Mrs. Belle G. Argo, the first two assuming their duties in September of 1899, the others the present session.

Frequent changes are to be deplored in a school like ours, where so much depends upon a thorough acquaintance with the child and its peculiar habits of thought and action, but we may expect them, especially so long as there is the least uncertainty as to the future in a financial way. Any talk of diminished incomes, shortened sessions, curtailment of saiaries or possible loss of position for any reason other than inefficiency does not help, to say the least, in securing the best people and holding them, and the sooner the legislature carf solve the money problem for the state the better for all her institutions.

METHODS OF INSTRUCTION.

The deaf department is classed among the combined schools of the United States, in that all methods are made use of, the instruction being given as is best suited to the needs and capacity of the individual. In the oral department, signs and finger spelling are not used in the school room; speech and speech reading are taught and form the principal means of communication between the teacher and the pupil, writing also being an important feature of the daily work. In the manual department, signs are used freely in the younger classes, and finger spelling is the chief medium of instruction, writing also holding a prominent place. All pupils are given an opportunity to learn speech and speech reading and are transferred to the manual department only when it is clearly demonstrated that they can do better there.

While practically all instructors of the deaf are agreed that there are deaf children with whom the oral method should be employed, there is a wide variance of opinion as to the percentage that may be taught lip reading and speech to such an extent as to prove of material benefit in their every-day interconrse with the business world. One extreme holds that the semi-mute and semi-deaf, with here and there a congenitally deaf child unusually talented in that direction, can be successfully taught by the oral method, while the other extreme contends that all deaf children of whatever mental capacity may as well be taught in that way as in any other, with the advantage of getting the articulation and lip reading as so much extra. That there is somewhere between these two a "golden mean," time will undoubtedly prove, and with so many conscientious workers earnestly seeking after the truth we may confidently believe that the whole question will be settled in the right way in the end

The methods of instruction in the blind department are those in use in the best schools of the United States, modified only to suit the conditions. New York point is used in the school room, though the pupils are also taught to read American braille and line.

The supply of modern text books printed in point is so meagre and the books are so expensive that the school has never been able to furuish the pupils individually with them. We very much hope before another session opens you may be able to purchase a stereograph, a machine by which lessons can be quickly prepared in point, thus enabling us, at small expense, to multiply the text book indefinitely. These machines have now been in use long enough to test their efficiency and durability.

COURSE OF STUDY-DEAF DEPARTMENT.

Our aim is to give to the deaf child about the same course of study as the hearing child gets in the public schools of the state. Language being the chief difficulty, a great deal of time is devoted to it, and though in many instances our deaf pupils never acquire a perfect command of words, it is seldom that one goes out unable to express himself sufficiently clear for business purposes.

An outline of the work done is as follows:

PRIMARY GRADE-Language, reading, writing, numbers, nature study, drawing.

Text books: Miss Fuller's primer, Miss Sweet's Nos. 1 and 2, Prince's arithmetic.

Note—Much of the instruction in this grade is by means of manuscript lessons.

INTERMEDIATE GRADE—Language, reading, writing, geography, arithmetic, nature study, drawing.

Text books: Miss Sweet's Nos. 3 and 4, Jenkins' Talks and Stories. Crane's Bits of History, Eggleston's First Book in United States History. Monteith's primary geography, Prince's arithmetic, Dudley's arithmetic.

GRAMMAR GRADE—Language, reading, geography (political and physical), arithmetic, drawing, history of the United States, history of England, general history, civil government, physiology, natural philosophy. botany (lectures), zoology (lectures).

Text books: Longman's school grammar, Felter's arithmetic, Walsh's arithmetic, Barnes' complete geography, Houston's physical geography, Eggleston's United States, Higginson and Channing's English history, Parley's universal history, Steele's physics.

Daily exercises are held in the chapel throughout the entire course. A literary society has been in existence for the past ten years, and has proven very helpful to the older pupils, all of whom are memoers.

COURSE OF STUDY-BLIND DEPARTMENT.

In this department, language, being acquired through the ear, as with normal children, presents no greater difficulty than in the ordinary school and more is attempted than with the deaf, as will be seen by an examination of the following: PRIMARY GRADE-THREE YEARS-

(C)

Mathematics: Numbers to 50; simple mental work. Reading: Primer and first reader; spelling. English: Language lessons. Writing, in New York point.

(B)

Mathematics: Numbers to 150; reading from 100-1,000; simple mental work in addition, subtraction, multiplication and division.

Reading: Second and third readers; spelling.

English: Language lessons, with emphasis upon the noun and adjective.

Science: Talks by the teacher.

Writing, in New York point.

(A)

Mathematics: Numbers to 1,000; reading from 1,000-10,000; simple mental work in addition, subtraction, multiplication and division.

Reading: Fourth and fifth readers; spelling.

English: Language lessons, with special emphasis upon the pronoun, verb, subject, copula and predicate.

Science: Talks by the teacher.

Writing, in New York point.

INTERMEDIATE GRADE-THREE YEARS-

(C)

Mathematics: Review and compound numbers. Reading: From various authors; spelling. Geography: Elementary. English: Languago lessons. Science: Elementary work.

(B)

Mathematics: Common fractions and decimals. History of the United States. Geography of the world. English: Grammar. Science: Elementary work.

(A)

Mathematics: Decimals. History of the United States, complete. Geography: Descriptive. English: Review of grammar. Science: Elementary work.

GRAMMAR GRADL-THREE YEARS-

(C)

Mathematics: Arithmetic. History: General, Grecian, complete. Geography: Physical, complete. English: Grammar.

(B)

Mathematics: Arithmetic, with a review of arithmetical principles. History: General, Roman, complete.

Science: Physiology and hygiene; zoology.

English: Analysis and composition.

(A)

Mathematics: Elementary algebra.

History: Mediæval and English.

English: Composition and introduction to literature.

Typewriting: Letter writing; writing from dictation, with emphasis upon rapidity; manifolding; care of machine.

SENIOR GRADE-THREE YEARS-

(C)

Mathematics: Algebra, Robinson supplemented by Peck's Manual.

History: Civil government, Fiske; Hatch's civil government of Colorado; Johnston's history of American politics and lectures on political economy.

English: Elements of composition and rhetoric, Waddy. Latin: Collar and Daniels' beginner's book.

(B)

Mathematics: Plane geometry, Wells', with exercises. Science: Introduction to physical science, Gage, with lectures. English: Introduction to American literature, Painter. Latin: Collar and Daniels' beginner's book reviewed; Caesar.

(A)

Mathematics: General review.

Science: Geology, Tarr; chemistry, Williams; botany, Youman and Gray; lectures through the year on each subject.

English: English literature, Kellogg; a general review of literature.

Latin: Caesar, with Allen and Greenough's grammar; writing short compositions in Latin.

Philosophy: Mental, Gordy and Baldwin; moral, Fairchild; lectures throughout the year.

Monthly rhetoricals, evening readings, daily chapel exercises and special Sunday exercises are carried on throughout the entire course by the teachers of the literary department.

INDUSTRIAL DEPARTMENT.

The wisdom of this board in insisting so strenuously for years upon the enlargement and improvement of the industrial department of our school has been more than justified, in view of the results already attained in like schools, as well as the opinion now held almost universally by educators of all classes of children. It is generally conceded that manual or industrial training has a distinct psychological value in the proper education of a child, aside from its practical value in the gaining of a livelihood. In all educational matters we see a decided tendency toward less of the purely theoretical and more of the practical, and if this be'true of those who may, if they so elect, largely earn their bread by the use of the brain alone, little argument is needed to show how more true it is when, in most cases, the living must come through an intelligent use of the hands.

Our industrial department is at present conducted along the same lines as heretofore, with some change in hours, giving the older pupils larger periods of uninterrupted time in the shops. We are doing good work in some branches, but in others great improvement could be made by the purchase of proper equipment.

Our younger pupils, both blind and deaf, should have an hour a day in Sloyd, and the course in carpentry should be graded, passing from Sloyd through a special course in manual training to the practical work of building, thus enabling us to send our boys out so well instructed that a little practice would render them skilled workmen.

We have for the deaf boys broommaking, carpentry, mattressmaking, printing and shoemaking; for the blind boys broommaking, canceating and mattressmaking; and for all the girls plain sewing, dressmaking, knitting and crocheting, together with such general housework as is involved in the care of their rooms and the dining room.

CONFERENCE OF PRINCIPALS.

Your superintendent had the pleasure of attending the eighth national conference of superintendents and principals held at Talladega, Ala.. June 30 to July 4, inclusive. The attendance was not large, many fearing to venture so far south at that season of the year, but those present were very much in earnest and the meeting was a most successful one. Superintendent J. 11. Johnson, backed by his board of trustees, spared no effort in planning for the occasion, and our entertainment was simply perfect. The time was devoted to the discussion of school work, detail in the management of schools for the deaf, and such "questions as arise in the daily planning for large numbers of children.

REPAIRS AND IMPROVI MENTS.

The last legislature appropriated the sum of \$22,600 for making sundry repairs and improvements on buildings and grounds, not one cent of which has been realized, consequently comparatively little has been done in that direction. Fortunately there was a small balance on hand from an appropriation made some four years ago, and with this insurance has been kept up and the exterior of the buildings painted and kept in repair, otherwise there would have been by this time considerable deterioration. All minor repairs to the interior of the buildings have been attended to promptly and some changes have been made in the arrangement of the girls' halt that have added materially to the convenience and comfort of all concerned, especially the fitting up of a girls' hospital opening into the matron's room, and the addition of two large closets for bedding. Two of the larger items were the purchase of a ten-ton wagon scale of the latest and best make for the purpose of reweighing coal, etc., and the rearrangement of all the electric wiring on the premises, where exposed, to conform more closely to the regulations of the board of underwriters. Both of these were regarded as absolutely necessary in the interests of economy and protection to life and property There have also been such changes made in the shop building and barn as could be done by our boys with small expenditure for material, but that there is much remaining undone may be seen from the following list of

MEEDS.

As has been stated, the buildings are already full and we may expect the school to grow rapidly. We shall need more dormitory room before another session.

The old central building is in very bad repair and needs to be thoroughly overhauled and rearranged from attic to basement, including the kitchen and cellar, with new floors, new plumbing, and on the ground floor new joists.

The attic of the school building should be finished up and used for the music department. At present the pianos are scattered from top to bottom of three buildings, necessitating both exposure and loss of time in making the changes.

The shop building should be completed.

The walls and woodwork of all the buildings need repainting and varnishing, having had no attention for years.

The old iron beds, which were very cheap affairs in the beginning, need to be replaced with new ones of the best make.

The arrangement for the care of the boys' clothing is very inadequate. New presses and lockers are needed throughout for both boys and girls.

The shops, especially those devoted to manual training and wood-working, need both tools and machinery to render them thoroughly efficient.

The old laundry machinery, which was too small in the first place, is now about used up and should be replaced with larger.

We should have an electric light plant. Our electric light now costs us over eight hundred dollars per annum, though we use it as economically as possible. Had we a plant we could, for the same sum or less, produce all the light we wish and also have power for small motors in the various shops, thereby increasing their efficiency.

A new range and boiler will be needed before two years have passed, and a broiler should be added to the equipment of the kitchen.

The blind department should have at least ten modern typewriters and a stereograph for the preparation of lessons in New York point.

Both departments are sadly in need of such apparatus as is necessary to elementary instruction in physics and chemistry.

The library, never very complete, has had no additions worthy of mention for years. Five hundred dollars are needed at once if we are to cultivate the reading habit considered so essential to the welfare of our pupils.

The grounds have never been completed for lack of funds for grading, purchase of water pipe, etc. This should be done and walks be laid out as originally designed.

The vehicles now in use by the school are almost past usefulness and must soon be replaced.

The board should, if possible, secure the strip of ground lying just east of the alley running north and south back of the institution grounds. While it would be desirable to extend our boundaries even further east than this, the additional space thus gained would give room for a muchneeded play ground for the boys, and the school could get along for an indefinite period of time without further addition to its territory. This is a matter of importance to which I ask your most earnest attention.

ACKNOWLEDGMENTS.

We wish to express to all who have in any way contributed to the pleasure and comfort of the pupils our sincere appreciation. Our thanks are especially due to the following:

To the passenger agents of the railroads of the state for reduced rates, and to both officials and employees for their uniform courtesy and kind treatment to our pupils.

To Dr. W. C. Ogden, who, for two years, has given the school the benefit of his skill as oculist and aurist free of charge.

To Mr. W. S. Stratton for the continuance of the prizes to the blind department.





To J. H. Lauterman for very low rates to the lyceum course.

To W. W. Wade, of Oakmont, Pennsylvania, for books for the library and various contributions to the pupils' reading room.

To the Colorado Springs Musical Club for numerous courtesies in the way of free admission for all the older blind pupils to the various high class concerts enjoyed by that society during the year.

To a number of our citizens through whose generosity the swings, seesaws and football suits, so greatly enjoyed by the pupils, were secured; and,

To the schools throughout the country for copies of the school papers for our reading rooms.

DAVID C. DUDLEY.

Early in the period covered by this report our hearts were saddened by the knowledge that the working days of our beloved friend and superintendent, Mr. D. C. Dudley, were fast drawing to a close, owing to rapidly failing health. Mr. Dudley had for years been more or less of an invalid, having been compelled to give up the superintendency of the Kentucky School for the Deaf in 1884 on account of ill-health, when he moved to Colorado, and in 1885, having greatly improved, was placed at the head of the Colorado school, which at that time had anything but a savory reputation. Though not a well man, he soon brought order out of chaos and had the school running smoothly, but a return of the old trouble in 1887 compelled him to give up the work and take a year's rest. Regaining his usual health, he was appointed teacher, which position he held until 1894, when he was again elected superintendent, holding the place until March, 1899. Obtaining a leave of absence in November, 1898, he went to Redlands, California, in the hope of benefit from the change of climate, but the frail body had reached the limit, and in November, 1899, the wearied soul took its departure.

Through his frequent contributions to the literature of the profession. Mr. Dudley was widely known throughout the United States as one of the most earnest and well balanced men engaged in the work of educating the deaf. Possessed of a genial, kindly disposition, and real ability in his chosen line of work, he was liked and respected by all who knew him, and at his death was mourned as a friend as well as a benefactor to mankind.

CONCLUSION.

The Colorado School for the Deaf and the Blind has for years stood well in the estimation of those who know what such a school should be and do. That there is room for improvement no one will deny, but that the very best has been done with the means at your disposal cannot be gainsaid. Whatever of reputation the school may have gained is largely due to the broad-minded, progressive policy which has characterized this board of trustees for years, and for which I wish personally to express to you my gratitude as being one of the helpful elements in the successful prosecution of my work. Then, too, I must express here my sincere appreciation of the faithful service rendered the state by as earnest and efficient a corps of assistants as can be found in any school.

TWELFTH BIENNIAL REPORT

With the hope that a benign Providence may guide you in all your deliberations, and that the school may receive generous treatment at the hands of the coming legislature, I am,

Very respectfully,

W. K. ARGO, Superintendent.

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MUSICAL DIRECTOR'S REPORT.

W. K. Argo, Superintendent:

Complying with your request, 1 take pleasure in submitting the following report and suggestions:

There are at present thirty-five pupils receiving instruction in music, classified as follows: Piano, 32; piano and violin. S; piano, violin and tuning. 2; piano and tuning, 4; piano and voice, 2; violoncello, 1; guitar. 1; cornet, 1; violin, 1.

The harmony class, consisting of eleven pupils, is unfortunately limited to two sessions per week of forty-five minutes each. There is also an orchestra of eight members having three forty-five minute sessions per week. The choir meets five days in the week and has a thirty-minute session.

The work done last year was practically the same as this, except that now we have two more on the violin and four more in tuning.

Among those who have graduated during the past two years there are three who report some degree of success. From Miss Pearl Hawes, we learn that she is carrying the studies of the senior grade in the Idaho State Normal, and in addition is teaching a choral class of forty members and has all the piano and vocal pupils she can care for. Elmer Francis sends us gratifying statements of his success in piano tuning. John Myers is struggling bravely to establish himself in Canon City as a teacher and piano tuner and is meeting with some encouragement.

The efficiency of the department would be much enhanced if the practice rooms could all be adjacent to each other, thereby making supervision of practice possible and saving the time of the teacher in passing from one building to the other so frequently. It would also be wise to arrange the curriculum so that the older pupils intending to make music their life work could have at least four or five hours' practice per day and an opportunity to study musical history, literature and kindred subjects. This would necessitate a larger teaching force and more instruments. but I am quite sure that the results would demonstrate the wisdom of such a policy. The department is very much in need of a stereograph, and it could use with advantage two punctographs.

The tuning department is in need of one new upright piano action, a few minor tools and piano supplies. The stock which I brought with me being about exhausted, it would also be well if we could add a small reed organ to our equipment, for the purpose of teaching the tuning and cleaning the reeds. This brings me to my oft-repeated request, a pipe organ—by all means, please ask for one.

Very respectfully submitted,

A. L. BOHRER, Director of Music.

PHYSICIAN'S REPORT.

Colorado Springs, Colorado, December 1, 1900.

To the Board of Trustees of the Colorado School for the Deaf and the Blind:

In submitting to you my usual report upon the sanitary condition and healthfulness of the institution. I am glad to say that for the two years past the health of the pupils has been most excellent. The only serious case of illness was that of a little girl who contracted typhoid fever of a very virulent type at her home in Ouray and was ill with the disease when she entered the school last September. She made a complete recovery. There have occurred from time to time isolated cases of measles and mumps and the usual number of colds, etc.

In looking over the sanitary needs of the institution I must call your attention to my report of 1898, and again suggest and urge, as of the most vital importance, the radical change and improvement of the boys' baths in the main or old building. Located on the ground floor, the tubs and woodwork old and in decay, the room badly ventilated and lighted, makes a source of infection which may at any time prove disastrous. I would earnestly urge the removal of the tubs and that they be replaced by more modern and sanitary substitutes. I would also suggest and urge that the closets and urinals for the boys' use be removed entirely, if possible placed outside, and that the ground urinals at present in use be dispensed with altogether, bowl urinals being substituted in their place. The odors and objections to the ground urinals will be at once appreciated upon a visit and inspection of the room in which they are located. I must also again urge the importance of the removal of the old, worn out, and disease breeding material of the flooring of the ground floor of the main building. I deem these alterations and improvements absolutely necessary from a health point of view.

I need only add that the hospital building should, as formerly, always be kept in a state of preparedness or readiness for the reception of such cases as might spread disease if allowed to remain in the main buildings.

I would also suggest as an important adjunct to health and the proper development of the children a well appointed and equipped gymnasium. The addition and proper administration of the gymnasium would fully repay in the development and carriage of the pupils any cost incurred.

With the improvements and alterations suggested the institution would be in as perfect state of modern sanitation as possible. The low mortality of the past several years and the absence of mortality during the past two years is due to your watchfulness and assistance and cooperation with the manager and officers in adopting suggestions in regard to necessary sanitary improvements, for all of which I congratulate and thank you.

Very respectfully,

B. P. ANDERSON, M. D.

TREASURER'S REPORT.

Colorado Springs, Colo., December 6, 1900.

To the Board of Trustees of the Colorado School for the Deaf and the Blind:

I most respectfully submit herewith my report as treasurer of said school for the biennial term ending November 30, 1900:

	PROFIPTS		Tatal
Date	RECEIPTS	Amount	Total
1899			
Jan. 31	State warrant	\$ 2.764.45	
Feb, 13	Superintendent, board and tuition, non-residents	645-61	
Feb. 13	Superintendent, miscellaneous receipts	790-45	
Mar. 11	State warrant	3,800-00	
Mar 11	State warrant.	1,348-81	
April 4	State warrant	7,501 94	
April 12	Superintendent, board and tuition, non-residents	418 65	
April 12	Superintendent, miscellaneous receipts	605-56	
April 12	Interest on warrants	26	
April 12	Interest on warrants	65	
May S	State warrant	3,026-07	
June 9	Superiutendent, board and thition, non-resident.	166-16	
June 9	Superintendent, miscellaneous receipts	587 25	
July 17	State warrant	2,965-57	
Aug. 15	Superintendent, miscellaneous receipts	450.45	
Aug, 18	State warrant	4,712 40	
Aug. 18	State warrant.	6 800-00	
Nov. 4	State warrant.	1 397 87	
Nov. 4	Superintendent, board and tuition, non-resident	145 85	
Nov. 4	Superintendent, miscellaneous receipts.	193-86	
	• Carried forward		\$ 33 350 2 9

Date	RECEIPTS	Amount	Total
1899	Brought forward	\$ 38,350 29	
Dec. 6	Superintendent, board and tuition non-residents	915-80	
Dec. 6	Superintendent, miscellaneous receipts	369-65	
Dec. 6 1900	State warraut	2.412-58	
an, 15	State warrant	1 600 00	
Feb. 9	Superintendent, board and tuition non-residents	564 85	
řeb, 9	Superintendent, miscellaneous receipts	442 71	
⁷ eb. 22	State warraut	647-86	
Mar. 16	State warrant	2,412 88	
April 5	State warrant.	6,410-71	
April 6	Superintendent, board and tuition non-residents	910-80	
April 6	Superintendent, miscellaneous receipts	762-92	
April 11	State warrant	2 000 00	
April 13	State warrant	3 000 00	
May 2	State warrant.	3,000-00	
đay 11	State warrant	1 680 33	
une 13	Superintendent, board and tuition uou-residents	317-50	
une 13	Superintendent, miscellaneous receipts	881 87	
une 22	State warrant	1.200-00	
uly 20	State warraut	1,600-00	
ug. 9	Superintendent, miscellaneous receipts	529-38	
ug. 9	State warrant	4,200-00	
Aug. 22	State warraut	737-52	
Det. 1	State warraut	4,465 \$1	
oct. 8	Superintendent, board and tuition non-residents	550-00	
Det. 8	Superintendent, miscellaneous receipts	125 56	
Det. 10	State warrant	2 200 00	
lov. 5	State warrant	1 700 00	
Dec. 4	State warrant	1.650.00	
)ec. 6	Superintendent, board and tuition non-residents	916-65	
Dec. 6	Superintendent', miscellaneous receipts	188-57	
	Balance overdraft November 30, 1900	8.017-34	
			\$ 94 831 3

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TREASURER'S REPORT—Continued.

Dat	e	DISBURSEMENTS	Amount	Total
1895 Dec. 1595	-	Paid overdraft November 20, 1898	\$ 5 919 02	
eb,	9	Paid warrants 2617 to 2744, inclusive	8 197 87	
pr.	6	Paid warrants 2715 to 2871, inclusive	7,597-19	
une	6	Paid warrants 2872 to 2999, inclusive	7,718-06	
ug.	8	Paid warrants 3000 to 3083, inclusive	5,050 55	
oct	õ	Paid warrants 3084 to 3214, inclusive	7,073-62	
ec. 1900		Paid warrauts 3215 to 3339, inclusive	8,786-76	
eb.	8	Paid warrants 3340 to 3455, inclusive	8 420 71	
pr.	ð	Paid warrants 3456 to 3569, inclusive	7,680-33	
une	5	Paid warrants 3570 to 3678, iuclusive	7,737 52	
ug.	9	Paid warrauts 3679 to 3749, inclusive	1.465 \$1	
oct.	4	Paid warrants 3750 to 3876, inclusive.	7 350 70	
ec	6	Paid warrants 3877 to 4005, inclusive	\$ 806-74	
				\$ 94.534

TREASURER'S REPORT-Concluded.

SUMMARY.

RECEIPTS.

Auditor of state	\$ 75,243 77
Superintendent, board and tuition of non-residents	5,580-17
Superintendent, receipts from miscellaneous resources	5,963-60
Total	\$ 86,787.54
Overdraft December 6, 190.)	
Total	

DISBURSEMENTS

Paid overdraft December 8, 1898.		\$ 5,919 02	
Paid warrants 2617 to 4005 inclus	ive	88,915-86	
Total		 	\$ 94.834.85

BUILDING FUND.

RECEIPTS

189	8			
Dec.	1	By balance	\$ 1,149-55	
Dec.	6	By state warrant	1,500-00	
		By interest on state warrant	33 75	
		Total		2,683-00

DISBURSEMENTS.

159	~					
Apr.	7	To paid warrants 485 and 486, inclusive	\$ 164	36		
June	6	To paid warrants 4%7 to 494, inclusive	2,197	19		
Aug.	10	To paid warrant 495 .	266	50		
Oct.	5	To paid warrant 496	55	25		
		Total			\$ 2,683	30

Very respectfully,

A. J. LAWTON, Treasurer.

ITEMIZED STATEMENT OF EXPENSES

FROM DECEMBER 1, 1898 TO DECEMBER 1, 1900.

ITEMS	1899	1900	Totals
Clothing	\$ 456-18	\$ 390.70	\$ \$46 88
Drugs and hospital supplies	135-81	153 27	289/08
Dry goods, bedding, etc	571-60	511-19	1.682 19
Food	5,032 25	8,217-38	16 249 63
Freight and express	12 23	6 43	15 66
Fuel	1,937 23	1,685-57	3.622 80
Furniture	174-55	239-01	113-56
Garden	6-80	34 09	40-89
Groceries, not food	101 49	68-97	170-46
Household supplies	524 36	475 47	969 83
Improvements and repairs	2,628-96	1,931-14	4,560-10
Insurance	8 53	586 64	595-17
Interest	440 42	$547 \ 15$	987-57
I.auudry supplies	223 06	201 85	424-91
Library	26 90	47/22	74 12
Lighting	832 56	530-68	1,363-24
Live stock. vehicles, etc	145 95	141-18	287 13
Medical atteudance, dentistry, etc	216 50	308-12	524 62
Miscellaneous	85-68	116 29	201 97
Postage, telephone, etc	236 52	289 77	526-29
Printing and advertising	62 45	6 05	68-50
Provender	156 53	214 62	371-15
Salaries and wages	23,407-33	23,820 99	47,22× 32
School supplies	376-95	526 69	903-64
Shop expenses	1,725-32	1,967 12	3,692 44
Stationery and office supplies	70-30	\$8 50	158 80
Traveliug expenses	1,328-19	885 72	2,213 91
Water	500 00	500 00	1,000 00
Totals	\$ 44,424 05	\$ 44,491 81	\$ 58,915 86

To make above agree with treasurer's report add deficit tast report as follows:

Total itemized expenses Deficit last report	
Treasurer's total	\$ 94,834 88

LIST OF PUPILS

IN ATTENDANCE FROM NOVEMBER 30, 1898, TO DECEMBER 1, 1900.

DEAF.

NAME	Parent or Guardian	Postoffice	County
Alford, Luther	John N. Alford	Denver	Arapahoe
Allen, Charley	Mrs. W. T. Allen	Leadville	Lakc
Allen, Chas. Louis	Chas. L. Allen	Denver	Arapahoe
Ashton, Oscar	W. W. Ashton	Denver	Arapahoe
Baiers, Ada	Mrs. Mary Baiers	St. Louis	State of Missouri
Bailey, Fred	Mrs. Laura Bailey	Gunnison	Gunnison
Bates, Fred	A.E. Bates	Aspen	Pitkin
Bean, Pearlie	Albert J. Bean	Denver	Arapahoe
Beasley, Addie	Mrs. Laura Beasley	Wheatland	State of Wyoming
Bianchi, Lucy	Mrs. J. J. Bianchi	Altman	
Bourne, Ralph	Mrs. Frieda Bonrne	Eckert	Delta
Boycc, Martha	W. F. Boyce	Lamar	I.amar
Bradley, Roscoe	T. E. Bradley	Colo. Springs.	El Paso
Branum, Nicholas	A. Branum	Porter	I.a Plata
Brancr, Lena	Frank Braner	Villa Park	Arapahoe
Brinkerhoff, W.	Clark J. Brinkerhoff	Maucos	Montezuma
Brooks, Roy	Geo, W. Brooks	Fort Collins	
Cantonwine, Eddie	Martin Cantonwine	Longmont	Boulder
Carnahan, Leonard	Mrs. H. A. Carnahan	Kemmerer	. State of Wyoming
Castle, Nellie	Frauk J. Castle	Garden Valley	State of Idaho
Chaudler, Chas	V. H. Chandler	Yale	Kit Carson
Chelius, Anna	Peter Chelius	Grand Junction	Mesa
Clarke, Wallace	Robert Clarke	Denver	Arapahoe
Clesson, John	Gabriel Clesson	La Junta	Otero
Collins, Thomas	C. W. Collins	Longmont	Boulder
Connell, Ralph	Robert Connell	Deuver	Arapahoe
Cummings, Ray	John R. Cummings	Golden	Jefferson
Cunningham, Walter	Wm. Cunungham	Calvert	State of Kansas
Cunningham, Ben	W. D. Cunningham	Victor	El Paso
Decker, Daniel.	Mrs. Mary O'Brien	Denver	Arapahoe
Downes, Agnes	Mrs. J. P. Downes	Evanston	State of Wyoming
Drumm, Edua	August Drumm	Denver	Arapahoe
Duffy, Ella	Mis, II M. Duffy	Denver	Arapahoe

SUPERINTENDENT OF PUBLIC INSTRUCTION. 413

LIST OF PUPILS

IN ATTENDANCE FROM NOVEMBER 30, 1898, TO DECEMBER 1, 1900.

NAME	Parent or Guardian	Postoffice	County
Dunbar, Flora	Jas. Duubar	Mosca	Costilla
Edmouds, Guertha	W. H. Edmonds	Pinewood	Larimer
Evans, Grover	Walter Evans	Mcridiau	State of Idaho
Fernandez, Agapita	Antonio Fernandez	Weston	Park
Fiedler, Lida	Chas. Fiedler	Holyoke	Phillips
Forse, Albert	Albert T. Forse	Denver	Arapahoe
Fox. Hugh	Mrs. Mary A. Fox	Denver .	Arapahoe
Frazer, Richard.	Mrs. Wm Frazer	Denver .	Arapahoe
Frazziui, Franz	Felix Frazzini	Denver	Arapahoe
Furstenfeldt, Fred	Mary Furstenfeldt	Denver	Arapahoe
Gajewiski, Frauk	Michael Gajewiski	Denver	Arapahoe
Gallegas, Frank	Melquides Gallegas	Weston .	Las Animas
Gallegas, Marcelina	Malquides Gallegas	Weston	Las Animas
Garrison, Frauk	Mrs. Agnes Garrison	Pueblo	Pueblo
Greenwald, Willie	V. Greenwald	Denver	Arapahoe
Harris, Lizzie	John Harris	Leadville	I,ake
Hart, Nellic	Frank Hart	Nampa	State of Idaho
Hart, Walter	Frank Hart	Nampa	State of Idaho
Harvat, Leon	Mrs. A. C. Harvat	Denver	Arapahoe
Hays, Le Roy	Lee Hays	Loveland	Larimer
Henry, John	James Henry	Elizabeth	Elbert
Hill, Geo.	Mrs. G. M. Hill	Denver	Arapahoe
Holcomb, Frank	Thomas Holcomb	Florence	Fremont
Horton, Frank	Mrs. W. S. Horton	Denver	Arapahoe
Hosea, Stephen	John Hosea	Rockvale	Fremout
Howe, Perry	Mrs. L. E. Howe	Durango	La Plata
Johnson, Bert	Jas. M. Johnson	Golden	Jefferson
Kennedy, Linnie	Mrs. E. Kennedy	Colo, Springs	El Paso
Kesterson, Wm. E.	W. N. Kesterson	San Luis	Costilla
Ketler, Walter	H. L. Ketler	Pueblo	Pueblo
Knudsen, Karl	B. Knudsen	Denver	Arapahoe
Laue, Robert	Mrs. F. Knight	Langford	Boulder
Maneval, Alice	Louis Maneval	Colo. Springs.	El Paso

DEAF-Continued.

TWELFTH BIENNIAL REPORT

LIST OF PUPILS

IN ATTENDANCE FROM NOVEMBER 30, 1898, TO DECEMBER 1, 1900.

DEAF-Continued.

NAME	Parent or Guardian	Postoffice	Couuty
Martinez, Carmalita	F. Martinez	Starkville	Las Animas
Masser, Henry	C B. Masser	Fruita	Mesa
Mauldin, Emma	A. C. Mauldin	La Veta	Huerfano
Meddings, Elsie	Mathew Meddings	Pueblo	Pueblo
Metcalf, Harry	H D. Metcalf	Silver Cliff	Custer
Moore, Fred	L. W. Moore	Colo, Springs	
Morgan, Harriet	Wm. O. Morgan	Wigwam	
Mosey, Baxter	Geo. Mosey	Evanston	State of Wyoming
McGowan, Eddie	Mrs. A McGowan	Deuver	Arapahoe
Neal, Alta J.	C.C Neal	Denver	Arapahoe
Neil, Mary	W. A. Neil	Denvcr	Arapahoe
Nelson, Fred	R. Nelsou	Ft. Morgan	Morgan
Nichols, Beatrice	John Nichols	Black Hawk	
Orton, Roy	Geo, W. Orton	Hooper	Costilla
Patch, Laura	J. W. Patch	Edwards	Eagle
Patterson, Birdie	N. F. Patterson	Pueblo	Pueblo
Pearce, Madie B	Frauk E. Pearce	Monte Vista.	Rio Grande
Peter, Ammon	S. B. Peter	Spinney	
Peterson, Adolph	C. J. Peterson	Laramie	. State of Wyoming
Petrie, Grant	Alouzo Petrie	Golden	Jeffersou
Pierce, Albert	J. N. Pierce	Leadville	
Porter, Mary	N. B. Porter	Franklin	
Roller, Winnie.	W. W. Roller	Salida	Chaffee
Romero, Alcauta	Felipa Romero	Durango	La Plata
Romero, Eufemia	Felipa Romero	Durango	La Plata
Romero, Timotio	Felipa Romero	Duraugo	La Plata
Rowe, Elizabeth	Lewellyn Rowe	Rowe	Prowers
Runge, Emerel	J. E. Runge	South Denver-	Arapahoe
Sabott, Joseph	Michael Sabott	Pueblo	Pueblo
Seavey, Nina	G. A. Seavey	Colorado City.	
Shaner, Joseph	Jacob Shaner	Denver	Arapahoe
Skovholt, Marie	Gustav Skovholt	Boulder	Boulder
Smith, Mary	W. G. Smith	Golden	. Jefferson

LIST OF PUPILS

IN ATTENDANCE FROM NOVEMBER 30, 1898, TO DECEMBER 1, 1900.

NAME	Parent or Guardian	Postoffice	County
Suow, Blauche	P.E. Suow	Cheyenne	. State of Wyoming
Sullivau, Lottie	T. C. Sullivan	Deuver	Arapahoe
Sympson, Mabel	II. B. Sympson	Sueffels	. Ouray
Taylor, Nellie	Nelson Taylor	Granada	Prowers
Taylor, Lucy	E, B. Taylor	Deuver.	Arapahoe
Taylor, Ory	E, J. Stockwell	Loveland.	Larimet
Thompson, Lillie	H. F. Thompson	Pneblo .	
Toles, Hattie	John Toles	Rifle	Garfield
Tuskey, Jas	Wm. Tuskey	Gr. Junction	
Vijil, Hnberto.	Isidoro Vijil	Gulnare	Las Animas
Wallaesa, Chas	Harry H. Wallaesa	Leadville	Lake
Williams, Edith	Edward Williams	Denver	Arapahoe
Williams, Jay E.	Dr. Geo. T. Williams	Avoudall	
Williams, Edua P	W. J. Williams	Denver	Arapahoe
Williams, Ada	Miss M. Phillips	Lafayette	Boulder
Winters, Agnes	F. S. Winters	Gunnison	Gunnison
Washburn, Cora	Mrs. Etta Washburn	Trinidad	Las Auimas
Wooden, Ralph	R. Wooden	Colo, Springs.	
Young, Ethel	Mrs E. F. Scott	Denver	Arapahoe
Zeiler, Jacob	Henry Zeiler	Sugar City	

DEAF-Concluded.

TWELFTH BIENNIAL REPORT

LIST OF PUPILS

IN ATTENDANCE FROM NOVEMBER 30, 1898, TO DECEMBER 1, 1900.

BLIND.

NAME	Pareut or Guardian	Postoffice	County
Adamsou, Bruce	Mrs. L. Adamson	Colo. Springs	
Adamson, Helen	Mrs. I., Adauson	Colo Springs	El Paso
Anderson, Emil	Mrs. Thilea Anderson	Loveland	Larimer
Balfour, Carl	Mrs. H. H. Dorsey	Colo.Springs.	El Paso
Bantz, Lucile	Mrs, Laura M. Bautz	Silver City	State of New Mexico
Bieber, Henrietta	William Bieber	Denver	Arapahoe
Botefur, Minnie	Fritz Botefur	Del Norte	Rio Grande
Braley, John	John W. Braley	Franklin	State of Idaho
Brose, Clara	Mrs. Helen Brose	Ft. Collins	Larimer
Brunk, Daisy	Mrs. G. M. Brunk	Deuver	Arapahoe
Cheatley, Pauline	John F. Cheatley	Russell Gulch .	Gilpin
Coe, Elisco	John P. Coe	Stouewall	
Cope, Fred	Mrs. A. B. McMillan	Leadville	
Cowan, Arvel	Marion Cowan	Colo.Spriugs	
Cowan, Willie	Marion Cowau	Colo. Springs	El Paso
Davis, Ralph	Mrs. A. C. Veruer	Deuver	Arapahoe
Davis, Ella	Dr. L. L. Davis	Platteville	Weld
Drury, Dena	Mrs. I., Wiemau	Towner	
Dunham, Ethel	Alfred Dunham	Norwood	San Miguei
Farley, Roland	John C. Farley	Victor	El Paso
Fegan, Rose	Hugh Fegan	Boulder	Boulder
Finley, Lizzie	Mrs W. M. Jones	Pueblo	Pueblo
Fisher, Ray	William H, Fisher	Denver	Arapahoe
Francis, Elmer	Clinton Francis	Moscow	State of Idaho
Gay, Wilfred	Dr. A. Gay	Colo. Springs	El Paso
Green, Ava	Ella Greeu	Canon City	Fremont
Hardin, Mattie	J. W. Hardin	Rye	Pueblo
Harris, Charlton	Mrs. II, E. Harris	Denver .	Arapahoe
Hawes, Pearl	B. F. Hawes	Boise	
Hayes, Amelia	Flagler Hayes	Colo, Springs	El Paso
Herpick, Auna	August Herpick	Denver	Arapahoe
Higby, Myrtle	Mrs. N. L. Turner	Golden	
Higgiusou, James	W, T, Higginsou	Hatch	State of Idaho





RURAL SCHOOL, DISTRICT NO. 69, ARAPAHOE COUNTY.

LIST OF PUPILS

IN ATTENDANCE FROM NOVEMBER 30, 1898, TO DECEMBER 1, 1900.

BLIND-Concluded.

NAME	Parent or Guardian	Postoffice	County
Hubbard, W. O.	D. P. Hubbard .	La Salle	
Irvin, Nannie	Mrs. Hannah Irvin	Boulder	Boulder
Johnson, Omar	David Johnson	Malta	Lake
Jones, Ivy	Marion Jones	Colo, Springs.	El Paso
Jones, Geo.	F. E. Jones	Evanstou	State of Wyoming
Kerr, Chester	Fied Kerr	Sheridan	State of Wyoming
Koch, Willie	Geo, Koch.	Sugar City	
Lesher, Ella	Frank Lesher	Ft. Collins	Larimer
Light, Chas	M. Light	Peytou	
Manning, Frankie	Frank Manning	Canou City	Fremont
Mestas, Claudio	Mrs. Mannela Mestas	San Pablo	Costilla
Mills, Mary	J. C. Mills	Garden Valley	State of Idaho
Moyer, Ruth	Mrs. Lena Webber	Deuver	Arapahoe
Myers, John	John Myeis	Colo. Springs	El Paso
McGregor, Robin	A. J. McGregor	Colo. Springs.	El Paso
McIntosh, Thos.		Sunlight	Garfield
O'Graske, Emil	Ernest O'Graske	West Cliffe	Custer
Quinn, Willie	Mrs. J. Quinn	Denver	Arapahoe
Ruiz, Delida	Francisco Ruiz	Weston	Las Animas
Rudd, Lizzie	Thos. E. Rudd	Cripple Creek	Teller
Salazar, Albino	Manual Salazar	Torres	Las Animas
Semple, Robert	Miss Belle Semple	Colo. Springs	El Paso
Severn, Frank	Harry Severn	Cripple Creek.	Teller
Smoot, Mary	Mrs, Geo, Smoot	Caldwell	State of Idaho
Taylor, Walter	Argo Taylor	Saguache	Saguache
Todd, Eliza	Mrs. A. J. Francis	Boulder	Boulder
Trout, Lawrence	Joseph Trout	Aspen	
Wade, Joe	H. R. Wade	Prospect	State of Idabo
Wade, Ellis	H. R. Wade	Prospect	State of Idaho
Warren, Mable	Mrs. Mary E. Warreu	Nampa	State of Idaho
Watt, Sidney	Mrs. A. C. Watt	Elyria	Arapahoe
Williams, David	Mrs. Margaret Williams	Highland	Arapahoe
Wilson, Royal	W. R. Wilson	Aspeu	P tkin
Wood, Frank		Peyton	El Paso
Wyatt, Jessie	D. B. Wyatt	Greeley	weld
Zilk, Millie	Adam H. Zilk	Elizabeth	Elbert

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APPENDIX.

EXHIBIT A.

SHOWING OFFICERS, TEACHERS AND OTHER EMPLOYEES AND THEIR SALARIES.

NAME	Resident or Non-Resident	Position	Salary
W. K. Argo	Resident	Superintendent	\$ 1,500 00
J. Will Valien	Resident	Clerk	300 00
G. W. Veditz	Non-resident	Teacher of the deaf	1,300 00
E. C. Campbell	Non-resident	Teacher of the deaf	1,100 00
M. E. Griffin	Resident	Teacher of the deaf	650-00
Hermine Haupt	Resident	Teacher of the deaf	650 00
Belle C. Argo	Resident	Teacher of the deaf	650-00
Alice W. Ely	Resident	Teacher of the deaf	550-00
Jessie G. Dudley	Resident	Teacher of the deaf	500-00
Elizabeth Rice	Resident	Teacher of the deat	400 00
Mrs. G. W. Veditz	Non-resident	Special teacher deaf and blind	300-00
H. R. Chapman	Non-resident	Teacher of the blind	1,100 00
Jessie Baker	Non-resident.	Teacher of the blind	750-00
Mrs. A. L. Bohrer	Resident	Teacher of the blind	650-00
Myrna Woodruff	Resident	Teacher of the blind	550-00
A. L. Bohrer	Resident	Teacher of music and piano tuning	900-00
M. E. Churchman	Resident	Teacher of music	650-00
Karl Ness	Non-resident	Teacher of violin	180-00
C. C. Owen	Non-resident	'Feacher of carpentry .	1,000-00
H. M. Harbert	Non-resident	Teacher of printing.	800-00
J. W. Ayres	Non-resident	Teacher of shocmaking	260-00
R. Smith	Resideut	Teacher of broom and mattress making	360-00
Emma C. Allen	Resident	Teacher of sewing (deaf)	300 00
Anna Harriugtou	Resident	Teacher of sewing (blind)	250 00
J, W, Taylor	Resident	Eugineer.	780 00
Mrs. J. W. Taylor.	Resident	Matron	500-00
Rudolph Valien	Resident	Supervisor of boys and storekeeper	360-00
Olga Bright	Resident	Supervisor of boys.	300-00
Elizabeth Osgood	Resident	Girls' matron	400-00
Sadie Young	Resident	Supervisor of girls	250 0.)
Charles Beals	Resident .	Fireman, per month	25/00
J. H. Marshall	Resident	Night watch, per month.	30 00
John Reynolds	Resident	Baker, per month	35-00

APPENDIX.

EXHIBIT A Concluded.

SHOWING OFFICERS, TEACHERS AND OTHER EMPLOYEES AND THEIR SALARIES.

NAME	Resident or Nou-Resident	Position	Salary		
Vincent Gray	Resident	Head cook, per month	\$	45 00	
Jacob Rowe	Resident	Assistant cook, per month		30 00	
Lolo Giles	Resident	Head laundress, per month.		35 00	
Ella Duff	Resident	Assistant laundress, per month		30 00	
Anna Burkland	Resident	House girl, per month		25 00	
Ella Dickens	Resident	House girl, per month		25 00	
Minnie Reynolds	Resident	House girl, per month		25 00	
Tina Thompson	Resident	House girl, per month		25 00	
Ed Kimball	Resident .	Jauitor and hostler, per month		25 00	

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EXHIBIT B.

INFORMATION REGARDING NEW PUPILS ADMITTED SINCE LAST REPORT.

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	Admitted	Sept. 6, 1899	Sept. 6, 1899	Sept. 6, 1899	Sept. 6, 1899	Sept. 6, 1899	Sept. 6, 1899	Sept, 6, 1899	Sept 10, 1899	Sept 10, 1×99	Sept 15, 1899	Sept.15, 1899	Oct., 1899	Nov. 7, 1899	Jan. 1, 1900	Jan. 12, 1900	Jan. 22, 1900
	Partial or Total A	Total Se	Total Se	Total Se	Partial Se	Partial Se	Total Se	Total Se	Partial Se	Total Se	Partial Se	Partial Se	Total Oc	Partial No	Total . Ja	Total Ja	Total Ja
	Deaf Relations	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
	Parents Related	No	No	No	No	No	No	Yes	No	No	No	No	No	No	No	Yes	No
	Born in	Colorado	Colorado	Kansas	Nebraska	Missouri	Colorado	Norway	Utah	Nebraska	Colorado	Kansas	Kansas	Oklahoma	Pennsylvania	Kansas	Illinois
UEAL.	Cause	Scarlet fever	Spinal trouble		Spinal meningitis	scarlet fever	Scarlet fever		Pneumonia	I.a grippe	Scarlet fever	Measles	Catarrh		Injured intervally	Fever, abcess	Catarrh
	Became Deaf	8 years, 6 months	15 years	Congenital	10 months	6 years, 3 months .	11 years	Congenital	Unknown	I year, 8 months	2 weeks	1 year	11 years	Congenital	3 days	18 months.	² years
	Date of Birth	Apr. 14, 1890	Oct 22, 1883	Dec. 9, 1888	Jan. 16, 1888	Sep. 10, 1890	July 25, 1886	Jan.14,1891	Dec. 11. 1893	Mar.24,1892	Mar. 8, 1592	Dec, 10, 1889	Apr. 6, 1885	Sep. 29, 1593	Nov. 9, 1883	Sep. 8, 1867	June 1, 1×90
	NAME	Carpahan. Harry	Forse, Bert	Holcomb, Frank	Ноwe, Реггу	Moore, Fred.	Pierce, Albert	Skovholt, Marie	Allen, Charley	Porter, Mary.	Harvat, Leon	Sympson, Mable	Fox, Hugh	Neal, Alta J.	Wallaesa, Charles	Williams. Jay	Bradley, Roscoe
	No.	259	260	261	262	263	195	263	266	264	265	269	270	112	272	273	110

Partial Mar. 4, 1900	Sept6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Nov. 1, 1900
Ma		_						. Sep						
Partial	Total	Partial	Partial	Partial	. Total	Partial	Total	Total	Partial	Total	Partial	Total	Partial	Total
Noue	None	None	None	None	2 aunts and uncle Total	Noue	None	None	None	None	None	None		Noue
No		***	No.	No	No.	No	No	No	No	No.	No	No.	No	No
Russia	Mitsouri	Colorado	Colorado	1daho	Wyoming	Idaho	Colorado	Colorado	Illinois	Kausas	Kansas	Russia	Kansas	Kansas
Typhoid fever.		Scarlet fever	Scatlet fever	Caught cold		Sickness	Iuflammation ear	Scarlet fever			Scarlet fever		ŀtever	Eruption
4 years	Congenital	4 years	2 years	Birth	Congenital	18 months.	4 years	Feb. 15, 1894 2 years, 6 months .	Congenital	Congenital	8 years	Congenital .	18 months.	2 years
Jan. 10, 1891 4 years	Feb. 16, 1891 Congenital	Jau. 5, 1885 4 years	Oct. 21, 1889	Apr. 10, 1892	May 7, 1891 Congenital	Oct. 18, 1892	June 25, 1886 4 years	Feb. 15, 1894	May 27, 1893	Nov. 1, 1892	June 1, 1888 8 years	May 24, 1886 Congenital	May 19, 1886 18 months.	Jan. 27, 1%66 2 years
Shaner, Joseph.	Altord, Luther	Bates, Fred	Cantonwine, Eddic .	Castle, Nellie	Collins, Thomas	Evans, Grover	Manldin, Emma.	Pearce, Madie	Rowe, Eflizabeth	Taylor, Lucy	Williams, Edna P.	Zeiler, Jacob	Masser, Henry	Washburn, Cora
672	516	277	513	279	250	281	282	283	284	285	286	287	288	289

•

EXHIBIT B-Concluded.

INFORMATION REGARDING NEW PUPILS ADMITTED SINCE LAST REPORT.

BLIND.

1	p	1883	1888	1899	1899	1899	1899	1899	1899	1899	1899	1899	8, 1900	1900	1900	0061	0061
	Admitted	Sept.,	Sept. 5, 1888	Feb. 21, 1899	Sept. 6, 1899	Sept. 6, 1899	Sept. 6, 1899	Sept. 6, 1899	Sept. 6, 1899	Sept. 6, 1899	Sep. 14, 1899	Oct. 22, 1899	Jan. 8, 1	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900
	Partial or Total	Partial Se	Partial S	Partial P	Partial S	Partial S	T'otal S	Partial S	Total S	Partial S	Partial S	Partial 0	Partial Ja	Partial Sc	Total S	Partial Se	Partial S.
	Blind Relations	Sister	None	None	Nephew of Mother's	None	Aunt	None	None	None	None	None	None	None	None	None	None
	Parents Related	No	No	No	No	No	No	No	No	No	No	No	No	*******	Second cousins	Third cousins	No
	Born in	Ohio	Ohio	Colorado	Kansas	Colorado	Utah	w. virgiuia .	Idaho		Misscuri	Colorado	Colorado	Hungary	Tennessee	Missouri	Colorado .
10TUTPTCC	Cause				Undeveloped retina	Improper care	Unknown	Explosion		Unknown	Unknown	Scarlet fever	Teething	Fall	Measles	Fall	Knife
	Became Blind	Congenital			13 years	10 days	10 years	10 years	Congenital		10 years	2 years, 9 months.	5 months	4 years	2 years	10 months	8 years
	Date of Birth		Mar 18, 1880	July 15, 1886	Dec. 18, 1894 13 years	June 18, 1892	Feb. 28, 1882	Oct. 17, 1885 10 years .	Sep. 26, 1889	Aug. 30. 1887	Aug. 21, 1884	July 21, 1892	Oct. 7, 1891	Sep. 28, 1847	Dec. 19, 1879	Jan. 19, 1~6	May 15, 1991
	NAME	Adamson, Bruce	Hubbard, W. O.	Watt, Sidney	Finley, Lizzie	Harris, Charlton	Higginson, Jas	Johnson, Omar	Wade, Ellis	Zillk, Millie	Bantz, Lucile	Fisher, Ray	Quinn, Willie	Bieber, Heurietta	Braley, John	Cowan, Arvel	Dunham, Ethel.
	No.	124	125	126	127	125	129	120	131	132	133	134	135	136	137	138	139

TWELFTH BIENNIAL REPORT

SUPERINTENDENT OF PUBLIC INSTRUCTION. 423

Partial Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1900	Sept. 6, 1200	Sept. 6, 1900	Sept. 6, 1900	Sept. 15, 1900	1
Partial	Partial	Total	'fotal	Total .	Total	Partial	Partial	Partial	Total	
None	Two	None	None.	None .	Brother	Gt. grandfather	None	None	None	
No	No Two	Distant	No	No	No	Nu	No	No	No	
Colorado	Kansas	Nebraska	Idaho	Nebraska	Idaho	New Mexico.	Colorado No	Idaho	Missouri	
Accident	Cataract.	Inflammation.	Scarlet fever	Shot in eye			Stomach trouble .		Eczema	
5 years	5 months	6 months	7 years	10 years	Congenital	Congenital	6 months	Congenital	13 months	
Mar. 17, 1892 5 years	Nov. 24, 1883 5 months	Dec. 23, 1890 6 months.	Mar. 16, 1584 7 years	Nov, 16, 1883 10 years	July 15, 1881 Congenital.	May 4, 1891 Congenital	June 10, 1892 6 months .	June 9, 1891 Congenital	Aug, 18, 1883 13 months.	
140 Farley, Roland	141 Gay, Wilfred	142 Koch, Willie	113 Mills, Mary	Trout, Lawrence.	145 Wade, Joe	146 Warren, Mable	117 Wilson, Royal	148 Smoot, Mary	149 Kerr, Chester	
1.10	141	140	113	144	145	146	117	148	149	

EXHIBIT C.

GIVING STATISTICS AS TO ENROLLMENT. CAUSES OF DEAFNESS, ETC., FROM THE BEGINNING OF THE SCHOOL TO NOVEMBER 30, 1900.

TABLE I.

SHOWING THE ENROLLMENT FOR EACH SESSION, THE NUMBER OF NEW PUPILS ADMITTED EACH SESSION, AND THE TOTAL ENROLLMENT FROM THE ESTABLISHMENT OF THE SCHOOL TO THE PRESENT TIME, IN-CLUDING THE SESSION OF 1900-1901 TO NOVEMBER 30.

DEAF DEPARTMENT.

SESSION	Enrolled	New Pupils	Total Enrolled to Date
1874-1875	13	13	13
1875-1876	18	7	20
1876-1877	21	4	24
1877-1878	25	5	29
1878-1879	27	5	34
1879-1880	30	6	40
1880-1881	38	9	49
1881-1882	39	6	55
1882-1883	40	9	61
1853-1851	42	7	71
1884-1885	38	3	74
1885-1886	35	7	81
1886-1887	43	5	86
1887-1888	19	4	90
1888-1889	62	19	109
1889-1890	75	22	131
1890-1891	50	11	142
1891-1892	55	17	159
1892-1893.	83	21	150
1893 1894	\$3	17	197
1894-1895	75	9	206
1895-1896	78	16	202
1896-1897	79	11	233
1897-1898	85	17	250
1898-1899	82	9	259
1899-1900	81	16	275
1900-1901	87	11	289

EXHIBIT C—Continued.

TABLE 1- Concluded.

SESSION	Enrolled	New Pupils	Total Enrolled to Date
1883-1884	10	10	10
1884-1885	10	2	. 12
1885-1886.	19	11	23
1886-1887	20	3	26
1887-1888	18	1	27
1888-1889	28	10	37
1889-1890	33	8	15
1890-1891	42	13	58
1891-1892	45	11	69
1892-1893	47	~	77
1893-1894	52	12	*9
1894-1895	53	7	96
1895-1896	50	6	102
1896-1897	55	8	110
1897-1898.	56	9	119
1898-1899	44	6	125
1899-1900	47	9	134
1900–1901	52	15	149

BLIND DEPARTMENT.

Total enrollment to date, deaf and blind, 438.

EXHIBIT C-Continued.

TABLE II.

SHOWING AGES AT WHICH THE 289 PUPILS IN THE DEAF DEPARTMENT BE-CAME DEAF, AND THE 149 PUPILS IN THE BLIND DEPARTMENT BECAME BLIND.

AGE	Deaf	Blind
At birth	76	27
At two years or under	105	27
At five years or under.	46	20
At ten years or under	22	22
At fifteen years or under	7	22
Over fifteen years	2	12
Age unknown	31	19
Totals	289	149

EXHIBIT C—Continued.

TABLE III.

SHOWING THE PLACE OF BIRTH OF THE 289 DEAF PUPILS AND THE 149 BLIND PUPILS ENROLLED TO DATE.

PLACE OF BIRTH	Deaf	Blind
Arkansas	1	1
Colorado	95	45
Florida	1	
Georgia	1	
Idaho	6	4
[llinois	19	4
Indiana	2	6
Indian Territory	1	
Iowa	10	9
Kausas	29	13
Kentucky	2	
Massachusetts		2
Michigan	1	2
Minnesota	3	
Mississippi	1	1
Missouri	9	8
Montana	1	
Nebraska	12	5
New Mexico	2	5
New York	5	9
Ohio	5	- 8
Oklahoma	1	
Pennsylvania		
	5	1
South Dakota	2	1
fennessee	1	1
Fexas	3	1
Utah	8	2
Vermont		1
Visconsin	4	2
·		1
Wyoming	6	2
Canada	1	2
Denmark	3	2

EXHIBIT C—Continued.

TABLE III-Concluded.

PLACE OF BIRTH	Deaf	Blind
England		5
Hungary		1
Ireland		1
Italy	1	
Norway	2	
Prussia	1	
Russia	1	2
Scotland	2	
Sweden	1	1
Wales		1
Unknown	41	ĩ

TABLE IV.

SHOWING ASSIGNED CAUSES OF DEAFNESS AND BLINDNESS IN 2-9 DEAF AND 149 BLIND PUPILS.

DEAF.

CAUSE	No.	CAUSE	No
Accident	4	Impure blood	1
Boils in head	1	Measles	11
Brain fever	10	Muscular rheumatism	1
Catarrh	10	Paralysis.	1
Cholera infantum	1	Pnenmonia	4
Congenital	75	Scarlet fever	32
Cold	13	Scarlet fever and meningitis	2
Diptheria	4	Spasms	4
Diptheria and meningitis	1	Spinal meningitis	31
Ernption	7	Snnstroke	1
Erysipelas	1	Teething	4
Fall	5	Throat disease	1
Fever.	7	Typhoid fever	6
Fits	1	Whooping cough	9
Inflammation	1	Worms.	1
Influenza	4	Unknown	35

EXHIBIT C-Continued.

TABLE IV-Concluded.

No.	CAUSE	No
6	Measles	7
1	Medicine	1
1	Pitch fork	1
1	Pneumonia and measles	1
Ĵ)	Poison	1
27	Scrofula	2
1	Scarlet fever	5
2	Smallpox	6
6	Snow ball	1
1	Snow blind	1
1	Spec. Optha	2
1	Spinal meningitis	7
2	St. Vitas dance	1
5	Stigmatism	1
1	Strain	2
4	Struck by fork	1
2	Stomach trouble	1
3	Teething	1
1	Undeveloped retinea	1
16	Whooping cough	1
1	Unknown	17
	6 1 1 5 27 1 2 6 1 1 1 2 5 1 4 2 3 1	6 Measles 1 Medicine

BLIND.

EXHIBIT C—Continued.

TABLE V.

Showing kinship as reported in 289 cases of deafness and 149 cases of blindness.

DEAF.

 $1. \ {\rm In} \ {\rm seven} \ (7) \ {\rm cases} \ {\rm of} \ {\rm deafness}, \ {\rm the} \ {\rm parents} \ {\rm were} \ {\rm related} \ {\rm before} \ {\rm marriage}.$

2. Two (2) deaf pupils have deaf parents.

3. Thirty-four (34) deaf pupils have deaf relatives.

BLIND.

1. In three (3) cases of blindness, the parents were related before marriage.

2. No blind pupil has blind parents.

3. Fifteen (15) blind pupils have blind relatives.

EXHIBIT C—Concluded.

TABLE VI.

SHOWING AGES AND TIME IN SCHOOL OF 88 DEAF AND 52 BLIND PUPILS, ENROLLED THE PRESENT SESSION UP TO NOVEMBER 30, 1900.

AGE	Number of Pupils			Number of Pupils	
	Deaf	Blind	TIME IN SCHOOL	Deaf	Blind
Six years	I		No years	14	15
Seven years	3		One year	14	~
Eight years	7	4	Two years	13	3
Nine years	10	15	Three years	6	3
Ten years	2		Four years	10	3
Eleven years	ī	ă	Five years	б	I
Twelve years	9		Six years	2	3
Thirteen years	ī	4	Seven years	ō	3
Fourteen years	14	5	Eight years	4	1
Fifteen years	5	ī	Nine years		3
Sixteen years	3	2	Ten years	3	ō
Seventeeu years	5	5	Eleveu years	8	
Eighteen years	ā	2	Twelve years	2	1
Nineteen years	5	1	Thirteen years		I
Twenty years	ō	ő	Fourteen years	1	2
Twenty-one years		2			
Twenty-three years		2			
Twenty-five years		1			
Twenty-six years		1			

Average age of deaf	1312	years
Average age of blind	15	years
Average time in school of deaf	41/3	years
Average time in school of blind	4½	years

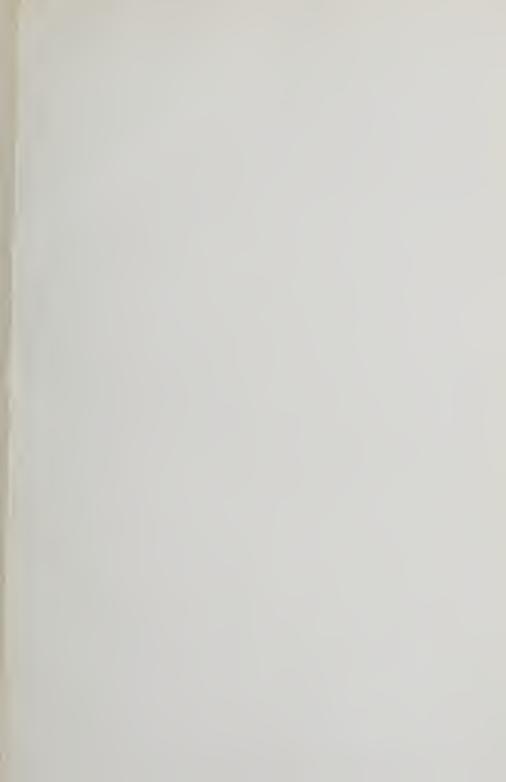
GENERAL INFORMATION CONCERNING THE COLORADO SCHOOL FOR THE DEAF AND THE BLIND.

CHARACTER OF THE SCHOOL.

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 school 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. To 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 receive 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 has had buildings erected and equipped for the deaf and the blind at this school. The general management is under the control of a board of trustees, five in number, residents of the state. The administration of the affairs of the school is intrusted to competent and experienced officers and teachers. who are familiar with the methods employed ln 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-one, actual residents of Colorado, are entitled to admission to the school 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. Tuition, board and washing, medicines and medical attendance, books and apparatus used in teaching, in short, everything is furnished free of charge except clothing and traveling expenses. In cases of absolute poverty, the respective countles assume the expense of traveling and clothing. While no persons are taken into the school for the purpose of giving medical treatment, all children coming to us are examined by a specialist and treatment is given wherever it is needed. The slck have the very best of care and attention.





RURAL SCHOOL, DISTRICT NO. 10, LARIMER COUNTY.

SESSIONS.

The school opens on the first Wednesday of September and closes on the first Wednesday of the following June, 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 comnunicate 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, shoemaking, 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, needlework 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.

Persons desirous of entering children should carefully observe the following:

First—A child once entered is expected to remain until the close of the session and not be withdrawn without the consent of the superintendent, and in case pupils are withdrawn without his consent, they forfeit the right to the privileges of the school unless permitted to return by special action of the board of trustees.

Second—All pupils expecting to attend the school should be sent promptly on the opening day and such as are not entered within fifteen days after the opening, except for such reasons as are deemed valid by the superintendent, shall be denied admission until the opening of the next school year.

Third—All children should, if possible, be vaccinated before entering.

Fourth—Parents must furnish postage in all cases and may hear from their children in proportion to the amount furnished. The session lasts about forty weeks. Parents sending us fifty cents (50 cts.) may hear from their children once a week, ten letters and thirty postals. Those who do not furnish postage will not hear except in case of illness, when a report is made daily until the child is out of danger.

Fifth—A contingent fee of \$5 should be deposited in every case to purchase such articles as clothing, shoes, etc., likely to be needed during the session. A strict account will be kept of all expenditures and an itemized statement made at close of the school year. Clothing and shoes may be sent from home or purchased by us here, but nothing will be furnished without the cash beforehand except in the case of county pupils. Sixth—All clothing should be of good quality and well made, with buttons sewed on tightly. Good shoes are cheapest. Woolen underwear or woolen stockings are not needed unless the child be very delicate. Our children romp and play a great deal, as all healthy children should, and are consequently very hard on clothing. All articles should be plainly marked. The best way is to sew in the name in turkey red, which will last as long as the garment.

Seventh—Parents will be expected to pay for property wantonly destroyed by their children. We find that nothing makes children so careful as to know that the parent is held responsible for their carelessness, and parents are as much interested as we are in raising their children to a right appreciation of their responsibilities in life.

Eighth—While we are always glad to have parents visit their children, they cannot be entertained at the school. Parents are at liberty to have their children stay with them down town over night, but not to interfere with the class work when it can be helped.

Ninth—All packages sent should be fully prepaid and, if you wish its receipt acknowledged, should be sent in care of the superintendent.

Tenth—No attention will be paid to any complaint or any communication of any kind not addressed to the superintendent or to the board of trustees. All money should be sent by express, money order, or registered letter directly to the superintendent, who will at once acknowledge receipt of same

Eleventh—The superintendent can, upon application, secure half rates over the roads for the pupils but not for persons accompanying them. Teachers are sent out to the most important points at the opening and close of school to assist the pupils in making changes and accompany them to the school.

Twelfth—Please bear in mind that the school is more than a quarter of a mile from the nearest depot and a full mile from two of them. The Colorado Springs Transfer Company, which meets all trains, gives special rates to children coming to us.

For any further information apply to

SUPERINTENDENT COLORADO SCHOOL FOR DEAF AND BLIND,

Colorado Springs, Colorado.

TENTH BIENNAL REPORT OF THE COLORADO STATE INDUSTRIAL SCHOOL.

ADMINISTRATION AND PERSONNEL.

BOARD OF CONTROL.

Hon. W. A. Smith, President......Denver, Colorado Hon. Charles Landes, Secretary.....Pueblo, Colorado Hon. George H. Kimball......Golden, Colorado

SUPERINTENDENT,

Barnard L. Olds.

ASSISTANT SUPERINTENDENT,

Frank G. Mirick.

MATRON,

Mrs. Barnard L. Olds.

Jacob Sharpes Commander Company A and Farmer
F. L. PaddelfordCommander Company B and Teacher
A. F. AtchisonCommander Company C and Shoemaker
Robert HarrisCommander Company D and Carpenter
F. J. SmithPrinter
E. E. WellerChaplain and Teacher
Charles HuscherInstructor in Penmanship and Manual Training
Alex McDermidTailor
R. W. GoldsworthyChief Engineer
H. W. RobbGeneral Police and Corral Master
R. R. FiskClerk and Band Director
F. O. BakerNight Watchman
L. Carl SmithHospital Steward
O. E. BakerLaunderer
J. D. McPikeBaker
Mrs. E. E. Weller
Miss Sadie RyanMatron Dining Rooms
Mrs. M. A. Slingerland

PHYSICIAN,

W. W. Branson, M. D.

List of Superintendents and members of the Board of Control since the organization of the school, July 11, 1881.

SUPERINTENDENTS.

Name and Residence.

W. C. Sampson, DenverFrom June 1, 1881, to April 15, 1889	
D. R. Hatch, GoldenFrom April 15, 1889, to July 1, 1893	
R. W. Morris, PuebloFrom July 1, 1893, to March 10, 1894	
G. A. Garard, Fort MorganFrom April 5, 1894, to February 15, 1896	
R. G. Smither, DenverFrom February 15, 1896, to January 17, 1898	
B. L. Olds, DenverFrom March 1, 1898, now in office	

MEMBERS BOARD OF CONTROL.

Name and Residence.

J. F. Gardner, FrankstownFrom 1881 to 1885
S. W. Fisher, GoldenFrom 1881 to 1883
W. B. Osborn, LovelandFrom 1881 to 1885
W. G. Smith, GoldenFrom 1883 to 1889
M. N. Megrue, PuebloFrom 1885 to 1892
A. L. Emigh, Fort CollinsFrom 1885 to 1891
J. C. Hummel, DenverFrom 1889 to 1893
J. M. Morris, GoldenFrom 1891 to 1893
B. F. Williams, DenverFrom 1893 to 1895
Joseph Mann, GoldenFrom 1893 to 1895
Mrs. E. G. Curtis, Canon CityFrom 1893 to 1897
C. P. Hoyt, GoldenFrom 1895 to 1897
C. W. Lake, GoldenFrom 1895 to 1899
Chas. Landes, PuebloFrom 1997, now in office
W. A. Smith, DenverFrom 1897, now in office
G. H. Kimball, GoldenFrom 1899, now in office

REPORT OF THE COLORADO STATE INDUSTRIAL SCHOOL.

To the Hon. Helen L. Grenfell,

Superintendent of Public Instruction.

Madam— The Board of Control of the State Industrial School, as required by law, respectfully submit the following report, covering the transactions of the institution for the two years ending November 30, 1900, and present, herewith, the reports of the superintendent, chaplain and physician, in detail:

MOVEMENT OF POPULATION.

Number of lnma	tes November	30, 1898	
Received during	term		

LEAVING DURING TERM.

Expiration of sentence	5
Apprenticed and paroled	ŧ.
Escaped	ŧ
Pardoned	L .
Discharged)
Returned to court	3
-	- 136

SUMMARY.

There were in school November 30, 1898118
There were in school November 30, 1900182
The greatest number was on November 26, 1900
The smallest number was on December 17, 1898
Average number per day during the term
Average number during last six months of term

The Twelfth General Assembly appropriated for the support and maintenance of this institution, for the two years, the cash receipts and \$60,000.00. They also appropriated, for improvements and repairs, \$10,000.00, of which sum the Auditor of State has issued warrants only to the amount of \$8,886.35.

Notwithstanding this shortage in the expected receipts, and the largely increased population as shown by the above tables, we have, by very careful and economical management, been able to greatly improve the general condition of the institution. We now have a complete system of steam heating, having done away with all stoves. A modern steamcooking plant has been placed in our kitchen. We have a modern and up-to-date steam laundry; washers, extractor and mangle; also an electric light and power plant of our own, which will be completed and in use by the time the legislature meets. And, last but not least, we have a modern bath house, fitted up with shower bath attachments, having both hot and cold water under the control of the operator. All of which, together with many other improvements, will more fully appear by reference to the report of our superintendent.

Below will be found a tabulated statement of the receipts and expenditures for the biennial term:

RECEIPTS.

Appropriation, maintenance\$6	50,000	00
Appropriation, repairs and improvements 1	10,000	00
Cash earnings	3,808	16

Total \$73,808 16

EXPENDITURES.

Support, maintenance and current expenses\$63,475 83	
Permanent improvements	
 Total	72.694 51
Balance unavailable	\$ 1,113 65

Many other improvements are badly needed, but are delayed on account of lack of funds.

On account of the great increase of population, more money will be required for support and maintenance, and additional buildings are needed. Our dormitories, school rooms, dining rooms, manual training department and chapel, are all overcrowded. More room must be had immediately, and we are, therefore, compelled to ask for the following:

For the general support and maintenance of the institution for the next two years, our cash receipts and \$85,000.00.

For dining room, kitchen and chapel, complete, all in oue building. Chapel on the second floor; kitchen, dining rooms, cold storage and ice plant on the first floor, \$12,000.00.

For one cottage, complete, with dormitory, school room, etc., \$8,500.00.

For steel water stand pipe, to give adequate fire protection and water supply (the old tank being rotted out and ready to fall), \$2,500.00.

For contagious ward at hospital so as to properly isolate cases of scarlet fever, small-pox, etc., \$1,000.00.

438

For an additional well, as our present wells are not able to supply sufficient water but part of the season, \$500.00.

For mannal training machinery and tools, \$2,000.00.

For gymnasium apparatus, as we now have nothing of the kind in the school, \$500.00.

RECAPITULATION,

	General maintenance	\$85,000	00		
	Dining rooms and chapel	12,000	00		
	One cottage	8,500	00		
	Steel stand pipe	2,500	00		
	Hospital ward	1,000	00		
var	New well	500	00		
	Manual training machinery	2,000	00		
	Gymnasium apparalus	500	00		
	Total			\$112,000_00	0

The above are only our most pressing needs and we urge that appropriations be made fully covering the same.

HEALTH.

The exceptionally good health of the inmates of this institution for the past two years is a subject of general congratulation. This is, in a great measure, due to the excellent sanitary condition in which the school has been kept. The physician's report shows no deaths—in fact there have been none since April 30, 1895.

DISCIPLINE.

At no time during the history of the institution has discipline been maintained with as little punishment as at the present time—greatly due to the impartial and humane manner in which the officers have deported themselves. When punishment has been imposed, it has been in a manner to show the inmate that the object of the punishment was for his reformation rather than for his humiliation or injury.

CONCLUSION.

The board desires to make public recognition of the services of Superintendent Barnard L. Olds for his intelligent, energetic and progressive management of this institution. Mrs. B. L. Olds, our worthy matron, has ably seconded his efforts, and is also entitled to words of praise. Mr. Frank G. Mirick, our assistant superintendent, has heartily co-operated with the superintendent and the result of this is shown in the excellent condition of the institution.

In conclusion, the Board of Control most cordially invites all persons interested in the work of this institution, especially the judges of the different county courts and the members of the legislature, to visit it, at any and all times, and to inspect its workings.

Respectfully submitted,

W. A. SMITH,

President. CHARLES LANDES, Secretary. GEO. H. KIMBALL.

(Seal)

SUPERINTENDENT'S REPORT.

To the Honorable Board of Control:

Gentlemen—I have the honor to present herewith my second biennial report, covering the period from November 30, 1898, to December 1, 1900.

The present biennial term has been an extraordinary one in many respects. November 30, 1898, we closed the preceding term with 118 boys, and there being no immediate prospect of increased numbers, the legislature was asked for a maintenance appropriation of \$60,000.00, which they granted. We early saw, however, that rigid economy would be necessary to close the term without a deficiency. The truancy law, passed at the last session of the legislature, has added, and in the future will add greatly to our numbers.

The institution has the confidence of the courts, as evidenced by increased commitments and by letters received from judges who take occasion to praise the work being done here for the boys from their districts.

The legislature also appropriated \$10,000.00 for needed repairs, and improvements. Of this sum only \$8,886.35 has been available on account of lack of funds in the state treasury.

Many improvements have been made, some of which are enumerated below, viz.:

An electric plant has been purchased, with engine, dynamo and necessary fixtures complete. It is of sufficient capacity to abundantly light all the buildings and grounds and to provide power for additional requirements. This plant will furnish power to run the laundry machinery and electric power pumps. An electric power triplex pump has also been purchased, with a capacity of 6,000 gallons per hour. This will displace the old, expensively operated steam pumps, furnishing a great supply of water at a greatly reduced cost, and will be much more conveniently and expeditiously operated in case of fire.

A complete steam laundry plant has been added, with washers, extractor and mangle, electric power for same being furnished by the power and lighting plant.

Our heating plant is now complete, all the buildings being heated by steam.

The nineteen stoves, which for many years endangered life as well as property, are no longer in use.

Much work has been done in rearranging the old steam heating system, which was never satisfactory. The exhaust steam from the engine driving the dynamo is utilized in the heating system, and a corresponding saving of fuel is the result.

A complete steam cooking plant, consisting of steam kettles, roaster steam table, etc., has been installed in the kitchen and is giving splendid satisfaction.

A new 80-horse power steel boiler has been purchased, the old boilers being in a very unsatisfactory condition and of insufficient capacity.

An addition of fifteen feet has been made to the brick chinney at the boiler house, and we are now burning ordinary slack instead of lump coal as heretofore.

A new brick, one-story addition, 26x44, has been built to the boiler house. This furnishes ample room for the electric light and power plant, and also a room especially designed for use as an electrical training department.

The old cement vats that for years were the only bathing facilities in use by the boys, have been displaced and are now a relic of the past. A new central bath room has been fitted up of sufficient capacity to easily accommodate an entire company.

This room is provided with shower douches, with hot and cold water supply under control of the operator.

Adjoining is a large dressing room and a locker room containing lockers for each company, in which the tailor places the clean clothing, and from which on the day following the soiled clothing is removed by the laundryman.

The sewer system has been partially reconstructed and put in firstclass sanitary condition.

A new root cellar has been excavated in a convenient hillside, walled up and covered, thus making a dry, frost-proof cellar, that easily holds eighty tons of vegetables for the use of the school.

Many of the buildings have been thoroughly repaired, painted and new floors laid.

The two cottages and the officers' quarters building have been newly carpeted, interiors painted, new furniture purchased and generally put in first-class condition.

Iron roofs have been placed on several of the buildings, replacing shingles, and all roofs have been repainted. All the buildings now have iron roofs, thus the risk of fire is greatly lessened.

Cottage B dormitory has been newly furnished with sixty white enamelled, all metal beds, with steel woven-wire mattresses. The school room in this cottage has also received twenty new modern desks and seats, and the remaining old desks have been thoroughly repaired, varnished and made as good as new. The school room of cottage C has been entirely fitted with new desks and seats. Many important improvements have been made in our printing office:

A new 13x19 Gally Universal press has been installed; power for same will be furnished by an electric motor.

A $22\frac{1}{2}$ paper cutter and a stapler, together with new and modern type, have been added.

The printing of this report will evidence the excellent quality of the work taught in this department.

• We also printed the "Proceedings of the Industrial School Section of the Conference of Charities and Corrections" which was held at Topeka, Kan., in May last.

Words of praise for this work have been received from many of the newspaper and professional men of our own and other states.

January 1, 1900, the old "Industrial School Record" was changed to magazine form, and in name to the "Industrial School Magazine." It is published monthly and easily ranks with the best institution papers published in the United States.

A brass band of twelve pieces has been organized and placed under the direction of a competent instructor. This is a valuable addition to the school, a source of benefit to the boys and a pleasure to all.

Several hundred feet of new walks of vitrified brick have been laid and many other improvements, too numerous to mention, have been completed.

PRESSING NEEDS,

Our needs are many and pressing, and I cannot do better than repeat the opening paragraph with which my last biennial report began this subject:

"The paramount need of this institution is more money for maintenance. Under prevailing conditions, boys are often paroled long before permanent reformation has been accomplished. In many of the best institutions, the average period of detention is three years and more, while with us the average time that a boy remains is less than one and one-half years. Too short by far to secure change of thought and habit, and to overcome the evil effect of bad associations, supplemented in many instances by an utter lack of proper home training. Many of our boys never had a home, and it is folly to expect lasting improvement in so short a period of time. Sufficient funds should be supplied so that the Board of Control may feel warranted in keeping the boys here until their reform is reasonably assured."

Two years of added experience and observation confirm and emphasize my belief in the absolute correctness of these statements and conclusions.

The present biennial term has witnessed an increase in population from 118, at the beginning, to 182, the present number. A proportionate increase in the sum to be appropriated for maintenance must be made and an additional appropriation should be made to provide for the care of the anticipated increase in population, which will probably reach 225 or 250 by the end of 1902. In my judgment not less than \$85,000.00, with cash receipts, should be appropriated for maintenance for the next biennial term. To appropriate less will be to sadly cripple the institution in the quality of its work.

We greatly need a substantial, two-story building properly designed, to contain on the ground floor officers' and boys' dining rooms, kitchens, cold storage rooms, etc., and on the second floor a well-lighted and wellventilated hall, suitably arranged for use as a chapel on Sundays, for religious services, and for entertainments, concerts, lectures, etc., on weekday evenings.

The old dining rooms are low, dark, poorly ventilated and altogether too small for present requirements. The room now used for chapel purposes is overcrowded. Every Sunday numbers cannot obtain entrance. The ceilings are very low and there are no arrangements by which it can be ventilated, and it is altogether unsuitable for Sunday religious services or week-evening entertainments.

Our cottages and dormitories are crowded beyond their designed capacity and all sanitary limitations. We should have, immediately, a new cottage arranged for fifty boys, with school room, dormitory, etc. With the erection of the above buildings, the rooms now used for kitchen, dining rooms, chapel, etc., in the main building would be vacated and the entire building henceforth devoted to industrial purposes, thus providing space badly needed in all departments.

We have a very complete hospital with ten beds, but no contagion ward in connection therewith, or place where scarlet fever, smallpox or diphtheria cases can be cared for. Our recent experience with smallpox has taught us the imperative necessity of an isolation ward for contagious diseases.

The old wooden water tank is very badly rotted and ready to fall at any time. To replace it in wood would cost nearly, or quite, \$1,000.00. In my judgment it would be vastly better economy to replace it with a large steel stand pipe. This would last for all time, and being of larger capacity and greater elevation, would very greatly improve our fire protection service.

The wells now in use are not of sufficient capacity to supply the needs of the institution in dry weather, and as they are pumped dry, day after day, you will readily see that in case of fire we would shortly be without water. We therefore urge that an appropriation be requested for a new and larger well.

New beds and bedding are greatly needed; also new walks and fences. Many general repairs will also be required.

We also need more officers and employes. Every similar institution within my knowledge and observation which is doing an equal amount of work, have from twenty-five to fifty per cent. more employes and officers than we have, in proportion to the number of inmates. With more teachers and instructors we can make better progress.

DAY SCHOOLS.

Our schools are very badly crowded and the work performed is, therefore, unsatisfactory. At present we have but two school rooms with one teacher in each.

Thirty-five of the lowest grade bcys attend school all day, every day, the remainder of the school (with the exception of a few well-advanced pupils) attend school all day every alternate day. The schools are in session five days of each week, except during July and August, when all have a vacation.

With the erection of the buildings requested elsewhere in this report, we will have sufficient room for one or more greatly needed additional schools. At present we cannot teach beyond the sixth grade as taught in our public schools. New charts, books and maps are also needed.

Our schools are under the care of competent teachers, who are required to pass the regular teacher's examination of the public schools.

School hours are from 8:30 to 11:30 a. m., and from 12:50 to 4:30 p. m. Writing classes are held each evening from 4:10 to 5:00 and from 6:10 to 7:10. We have no classes in bookkeeping; these should be added.

TRADES INSTRUCTION.

Work is an important factor, if indeed it is not the greatest of human agencies, by which mankind may be kept in paths of rectitude. As inmates leave this institution they should go equipped with the best obtainable weapons, for the successful fighting of life's battles; thus may they avoid failure with its following train of idleness, tramp life and crime.

A great need of this institution is more and better facilities for industrial training and the teaching of useful occupations. In connection with our new engine house we have arranged a convenient room in which to organize a department of electrical and mechanical training. Certain lathes, benches and tools will be required. Electricity is the coming motive power of the present age, and we desire to have a class of bright, intelligent boys constantly under instruction in this branch of mechanics. •Our blacksmith shop is inadequately supplied with tools to be of good service as a place of instruction. We should have six new forges with anvils and tools complete.

The carpenter shop also needs new tools and more room. This latter want will be supplied by removal to the manual training building when that department is transferred to the main building. When this change occurs, more boys can be taught the carpentering trade. We respectfully request sufficient funds to properly equip these departments.

A number of the boys are given an opportunity to acquire a limited knowledge of tailoring, shoemaking, laundering, printing and the care of steam boilers, of live stock, farming and gardening. The time is too short to give a thorough knowledge of these trades, but it is sufficient to enable them to do the work of the institution, making all the shoes and clothing, doing the baking and printing, and after they leave the school, to assist them in obtaining employment at moderate wages.

The doing of the necessary work of the institution is a very important part of a boy's life here, yet not its most vital part.

MANUAL TRAINING.

Manual training as a reforming agency is no longer a new and untried experiment. It is in the front rank of all means used to this end Our public schools are defective in that they do not introduce this training in some of its various branches while the child is yet in the rudimentary studies. It is a great mistake to leave this important part of a common sense education until the pupil has advanced to the high school grade. It should come in the curriculum as early as the third grade for the reason that a great majority of scholars leave school before passing the sixth grade, and such teaching must begin early or the opportunity will be lost. Instead of narrowing a child's education to simply text book instruction, it should be broadened to a preparation for the meeting of life's experiences. The hand, the cye, the judgment, the power of observation; in brief, the whole nature should be developed industrially as well as mentally. If this policy be carried out, I am convinced that many children will remain in regular attendance at school, who, under existing conditions, become truants or worse, and are necessarily committed to the care of this and similar institutions. We aim to teach here, the first principles of mechanical and free-hand drawing; of measurements (fcet, inches and fractions of an inch), of squares, cubes, cylindrical and irregular shapes; of straight, level and uneven surfaces; also the first principles of cutting, leveling and sizing, to given dimensions and lines, of objects in both wood and iron. We also teach the names of different kinds of wood and metal. The prime purpose in this training is educational, and not to make a mechanic of the boy, to stimulate his entire being, teach him self-control and its score of kindred virtues; secondarily, the technical knowledge gained will in many ways be helpful to him in after life.

Our present manual training building is altogether too small for our needs, but with the removal of the dining rooms and chapel to new quarters, sufficient room will be at our disposal to properly care for this department. We need new tools and machinery, turning lathes, saws, drills, etc.

With the installation of our electric light and power plant, power can be readily supplied for all necessary requirements. Tools should be purchased for work in both wood and iron. We desire to call attention to the excellent work of this department with the limited facilities at our disposal. The boys take great interest and their work will compare favorably with that done in the city schools by pupils of more advanced ages. The following table will give an idea of the work for the two years:

Number of different boys receiving instruction1	47
Average age of boys, years	$14\frac{1}{2}$
Average attendance each month	
Average number of months each boy has attended	714
Average attendance at each three-hour lesson	15

One hundred and forty-three models are being used and about one hundred and fifty additional models for the whittling class. Carving has been undertaken during the last four months, and excellent progress is being made in this line.

MUSICAL TRAINING.

No class of people in all the world love music better than our boys. Any day or evening they will gladly come together in chapel for a song service. Under the care of our general matron many songs have been learned and the boys are quite proficient in their singing of religious, patriotic and popular songs. Their singing of religious songs in the chapel during regular services on Sunday is inspiring. If music, vocal and instrumental, could be taught regularly as one of our departments of education it would be of great benefit. To do this would require a teacher whose entire time could be devoted to the work. The charm of music is a wonderful cducator of the finer sensibilities, and is everywhere recognized as an important feature in reformatory work.

BAND INSTRUCTION.

In August last we secured the services of a competent instructor and organized a band of twelve pieces. The boys have taken hold splendidly and now play a number of selections in a very creditable manner. Their rapid progress under unfavorable conditions is a flattering indication of what may be accomplished when all the requirements are properly met.

The band is of great assistance at our evening entertainments. During the winter, regular practice will be kept up and we anticipate that by next summer the band will be a great attraction and pleasure, as well as being an important factor in our dress parades and out-door gatherings.

The experience gained in this department will greatly assist the boys in securing profitable employment when they go out from the institution.

Several new and additional instruments are needed, for which I trust funds may be provided.

MILITARY DRILL.

The school is divided into four companies, each in charge of an officer who is called the "Company Commander." Six non-commissioned officers are assigned to each company. Having no guns we are limited to setting-up exercises and to company and battalion evolutions. Arrangements are now under way for the manufacture, in our trade schools, of sufficient imitation or cadet guns, of wood with iron fittings, to equip the entire school. When these are completed, the full manual of arms will be taught as prescribed in the United States regulations.

GYMNASIUM,

Nearly all institutions of this character have a gymnasium, more or less elaborate in its equipment, in which the inmates are required or allowed to take prescribed exercise.

We have nothing whatever in this line. If the funds were provided, we could fit up a room, at a comparatively small cost, for this purpose. It would be a lasting benefit as well as a pleasure and would aid in maintaining discipline. We need turning poles, parallel bars, chest pulley weights and other inexpensive athletic apparatus.

Boys, like young animals, are full of life and activity, which if not given an outlet or escape in a safe direction, will likely find an unsafe one. They come to us lacking in physical development, not erect in form, stoop-shouldered and flat-chested. They should have properly directed physical training. Many have morbid tendencies, being victims of their own self-indulgence. These need the stimulus of vigorous bodily exercise to assist them in recovering a normal tone of body and mind.

RECREATION AND AMUSEMENT.

Realizing that every normal boy must have his fun "in season or out of season," we aim to provide abundant time in which, released from labor and study, each inmate may "holler," laugh and play to his heart's content. Colorado's pleasant weather and abundant sunshine permit of much of this diversion in the open air, but for stormy and cold weather we are, in this direction, but poorly furnished. A proper fund should be set apart to procure necessary games, checkers, chess, etc., for indoors and to liberally furnish balls, bats and necessary apparatus for out-ofdoor sports. Expense must also necessarily be incurred in providing lectures, concerts, etc., for week-evening entertainments. One evening each week, all come together in the chapel to hear some good lecturer on a popular topic, or to spend a pleasant evening in listening to songs, recitations and plays. Frequently the entire program is furnished by the boys.

A stereopticon with proper slides would be a wonderful addition to our entertainment bureau and of great advantage as a means of imparting information in an attractive manner.

LIBRARY AND READING.

A small addition has been made during the term to our collection of books, but even now it can hardly be dignified by the name of library. There are too few books, and many of these are not at all adapted to the purposes of an institution of this character.

At least three-fourths of the boys are great readers and it is of prime importance that they be provided with good, wholesome and instructive reading, as it broadens the intellect and cultivates a taste for the higher things of life.

When I see the splendid collection of books in other similar institutions, I covet for some of our people of means, the great privilege of supplying this need, by presenting us with sufficient funds to purchase a library, to be called by such name as they may choose, thus enjoying the satisfaction of knowing that a portion of their wealth, at least, is placed where it will earn 100 per cent. and more, long after they are through with life's cares and responsibilities.

We also need subscriptions to several copies of such papers as the Youth's Companion, Success, many of the magazines and other good literature. The demand is also great for old numbers of the same class of reading matter.

CHARACTER BUILDING.

Character building is the great aim of all our labor; the desired end for which money is spent so liberally.

Building of character is of vastly greater importance than the building of an institution. A correct public sentiment and a good feeling among the inmates, are prerequisites to the accomplishment of this end. The saving of man is the greatest and grandest work given to men. To reach the ideal standard costs money. Would it pay if it was your boy? Can the state afford to neglect this duty by refusing to pay the price? The responsibility resting upon the executive head of an institution of this character is simply overwhelming. Much that seems hopeful proves of little value. The work must be done conscientiously, but the results must be left to Him who makes no mistakes.

RELIGIOUS TEACHING.

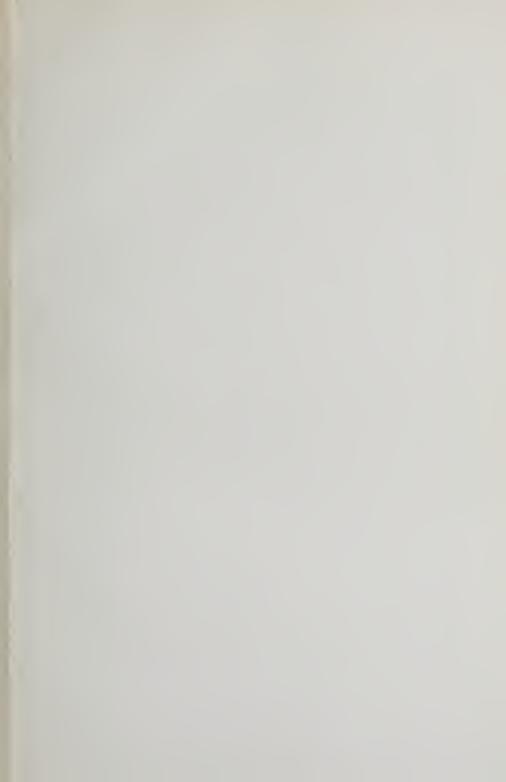
In July, 1899, the board of control secured the services of a resident chaplain: his report appears elsewhere. Preaching services are held each Sunday at 9:30 a. m. Sunday school classes are taught at 2:30 p. m., at which the regular international lessons are used, followed by a condensed review of the lesson by the chaplain or superintendent. Ladies from Golden assist each Sunday as teachers.

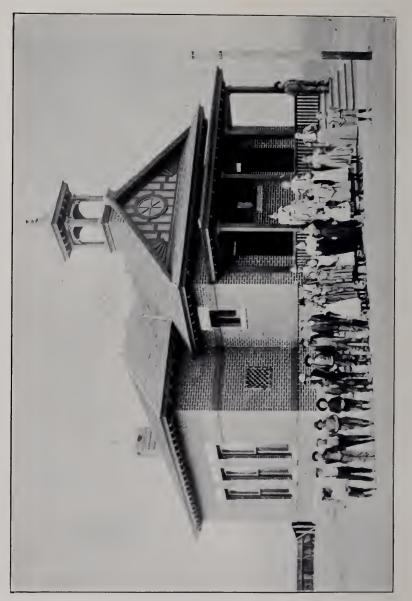
More than a year since an organization called the Christian Volunteers was formed. It holds brief services each Sunday evening in the chapel, the attendance to which is purely voluntary. The service has become very interesting and is of great benefit to the boys. The attendance will average from 40 to 60 per cent. of the entire school. The exercises consist of Scripture recitations, informal conversations, recounting of difficulties, expressions of desires and intentions, interspersed with the singing of gospel songs.

Grace is said in the dining rooms before each meal and prayer at retiring.

TRUANCY COMMITMENTS.

The legislature of 1899 enacted a compulsory education or trunney law. By its terms children in districts of the first and second class





RURAL SCHOOL, DISTRICT NO. 16, LARIMER COUNTY,

between the ages of S and 14. are required to attend school not less than twenty weeks in each year. Any such children, together with children between the ages of 14 and 16, who cannot read or write the English language, and who habitually absent themselves from school, or who, attending school, are incorrigible, vicious or immoral in conduct, or who habitually wander about the streets and public places during school hours, having no business or lawful occupation, are decmed juvenile disorderly persons. Any complaints under this law come before the County Courts of the various counties and if such child, so complained of, is a juvenile disorderly person within the meaning of this act, he or she will be committed to a children's home or boys' or girls' industrial school, the age of the child being taken into account, not to be detained, however, beyond the age of 16 years.

To this date we have received 19 boys under this law. Several of these, I am told, were sent as "truants," although they had committed various offenses and could have been convicted as criminals as other boys who are sent to us. In some cases this was done to spare the feelings of the boys' friends and relatives. In my opinion it is just as well thus, for in any ease it is not for the purpose of punishment that a boy is sent here, but rather that he may be properly cared for and taught the "rightness" of things. Had we special parental or truancy schools many boys would, doubtless, be sent to them under similar conditions. Our "truancy" boys average neither better nor worse than the other boys.

Under present conditions, I see no reason why "truant" boys may not be as well cared for in this institution as in any specially provided parental or truancy school. Such schools should, in any event, be located in the country, so that neither bars nor walls may be required to detain the inmates.

PREVIOUS HOMES.

Many of our boys come from very poor homes. Homes broken by death, by sin and by disease. Many from homes made unhappy by ill assorted second marriages. and from homes where the struggle for the daily necessities of life is constant, grinding and at times unendurable.

These unfortunates are as deserving of proper education, care and industrial training as are any of those who have been born and reared under more auspicious circumstances. An authority has said "parental neglect may be assigned for the presence of boys in the reform school in fully 90 per cent. of the cases, the other 10 per cent. being accounted for by a criminal environment." I am a firm believer that environment is more prolific of erime than heredity, although this also has an influence on many lives. The state sadly neglects her duty to these unfortunate youths if she fails to care for and teach them to be self-respecting and respectable members of society and fit them for self-support as wageearners. If the state disregards this duty, hundreds of poor boys will continue in their course of lawlessness and crime, thus filling our reformatories and penitentiaries and becoming a constant menace to soeiety and a continued expense to the commonwealth.

MERIT SYSTEM.

In August, 1898, the following merit and demerit system was designed and put into successful operation, viz.:

Each boy at entrance is given the twelfth badge. To be entitled to parole, he must pass from the eleventh, tenth, and so on up to the first badge, and obtain the first and second honor badges, the latter to be held clear for the entire month.

For each clear day he is entitled to 5 merits. Demerits are charged against inmates according to schedule.

To advance a badge in any month, he must have to his credit, after all demerits are deducted, not less than the following merits, viz.:

Until the sixth badge is obtained, 90 merits are required each month.

From the sixth to the fifth badge, 100 merits.

From the fifth to the fourth badge, 110 merits.

From the fourth to the third badge, 120 merits.

From the third to the second badge, 130 merits.

From the second to the first badge, 140 merits.

From the first to the first honor badge, a perfect month.

From the first honor to the second honor badge, a perfect month.

When a boy has held his second honor badge clear the entire month, he is granted a leave of absence by the board of control, for four months, provided a suitable home is ready for him; if good conduct and steady habits are maintained, this leave of absence is renewed for one year or longer, in the pleasure of the board.

You will notice that the last three months must be perfectly clear. Our marks include lessons, deportment, work, untidyness and all sorts of objectionable conduct. Boys can and do get their parole in 14 months. We teach our boys the value of a community of interest, that each boy is dependent to a degree on those about him, and it is therefore to his advantage in the school as well as out of it, to use all proper means within his power, to hinder wrong-doing as well as to assist in its detection.

In connection with this system, we have a "roll of honor" dining room for the exclusive use of such boys as gain a perfect month—they being entitled to the privileges of this room for the succeeding month. Conversation at meals, special food and better service are some of the benefits thus enjoyed. The system is a success, and is a wonderful aid and incentive to good conduct and a means by which the number of corporal punishments is greatly reduced.

PAROLES,

Boys are now paroled on recommendation of the superintendent, after having gained, by good conduct, the required honor badge or grade, but not until the fact is established that they have a good home to which they can go or that a suitable place has been found for them. Home is the natural and best place for a boy, provided it is moral and in all particulars respectable. Sometimes we are compelled to object to homes on account of evil environment. We can expect little from a boy's future if he is returned to a home such as some come from, being tocated, as they are, amid vile surroundings and evil associations. How to purify these morally pestilential districts of our cities and larger towns is indeed the problem of the twentieth century.

PAROLE AGENTS.

Thus far in the administration of the affairs of this institution, no arrangements have ever been made by which any requisite care has been exercised over boys after their parole.

Under our present parole system, boys are required to write to us monthly, giving a review of their conduct since their previous letter, stating whether they are attending school, or if not at school, where they are at work. These reports are altogether unsatisfactory, and often unreliable.

In 1895 the state of Minnesota made provision for the appointment of a "State Agent." The purposes of the agency was "to provide well regulated and congenial homes for the inmates who had earned their paroles and to supervise them in those homes, making sure, if possible, that they are receiving the sort of treatment that will seal their reformation." In the report of 1899 these words appear. "The agency continues to give satisfaction." The report further says: "We are satisfied that it would be a wise economy to put the principles of the agency into operation earlier in the lives of some of these inmates." Massachusetts, New Jersey, Michigan and other states have similar laws and systems. A section of the report of the trustees of the Massachusetts Industrial School reads as follows:

"The three visitors connected with the school are doing excellent work among probationers. Indeed, the trustees believe that this work of carrying on the work of the school in behalf of boys in their own homes, or in places, is the most important advance in reformatory methods which has been made in recent years. Without some such system of visiting, the break between the restraint of the institution and the freedom of the world is too sudden. In the institution the boys are subject to a strict routine and to the support and stimulus of constant direction and companionship; and many of those who do best under such conditions are the first to fail when they must choose and act for themselves, amid the distractions and temptations of the world. The excellent tact of the visitors in following up sharply the boys who need to feel the school's discipline, and leaving room for freedom and initiative in those who are capable of acting for themselves, relieves the system of any of the dangers which may have been anticipated. There are recorded 1,573 visits by the visitors, and 107 by individual trustees, to outside boys, and 216 homes and places have been investigated and reported upon. The sum of \$1,198.00 has been collected in behalf of 41 probationers and placed to their credit in the bank, to be held for them until they become of age."

Is it not folly to expect that these boys, who have been with us but a few months, can, with impunity, be returned to their homes, located, as they often are, amid pernicious environments? A large percentage of them, left thus utterly without supervision on the part of any authorized agent or officer, will relapse into old ways and habits.

A constant but discreet supervision should be maintained over each boy until he reaches his majority or is discharged. His school conduct, where and for whom he works, the hours and company that he keeps, the places that he visits, these all should be noted and made a matter of inquiry and record.

For misconduct he should be promptly returned to the school by the agent, not rearrested and resentenced with added fees thus charged the county or state. The effect of this supervision would be beyond computation in its helpful influence upon the boys themselves, keeping many from lapsing into crime and incidentally a great economy of funds.

The appointment of such an officer should be made absolutely without partisan bias, and he should be a person of spotless integrity and firm character; one who can neither be bought nor bullied. It should also be his duty, as far as possible, to investigate all cases where juveniles are charged with crime and advise with the court as to their disposition. Clothed with proper authority as a probation officer, he should receive from the courts such juveniles as they may think wise to continue on suspended sentence or probation; keeping a constant supervision of such probationers and making return to the court of their condition, or person, as the case may require. I firmly believe that such an officer would more than save the cost of the office and expenses, to say nothing of the vastly greater saving of these lives that otherwise would likely be lost to society and the state, and by filling penal institutions become a charge upon the commonwealth.

DISCIPLINE AND PUNISHMENT.

This is not a jail in any sense of the word nor a place to which boys are to be sent for punishment for offenses committed. Our mission is purely one of reformation. A prime essential is the maintenance of a strict yet kind and parental discipline. We contend that the nearer approach we are able to make, under the changed conditions, to a firm and kindiy parental home training, the better for all concerned.

We have absolutely no walls, cells or lock-ups. Our desire is to efface from the minds of all who enter the thought that this is in any sense a prison. Therefore we have no prison surroundings. Visitors often express surprise at the seeming lack of restraint with which inmates move about the institution and grounds. By thus trusting the boys, we assist in the cultivation of a spirit of honor and trustworthiness, and as a result there are few escapes—our net loss being but four for the entire biennial term.

Many good people affect to believe that by some legerdemain or secret art boys who for years have been forming habits of idleness and vice may, by an instantaneous process, be transformed into orderly and industryloving boys. We have not learned this secret. The process is slow; step by step, and with many backward falls, is the height attained. As a last resort corporal punishment is used; the less the better, but at times it is absolutely necessary. All cases requiring corporal punishment are reported to the superintendent, by him investigated, and it is never administered except by his authority and in the presence of the superintendent or his assistant, but never by them.

HEALTH OF INMATES.

The health of the school is excellent and there has been very little sickness during the term. We challenge any institution or community to produce a company of boys in better flesh and spirits, or with smoother, rosier cheeks.

No serious sickness has occurred since my last report. In August, 1899, while excavating for a root cellar a portion of the roof caved in, causing two severe injuries, viz., the breaking of a boy's leg and injuring the spine of another boy. This latter boy is still with us and is slowly progressing, we trust, to ultimate and complete recovery. The former boy has entirely recovered and has been paroled to his mother.

During the summer of 1900 we had four cases of scarlet fever and thirteen cases of so-called small-pox (by some called "Kangaroo smallpox" or "Cuban chicken-pox"). If small-pox at all it was of a very mild form. The boy having it most severely was sick in bed but three days. Very rigid quarantine measures were adopted and the disease was soon stamped out. A peculiar feature of the disease was that those who had recently been vaccinated were the greatest sufferers.

An experienced physician is employed by the Board of Control at a stated salary. He visits the school regularly semi-weekly, with additional visits as required. His report appears elsewhere.

HOSPITAL.

Our hospital is in excellent condition and finely adapted to its purpose. It contains a general ward with 10 beds and all necessary conveniences. It is under the care of a medical student as hospital steward. Daily reports are made to the superintendent on blanks printed for the purpose of all cases of sickness and their condition. This report is made a part of our permanent files.

No provision exists for the isolation and care of those suffering from contagious diseases and a suitable ward for that purpose, as already mentioned, should be immediately provided and equipped.

ACKNOWLEDGMENTS.

My sincere and heartfelt thanks are herewith tendered:

To Mrs. J. H. Brown and Miss Hattie Mencimer for valuable and continued assistance rendered in our Sunday school. Regardless of storm or heat, they have faithfully visited and taught their classes Sunday after Sunday.

To Mrs. J. H. Brown and the Flower Mission of Golden for the beautiful bouquets that came to each one of our boys every Sunday during the summer. To the able ladies and gentlemen who at our week-evening gatherings have instructed and entertained us with lectures, songs and plays. We greatly appreciate their kindness and desire that they "come again."

To the Denver Public Library for a generous donation of partly worn books.

To many individuals who have sent us large numbers of magazines and papers.

To the newspapers, judges, officials, both state and county, and the many kind friends who have expressed sympathy with us in our discouragements and wonderfully cheered us with their kind words of encouragement. These all have been helps and "bright places by the wayside."

In conclusion, I desire to express to each member of the Board of Control my appreciation of your deep personal interest in the welfare of the school and your uniform courtesy and kindness to me as your trusted servant and co-laborer; for your confidence as manifested in the enlarged powers conferred upon me; for the loyal support given me, asking only that each officer be competent and faithful, and lastly for your unlimited patience and kindness to me and mine as individuals.

In reviewing the work of the past two years, we are painfully cognizant of the fact that it falls far below our hopes and plans. Yet great advancement has been made. May we not, therefore, take courage and press forward?

To Assistant Superintendent Frank G. Mirick, who has so faithfully and loyally performed the arduous duties of his office; whose books and records have always been complete and accurate, and whose cheerful and prompt assistance and advice have been of great value in bringing the institution to its present standard, I desire to express my hearty thanks.

To the officers and employes, one and all, who have, at all seasons and under all circumstances, rendered such prompt and valuable aid, and to the boys who, often under trying circumstances and difficulties, have stood by me so loyally, rendering prompt and cheerful obdience, thus making possible the success that has crowned our efforts, to you all I tender my good will and hearty appreciation.

In all our ways, we desire to acknowledge Him, who rules over all, that He may direct our paths.

With gratitude to God for His abundant mercies, I close this report.

Respectfully submitted,

BARNARD L. OLDS, Superintendent.

PHYSICIAN'S REPORT.

Golden, Colo., November 30, 1900.

To the Honorable Board of Control:

I have the honor to hcrewith submit the following report: The duties of physician have consisted in regular visits to the school, and in a general sanitary supervision of the grounds and buildings.

Epidemics of scarlet fever and small-pox have broken out during the past two years, and they caused considerable anxiety, owing to the crowded condition of the school, and the lack of proper hospital facilities to take care of an epidemic of contagious disease. Owing to the prompt quarantine measures, and the hearty co-operation of all the officers in enforcing the same, severe epidemics were avoided. The number of scarlet fever cases was limited to four, that of small-pox to thirteen.

I would recommend that a suitable building be erected for the proper isolation and care of contagious diseases.

There has been a number of cases of minor importance that I have not tabulated. The following is a list of diseases treated since August 1, 1899:

Arthritis, 4; burns, 2; cystitis, 2; croup, 1; conjunctivitis, 3; fractures, 5; gonorrhoea, 1; hemorrhoids, 1; dislocations, 2; hernia, 2; ivypoisoning, 5; la-grippe, 14; nephritis, 2; pterygium, 1; small-pox, 13; suppurating ear, 3; tonsilitis, 27; trachoma, 3; incontinence of urine, 4; phimosis, 2.

Respectfully submitted,

WALTER W. BRANSON, Physician to the School.

CHAPLAIN'S REPORT.

Golden, Colo., November 30, 1900.

To Barnard L. Olds, Superintendent:

Dear Sir—It has been my privilege to serve as chaplain of the State Industrial School during sixteen months of the time covered by this report. The work was new and I entered upon it as learner. My experiences have been varied and almost as numerous as the boy himself. In reviewing the work it is impossible to measure the results. It has not been without its bright hopes and sad disappointments.

The following Sunday services have been held with but few interruptions: The morning chapel service, the afternoon Sunday school and the evening Volunteers' meeting, attendance upon the latter being optional.

The Volunteers' service has been unusually well attended. The boys are encouraged to take part by reciting or reading a verse of Scripture; to tell their difficulties and temptations; to speak of their victories and defeats, and to make known their purposes while at the school and after parole.

The usual religious and national holidays have been observed with special programs and the individual's duty to God and the state dwelt upon.

I have tried to emphasize the simple gospel of faith, work and right living in my talks to the boys; urging them to be manly, faithful in all their work and in living union with God, and thus lay a sure foundation upon which to build a successful life.

Respectfully,

E. E. WELLER, Chaplain. The following tabulated statement is compiled from the records of this institution for the period intervening between November 30, 1898. and December 1, 1900:

EXHIBIT A.

Showing Number of Inmates Received Each Month.

December,	1898	January,	1900 S
January,	1899 5	February,	1900
February,	1899	March,	1900 10
March,	1899 S	April,	1900
April,	1899 10	May,	1900
May,	1899	June,	1900
June,	1899 10	July,	1900
July,	1899	August,	1900
August,	1899 2	September,	1900 6
September,	1899 14	October,	1900
October,	1899	November,	1900 5
November,	1899		
December,	1899 5	Total	

EXHIBIT B.

Showing from What Counties Boys Have Been Received.

Arapahoe 63	Larimer 3
Bent 1	Mesa 3
Boulder 2	Montrose 1
Clear Creek 1	Otero 3
Chaffee 5	Ouray 2
Delta 2	Pueblo
El Paso	Pitkin 1
Fremont 1	Teller 3
Gilpin 1	Weld 14
Garfield 1	Wyoming 2
Jefferson 4	Arizona 1
Logan 1	—
Lake	Total163
Las Animas 2	

EXHIBIT C.

Showing Nativity of Parents.

American104	Mexico 1
Austria 2	Poland 1
Canada 2	Russia 2
England 5	Scotland 2
Germany 13	Sweden 2
Hungary 1	Wales 1
Ireland 15	—
Italy 12	Total163

EXHIBIT D.

Showing Nativity of Boys.

Colorado	Tennessee 7
Georgia 1	Utah 3
Illinois 8	Wyoming 1
Indiana 2	Canada 1
Iowa 5	England 1
Kansas 11	Germany 1
Missouri 16	Italy 2
Michigan 3	Ireland 1
New York 7	Mexico 1
Nebraska 12	Russia 1
Nevada 1	Scotland 2
New Mexico 1	—
Ohio 1	Total163
Pennsylvania 7	

EXHIBIT E.

Showing Ages When Received.

Nine years 1	Flfteen years 42
Teh years 5	Sixteen years 19
Eleven years 15	Seventeen years 2
Twelve years 22	—
Thirteen years	Total163
Fourteen years	

EXHIBIT F.

Showing Offenses for Which Committed.

Assault	4	Malicious mischief	4
Arson	2	Obstructing trains	5
Burglary	38	Rape	ł
Embezzlement	2	'Robbery	2
False pretenses	1	Truancy	19
Forgery	1	-	_
Incorrigible	4	Total	63
Larceny	80		

EXHIBIT G.

Showing Length of Sentences.

†Five ye	ears	· · · · · · · · · · · · · · · · · · ·	1	Minority	
*U'ntii si	ixteen yea	urs of age	19		—
				Total	

*United States ward. *Boys sentenced under the truancy act.

EXHIBIT II.

Showing Social Condition of Boys Received.

Both parents living	Without step-parents149
One parent living	Both step-parents 2
Both parents dead 14	_
Unknown 1	Total163
—	Parents who own property 47
Total163	Parents who have no property116
Boys who have been inmates of	_
other institutions 16	Total163
Boys who have never been inmates	Boys who have been arrested be-
of other institutions147	fore 89
	Boys who have never been arrested
Total163	before
Step-father	
Step-mother 4	Total163

TWELFTH BIENNIAL REPORT

EXHIBIT I.

Showing Scholarship When Received.

First grade	Seventh grade 7
Second grade 17	Eighth grade 4
Third grade 36	Ninth grade 1
Fourth grade 48°	No schooling 5
Fifth grade 30	—
Sixth grade 6	Total163

EXHIBIT J.

Showing Religious Denominations.

Baptist 8	Presbyterian 5
Congregationalist 2	Seven-day Adventists 1
Catholie 39	Unitarian 2
Christian 2	No religion 87
Jewish 5	—
Methodist 10	Total163
Mormon 2	

EXIIIBIT K.

Number in school at last report	1 1S
Admitted (new)163	
Paroles returned 37	
Number received during the term	200
Total	315
Discharged 9	
Paroled114	
Escaped 4	
Returned to court 3	
Sentence expired 5	
. Pardoned 1	
Number leaving institution during term	136
	—
Total number remaining November 30, 1900	182
Average number per day during term144	

SUPERINTENDENT OF PUBLIC INSTRUCTION. 461

EXHIBIT L.

Showing Work Performed in Tailoring Department.

Aprons made 117	Pillow cases made 267
Aprons repaired 132	Piilow cases repaired 307
Bed sacks made 72	Pillow ticks repaired
Bed sacks repaired 277	Shirts made, over 756
Bed clothing repaired 578	Shirts repaired, over5,574
Caps made, uniform 201	Shirts made, under 377
Caps repaired, uniform 281	Shirts repaired, under1,906
Coats made, uniform 341	Sheets made 651
Coats repaired, uniform	Sheets repaired 579
Coats made, fatlgue 249	Trousers made, uniform 535
Coats repaired, fatigue 244	Trousers repaired, uniform1,321
Drawers made 493	Trousers made, fatigue 580
Drawers repaired	Trousers repaired, fatigue
Jackets made, waiters 66	Towels made, roller
Jackets repaired, waiters 114	Towels repaired, roller 125
Napkins made 225	Table cloths repaired 128
Napkins repaired 41	Window shades hemmed
Pairs of stockings repaired9,623	

EXHIBIT M.

Showing Work Performed in Carpenter Department.

Tables made	25	Feet of flooring laid6,632
Tables repaired	82	Floors repaired
Ladders made	2	Irrigation flumes repaired 4
Ladders repaired	38	Making and erecting shelving 6
Window and door frames made	58	Meat refrigerator built 1
Window and door frames repaired	113	Engine house built 1
Screens, doors and windows made.	64	Wagon house built 1
Screens, doors and windows re-		Depot placed at crossing 1
paired	208	Cow stalls built 3
Cupboards repaired	43	Squares of iron roof laid
Stools made	9	Root cellar built 1
Stools repaired	9	Roofs laid (on tank) 1
Chairs repaired	325	Feet of lumber used in miscel-
Lockers made	6	laneous work
Sashes repaired	42	Buildings and roofs painted 12
Panes of glass put in	493	

EXHIBIT N.

Showing Work Performed in Shoe Shop.

Boys' shoes made	68	Suspenders repaired	339
Boys' shoes repaired	71	Saddles repaired	2
Officers' shoes made	2	Hat visors made	-82
Officers' shoes repaired	54	Gloves repaired	9
Harness repaired	76	Football covers made	2
Bridles repaired 1	10	Slippers made	3
Halters repaired 2	23	Bass drum repaired	1

EXHIBIT O.

Showing Work Performed in Blacksmithing and Engineering Departments.

Farm implements repaired	18	Water pipe laid (feet)	400
Serapers, shovels, picks and hoes		Water eoolers repaired	5
repaired	160	Surface pipe laid	460
Wagons repaired	38	Steam pipe laid (feet)	800
Cooking utensils repaired	128	Steam traps re-set	6
Stoves, ranges, etc., repaired	28	Steam traps repaired	4
Laundry machinery repaired	5	Grates put in boilers	10
Tubs and buckets repaired	256	Steam utensils placed	4
Pumps repaired	13	Anchor bolts made	7
Steam pipes repaired (feet)1	,020	Sewers repaired	2
Radiators repaired	32	Water heaters made	1
Steam heaters repaired	1	Closets repaired	74
Water mains repaired (feet)	566	Flues repaired	96
Surface pipes repaired (feet)	197	Meat choppers made	1
Hydrants repaired	47	Water plugs put in	15
Rubber hose repaired (feet)	492	Water plugs repaired	15
Loeks repaired	6	Hand bowis put in	1
Machinery repaired	3	Stove pokers made	6
Boilers repaired	1	Miscellaneous repairs	37
Iron beds made	9		

SUPERINTENDENT OF PUBLIC INSTRUCTION.

ENHIBIT P.

Showing Work Performed in Printing Department.

Bill heads 2,050	Proposal blanks 375
Note heads10,150	Labels 275
Letter heads 9,900	70-page book
Envelopes	Roll of honor cards 400
Reports, assorted	School magazines23,140
Orders 2,405	Reprint of the Fifth Blennlal Re-
Blanks, assorted	port
Cards, assorted 2,800	Eighth Biennial Report 500
Songs 3,925	Reward notices 1,000
Sunday school lessons	Laundry lists 300
Circulars 2,100	

EXILIBIT Q.

Showing Fruits and Vegetables Put Up for Use of School.

Rhubarb, quarts of	Quinces, quarts of 8
Strawberries, quarts of	Grapes, quarts of 75
Raspberries, quarts of	Tomatoes, quarts of600
Cherrics, quarts of 8	Catsup, quarts of 55
Currants, quarts of 50	Pickled cucumbers, barrels of 15
Blackberries, quarts of460	Sauerkraut, barrels of 12
Plums, quarts of	Jellies, all sorts, quarts of

EXHIBIT R.

Showing Work Performed in Laundry Department.

Aprons 697	Waists, child's, starched 174
Bed spreads 820	Aprons, waiters' 4,614
Blankets	Bed spreads
Drawers 1,113	Blankets 1,046
Dresses 116	Bed ticks 496
Handkerchiefs 2,982	Coats, jumpers
Jackets	Drawers, cotton flannel
Napkins 4,630	Night shirts, hospital
Night dresses	Overalls
Night shirts	Pillow cases
Stockings, pairs of	Pillow ticks
Socks, pairs of	Socks, pairs of boys'
Shirts	Shirts (under)
Shirts	Shirts (under)
Slips	Sheets14,045
Table cloths818	Trousers 717
Towels 5,133	Towels (roller) 4,518
Undervests 117	Table cloths
Underskirts, starched 178	Napkins
Underskirts 119	Jackets, waiters' 2,287
Undershirts 937	Curtains 48
Waists, starched 260	





EXHIBIT S.

Showing Fruits, Vegetables, etc., Produced on Farm.

Alfalfa, tons of 175
Asparagus, bunches of 695
Beans, gallons of 380
Beets, bushels of 178
Corn, dozen ears of2,219
Cabbage, heads of
Caullflower, heads of 515
Carrots, bushels of 282
Cucumbers, bushels of 345
Lettuce, bunches of
Muskmelons
Onions, bushels of 365
Onions, bunches of table
Peas, gallons of1,146
Parsnips, bushels of 200
Pumpkins 212
Peppers, dozens of 11
Radlshes, bunches of9,341

Spinach, pounds of
Squash, pounds of4,200
Salsify, pounds of1,800
Turnips, busheis of 249
Tomatoes, pounds ofi,695
Watermelons2,623
Rhubarb, bunches of2,621
Okra, bushels of 6
Stock beets, tons of
Apples, bushels of 202
Currants, quarts of 78
Blackberries, quarts of2,059
Plums, bushels of 5
Grapes, pounds of1,995
Raspberries, quarts of1,423
Strawberrles, quarts of
Cherries, quarts of 120

EXHIBIT T.

Showing Number of Head of Stock, Fowls, etc.

Horses	Cows, bulls and ealves
Hogs and pigs32	Chiekens

EXHIBIT U.

Showing Milk, Butter, Eggs, Pork and Veal Produced on Farm.

Milk, gallons of15,706	Pork, pounds of 135
Butter, pounds of 2,054	Veal, pounds of 482
Eggs, dozens of 389	Beef, pounds of1,050

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TWELFTH BIENNIAL REPORT

EXHIBIT V.

Showing Cash Receipts.

Board\$	3,393.72	Shoes repaired	5.84
Subscription to Magazine	7.25	Sale of cloth	11.95
Sale of live stock	205.50	Sale of hides	2.50
Sale of old stoves	43.00	Sale of leather	4.00
Sale of old junk	23.50	Rebate on mower	2.50
Shade trees	4.00	-	
Pasturing stock	104.40	Total\$3	,808.16

EXHIBIT W.

Showing Expenditures Under the Different Accounts.

Salaries\$28,450.09		Improvements	9,218.68
Stationery and expenses of		Repairs	2,312.25
office	276.71	Fuel	3,449.58
Subsistence 10	,993.82	Light	1,764.23
Clothing 2	,514.26	Tools and implements	186.42
Shoes 2	,207.63	Freight and express	593.14
Beds, bedding and towels	529.05	Insurance	297.52
Hospital	105.45	Printing office	529.11
General expense 3	,493.00	School supplies	267.51
Discharged inmates	276.65	Hogs	15.00
Escaped inmates	555.65	Manual training	168.14
Furniture and fixtures 1	,408.85	Laundry	283.59
Library	25.00	-	
Farm and garden 2	,773.38	Total	572,694.51

RECAPITULATION.

MAINTENANCE FUND.

Appropriation\$70,000 00	
Vouchers issued	\$68,886-35
CASH FUND.	
Cash receipts	
Vouchers issued	3,808-16
\$73,808-16	\$72,694 51
Balance appropriation unavailable on account state's revenue	1,113 65

DESCRIPTION OF BUILDINGS AND GROUNDS.

The State Industrial School was established by the Third Legislature in the year 1881, and was formally opened for inmates July 11 of the same year.

It is located one mile south of the town of Golden, and fourteen miles west of the city of Denver.

Two railroads connect Golden with Denver, the Colorado Southern, which leaves passengers at its depot in Golden, and the Denver, Lakewood & Golden, whose trains stop on request, at the Industrial School station, which is only a few rods distant from the institution.

The school grounds consist of fifty-seven and three-fourth acres, about thirty-five of which are under the Golden Ditch and Flume Company's ditch, and constitute the garden, in which are raised nearly all the vegetables consumed by the school, except potatoes. Quite a large part of the garden is set out to fruit, from which we gather quantities of strawberries, raspberries, blackberries, currants, grapes, plums and apples.

Several acres are in alfalfa, from which three cuttings are taken annually, sufficient to winter all the institution live stock. For pasturage, 300 acres of land adjoining the school on the south, are leased.

The buildings are as follows: Administration building—a square two-story white pressed brick structure 40x50 feet, with basement. It is heated by steam, and has hot and cold water connections. In it are the board of control's room, library, superintendent's and assistant superintendent's offices, and superintendent's quarters. The basement is used as a store room for subsistence stores and clotning.

The main building is about 30x200 feet, two and one-half stories high and built of red brick. It is heated by steam throughout. On the ground floor are the shoe shop, laundry, boys' serving and dining rooms, boys' bath and wash rooms, officers' dining room, kitchen and bakery; on the second floor are the tailor shop, school room, printing office, chapel, and family room of Co. A; on the third floor are dormitories of Co. A, also store and clothing rooms. In the rear of this building are the root cellars, ice house, etc.

On the south side of the campus are the two cottages, B and C; these are built of red pressed brick, both two stories, with basement 33x73 feet square. They have hot and cold water and are heated by steam. In the basements are the boys' wash rooms and store rooms. On the ground floor are the school rooms, company officers' living rooms, etc. The entire upper floors are occupied as dormitories.

The hospital is a one-story brick building 30x60 feet, with hot and cold water, heated by steam. There is one ward containing ten beds, a large hall, nurses' rooms and bath rooms.

The boiler or power house is a one-story brick 60x85 feet, including three annexes, one containing the electric light and power plant and electric training department. One is used as a blacksmith shop, the other as a coal house.

There are three boilers, two being of 50-horse power each, the other 80-horse power; from these steam is furnished to run the electric light and power plant and to heat all the buildings, and in addition to furnish power to run the electric power pumps that supply water to all buildings and for fire protection, to run the laundry, and to supply the kitchen with steam for steam tables, kettles, etc.

The boys' water closet is a one-story brick, 18x36 feet, divided into three compartments with brick floors. It is furnished with first-class sanitary appliances, heated by steam and connected with water and sewer systems.

The manual training building is a red brick, one story high, 24x40 feet, is heated by steam and has water connections.

The carpenter shop is a red brick building 15x20 feet, one and one-half stories high, and is heated by steam. The hose house adjoins this building.

In addition to the buildings mentioned there is a frame, iron-covered barn, 36x54 feet, one and one-half stories high; also numerous out-buildings. The buildings generally are in excellent condition.

The supply of water is obtained from two large wells, which are located in the garden. From these wells water is forced, by an electric pumping plant, through mains up to the two large water tanks, from whence it is distributed to the grounds and buildings.

The buildings and campus are lighted by electricity.

REPORT OF SECRETARY OF STATE BOARD OF CHARITIES AND CORRECTION.

Office State Board of Charities and Correction, December 1, 1900.

Hon. Helen L. Grenfell,

Superintendent of Public Instruction.

Madam—In accordance with your request I have the honor to submit herewith a brief report in reference to educational work in state charitable and penal institutions.

Very respectfully,

C. L. STONAKER,

Secretary.

The State Home for Dependent and Neglected Children cares for children committed by the County Court until private homes can be found for them by state agents. During the time that these children are in the custody of the state at the State Home, they are carefully taught good manners and morals, instructed in the little details of housekeeping and care of the body and clothing, and in many ways are given the education and training in their home life which was neglected before they were committed. It often happens that this very training is the only essential necessary to fit them for placing out in private homes.

The rudiments of a common school education are given them in a school maintained at the Home, well equipped teachers being employed.

The State Industrial School for Girls is now located on a farm near Morrison. Wayward and vicious girls are committed to this institution by the County Courts. They are given a training on good morals and good manners very much as outlined above and receive regular daily instruction in schools conducted at the institution by competent instructors. Many of these girls thus instructed do well on parole in private homes.

State Industrial School for Boys: The educational idea is uppermost in the management of this institution. It is considered a training school rather than a penal institution. There are school rooms graded, with teachers having certificates issued by the county superintendent of schools, and marked progress is made by the pupils in their studies. A manual training school is in operation under a very competent instructor and practical results are accomplished. Nearly all the work about the institution, including repairs and improvements, is performed by the boys. This year the board of control established an electric lighting plant and in the power house left a space for school room so that a practical course in electricity can be had. It is the intention of the board of control to increase the departments of mechanical training as funds permit.

At the Reformatory, where prisoners between the ages of eighteen and thirty are confined. it is found that a large percentage of them do not possess even the rudiments of an education. The chaplain conducts a daily school in the chapel where the rudiments are taught. The prisoners learn to read and write and do simple arithmetical problems.

The State Penitentiary has had very little educational work during the past two years. The night school, conducted under a former chaplain, was not undertaken and but little effort was made in the matter of common school instruction.

Dr. Hubert Work of Pueblo this year started in a modest way to build up a school for the training of backward children, including feeble minded. Although this is a private enterprise it is supported and sanctioned in its effort by this board and through the efforts made from this office boards of county commissioners are defraying the expenses of a number of children needing this kind of training.

ANNUAL MEETINGS

STATE TEACHERS' ASSOCIATION 1898 AND 1899. ASSOCIATION OF COUNTY SUPERINTENDENTS 1899 AND 1900.

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ANNUAL MEETINGS.

COLORADO STATE TEACHERS' ASSOCIATION, 1898.

The twenty-fourth annual session of the Colorado State Teachers' Association was held in the East Denver High School December 28, 29 and 30, 1898.

OFFICERS.

President—J. W. Jackson, Leadville. Acting President—N. B. Coy, Colorado Springs. Secretary—F. J. Francis, Denver. Treasurer—Warren E. Knapp, Denver.

DIRECTORS.

One year, J. H. Hayes, Greeley; two years, W. Triplett, Golden; three years, J. F. Keating, Pueblo.

ANNOUNCEMENTS.

Tuesday, December 27.

2:00 p. m.-Educational Council, rooms Board of Education.

Wednesday, December 28.

9:30 a. m.-Psycho-Manual and Science Sections, auditorium.

9:30 a. m.-Child Study Section, room 1.

11:30 a. m.-Superintendents' and Principals' Round Table, room 2.

2:00 p. m.-Kindergarten Section, auditorium.

2:00 p. m.-County Superintendents' Section, room 1.

8:00 p. m.-Complimentary concert, Trinity church.

Thursday, December 29.

9:30 a. m.-General Association, auditorium.

2:00 p. m .--- General Association, auditorium.

8:00 p. m.-Reception by Teachers' Club and the Artists' Club.

TWELFTH BIENNIAL REPORT

Friday, December 30.

9:00 a. m.—College and High School Section, auditorium.

9:00 a. m.—County Superintendents' Section, room 1.

11:30 a. m.—Business Meeting of General Association, room 1.

2:00 p. m.-State Federation of Women's Clubs.

2:00 p. m.—Conference of Latin Teachers, room 1.

8:00 p. m.-Leeture, E. Benjamin Andrews, auditorium.

PROGRAM.

PSYCHO-MANUAL AND SCIENCE SECTIONS.

Wednesday, 9:30 a. m.—Auditorium.

President of Psycho-Manual Section-Miss E. Skinner, Denver.

President of Science Section-Chas. Ling, Denver.

Paper—"Common Ground Between Science and Mathematics," Professor N. M. Fenneman, Greeley.

Discussion led by Robert W. Hughs, Denver.

Paper—"Psycho-Manual Training as a Factor in the Education of To-day," Miss Lisa Osterholm, Pueblo.

Discussion led by Sidney F. Smith, Denver.

Explanation of Exhibits-1. Manual Work. 2. Science Equipment.

Special meetings of the sections, for the transaction of such business as may come before them, will be announced at the close of the joint meeting.

Music for these sections by Jeannette F. Hall, District 17, Denver.

CHILD STUDY SECTION.

Wednesday, 9:30 a. m.-Room 1.

President-D. D. Hugh, Greeley.

General Topic—"The Parallelism of the Development of the Child and the Race."

Paper-"The Evidence from History," president of the section.

Paper—"The Evidence from Sociology," Superintendent J. H. Van Sickle, Denver.

Paper-"The Evidence from Biology," Dr. Arthur Allin, Boulder.

Paper—"The Evidence from Child Study," Dr. E. G. Lancaster, Colorado Springs.

Discussion opened by Dr. D. E. Phillips, University of Denver, and continued by John W. Hall, superintendent of training department, State Normal, Greeley, and Dr. Francis Kennedy, State University, Boulder.

General discussion.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

SUPERINTENDENTS' AND PRINCIPALS' ROUND TABLE,

Wednesday, 11:30 a. m.-Room 2.

President-D. R. Hatch Georgetown.

Business meeting.

KINDERGARTEN SECTION.

Wednesday, 2:00 p. m.-Auditorium.

President—Margaret G. Grabill, director kindergarten department Denver Normal and Preparatory School.

Address—"The Child in Literature," Rev. Barton O. Aylesworth.

General discussion.

Violin Solo-"Fantasie" (Singlee), little Regina Hanson (pupil of Miss Dawkins).

Paper—"The Kindergarten in the Rural Schools," Mrs. Charlotte Godsman, Burlington, Colo.

General discussion.

Paper—"Economical Decoration Possible," Miss Emily Miles, superintendent of drawing, District No. 1, Denver.

This paper will be illustrated by pictures, pottery, etc. A list of suitable decorations, with prices, will be furnished those desiring it.

The boys of St. Mark's choir, Dingley Brown, director, will render two choruses for this section.

COUNTY SUPERINTENDENTS' SECTION.

Wednesday, 2:00 p. m,-Room 1.

President-Frank D. Ball, Douglas county.

Address—"The Schools of Colorado," Hon. Grace Espy Patton-Cowles, Superintendent Public Instruction.

Paper—"Defects in the School Law, Emphasizing Compulsory Edueation," G. E. McCauley, Bent county.

General discussion.

Wednesday, 8 p. m.-Trinity Church.

Complimentary concert by the School of Music of University of Denver.

GENERAL ASSOCIATION.

Thursday, 9:30 a. m.-Auditorium.

Acting President-Nathan B. Coy, Colorado Springs.

9:30 a.m.

"The Boy Voice and How to Train It," W. J. Whiteman, District 2, Denver.

Mr. Whiteman will be assisted by the Trinity choir boys. Soloists: Master Ralph Rader and Master Vincent Leahy.

TWELFTH BIENNIAL REPORT

10:00 a.m.

"Mathematics, (a) In Grammar Grades, (b) In High Schools," Miss Catherine Munford, Pueblo.

Discussion led by Adelia Denis, Colorado Springs.

11:00 a.m.

"When May Specialization Wisely Begin in the Education of the Child?" Superintendent C. E. Chadsey, Durango.

General discussion.

2:00 p. m.

Vocal Solo-Grace Berg, District 22, Arapahoe county.

Address—"The Heroic and the Commonplace," Acting President Nathan B. Coy, Colorado Springs.

Paper—"Scientific Aspect of Culture Epochs as Set Forth by Herbart," Dr. Louise Hannum, Greeley.

COLLEGE AND HIGH SCHOOL SECTION.

Friday, 9:00 a. m.-Auditorium.

President-Nathan B. Coy, principal of Cutler Academy, Colorado Springs.

Topic—"Student Self-Government in Higher and Secondary Education. Its Present Place. Can It Safely Be Extended?"

Paper—"In Higher Institutions?" A. R. McLean, Boulder.

Paper—"In Private Secondary Schools?" W. F. Slocum, Colorado Springs.

Paper-"In Public High Schools?" Wm. H. Smiley, Denver.

Discussion.

First Paper—J. E. Le Rossignol, University Park. Ruth Mabel Loomis, Colorado Springs.

Second Paper-Anna L. Wolcott, Denver. D. E. Stephenson, Sallda.

Third Paper-Henry White Callahan, Boulder. Geo. B. Turnbull, Colorado Springs.

The music for this department by Jeannette F. Hall, District 17, Denver.

COUNTY SUPERINTENDENTS' SECTION.

Friday, 9:00 a. m.-Room 1.

Address by Superintendent of Public Instruction-elect Mrs. Helen L. Grenfell, Gilpin county.

Paper—"Duty of County Superintendent in Vlsitling Schools," James Wood, Fremont county.

Round Table discussion.

"Should the present union high school law be so amended as to give to the voters of third, fourth and fifth-class countles the opportunity of determining whether or not such counties shall be organized each into one district for high school purposes; and, if so, to provide for the support of such high school by a tax on all taxable property in the county, not to exceed one mill on the dollar?"

By-laws of the association, general discussion.

GENERAL ASSOCIATION.

Friday, 11:30 a. m.-Auditorium.

Business meeting.

STATE FEDERATION OF WOMEN'S CLUBS.

Friday, 2:00 p. m.-Auditorium.

President-Mrs. J. H. Baker, Boulder.

Paper—"A Pre-Requisite to Art Decoration in our Schools," Celia Mott Martin.

Discussion-Open to all.

Paper—"Physical Culture an Essential to Proper Expression," Ena Louis Stahl. Mrs. Westendorf.

Discussion-Open to all.

CONFERENCE OF LATIN TEACHERS.

Friday, 2:00 p. m.-Room 1.

Chairman-H. M. Barrett, Denver High School, District No. 1.

All Latin teachers are requested to attend this conference. The program will be informal; no papers written.

"The Essentials in Latin Prose Composition."

Discussion introduced by Edward B. T. Spencer, Denver University. "The Roman Method of Pronunciation."

Introduced by Mr. James H. Hays, teacher of Latin in the State Normal School, Greeley.

"The Inductive Method."

Discussion introduced by Miss Izara C. Scott, teacher of Latin in the Pueblo High School.

Friday, 8:00 p. m.—Auditorium.

Lecture—"The Public School System an Instrumentality in Social Reform," Superintendent E. Benjamin Andrews, of Chicago.

Music—Vocal solo, Mrs. Olive Otis. W. J. Whiteman, District 2, Denver.

CONSTITUTION AND BY-LAWS OF THE COLORADO TEACHERS' ASSOCIATION.

Adopted at the annual holiday session of 1892.

COMMITTEE ON REVISION—Ira M. DeLong, Boulder; S. T. Hamilton, Fort Collins; Joseph Shattuck, Denver.

The committee on a new constitution, Ira M. DeLong, of Boulder; S. T. Hamilton, of Fort Collins, and Joseph Shattuck, of Denver, was appointed at the annual session of 1891. By order of the association, a preliminary report of this committee was published in the Colorado School Journal for July, 1892. The final report of the committee was submitted to the association at its annual meeting in 1892, and was by it amended and adopted as printed in the text appended.

CONSTITUTION—AMENDMENTS.

Article V. Section 3.

An amendment to Section 3, Article V, of the constitution, so that the section now reads: "The Council shall elect its own president, and vice-president, and these two, co-operating with three representatives chosen by the Council, shall act as its executive committee."—Passed Dec. 29, 1894.

Article III, Section 9.

An amendment to Article III, Section 9, by inserting after the word "November," the following clause: "The chairmen of the several departments shall be notified by the secretary of all meetings for the preparation of the program, and be invited to be present."

Article V, Section 2.

That Article V, Section 2, be amended by inserting after "Cause," and before "shall pay," the following words: "or by lapse of their membership in the General Association."—Passed Dec. 28, 1895.

Article V. Section 6.

The Educational Council shall itself elect six representatives to its membership, possessing the same rights and subject to the same provisions as those elected by the departments.—Passed Dec. 31, 1896.

PREAMBLE AND CONSTITUTION.

Preamble.

We, the teachers of Colorado, for the purpose of increasing our efficiency, elevating our profession, and promoting every wisc educational movement accessible to us, do ordain and establish this constitution for the Colorado Teachers' Association.

Constitution.

Article I. Incorporation and Name.

The teachers organized and acting under this constitution shall be incorporated as the Colorado Teachers' Association.

Article 11. Membership.

1. Any teacher or friend of education shall, upon paying the stipulated dues, be entitled to receive a certificate of membership running from the date of payment.

2. Membership shall be: (a) For one year, or for life—the former depending upon the payment of one dollar; the latter, upon the payment either of ten dollars in one sum, or of one dollar annually for fifteen years. (b) Active, or associate—the former including all life members and such one-year members as are engaged in some distinctly educational work; the latter, all other members.

3. Associate members shall not be eligible to office; but, in speaking and voting, all members shall have equal rights, save that associate members may not vote on any particular question when an open objection thereto, made before taking up the next business in order, has been sustained by a majority of the active members present.

Article III. Officers.

1. The officers shall be a president; as many vice-presidents, and four times as many nominators as there may be sectional departments; a secretary, who shall (when feasible) reside in the place of meeting; a treasurer; three directors, and three auditors.

2. Where not herein otherwise prescribed, an official year shall begin with the final adjournment of the electing session and end with that of the next regular session; but all officers shall hold over until their successors are duly qualified.

3. The president and vice-presidents shall serve one year; the secretary and treasurer, three years; the directors and the auditors, three years (but so chosen at the first election that only one need retire each year thereafter); the nominators, during the session at which they are chosen.

4. The nominators shall consist of the nominators of the sectional departments, co-operating with an equal number chosen viva voce by the Association, and it shall be their duty, sitting as a committee, the chairman of the directors presiding with right to speak and vote, and a majority being a quorum, to nominate all officers not otherwise provided for (giving due weight to fitness for the positions, sectional and geographical rotation, and seniority in membership) and report the same to the Association in a business session held at least one half-day session before final adjournment. The adoption of this report as given or as amended shall complete their election.

5. It shall be the duty of the president to preside at all meetings; appoint committees not otherwise provided for; send and answer fra-

ternal messages and greetings; time speakers with precision and fairness; fill inter-sessional vacancies not otherwise provided for, and call extra sessions, subject in both cases to the prior approval of the directors; and perform any other acts pertaining to his office.

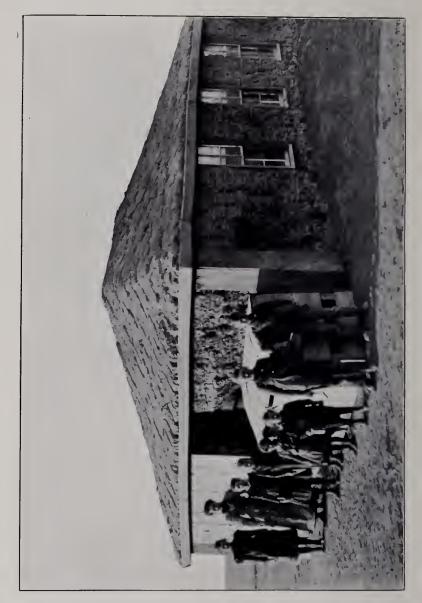
6. The vice-presidents shall consist of the chairmen of the sectional departments; and, when the president fails to serve, it shall be the duty of one of their number, in the order of personal seniority, to act in his place.

7. It shall be the duty of the secretary, with the aid of the reporter, to keep an accurate record of the proceedings, including all motions, discussions, resolutions and reports, publishing the same if the directors so order; collect and file all papers read before the Association, and copies of all circulars, programmes and other official publications; keep the necrology of the Association in a book for the purpose, reporting thereon annually to the Association; act as secretary of the directors and of the Educational Council, keeping a concise record of their proceedings and reporting thereon annually; and perform any other acts pertaining to his office.

8. It shall be the duty of the treasurer to collect and hold all moneys due the Association, paying out the same only on the written orders of the directors, attested by the secretary and accompanied by the itemized bills of the payees, filing such orders and bills, all duly receipted, as his vouchers to the auditors; make under classified heads an annual statement of the receipts and disbursements, starting with the cash balance named in the report of the auditors for the previous year; issue all certificates of membership, retaining a membership stub as a voucher to the auditors; collect the Council fees and issue credentials therefor; furnish the secretary an alphabetical list of all members, giving their addresses, their official positions as teachers, and the sectional departments to which they belong; and perform any other acts pertaining to his office.

9. It shall be the duty of the directors, sitting as a committee, the senior official being chairman, and two being a quorum, to meet each year early in October, and at such other times as occasion may require, for the transaction of business as follows: To execute orders of the Association; fix the time and place of meetings; prepare and publish the annual programme before the end of November; designate a suitable hotel for official headquarters; appoint annually a clerk of rates, and (if possible) a reporter; limit the annual expenses to the funds on hand; fix the remnueration of the secretary and of the reporter, and pay the same after the year's work has been satisfactorily completed; require all claims for money to be in the form of fully itemized bills; draw all orders for the payment of approved bills; revise triennially the basis of sectional representation in the Council; designate (subject to approval) annually prior to each regular session some standard school journal as the official organ for the ensuing year; reserve at all business sessions central seats in a body for the use of members; and perform any other acts which the interests of the Association may require.





SOD SCHOOL HOUSE. DISTRICT NO. 6, SEDGWICK COUNTY,

10. It shall be the duty of the auditors, sitting as a committee, the senior official being chairman, and two being a quorum, to make annually a faithful examination of the books, vouchers and membership stubs, submitting a written report thereon, engrossed in a book kept by the secretary for the purpose, setting forth the condition of the books, the accuracy of the accounts as checked by the vouchers, the cash balance with its place of deposit or investment, and any other item which in their judgment should come before the Association.

11. It shall be the duty of the clerk of rates to arrange with the railroads and hotels for reduced rates to members, making written contracts when desirable, and providing for such identification as may be demanded: report all terms secured to the directors in time for insertion in the annual programme; and perform any other work appropriate to his office which the directors may prescribe.

12. It shall be the duty of the reporter to keep an accurate record of the extempore proceedings, with the names of the speakers, and to turn the same over to the secretary in legible long hand at the close of each session.

Article IV. Departments.

1. Upon a written petition, signed by twenty members identified with a special line of work in the state, permission may be given to organize and maintain a sectional department.

2. Subject to the government of the Association, each department shall qualify its own members, and determine its rules of procedure; choose at the opening of its annual session two nominators to name (subject to amendment and approval) a chairman, a secretary, and the representatives in the Council; make assessments for necessary expenses not otherwise provided for; and take any other action demanded by the special interests which it represents.

3. The chairman and the secretary of each department shall perform the duties suggested by their titles, and shall serve also as an executive committee for the preparation of the sectional programme, and for the performance of any other work connected with their department. Moreover, each secretary shall promptly file with the secretary of the Association a copy of his minutes.

4. Not more than one half-day of each regular session shall be set apart for sectional meetings, and the special programmes for these meetings shall be printed in the annual programme of the Association, provided that the committees in charge shall prepare and submit them to the directors prior to the middle of November.

5. During any one year, each department may, with the approval of the directors, draw upon the treasurer for an amount of money not exceeding (save with the prior consent of the Association) one-fourth of the fees contributed by its members at the last regular session.

6. If any department shall, at any regular session, fail to meet for such deliberation and action as its special line of work may need, it

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shall thereby forfeit its organization, and can then be reorganized only by the original process.

Article V. The Educational Council.

1. An Educational Council, composed of representatives of the sectional departments, on a ratio to be determined by the directors and revised by them every three years thereafter, may be organized by a twothirds vote at any regular meeting of the Association.

2. Representatives shall be chosen for three years (but so chosen at the first election that, as nearly as may be, one-third of the whole number may be chosen each year thereafter) from members in attendance who attended the previous year also; shall forfeit their council seats by absence from two successive sittings, unless excused for serious cause; shall pay to the treasurer of the Association an annual council fee of two dollars, and receive from him their council credentials; and shall not be reimbursed for their expenses beyond an annual rebate of not more than one-half (as may be allowed by the directors) of their necessary outlay for a single railroad fare.

3. The Superintendent of Public Instruction, or the president of the Association, shall be *ex officio* the presiding officer of the Council; and these two, co-operating with three representatives choosen by the Council, shall act as its executive committee.

4. The Educational Council shall meet annually just prior to the opening day of the regular holiday session, and in the same place; and at other times and places upon its own adjournment, or upon the call of one of its presiding officers.

5. It shall be the duty of the Educational Council to report to the respective departments seats made vacant by absence or otherwise; consider all matters referred to it by the Association; communicate with the directors respecting the work and welfare of the Association; discuss advanced educational topics; propose educational reforms in legislation and in practice; stimulate and maintain a local interest in the National Educational Association, and co-operate in every practical way with the progressive educational forces of the state and country.

Article VI. Miscellancous Provisions.

1. The regular sessions shall be held annually some time during the winter holidays, but extra sessions may be held at other times, provided that all officers shall be personally notified by mail or otherwise, and all other members by a prominent statement of the call in the leading dailies of at least four large cities within the state.

2. All papers are limited to twenty minutes, and shall, when read, be deposited with the secretary as the permanent property of the Association. The leading discussions are limited to ten minutes each, and shall be presented in extempore form. All other discussions are limited to five minutes each.

3. A business session shall be held at least one half-day session before final adjournment for the following purposes: (1.) Reports of special committees.

(2.) Petitions for sectional departments.

(3.) Reports and election of officers.

(4.) Instructions to incoming officers.

(5.) Consideration of amendments.

(6.) Any other appropriate business.

4. Voting shall ordinarily be done by acclamation; but a minority of one-third may demand a ballot; and a majority of all, the yeas and nays.

5. A majority may at any time enact by-laws in harmony with the constitution, and may in business session alter or suspend them. In open session a two-thirds standing vote shall be required for all changes.

6. This constitution shall be adopted in a business session by a three-fourths vote, and may at any regular session thereafter be amended in the same manner.

By-Laws.

1. Not more than three topics shall be assigned to any one session of the annual programme.

2. Speakers who are interrupted by the call of time, as also those who do not respond in their assigned order, may be allowed by the president to continue at the conclusion of the regular programme.

3. In the organization of departments, concise and expressive names shall be chosen—such names being in every case subject to the revision of the directors.

4. Parliamentary points not otherwise covered shall be settled by Roberts' Rules of Order.

LIST OF MEMBERS OF STATE TEACHERS' ASSOCIATION, 1898-1899.

MEMBERS OF SCIENCE SECTION.

Allen, Bennett MFort Collins	Johnson, S. ArthurDenver
Brown, E. LDenver	Kepner, H. VDenver
Brookover, ChasColorado Springs	Kennedy, FrancisBoulder
Bethel, EDenver	Ling, Chas. JDenver
Butterfield, R. ODenver	Miles, CorneliaDenver
Beardsley, A. EGreeley	Moore, Alice MNi Wot
Cajori, FlorianColorado Springs	Munford, CatherinePueblo
Cannon, Geo. LDenver	Mosley, F. YBoulder
Dorr, A. WGolden	Palmer, Chas. SBoulder
Elder, E. WBoulder	Putnam, W. WGreeley
Engle, WUniversity Park	Remington, W. WFort Morgan
Fenneman, N. MGreeley	Russell, H. EUniversity Park
Frick, Philip SDenver	Ramaley, FrancisBoulder
Garvin, John BDenver	Shaw, F. MDenver
Howe, H. AUniversity Park	Smith, Sydney FDenver
Hays, C. IDenver	Triplet, WmGolden
Harris, E. JDenver	Troth, Alonzo PLeadvilie

MEMBERS OF COLLEGE AND HIGH SCHOOL SECTION.

Allin, ArthurBoulder	Haskell, Annle NDenver
Arundel, W. CDenver	Klmball, Martha NLeadvllle
Batterson, ChasFrulta	Morrison, Lewis JGranite
Belcher, ArchlbaldLeadville	McDowell, Wm. FUniversity Park
Barrett, II. MDenver	Meek, J. RDurango
Ballard, Charlotte EDenver	McClure, Frances CDenver
Burger, Chas. EArapahoe	Mead, MabelGreeley
Clark, Ernest RColorado Springs	McLean, Dr. J. ABoulder
Chadsey, C. EDurango	Mussey, W. ODenver
Coy, Nathan BColorado Springs	O'Brien, SarahDenver
Cramer, Mary KGreeley	Pendleton, BeulahGunnlson
Callahan, H. WhiteBoulder	Parker, C. VFort Collins
Cleveland, OllvlaPueblo	Polhemus, Cornelius HDenver
Denlson, Lucy DDenver	Parson, Edward SEl Paso
Dunn, A. HFort Collins	Smlley, Wm. 11Denver
Deardorff, Chas. MUniversity Park	Smlth, Henry BDenver
DeLong, Ira MBoulder	Scott, IzoraPueblo
Elllott, L. SDenver	Stockton, J. LeroyGreeley
Ellis, AlstonFort Collins	Spooner, Chas. CChaffee
Fynn, A. JBoulder	Shoe, Grace EllenLongmont
Fulton, HenryBoulder	Salisbury, Cella ADenver
Gass, B. RDenver	Turnbull, Geo. BColorado Springs
Hughes, R. WDenver	Witter, Miss M. A. BArapahoe
Hart, H. MPueblo	Woodford, Mary EFort Collins
Hays, James HGreeley	

MEMBERS OF CHILD STUDY SECTION.

Ault, C. BGoldfield	Horton, Jennie DDenver
Braun, HelenDenver	Jameson, GraceGolden
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Beardsley, Eva ADenver	Johnson, MinnieLeadville
Broad, Clara LGolden	Johnson, AnnaDenver
Baughman, M. VColorado Springs	Knapp, KatherinePueblo
Corey, Maud EDenver	Krueger, Flora HDenver
Clark, Anna MDenver	Lynch, JohnDurango
Clark, F. HFlorence	Lancaster, E. GColorado Springs
Churchill, BlancheGilpin	Logan, DoraLouisville
DeBolt, EttaDenver	Lilley, Joseph ALittleton
Dickinson, Mrs. ChasDenver	Mencimer, JuliaGolden
Dolan, Alice MLeadville	Merrill, Louis ADenver
Dcamer, E. HDenvcr	Miller, KatherineLittleton
Ecker, EmmaAlcott	Peterson, Celia F. ODenver
Evans, SadieFort Collins	Phillips, D. EUniversity Park
Greenlee, L. CDenver	Russell, MamieBrighton
Gould, G. WCripple Creek	Sorin, Elizabeth AErie
Greene, Sarah MPueblo	Sims, ElmerHazeltine
Goldsborough, MFort Collins	Soper, Frances DColorado City
Hugh, D. DGreeley	Sloan, Minnie DDenver
Hague, Sadie BAspen	Thompson, LucyDenver
Hatch, D. RGeorgetown	Wheeler, Gertrude EGolden
Hiatt, J. FrancisGolden	Watson, ElizabethDenver

KINDERGARTEN.

Boylan, M. NoraGreeley	Davis, AnnieDenver
Collar, EmilyFlorence	Grabill, MargaretDenver
Copeland, Mrs. A. BGreeley	Snyder, Z. XGreeley

MEMBERS PSYCHO-MANUAL SECTION.

Bradley, C. ADenver	Ragan, J. BDenver
Cagwln, D. CDenver	Songer, MyrtleAlcott
Clauser, MiltonDenver	Snyder, E. RWindsor
Hadden, S. MOrchard	Shumway, WmDenver
Henderson, J. RDenver	Sale, KatherineDenver
Hull, M. WPueblo	Sale, JuliaDenver
Kyte, Eliza JDenver Mills	Work, C. TGreeley
Lawton, ADenver	Watson, ViolaAlcott
Miles, Emily IIDenver	

MEMBERS COUNTY SUPERINTENDENTS' SECTION.

Knapp, W. EDenver
Lay, H. CTelluride
Ligett, Mrs. E. OKiowa
Maxey, SadicFairplay
Snook, J. EGreeley
Secrest, C. OGolden
Scanlan, Edward MAspen
Shepherd, Lois JPueblo
Walker, ElizabethGrand Junction
White, Mrs. AGlenwood Springs
Williams, Mary EGunnison
Ware, C. EYuma
Wilson, HenriettaLarimer
Williams, F. EMorgan

SUPERINTENDENTS' AND PRINCIPALS' ROUND TABLE SECTION.

John Dietrich, Colorado Springs, President.

W. J. Wise, Denver, Secretary.

Arasmith, J. WGolden	Matthews, J. HBlack Hawk
Banta, EdithDenver	Mandeville, W. BDenver
Cowan, JamesCraig	Miller, A. NDenver
Casey, Wm. VBoulder	Miller, M. FDenver
Chapman, H. RColorado Springs	Moles, O. SDenver
Daeschner, ACheyenne Wells	Moore, Dora MDenver
Dietrich, JohnColorado Springs	Otto, Albert SGrand Junction
Donahue, J. LArvada	Parks, W. TDenver
Dodds, J. HDenver	Philips, H. SDenver
Ellison, J. WAlcott	Palmer, E. WCripple Creek
Elliot, E. CLeadville	Price, J. MEaton
Eagleton, J. SDenver	Shriber, J. HMorrison
Eagleton, W. HDenver	Shipman, S. TDenver
Eagleton, M. ELittleton	Stevens, E. CDenver
Grafton, L. BColorado City	Stevens, J. CDenver
Hall, L. HDenver	Smith, F. WGrand Junction
Harris, W. GDelta	Slocum, Wm. FColorado Springs
Hermanns, Ed. FDenver	Thorn, T. JLyons
Jones, Jennie MLeadville	Ward, DanielPueblo
Keating, J. FPueblo	White, H. CCentral City
Lewis, F. DLouisville	Wise, W. JDenver
Long, Geo. BDenver	Zirkle, H. WDenver
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COLORADO STATE TEACHERS' ASSOCIATION, 1899.

The twenty-fifth annual session, Colorado State Teachers' Associa tion, was held at East Denver High School, December 27-28-29, 1899.

Officers of General Association—President, W. F. Slocum, Colorado Springs; secretary, Fred Dick, Denver; treasurer, W. E. Knapp, Denver.

Directors—One year, William Triplet, Golden; two years, J. F. Keat ing, Pueblo; three years, H. A. Howe, University Park.

Clerk of Rates-L. C. Greenlee, Denver.

WEDNESDAY, DECEMBER 27, 9:30 A. M.-AUDITORIUM,

General Association-Order of Proceedings-

1—Invocation. 2—Music. 3—President's address. 4—Reading minutes of previous meeting. 5—Announcements. 6—Appointment of committees: (a) committee on necrology, 3; (b) committee on resolutions, 3. 7—Election of fourteen nominators. 8—Music. 9—Report of committee on Arithmetic. Committee—E. G. Lancaster, Colorado College; D. E. Phillips, University of Denver; Arthur Allin, University of Colorado; J. W. Hall, Colorado State Normal School; R. H. Beggs, Whittier School; Florian Cajori, Colorado College; E. L. Brown, North Denver High School; Mary S. Mack, Gilpin School. 10—Discussion. Adjournment.

Music will be in charge of Dean S. J. Blakesley, Conservatory of Music, Denver.

WEDNESDAY, 2 P. M.-ROOM 1.

Science Section.

President-Florian Cajori, Colorado College, Colorado Springs.

College and High School Section.

President, Henry Fulton, State University, Boulder.

Joint Meeting-Order of Proceedings-

1—Announcements. 2—Appointment of committees, (a) on nominations, (b) special committee. 3—Paper, Entrance Requirements, Florian Cajori, Colorado College, Colorado Springs. 4—Paper, English in Secondary Schools, C. G. Osgood, State University, Boulder. 5—Reading minutes of previous meeting. 6—Report of nominating committee. 7—Election of officers: (a) president, (b) secretary, (c) representative to Educational Council, (d) two nominators. 8—Report of committee on science. Committee, H. A. Howe, N. M. Fenneman. 9—Report of committee on future action of the section. Committee, G. L. Cannon, C. S. Palmer. 10—Report of committee on resolutions. Committee, S. F. Smith, E. Bethel, E. Waite Elder. 11—Unfinished business. 12—New business. Adjournment.

WEDNESDAY, 2 P. M.-AUDITORIUM.

Child Study Section.

President, D. E. Phillips, University of Denver, Denver; secretary, Etta De Bolt, Colorado Springs.

Kindergarten Section.

President, Z. X. Snyder, State Normal School, Greeley; secretary, Beatrice Morris, Washington Kindergarten, Denver.

Joint Meeting-Order of Proceedings-

1—Announcements. 2—Appointment of committees, (a) on nominations, (b) special committees. 3—General topic, "Stimuli to Child Development;" (a) paper, "Artificial Stimuli," Miss Ceclia Adams, Denver; (b) paper, "Stimuli of Nature," Dr. E. G. Lancaster, Colorado Springs; (c) paper, "Stimuli of Heredity," Dr. E. G. Dexter, Greeley; (d) paper, "Social Stimuli," Dr. Arthur Allin, Boulder; (e) discussion, Dr. Z. X. Snyder, President State Normal School, Greeley; Miss Mary Mack, Gilpin School, Denver; Dr. E. C. Chadsey, Superintendent of Schools, Durango; (f) general discussion. 4—Reading minutes of previous meeting. 5—Report of nominating committee. 6—Election of officers, (a) president, (b) secretary (c) representative to the Educational Council, (d) two nominators. 7—Unfinished business. 8—New business. Adjournment.

WEDNESDAY, 2:00 P. M-ROOM 3.

Psycho-Manual Section.

President, William Shumway, supervisor of Sloyd, District No. 1, Denver; secretary, Julia Sale, Denver.

Order of Proceedings-

1—Announcements. 2—Appointment of committees, (a) on nomin ations, (b) special committees.

Program-

Piano solo (Bells of Aberdovey-Willie Pape), Miss Fannie Riddell.

Clay modeling and wood carving, John R. Henderson, Manual Training High School.

Sloyd in the grades, Miss Rec Wyman, Wyman School.

Vocal solo, selected, Miss Ida Reitze.

Forging and pattern making, Clarence A. Lawton, Manual Training High School.

Some hints on artistic drawing, Charles M. Carter, supervisor North Denver Schools.

Violin duet, selected, Misses Julia and Olga Ferlen.

Sewing in public schools, Miss Charlotte C. Merrell, Ashland School.

Machine and bench work in metals, Joseph Y. Parce, Jr., Mannal Training High School.

Vocal solo, selected, Mrs. Charles J. Scott.

Cooking and domestic science, Miss Amy L. Daniels, Manual Training High School.

The value of manual training in mental development, Dr. E. G. Lancaster, Colorado College.

Vocal trio, selected, Miss Adelaid Beardsley, Mrs. R. H. Beggs and Miss Orlina Beggs.

3—Reading minutes of previous meeting. 4—Report of nominating committee. 5—Election of officers: (a) president, (b) secretary, (c) representatives to the Educational Council, (d) two nominators. 6—Unfinished business. 7—New business. Adjournment.

WEDNESDAY, 2 P. M.-ROOM 2.

County Superintendents' Section.

President, Helen L. Grenfell, State Superintendent of Public Instruction, Denver; secretary, Elizabeth Walker, County Superintendent, Mesa county, Grand Junction.

Order of Proceedings-

1—Reading minutes of previous meeting. 2—Announcements. 3— Appointment of committees: (a) on nominations, (b) special committees.

Program-

1—The Speer method of arithmetic in rural schools, general discussion. 2—The County Associations, discussion. 3—Reading circles, discussion. 4—Round Table discussion: (a) compulsory education, (b) rural school libraries, (c) eighth grade examinations, (d) problems of rural schools.

4—Report of nominating committee. 5—Election of officers: (a) president, (b) secretary, (c) treasurer, (d) representative to the Educational Council, (e) two nominators. 6—Unfinished business. 7—New business. Adjournment.

WEDNESDAY, 2 P. M.-ROOM 4.

Superintendents' and Principals' Round Table Section-Order of Proceedings-

1—Reading of minutes of previous meeting. 2—Announcements. 3—Appointment of committees: (a) on nominations, (b) special committees. The board of directors has not received the program of this section. 4—Report of nominating committee. 5—Election of officers: (a) president, (b) secretary, (c) representative to the Educational Council, (d) two nominators. 6—Unfinished business. 7—New business. Adjournment.

WEDNESDAY, 8 P. M.-AUDITORIUM.

General Association-Order of Proceedings-

1—Statement from the board of directors concerning the next place of meeting of the association. H. A. Howe, director, Denver. 2—Discussion. 3—Musical in charge of the Academy of Music. Miss Dora Diers, manager, 1711 Grant avenue, Denver. 4—Social.

THURSDAY, DECEMBER 28, 9:30 A. M.-AUDITORIUM.

General Association—Order of Proceedings—

1—Paper, "The Overcrowding of the Curriculum in Elementary Schools," E. C. Stevens, principal Maria Mitchell School, Denver. Discussion: W. S. Glass, High School, Canon City; Elizabeth Richards, Boulder. 2—Music, in charge of W. J. Whiteman, supervisor of Music, District No. 2, Denver. 3—Paper, "Compulsory Education," E. C. Elliott, city superintendent, Leadville. Discussion: John Lynch, principal Longfellow School, Durango; Margaret L. Rank, Central City.

THURSDAY, 2 P. M.—AUDITORIUM.

General Association—Order of Proceedings—

1—Paper, "Economics in the High School," J. E. Le Rossignol, University of Denver, Denver. Discussion: Ortha B. Fielder, High School, District No. 1, Denver; W. O. Mussey, High School, District No. 2, Denver. 2—Music, in charge of Dean O. B. Howell, Conservatory of Music, Champa and Fifteenth streets, Denver. 3—Paper, "The Function of the Normal School," W. H. Miller, city superintendent, Grand Junction. Discussion: J. B. Ragan, principal Edison School, North Denver; E. G. Lancaster, Colorado College, Colorado Springs.

FRIDAY, DECEMBER 29, 9:30 A. M.-AUDITORIUM.

General Association-Order of Proceedings-

1—Paper, "School and Home," Helen L. Grenfell, State Superintendent, Denver. Discussion: Bertha M. Andrews, State Normal School, Greeley; Edgar Kesner, city superintendent, Salida. 2—Music, in charge of Herbert Griggs, director of music, District No. 1, Denver. 3—Paper, "Commercial Courses in High Schools." Charles J. Gilkison, professor commercial department, State Agricultural College, Fort Collins. Discussion: J. F. Cooper, director commercial department, Denver Normal and Preparatory School, Denver; E. E. Cole, High School, La Junta.

Business Session, 11 A. M.-

1—Announcements. 2—Reading minutes of previous meeting.. 3— Report of nominators. 4—Election of officers. 5—Consideration of recommendations of the Educational Council. 6—Report of committee on necrology. 7—Report of committee on resolutions. 8—Report of treasnrer. 9—Report of auditing committee. 10—Unfinished business: (a) revision of sections. 11—New business.

FRIDAY, 2 P. M.-AUDITORIUM.

General Association-Order of Proceedings-

1—Paper, presentation of geography in the grades, Lulu White, Pueblo. Discussion: Carrie Fashbaugh, Greeley; D. C. Bauman, High School, Trinidad. 2—Paper, language tcaching in the seventh and eighth grades, Grace Ellen Shoe, High School, Longmont. Discussion: J. S. Howe, principal, Akron; Ethel C. Roberts, Colorado Springs; T. R. Ronte, principal, Altman. 3—Unfinished business. Adjournment.

TWELFTH BIENNIAL REPORT

LIST OF MEMBERS FOR 1899-1900.

PSYCHO-MANUAL.

Allen, Mrs. M. LDenver
Bradley, Chas. ADenver
Clauser, MiltonDenver
Day, HarrietGreeley
Hull, W. HPueblo
Henderson, W. LDenver
Heileman, AnnaGreeley
Jones, B. IdaDenver
Lawton, C. ADenver

Parce, J. YDenver
Ragan, J. BDenver
Sanford, Mary EPueblo
Shumway, WDenver
Sale, KatharineDenver
Sale, JuliaDenver
White, Lulu JPueblo
Work, C. TGreeley

CHILD STUDY.

Adams, CeciliaDenver	Hollingshead, C. ADenver
Allen, Luella	Hall, Mrs. L. HDenver.
Allin, ArthurBoulder	Hatch, D. RCastle Rock
Bartels, BinaPueblo	Harris, Joe ADenver
Braun, Frieda ADenver	Harris, KateDenver
Braun, Helen MDenver	Johns T. AdaDenver
Clark, F. HCentral City	Jameson, Grace JGolden
Cole, E. ELa Junta	Keough, M. EmmaPueblo
Crow, M. MFrancis	Kolbe, AnitaDenver
Churchill, BlancheDenver	Laneaster, E. GColorado Springs
Christensen, DoraDenver	Larson, Kate RLeadville
Crawford, Ida SFort Collins	Logan, DoraDenver
Darley, MaryPueblo	Meyer, E. HDenver
Doak, MaryPueblo	Morrison, LizziePueblo
Dolan, Aliee LLeadville	Mencimer, JuliaGolden
Dick, FredDenver	Phillips, D. EUniversity Park
Dingman, MayPueblo	Peterson, Celia F. OsgoodDenver
De Bolt, EttaColorado Springs	Richards, ElizabethBoulder
Freyer, MinnlePueblo	Richards, Carrle LPueblo
Eastman, F. WIdaho Springs	Sorin, Elizabeth AErle
Fletcher, Mary LGeorgetown	Sibley, Mrs. Belle BGreeley
Ferguson, Belle CDenver	Scott, Jessie MDenver
Force, Anna LauraDenver	Thompson, JennieDenver
Grelst, AnnaPueblo	Thompson, LucyDenver
Greenlee, L. CDenver	Wolfersberger, Mary SDenver
Green, SarahPueblo	Wells, Myrtle JFort Collins
Green, Sarahirittinittinittinittinittinitti	wens, myrtie JFort Comms

COLLEGE AND HIGH SCHOOL.

Aylesworth, B. OFort Collins	Hays, James HGreeley
Belsher, ALeadvllle	Hadden, S. MGreeley
Barrett, H. MDenver	Knapp, KatharlnePueblo
Bigelow, C. WDenver	Kirkendall, F. E. CCanon City
Brackett, J. R Boulder	LeRossignol, J. EUniversity Park
Bauman, E. GTrlnidad	McClure, Frances CDenver
Baker, James HBoulder	Mussey, W. ODenver
Buchtel, Henry AUniversity Park	O'Brien, SarahDenver
Burger, Chas. RDenver	Russell, H. EUniversity Park
Brown, Zaidee MPueblo	Rhodes, W. PMontrose
Clark, E. RColorado Springs	Slocum, W. FColorado Springs
Cannon, Geo. LDenver	Scott, IzoraPueblo
Collier, OliveNorwood	Smith, Henry BDenver
Coy, Nathan BColorado Springs	Spencer, EdwardUniversity Park
Corson, Cora MDenver	Shafer, Wilson MVictor
Dunn, A. HFort Collins	Smith, ClynGrand Junction
DeLong, I. MBoulder	Shoe, Grace EllenDenver
Dickie, Alice EPueblo	Smiley, Wm. HDenver
Fulton, HenryBoulder	Salisbury, Celia ADenver
Fynn, A. JDenver	Spooner, C. CSalida
Fraser, Georgine ZDenver	Stephens, May EGolden
McGinnis, HarryGeorgetown	Taylor, Geo. CBoulder
Hart, H. M Pueblo	Warr, Vina LDenver
Hollabaugh, T. GDenver	Williams, Florence LPueblo
Hale, H. MDenver	

KINDERGARTEN.

Brownlee, Sylvia LRocky Ford	Green, IsabellaDenver
Boylan, Nora MGreeley	Kendall, Elizabeth HGreeley
Bearce, Eva BLa Junta	Snyder, Z. XGreeley
Carlile, CarriePueblo	Trehearne, BeatriceDenver
Gove, AaronDenver	

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SUPERINTENDENTS' AND PRINCIPALS' ROUND TABLE.

Arasmith, J. WGolden	Keating, R. E Boulder
Brownscomb, F. JAspen	Miller, M. F
Beggs, R. HDenver	Moore, Dora M Denver
Butler, O. P. MDenver	Moles, O. S Denver
Chase, InesPueblo	McClung, J. SPueblo
Copeland, A. BGreeley	Norvell, L. P Denver
Cole, Marie DDenver	Overmeyer, Alice L
Dletrich, JohnColorado Springs	Philllps, H. S Denver
Donahue, J. LDenver	Price, J. M
Daeschner, AugLoveland	Palmer, E. W Cripple Creek
Dodds, J. HDenver	Parker, C. V Trinldad
Eagleton, J. SDenver	Rontree, T. R . Altman
Eagleton, W. HDenver	Reeder, J. M Buena Vista
Elllott, Edward CLeadville	Spangler, D. W Boulder
Eagleton, M. ELlttleton	Shaff, D. C Fort Collins
Elder, A. WDenver	Shrlber, J. 11 Morrison
Ellison, J. WAlcott	Stevens, Eugene C Derver
Grafton, L. BColorado City	Van Sickle, Jas. H Baltimore
Harris, W. GTellurlde	Ward, Danlel Pueblo
Hermanns, E. FDenver	Walker, Nannle Pueblo
Hall, L. HDenver	Wilson, A. M Buld Mountain
Howe, J. SAkron, Washington Co.	Wyatt, G. W Denver
Keatlng, J. FPueblo	Wrlght, J. P. Vletor
Knapp, W. EDenver	Zlrkle, 11 W Denver
Keplinger, W. WDelta	



SCIENCE.

Allen, Bennett M Puet	olo Howe, H. A.
Brown, E. LDenv	ver Jones, C. W
Brookover, ChasColorado Sprln	gs Johnson, S. A
Beardsley, A. EGreel	ey Kepner, II. V
Buchanan, J. ESterll	ng Llng, C. J
Bethel, EllsworthDenv	er Mosley, F. Y.
Cajori, FlorlanColorado Sprln	gs Miles, Mrs. C
Collett, A. MDenv	er Munford, Kat
Duane, WmBould	ler Otto, Albert S
Dorr, A. WGold	en Palmer, C. S.
Dollinger, F. JAsp	en Patton, Arthu
Elder, E. WDenv	er Ramaley, Fra
Evans, W. LColorado Sprin	gs Russell, H. E
Fenneman, N. MGreel	ey Shaw, F. M
Fonda, C. PercyPuet	olo Small, Miss I
Felger, A. HDenv	er Smith, Sidney
Glass, W. SCanon Ci	ty Trlplett, Wm
Garvin, John BDenv	er Thorn, T. J
Hays, C. IDenv	er Westhaver, J.

lowe, H. A University Park
lones, C. WPueblo
Johnson, S. A Denver
Sepner, II. VDenver
dng, C. JUniversity Park
Mosley, F. YBoulder
Milles, Mrs. CornellaDenver
funford, KatharinePueblo
Otto, Albert S Grand Junction
'almer, C. SBoulder
Patton, ArthurFort Collins
tamaley, FrancisBoulder
Russell, H. EUniversity Park
Shaw, F. MDenver
Small, Miss L. ADenver
Smith, Sidney FWashington
Frlplett, WmGolden
Thorn, T. JLyons
Westhaver, J. BEdgewater

COUNTY SUPERINTENDENTS.

Anderson, Mary JLa Junta
Browne, Mrs. M. JDelta
Ball, F. DCastle Rock
Bowman, Mrs. M. AIdaho Springs
Collins, E. M Colorado Springs
Frey, MinnieCentral City
Grenfell, Helen LGilpin
Groenendyke, ChasHooper
Herey, Emma MDenver
Harding, G. LBreckenridge
Lay, H. CTelluride

Ruland, GrantRed Cliff
Remington, Lillian K Fairplay
Snook, J. EGreeley
Shepherd, Lois JPueblo
Secrest, C. OGolden
Satterlee, Mrs. Thera H. Cripple Creek
Scanlan, E. MAspen
Thomas, W. CBoulder
Wood, JamesCanon City
Willard, Annie CKiowa
Williams, Mary EGunnison

GENERAL ASSOCIATION.

Alverson, Ethel EBoulder	Gass, B. RDenver
Avitt, M. ETrinidad	Griffith, EmilyDenver
Alexander, ElizabethPueblo	Hisey, J. CChieago
Butterfield, JuliaDenver	Harrington, HelenDenver
Bird, T. BDenver	Holman, C. ELakewood
Burkart, F. ADenver	Hammond, P. HElyria
Blakesley, O. JLa Junta	Hague, Sarah BDenver
Bridges, Lela RColorado City	Hauser, Harriet SDenver
Braidwood, John HDenver	Hall, John WGreeley
Booton, Mary AlmaGolden	Hall, F. JeannetteDenver
Ball, HarriettDenver	Helmich, Ida FDenver
Boyd, DavidGreeley	Jones, JennieGreeley
- <i>'</i>	
Cunningham, Alice LIdaho Springs	Kaempfer, A. C. GElizabeth
Carson, Mary GDenver	Krueger, Flora HFort Collins
Clark, Ruby MDenver	Kimball, Martha NLeadville
Carter, HenryPine, Jefferson Co.	Klein, LouiseDenver
Carter, Chas. MDenver	Kenney, Mrs. E. DColorado City
Collins, O. EColorado Springs	Kendel, JuanitaGreeley
Crater, MaryDenver	Love, D. SQuinby, Colo
Craise, F. ADenver	Little, IsabelRed Cliff
Curran, KatieCoal Creek	Leake, Mrs. E. GDenver
Curran, MabelCotopaxi	Love, G. POakes
Lowell, H. LAlma, Park Co.	Lee, Emeline AErle
Dewey, Lova CDenver	MeFarland, NanDenver
Davenport, Floyd SBuffalo Creek	McCall, Minnie LColorado Springs
Diekinson, Mrs. ChasDenver	Mitchell, Emma BDenver
Darlington, Lena Aldaho Springs	Moorehouse, Zeda BDenver
Elms, Mrs. Kate PDenver	Mack, MaryDenver
Eldridge, MadgeCripple Creek	Morrison, AllceDenver
Feldwisch, BerthaDenver	Mitchell, Alice SDenver
Fidler, W. ADenver	McComb, JamesLongmont
Felteau, Olive MIdaho Springs	McDonald, Mary ADenver
Fashbaugh, Carrle EEvans	McConnell, Lillian JDenver
Ganley, WinifredElyria	Martin, Beatrice EDenver
Galucia, Alice TEvans	McFadden, KatieBoulder
Garver, W. EApex	McDonald, S. LFort Collins
Gilmore, AngelaDenver	Miller, W. HGrand Junction
Gould, Mary LouiseFrisco	Miller, HannahDenver

GENERAL ASSOCIATION-CONTINUED.

Merrill, Louise ADenver
Newell, Mrs. Kora MDenver
Noll, VidaOrchard
Osborne, G. EDenver
Putman, W. WOrehard
Parker, JosephinePueblo
Probst, Emma ADenver
Peight, EllzabethParker
Parker, Fannie EDenver
Rolla, Mabel CDenver
Rolla, BerthaDenver
Romick, NellieDenver
Riee, ElizabethDenver
Rainey, Anna RPueblo
Rooney, AliceMorrison
Robinson, Kate KDenver

Stonaker, MabelPueblo
Stlles, Bessie CGeorgetown
Sloan, Minnie EDenver
Stueland, L. ABrush
Sklflington, Katherine
Colorado Springs
Strong, R. WDenver
Stone, MaymePueblo
Stoekton, Guy CErle
Stockton, J. LeRoyGreeley
Smith-Dodge, Mrs. Nannie ODenver
Shattuck, J. CUniversity Park
Walker, IdaPueblo
Weymouth, EdithDenver
Wilkinson, BesslePueblo

LIFE MEMBERS.

Baker, James HBoulder	Kna
Beggs, R. HDenver	McC
Boyd, DavidGreeley	Park
Copeland, A. BGreeley	Shat
Dick, FredDenver	Thor
Dodge, Mrs. Nannie ODenver	Trip
Elder, A. WDenver	Van
Gove, AaronDenver	War
Hale, Horace MDenver	

Knapp, W. EDenver	
McClung, J. SPueblo	
Parker, C. VTrinidad	
Shattuck, J. CDenver	
Thomas, W. CLongmont	
Triplett, WilliamGolden	
Van Siekle, J. HBaltimore, Md.	
Ward, DanielPueblo	

ASSOCIATION OF COUNTY SUPERINTENDENTS, 1899.

• The fourteenth annual session Association of County Superintendents of Schools of Colorado was held at Canon City, May 9, 10 and 11, 1899.

OFFICERS AND COMMITTEES,

President-Frank D. Ball, Douglas county.

Vice-President-Miss Henrietta Wilson, Larimer county.

Secretary-Mrs. Lois J. Shepherd, Pueblo county.

Treasurer-J. W. Tulles, Cheyenne county.

Executive Committee—Mrs. Anna C. Willard, Elbert county; Mrs. Sadie H. Maxcy, Park county; E. M. Scanlan, Pitkin county.

Members of the Educational Council State Teachers' Association— Alice M. Catlin, Montrose county (term expires 1899); Elizabeth Walker, Mesa county (term expires 1899); Helen L. Grenfell, Gilpin county (term expires 1901); J. E. Snook, Weld county (term expires 1899); J. S. Kilgore, Chaffee county (term expires 1900).

PROGRAM.

Tuesday, May 9, 2 p. m.

1. Roll call. 2. Reading minutes of last annual and midwinter session. 3. Address, President Frank G. Ball. 4. "School Law, Emphasizing the Compulsory Education Law," George E. McCauley, Las Animas county. 7:30 p. m.—5. Round Table discussion. Subject: "Effects of Recent Legislation on the Office of County Superintendents."

Wednesday, May 10, 9 a. m.

1. "The County Superintendent in Relation to Duty," C. O. Secrest, Jefferson county. 2. "Examinations," Mrs. M. J. Browne, Delta county. 2 p. m.—3. "Supervision of Rural Schools," J. E. Snook, Weld county. 4. "The Democratic Idea in School Government," G. A. Carpenter, Rio Grande county. Discussion by Mrs. Sadie H. Maxcy, Park county. All papers open to general discussion. 7:30 p. m.—At the disposal of the association.

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Thursday, May 11, 9 a. m.

1. Election of officers. 2. Miscellaneous business, including choice of place for next meeting. 3. Adjournment.

The State Association of County Superintendents was organized at Denver, April 15, 1886, under a call from State Superintendent Cornell. Its obejct is to discuss and compare methods of administering the public school system of Colorado.

The association is now incorporated as the County Superintendents' Section of the State Teachers' Association.

ASSOCIATION OF COUNTY SUPERINTENDENTS, 1900.

The fifteenth annual session of the Association of County Superintendents was held at Trinidad, May 15, 16 and 17, 1900.

PROGRAM,

Tuesday, May 15, 2 p. m.

Address of welcome, Mayor F. R. Wood. President's address, State Superintendent Helen L. Grenfell. "Rural Schools and Their Supervision," Superintendent Z. B. McClure, Mesa county. 8 p. m., in Christian Church —Lecture, President Z. X. Snyder, State Normal School.

Wednesday, May 16, 9 a.m.

"The Problem of Better Literature," Superintendent Mary E. Gill, Larimer county. "Office Work and Needs," Superintendent Minnie Frey, Gilpin county. 2 p. m.—Business meeting. Round Table discussion: 1. Problems that Confront Me. 2. County Teachers' Associations. 3. Blanks in Our Business. 4. The Reading Circle. 5. The County High School. Evening—Reception at the home of City Superintendent C. V. Parker.

Thursday, May 17, 9 a. m.

"The District Institute," Superintendent E. M. Scanlan, Pitkin county. "Needed Legislation," Superintendent Frank D. Ball, Douglas county. Music—Music for the sessions of the association is in charge of Superintendent C. V. Parker of the city schools.

Program—All subjects on the program are open to general discussion. Place of topics may be changed at the will of the association.

Officers of Superintendents' Association—President, Hon. Helen L. Grenfell, State Superintendent of Public Instruction; secretary, Mrs. Lois J. Shepherd, superintendent Pueblo county; treasurer, Mr. J. W. Tulles, Cheyenne Wells.

Executive Committee—Superintendent Lois J. Shepherd, Pueblo county; Superintendent J. E. Snook, Weld county; Superintendent Martha A. Bowman, Clear Creek county.

Local Committee of Arrangements-Superintendent J. W. Douthitt, Las Animas county.

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MISCELLANEOUS PUBLICATIONS.

HUMANE SOCIETY CIRCULAR. ARBOR DAY, 1899 AND 1900. ANNIVERSARY OF DEATH OF WASHINGTON. BIRTHDAYS OF WASHINGTON AND LINCOLN. CONSTITUTION DAY. STATE COURSE OF STUDY.

MISCELLANEOUS PUBLICATIONS.

The circular following, issued by the State Humane Society in 1899, was placed by the State Superintendent's office in the hands of every teacher in the state. To supplement the work of the llumane Society in this direction, the Arbor Day circular of 1900 urged the formation of bird clubs throughout Colorado. It was felt that through the schools the most efficient work in this line could be done, and the society be given the most effective co-operation in their work of protecting the birds. Reports received by the State Superintendent from the schools throughout the state, show that clubs for the protection of bird life have been very generally organized.

THE BIRDS OF COLORADO-SHALL THEY BE PROTECTED?

To the Teachers of the State:

Many plans have been brought forward to protect the birds of this state. None of them, so far, can be said to have succeeded except locally, and for brief periods. It is now proposed to organize the children of the state into great league for the protection of the birds. If this should succeed, the protection of other animals may later be added to its scope. The leading educators of the state approve the plan, for the importance of bird protection and the moral value of such teaching are, either one, sufficient to justify its introduction in the public schools of the state. The birds have the right from their Maker to life, liberty and the pursuit of happiness; their helplessness arouses compassion in the hearts of all good people; their songs and cheerful presence give them claims on our gratitude; and without their services insect pests would shortly put an end to the tilling of the soil.

This pamphlet is meant to provide a few suggestions for the creation and conduct of the league. It has been found that when children are to reach a given end, and the responsibility of reaching it is thrown upon the children themselves, they seldom fail to rise to the responsibility. The results of their own action are usually much better than when they are led or ordered to do the same things by others. Upon this idea, the suggestions here given as to the formation and conduct of the league are based. However, it must not be forgotten that the teacher in each room must be unobtrusively the pervading genius of the work, in order to direct and maintain it. It is earnestly hoped that the plan will be as cordially welcomed and tried by the teachers of the state as we have a right to expect from their high position of intelligence, sympathy and authority.

SUGGESTIONS ON ORGANIZATION AND METHODS.

It is proposed that the pupils in each room be organized as a branch of the Colorado Bird Protective League, giving to each branch some name distinguishing it from others, as, for instance, the number of the room; that organization be made by the pupils themselves, under merely general supervision of the teacher.

Organization may be effected by each pupil signing the pledge of the league and by electing the officers of the branch. The officers may consist of: Captain and first and second lieutenants. These officers to be responsible in chief for obedience to the motto of the league; to form, with the teacher, a court for the discipline of offenders, and to aid the teacher in every way possible in accomplishing the objects of the league. Some officer, perhaps the second lieutenant, might act as secretary of the branch and keep its records.

A suitable motto should be chosen for the league, e. g., "We Protect the Helpless." Each member of the league should be required to sign a pledge, e. g., "We agree to protect and aid birds and other animals in any way in our power; to maintain and enforce the motto of the league, and to obey its rules." Penalties should be established for offences against birds and other animals as being infractions of the motto and rules of the league. These penalties should be imposed by the court already suggested, and might consist of temporary or permanent suspension from membership, name written on blackboard with description of offence to birds, etc., etc.

In directing the activities of the branches, the members should be taught to observe the habits, location, number, nests, etc., etc., of various kinds of birds; to study the social side of their lives; to find points of resemblance between their lives and our own; to consider their rights, etc., etc., and report to the teacher. Children should be taught to consider the birds as individuals, each carrying on the business of his life as we ourselves do; their family and home life; the business of making a living; their wants, likes and dislikes; the relations of the young and old birds; the relation of individual birds to flocks, etc., etc. Few things tend more to arouse respect for other creatures than ourselves than to perceive the individuality and personality of each differing from every other one of his kind.

Essays may be written and the best of them published in local papers, as an incentive to the children. Brief records may be kept of anything of importance or likely to arouse and keep up the interest of the children.

It is hoped that we shall be able to furnish a league button or pin, as desired, made of sterling silver, and bearing the initials of the league, with a suitable device, to all who may desire them. This button or pin would, of course, be furnished at cost, which would probably be ten cents, unless the demand should enable us to obtain them in large quantities. A pin about the size of a silver dline and beautifully embossed with a bird's nest and with figures of birds, and with tracery around the edge, can be had for ten cents.

The possession of such a button by all the members of any branch would be pretty sure to hold the members closer together and help to give stability to the organization. There would also be many adults who would be glad to wear such a button.

Any suggestions in detail made herein are, of course, merely tentative, and may be rejected or modified as desired. The suggstion of State Superintendent Grenfell, that Bird Day be combined with Arbor Day, seems to be an eminently practical one. Should the schools adopt the plan herein outlined, the exercises of Bird Day would at once acquire great significance and value.

We shall be glad to receive information in detail concerning the organization of the league, in case the plan proposed, or a similar one, is adopted; and to furnish, in turn, information or assistance whenever possible.

THE COLORADO HUMANE SOCIETY.

THE IMPORTANCE OF GIVING INSTRUCTION IN OUR PUBLIC SCHOOLS ON THE PROTECTION OF BIRDS.

To the Colorado Humane Society:

The rapid disappearance of our native birds from many sections of the country is attracting general attention throughout the United States. Many communities have become seriously alarmed, and have passed stringent ordinances against the destruction of birds and birds' nests, and in communities where public sentiment demands the strict enforcement of these laws much good has been accomplished in checking the process of extermination, and in some localities the deserted fields and forests are being repeopled by our feathered friends.

It has, howver, been demonstrated that the enactment of such laws and the attempt to impose heavy fines and imprisonment for violations of the same are generally ineffective unless the general public, especially the young, have been educated, by a considerable agitation of the subject, to a keen realization of the numerous and great benefits that birds render to mankind and to a sense of the imminent danger of our losing these benefactions, unless vigorous efforts are made to protect our feathered guardians against all classes of enemies.

Our Colorado statutes, if properly enforced, would give our birds a fair measure of protection; but the Colorado public must be educated to a point where there will be a general demand on our local officials for a rigorous enforcement of our laws against the destruction of birds and other animals.

It is now generally admitted that the principal function of public schools is not the imparting of useful arts, but character building and the development of useful citizens—of men and women. Until recently our race has been compelled to subsist largely on the products of the chase, and our ancestors for countless generations have been compelled to defend themselves against wild beasts and wilder men. The habits of hundreds of generations of hunters and warriors have made a deep impression on our physical and mental constitution, and the average individual is the possessor of many tastes and instincts that are not only foreign to the life of civilized communities, but positively dangerous to the welfare of the individual and of the commonwealth. The child or the adult has an instinctive delight in capturing or killing any animated creature, and must, as a rule, be aroused to a consciousness that his pleasure is causing needless pain and anguish, and that his thoughtless acts may inflict great harm to the community.

Familiarity with suffering and death, even in the case of those striving to alleviate misery, blunts our finer feelings and sympathy. The physician, the nurse, the butcher, must make especial effort if they would retain keen ethical and esthetic perceptions. Our school children cannot ruthlessly slaughter birds and other animals without developing and cultivating the inherited passions of selfishness and cruelty which are so largely responsible for the crimes of the adult against property and person, and also at the same time weakening those feelings of love and sympathy that many teachers are striving so earnestly to cultivate as the basis of the ideal government.

Our school children must be taught to regard animals, not as insensible pieces of machinery, but as semi-intelligent beings, possessed, in a large degree, of similar tastes, feelings and thoughts as ourselves—as creatures, like ourselves, capable of suffering great physical and mental pain. They must be taught that cruelty to animals differs but little from cruelty to human beings, and that to persist in the former leads insensibly to various crimes to the latter. They should be taught that animals were created for other purposes than solely to serve the selfish interests of mankind, and that the beauty of nests, eggs, and the plumage of birds, were developed for the interests of the bird rather than those of man, and that our right to convert these objects to the gratification of pleasure at the expense of happiness or the life of birds is certainly a very questionable one.

They should be taught to study the living rather than the dcad bird; to study its homes and habits rather than its anatomy—a study which will not only put the child in living and loving touch with animal nature, but which will afford him throughout his life a perennial source of enjoyment in every environment which he may meet, even in the depths of the largest cities.

They should be taught that each bird's egg destroyed means not only the loss of one bird, but hundreds of birds in a few years, and that the death of a parent bird during the breeding season means the loss of several thousand possible birds in coming generations.

Remove, by all means, the common belief that the rate of the multiplication of birds is sufficient to replace the loss by the ravages of the pot-hunter, the small boy seeking an animated target, the unscientific collecting of bird skins and eggs, or by those of the purveyors of millinery supplies or household decorations. As long as such a belief exists, it is impossible to hope that selfish people will voluntarily obey supposedly sumptuary laws, or that our county officials will be very zealous in enforcing the penalties against crimes which seem to be offences against the refined esthetic state of a community rather than as a great injury to persons or the state. Persons who have no appreciation of the moral wrougs of the wanton destruction of birds may be led to abandon their barbarous habits if confronted by the testimony of scientists as to the constant danger to which the whole animate creation is exposed by the enormous rate of the multiplication of insects—a rate which, if increased, would render possible for the offspring of a single pair of insects to literally cover the face of the earth in a few years, and to destroy every vestige of vegetable life, involving, of course, the death of all animals. Show by the statistics of the agricultural departments of America and Europe that hundreds of millions of dollars in crops are annually destroyed by insects, and that millions of dollars are annually expended by every prominent government in attempting to check the ravages of insects, often with but little success. Show that seventy-five per cent. of all birds live almost exclusively on insects, and that nearly all birds are compelled to feed their young on insects in order to give them the necessary amount of readily digestible and nitrogenous food. Show that a young robin or bluebird consumes its own weight in insects in a few hours. Show that, both theoretically and practically, birds are the most efficient destroyers of insects that can be secured, and if encouraged to remain about our orchards and gardens, by a little feeding and protection from enemies, that we will suffer but little from the insect pests. Above all, confute the common erroneous belief that hawks, owls, crows, blackbirds, etc., are enemies of the husbandman, and should be exterminated; that it is far better to suffer the loss of a few hundred dollars' worth of poultry or fruit than to sacrifice hundreds of thousands of dollars to the rayages of insects. Teach that "he prayeth best who loveth best all things both great and small;" that the Author of this creation is one who watches even the fall of a sparrow, and one who cannot therefore ignore the useless and inhuman destruction of thousands of his most beautiful creatures.

GEORGE L. CANNON, JR. Instructor in Biology and Geology, Denver High School, Dist. No. 1.

FROM THE STATE SUPERINTENDENT OF PUBLIC INSTRUCTION.

To the Colorado Humane Society:

In response to your request for an expression regarding the propriety of establishing a league, for the protection of the birds of the state, among the children of our public schools, I am glad to have an opportunity to say that I most hearily sympathize with such an idea, and wish the movement might become universal. It is not enough that children should have an appreciation of the beauty of song and form of these feathered friends, but efforts should be made to have them understand how dependent man is upon bird life, and that they have truly earned the right to our gratitude and protection, as well as our love, since they are an economic factor toward the welfare of humanity, as their work makes the earth more habitable.

Careful instruction should be given regarding them and systematic work done toward the protection of these little ones, created by our own Heavenly Father. When the right kind of love is established for them, being based upon a true appreciation of their worth, we shall not need laws against killing them, and it will no longer be proper or fashionable to use their little bodies for purposes of decoration. It is a duty which I am sure will be a pleasure to those earnest workers, our public school teachers, to help establish a true and abiding interest on the part of their pupils toward the protection of the birds.

Very respectfully,

HELEN L. GRENFELL.

The following are extracts from letters received from county superintendents of schools in this state. Others equally encouraging are omitted for lack of space:

Arapahoe County-

Your favor in relation to the plan outlined by your society for the better protection of the birds of our state is at hand and noted, and I am glad of the opportunity to express to you my hearty approval of the plan. My early life was spent in a portion of our country where blrds of many kinds abounded, and their value was appreciated. To such a person the scarcity of birds, and the great need of their beneficial work in this portion of the country, is very apparent. The birds, with fcw exceptions, are valuable friends to the farmer and fruit-grower, and also furnish much of melody, beauty and happiness to the human race, and have a right to our protection. By all means lct us unite in such protection. I consider the plan outlined by the society very simple, and yet very practicable and commendable, and one which will be a very excellent means of stimulating in the hearts and minds of the children principles of love and justice toward the weak, and thus make stronger and better their characters and lives.

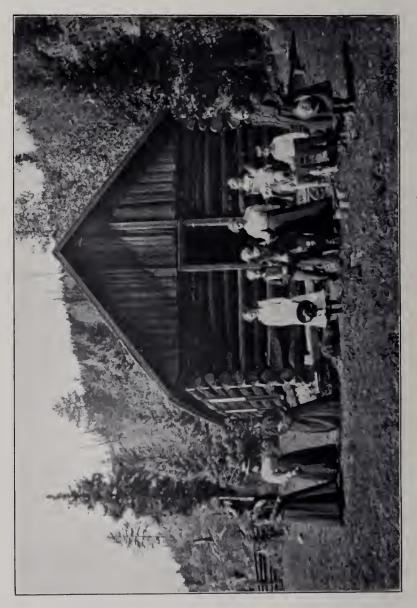
I shall be glad to aid you in this work in any manner possible, and I commend its plan and aim to those associated with me in the school work of the county. WARREN E. KNAPP, SuperIntendent.

Elbert County-

I think that you can depend upon the teachers of this county doing all they can to support you in protecting the birds. As for myself, I will be glad to aid in any measure adopted for their preservation.

ANNIE C. WILLARD, Superintendent.

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Summit County-

Your plan for the protection of birds has my approval, and I will do all I can to help the movement along.

LILLIAN COLCORD, Superintendent.

Montrose County-

I am in hearty sympathy with the movement to protect the birds of this state, and shall be glad to aid in any way that I can. I will promptly send any circulars or literature to schools.

ALICE M. CATLIN, Superintendent.

La Plata County-

You may count upon my support in the protection of the birds. In addresses to the schools, especially on Arbor Day, 1 have made a point on this subject frequently. I believe it a good plan to combine Bird and Arbor Day. JAMES R. DURNELL, Superintendent.

Weld County-

l would gladly help in bird protection, and have already done what l could personally in that line. J. E. SNOOK, Superintendent.

Park County-

Am very much pleased with your plan of organizing our school children into bands of bird protectors. I assure you of my hearty co-operation and any assistance I can render. SADIE H. MAXCY, Superintendent.

Sedgwick County-

I will be glad to distribute any literature you may send out relative to the protection of birds, and will do what I can to interest the teachers and children. C. F. PARKER, Superintendent.

Phillips County-

I note with interest your efforts to protect our birds. I received your letter this morning relative to organizing the children for study of the birds. I think the plan is good. The children of the Holyoke schools have been asked to bring word to the teachers of all the birds they see, and a list is written, in a prominent place on the blackboard, of the names of all that are seen. This seems to interest the children, and makes them anxious to learn something about them, instead of pelting them with stones. I am sure I shall be pleased to give you any aid in my power in your good work. S. H. JOHNSON, Superintendent.

Archuleta County-

Bird protection cultivates humanity. It makes people better to extend protection to the feathered songster that tries to brighten all who hear it. Every argument and real reason is favorable to your theme, and it is a service we owe to God. Around my little home in Pagosa Springs are a number of cultivated forest trees, and in them is a table set for the wild birds, to which many come daily and eat from the prepared food always found thereon during the past eight years. These birds know me. They know that I am their friend, and they say such musical notes to me as I think other people cannot hear. It gives me happiness, and I approve of the efforts you are making. BARZILLAI PRICE, Superintendent.

Baca County-

Heartily yes.

MRS. E. R. SHANNON, Superintendent.

Lincoln County-

It has my hearty support. E. I. THOMPSON, Superintendent.

Prowers County-

The establishing of a Bird Day, or any organization for their protection, will receive my hearty support.

DAVID BARNES, Superintendent.

Kiowa County-

I heartily approve of the plan adopted by the society for the protection of birds. In visiting schools in the county I make it a part of my talk, to talk on this subject. H. A. LONG, Superintendent.

Gilpin County-

I am in hearty sympathy with the movement now going forward for the protection of our birds. While in the school room I have always included a talk on birds with the Arbor Day program. We have very few birds here. I believe because of bare hillsides. More trees and more birds we are sorely in need of. I shall do all in my power to help the good cause. MINNIE FREY, Superintendent.

Pueblo County—

I assure you that you have my hearty co-operation. Indeed, I have taught and worked along that line for over ten years, and am very glad your society has taken its present earnest stand.

LOIS J. SHEPHERD, Superintendent.

Montezuma County-

I am heartily in sympathy with the movement to save the birds, and will do all I can to forward it. I am always very sorry to see a tendency in the youth of America to be cruel to any of God's creatures, and have always been quite earnest in advocating the principle of kindness to them. I am therefore very much pleased to assist any concerted plan for their protection. WILLIAM HALLS, Superintendent.

ARBOR DAY, 1899.

An act to establish Arbor Day. Approved March 22, 1889. In force June 22, 1889. [L. '89, p. 21.]

ARBOR DAY-THIRD FRIDAY IN APRIL-HOW TO BE OBSERVED,

Section 1. The third Friday in April of each year shall be set apart and known as "Arbor Day," to be observed by the people of this state in the planting of forest trees for the benefit and adornment of public and private grounds, places and ways, and in such other efforts and undertakings as shall be in harmony with the general character of the day so established; Provided, That the actual planting of trees may be done on the day designated or at such other most convenient time as may best conform to logical climatic conditions, such other time to be designated and due notice thereof given by the several county superintendents of schools for their respective counties.

Sec. 2. The day, as above designated, shall be a holiday in all public schools of the state, and school officers and teachers are required to have the schools under their respective charge observe the day by planting of trees or other appropriate exercises. [L. '89, p. 21, Sec. 2; Mills' Ann. St., Sec. 2130.]

Sec. 3. Annually, at the proper season, the Governor shall issue a proclamation, calling the attention of the people to the provisions of this act and recommending and enjoining its due observance. The Superintendent of Public Instruction and the respective county superintendents of schools, shall also promote, by all proper means, the observance of the day, and the said county superintendents of schools shall make annual reports to the State Forest Commissioner of the action taken in this behalf in their respective counties. '

ARBOR DAY NOTES WITH SUGGESTIONS FOR BIRD DAY, APRIL 21, 1899.

To the Teachers and Pupils of Colorado:

It is a pleasant duty to call your attention to our next holiday. Established but a few years. Arbor Day has won its way to our hearts by the best of all means—its own merits. The necessity for the planting of trees is growing to be better understood, through the influence of a day, annually set aside for the study of trees. Wherever practicable, a part of the day's exercises should be the actual planting of at least one tree, and even in localities where there are not facilities for planting trees, the reason is all the stronger for observing the day, by impressing upon the children their value.

The institution also of Bird Day is a movement of which all lovers of animate nature can but approve, and this not only from the poetic point of view, but also from the practical and utilitarian. Our children should learn that birds, in addition to being pretty creatures with beautiful voices, are exceedingly useful to mankind. Let us teach our pupils something of the lives and habits of the birds, as well as of their charm and the duty of kindness in their treatment.

In view of the fact that Arbor Day has become an established occasion for celebrating the awakening of spring, of whose coming the birds are the first harbingers, and following the custom already obtaining in several other states, I urgently recommend for the future the observance of Arbor Day and Bird Day as one.

> HELEN L. GRENFELL, Superintendent of Public Instruction.

PROCLAMATION-ARBOR DAY.

Arbor Day was born of an idea, is sanctioned by custom, and has been established by statute. The sentiment inspired by its purpose is not more beautiful than the benefits entailed by its observance. The appropriateness of its objects and the willingness of the people to effectuate them are too obvious for discussion.

In cheerful obedience, therefore, to the requirements of the law and pursuant to the authority in me vested, I hereby call the attention of the people to the Act of the General Assembly of the State of Colorado, designating Friday, the Twenty-first day of April, A. D. 1899, as Arbor Day, and do recommend and enjoin its observance in the planting of forest trees for the benefit and adornment of public and private grounds, places and ways, and in such other efforts and undertakings as shall be in harmony with the general character and purpose of the day.

In witness whereof, I have hereunto set my hand and caused the Great Seal of the State to be affixed this Third day of April, A. D. 1899. CHARLES S. THOMAS.

By the Governor,

ELMER F. BECKWITH, Secretary of State.

TO THE STATE FLOWER.

BY CELIA F. OSGOOD PETERSON.

O dainty Colorado flower,

Thou'st met us in a happy hour,

For we would choose our Queen: And what so sweet, so gracious fair, Can e'er to us with thee compare,

In thy lilac, white and green.

In simple grace dost thou appeal, Thy modest beauty half conceal, In valleys far away;

But standing in majestic state, Thon canst not justice long await,— Thy coronation day.

We crown thee as our chosen flower, And bow before thy regal power, Thou smile of Love Divine; And loyalty unto our State.

Bids us rejoice to hail thee, great,

O queenly Columbine.

EXTRACT FROM "BEAUTY OF TREES."

BY WILSON FLAGG, IN THE ATLANTIC MONTHLY, JUNE, 1868.

"It is difficult to realize how great a part of all that is cheerful and delightful in the recollections of our own life is associated with trees. They are allied with the songs of morn, with the quiet of noonday, with social gatherings under the evening sky, and with all the beauty and attractiveness of every season. Nowhere does Nature look more lovely, or the sounds from birds and insects, and from inanimate things, affect us more deeply than in their benevolent shade. Never does the blue sky appear more serene, then when its dappled azure glimmers through their green, trembling leaves. Their shades, which, in the early ages, were the temples of religion and philosophy, are still the favorite resort of the studious, the scene of healthful sport for the active and adventurous, and the very sanctuary of peaceful seclusion for the contemplative and sorrowful.

"In our early years, we are charmed with the solitude of groves, with the flowers that dwell in their recesses, with the little creatures that sport among their branches, and with the birds that convey to us by their notes a portion of their own indefinable happiness. At a later period of life, the wood becomes a hallowed spot, where we may review the events of the past. Nature has made use of trees to wed our minds to the love of homely scenes, and to make us satisfied with life. * * * "In fine, I cannot help regarding trees as the most poetical objects in nature. Every wood teems with suggestions of imaginative thought, every tree is vocal with language and music, and its fruits and flowers do not afford more luxury to the sense than delight to the mind. The trees have their roots in the earth, but they send up their branches towards the skies, and are so many supplicants to Heaven for blessings upon our homes. The slender gracefulness of the birch and the willow, the grandeur of the broad-spreading plane, the venerable majesty of the oak, the flowing dignity of the elm and the proud magnificence of the towering pine, are all calculated to inspire the mind with serene, lively, tender or sublime emotions. Their beauty leads us to the love of Nature, and fills us with profound veneration for the Creator."

EXTRACT FROM "PRESERVATION OF FORESTS."

BY HENRY MICHELSEN, IN ROCKY MOUNTAIN NEWS, MARCH 12, 1899.

"When the first settlers came to Colorado they found an abundance of water. The rivers were bankful the year round; all they had to do was to build ditches at convenient places and the water required for the crops was taken direct from the river. As the years rolled by they found, however, that for some reason the summer flow of the rivers diminished exactly at the season when water was needed most, while the spring and winter floods became more abundant and destructive. They were obliged to store water in reservoirs. This brought about some peculiar disadvantages, besides being attended by a very great expenditure of money. It was found that reservoirs were apt to cause the alkali contained within the soil to come to the surface, destroying the value of the best lowlands; evaporation caused much loss of water stored. There was much capital and labor wasted for inlet ditches to carry the reservoir sites, and many thousands of acres of rich land were covered with water within the reservoirs themselves, thus lessening the area of productive lands. And all these evils were created by a practice which had not been considered as particularly tending in this direction. The spring floods and the summer drouths were both caused by the destruction of the forests at the source of the rivers. * *

"I hold that in order to effect anything toward the preservation of the forests, we must commence at the very beginning by teaching the rising generation the usefulness of tree life, by impressing it with a sense of its beauty, by showing them the evils which history records as resulting from the destruction of it. * * *

"Let it be taught in our schools that the inevitable results of the destruction of forest growth is the ruin of agriculture, the decay of commonwealths and nations, and we shall achieve something in less than a generation. * * *

"To us of Colorado, the preservation of the forests means much, means practically the preservation of the state. Agriculture and mining are equally concerned. To all of those who are interested in the best ends of the commonwealth, I say: 'If you would keep in their present beauty your irrigated farm lands, see to it that you preserve their natural reservoirs in the mountains. If you would enable the miner to obtain timber at the very mouth of his mine, if you would preserve his mountain home from being swept away by avalanches, see to it that the growth of trees is fostered, not destroyed; if you wish to make Colorado what it ought to be, the very gem in the corona of these mighty commonwealths, keep her noble mountains and forests and rivers in their present beauty, that generations to come may praise and bless the forethought of those who have laid the foundation of the greatness of the state.'"

AN OLD CUSTOM REVIVED.

In an old Swiss chronicle it is related that away back in the fifth century the people of a little Swiss town called Brugg assembled in council and resolved to plant a forest of oak trees on the common. The first rainy day thereafter the citizens began their work. They dug holes in the ground with canes and sticks and dropped an acorn into each hole, tramping the dirt over them. Upwards of twelve sacks were sown in this way, and after the work was done each citizen received a wheaten roll as a reward.

"Great oaks from little acorns grow" it is said, but for some reason the work was all in vain, for the seeds never came up. Perhaps the acorns were laid too deep, or it might have been the tramping of many feet had packed the earth too firmly. Whatever the cause the acorns refused to sprout, and the townspeople sowed the same ground with rye and oats, and after the harvest they tried the acorn planting again-this time in another way-by plowing the soil and sowing the acorns in the furrows. But again the "great oaks" refused to grow; grass came up instead and the people were disappointed. But an oak grove they were determined to have, so after this second failure a few wise men put their heads together and decided to gain the desired result by transplanting. A day was appointed in October, and the whole community, men, women and children, marched to the woods, dug up an oak sapling and transplanted it on the common. At the close of the exercises each girl and boy was presented with a roll, and in the evening the grown people had a merry feast in the town hall.

This time the trees grew. The people of Brugg were pleased and satisfied and instituted the day of tree planting as a yearly holiday.

Every year, as the day came around, the children formed in line and marched to the oak grove, bringing back twigs or switches, thus proving that the oaks were thriving, and every year at the close of the parade the rolls were distributed to be eaten in remembrance of the day. This festival still exists and is known as "The Switch Parade." Our Arbor Day is only an old custom revived.—Selected.

IN APRIL.

What did the sparrow do yesterday? Nobody knew but the sparrows; He were too bold who should try to say; They have forgotten it all to-day. Why does it haunt my thoughts this way, With a joy that piques and harrows, As the birds fly past, And the chimes ring fast, And the long spring shadows sweet shadow cast? There's a maple-bud redder to-day; It will almost flower to-morrow; I could swear it was only yesterday In a sheath of snow and ice it lay, With fierce winds blowing it every way; Whose surety had it to borrow, Till birds should fly past, And chimes ring fast, And the long spring shadows sweet shadow cast? "Was there ever a day like to-day, So clear, so shining and tender?" The old cry out; and the children say, With a laugh aside: "That's always the way With the old in spring; as long as they stay, They find in it greater splendor, When the birds fly past, And the chimes ring fast, And the long spring shadows sweet shadow cast!" Then that may be why my thoughts all day-I see I am old, by the token-Are so haunted by sounds, now sad, now gay, Of the words I hear the sparrows say, And the maple-bud's mysterious way By which from its sheath it has broken, While the birds fly past, And the chimes ring fast,

And the long spring shadows sweet shadow cast.

-Helen Hunt Jackson.

THE EARLY OWL.

An owl once lived in a hollow tree, And he was as wise as wise could be. The branch of learning he did not know Could scarce on the tree of knowledge grow. He knew the tree from branch to root, And an owl like that can afford to hoot.

And he hooted until, alas! one day, He chanced to hear in a casual way, An insignificant little bird Make use of a term he had never heard. He was flying to bed in the dawning light, When he heard her singing with all her might, "Hurray! Hurray! for the early worm!" "Dear me," said the owl, "What a singular term! I would look it up if it weren't so late, I must rise at dusk to investigate. Early to hed and early to rise Makes an owl healthy, and stealthy and wise!"

So he slept like an honest owl all day, And rose in the early twilight gray, And went to work in the dusky light To look for an early worm at night.

He searched the country for a mile around, But the early worm was not to be found; So he went to bed in the dawning light And looked for the worm again next night. And again and again, and again and again, He sought and he sought, but all in vain, Till he must have looked for a year and a day For the early worm in the twilight gray. At last in despair he gave up the search, And was heard to remark as he sat on his perch By the side of his nest in the hollow tree: "The thing is as plain as night to me— Nothing can shake my conviction firm, There's no such thing as the early worm."

NATURE'S AWAKENING.

Said the sun unto the tree-buds. One day in the early spring, "You've lain so long and slumbered, It's time to wake and bring Joy and gladness, mirth not sadness, To the hearts of all mankind, And to cheer the eyes of many That to all things else are blind." First, the little pussy-willows, Growing close beside the brook, Whispered one unto the other, "Do you see how bare things look? Now we're sure spring is not perfect Till we don our coats of fur, Then we'll look so much like kittens, They can almost hear us purr." Then the summons reached the willows, Which grew by the running stream; And their branches, full of vigor, Quickly donned their robes of green. And the maples looking at them, Said, "We, too, must soon be out, For the birds will now be coming Just to see what we're about." "So, our boughs must not be naked, But clothed in their robes of state." And the buds that heard them whispered, "We will surely not be late." Soon the elm trees and the beeches, With the birches fair and tall, And the feathery, fragrant locust

Also answered to the call.

And the gently stirring branches Seemed to whisper low and deep, "If the birds will seek our shelter We will rock their babes to sleep."

When the birds came flying hither With the spring's refreshing breeze, Their songs were those of thanksgiving, Unto Ilim who made the trees.

-Sarah C. Flint.

AN ARBOR DAY TREE.

Dear little tree that we plant to-day, What will you be when we're old and gray? "The savings bank of the squirred and monse, For robin and wren an apartment house, The dressing room of the butterfly's ball, The locust and katydid's concert hall, The schoolboy's ladder in pleasant June, The school girl's tent in the July noon. And my leaves shall whisper them merrily A tale of the children who planted me."

--Youth's Companion.

THE COMING OF SPRING.

The birds are coming home soon; I look for them every day; I listen to catch the first wild strain,

For they must be singing by May.

The bluebird, he'll come first, you know,

Like a violet that has taken wings;

And the red-breast thrills while his nest he builds— I can hum the song that he sings.

And the crocus and wind-flower are coming, too;

They're already upon the way;

When the sun warms the brown earth through and through I shall look for them any day.

Then be patient, and wait a little, my dear;

"They're coming," the winds repeat:

"We're coming! We're coming!" I'm sure I hear,

From the grass blades that grow at our feet.

-Selected.

HOW THE WOODPECKER KNOWS.

Boy at the window-

"How does he know where to dig his hole, The woodpecker there on the elm-tree bole? How does he know what kind of a limb To use for a drum and to burrow in? How does he find where the young grubs grow? I'd like to know?"

TWELFTH BIENNIAL REPORT

The woodpecker flew to a maple limb, And drummed a tattoo that was fun for him. "No breakfast here! It's too hard for that," He said, as down on his tail he sat. "Just listen to this: rrrrr rat-tat-tat."

Away to the pear tree, out of sight, With a cheery call and a jumping flight! He hopped around till he found a stub, "Ah, here's the place to look for a grub! "Tis moist and dead—rrrrr rub-dub-dub."

To a branch of the apple Downy hied. And hung by his toes to the under side. "'Twill be sunny here in this hollow trunk; It's dry and soft, with a heart of punk, Just the place for a nest—rrrrr runk-tunk-tunk."

"I see," said the boy. "Just a tap or two, Then listen as any bright boy might do. You can tell ripe melons and garden stuff In the very same way—it's easy enough."

-Youth's Companion.

BIRD'S MUSIC.

The little leaves upon the trees Are written o'er with notes and words, The pretty madrigals and glees Sung by the merry minstrel birds.

Their teacher is the wind, I know; For while they're busy at their song, He turns the music quickly so The tune may smoothly move along.

So all through summer-time they sing, And make the woods and meadows sweet, And teach the brooks, soft murmuring, Their dainty carols to repeat.

And when at last, their lessons done, The winter brings a frosty day, Their teacher takes them, one by one, Their music, too, and goes away.

-Little-Folk Lyrics.

THE TREE'S DREAM.

Little tree, so slim and so small, Standing under the schoolhouse wall, Planted there upon Arbor Day. Tell me what are you doing, say? So quiet you stand, and so still you keep, I really believe you have gone to sleep.

"Oh, I'm dreaming now," said the little tree, "Of the pleasant days that are to be; Of the robins and bluebirds that every spring Will eome and sit in my boughs and sing. Oh, plenty of company, I shall see In my gay green tent," said the little tree.

"I'm dreaming of all the little girls, In gingham aprons and yellow eurls, That under the shade of my leafy boughs Will make for themselves a wee playhouse, With nice burr baskets, the dear little souls, And pepper-pod teapots and sugar-bowls.

"I'm dreaming of the barefoot boys That will fill my branches with merry noise, And elimb my limbs like an easy stair, And shake down my nuts till the boughs are bare. Oh, a jolly good comrade I shall be When 1 grow up," said the little tree.

-Elizabeth H. Thomas, Youth's Companion.

ALPHABET OF SUMMER.

(For Twenty-six Children.)

- A is for the Apple-blossoms Coming with the spring.
- B is for the Butter-eups

The merry May will bring.

- C is for the Crocus buds Pushing through the mold.
- D is for the Dandelions

With their erowns of gold.

E is for the Elder-brooms

White as driven snow. F is for the Flower-de-Luce

That mid the rushes grow.

TWELFTH BIENNIAL REPORT

G is for the meadow grasses .
Waving everywhere.
H is for the Honeysuckle,
Scenting all the air.
I is for the Idle hours
Spent in gathering posies.
J is for the lovely June
With her wreath of roses.
K is for the Katydids
And all their endless chatter.
L is for the Lily pads
Floating on the water.
M is for the Morning-glories,
Flowering high and low.
N is for the downy Nests
Where the birdies grow.
O is for the Orioles gay,
Singing loud and sweet.
P is for the Poppy-heads
Flashing through the wheat.
Q is for the Quinces, hanging
Golden in the sun.
R is for the little Rills,
Laughing as they run.
S is for the Silver glory
Of the Harvest moon.
T is for the Tender light
Of Nature's afternoon.
U is for the Underbrush
Where Hazel-nuts are browning.
V is for the luscious Vines,
With their purple crowning.
W is for Woodbine, when
The green and gold blend.
X is for the Exodus
Of robins and of wrens.
Y is for the Yellow leaves
That set the woods aglow.
Z is for the gentle Zephyrs
Vanished long ago.
-Mrs. J. M. Dana, in the Intelligence.

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BOB WHITE.

There's a plump little chap in a speckled coat, And he sits on the zigzag rails remote, Where he whistles at breezy, bracing morn When the buckwheat is ripe, and stacked the corn: "Bob White! Bob White!"

Is he hailing some comrade as blithe as he? Now I wonder where Robert White can be! O'er the billows of gold and amber grain There is no one in sight—but, hark again: "Bob White! Bob White! Bob White!"

Ah! I see why he calls: in the stubble there Hide his plump little wife and babies fair! So contented is he and so proud of the same, That he wants all the world to know his name: "Bob White! Bob White!" Bob White!"

-George Cooper.

APRIL.

The brooks and the rivers have broken the chain That held them in icy thraII,

And their dancing waters are bubbling again In response to the bluebird's call.

The hills and the lanes and the meadows Are in shades of emerald dressed.

And the robin's nest in the orchard Is awaiting the robin's breast.

The grosbeak calls from the topmost bough With a soul of love in his voice,

For the wintry gates are opened now And Heaven and nature rejoice.

-Albert Ralph Hager.

Little bird, little bird,

As you sing upon your bough,

A hundred hearts are happier

That you are singing now;

Though the sun is shining brightly,

Or is hiding in a cloud,

You give the world your sweetest songs,

And sing them brave and loud.

-Julia Anna Wolcott.

WHO STOLE THE BIRD'S NEST?

(This may be arranged for five pupils to speak.)

"To-whit! to-whit! to-wee! Will you listen to me? Who stole four eggs I laid, And the nice nest I made?"

"Not I," said the cow, "Moo-oo! Such a thing I'd never do. I gave you a wisp of hay, But didn't take your nest away, Not I," said the cow, "Moo-oo! Such a thing I'd never do."

> "To-whit! to-whit! to-whee! Will you listen to me? Who stole four eggs I laid, And the nice nest I made?"

"Bob-o'-link! Bob-o'-link! Now what do you think? Who stole a nest away From the plum-tree to-day?"

"Not I," said the dog, "Bow-wow! I wouldn't be so mean, anyhow! I gave the hairs the nest to make, But the nest I did not take. Not I," said the dog, "Bow-wow! I'm not so mean anyhow."

> "To-whit! to-whit! to-whee! Will you listen to me? Who stole four eggs I lald, And the nice nest 1 made?"

"Bob-o'-link! Bob-o'-link! Now what do you think? Who stole a nest away From the plum-tree to-day?"

"Coo-oo! Coo-oo! Coo-oo! Let me speak a word or two! Who stole that pretty nest From little yellow-breast."



"Not I," said the sheep; "oh, no! 1 wouldn't treat a poor bird so. 1 gave wool the nest to line, But the nest was none of mine. Baa! Baa!" said the sheep, "Oh, no, 1 wouldn't treat a poor bird so."

- "To-whit! to-whit! to-whee! Will you listen to me? Who stole four eggs I laid, And the nice nest I made?"
- "Bob-o'-link! Bob-o'-link! Now what do you think? Who stole a nest away From the plum-tree to-day?"
- "Coo-oo! Coo-oo! Coo-oo! Let me speak a word or two! Who stole that pretty nest From little yellow-breast?"
- "Caw! Caw!" cried the crow; "I should like to know What thief took away A' bird's nest, to-day?"

Cluck! Cluck!" said the hen, "Don't ask me again; Why, I haven't a chick Would do such a trick. We all gave her a feather, And she wove them together. I'd scorn to intrude On her and her brood. "Cluck! Cluck!" said the hen; "Don't ask me again."

- "Chir-a-whirr! Chirr-a-whirr! All the birds make a stir! Let us find out his name And all cry, 'For shame!'"
- "I would not rob a bird," Said little Mary Green; "I think I never heard Of anything so mean."

"It's very cruel, too," Said little Alice Neal; "I wonder if he knew How sad the bird would feel."

A little boy hung down his head And went and hid behind the bed, For he stole that pretty nest From poor little yellow-breast; And he felt so full of shame He didn't like to tell his name.

-L. Maria Child.

THE LITTLE PINE TREE.

"Once a little pine-tree, In the forest ways, Sadly sighed and murmured. Thro' the summer days. 'I am clad in needles-Hateful things!' he cried: 'All the trees about me Laugh in scornful pride. Broad their leaves and fair to see. Worthless needles cover me. "'Ah, could I have chosen, Then, instead of these, Shining leaves should crown me, Shaming all the trees. Broad as theirs and brighter, Dazzling to behold; All of gleaming silver-Aye, of burnished gold. Then the rest would weep and sigh; None would be so fine as I.' "Slept the little pine-tree When the night came down, While the leaves he wished for Budded on his crown. All the forest wondered, At the dawn, to see What a golden fortune Decked this little tree. Then he sang and laughed aloud;

Glad was he and very proud.

"Foolish little pine-tree! At the close of day, Thro' the gloomy twilight, Came a thief that way. Soon the treasure vanished: Sighed the pinc, 'Alas! Would that 1 had chosen Leaves of crystal glass.' Long and bitterly he wept, But with night again he slept. "Gladly at the dawning, Did he wake to find That the gentle fairies Had again been kind. Now his blazing crystals, Hot the morning air: Never had the forest Seen a sight so fair. Then a driving storm did pass And the leaves were shattered glass. "Humbly said the pine-tree. 'I have learned 'tis best Not to wish for fortunes Fairer than the rest. Glad were I, and thankful. If I might be seen. Like the trees about me, Clad in tender green.' Once again he slumbered, sad; Once again his wish he had. "Broad his leaves and fragrant; Rich were they, and fine, Till a goat at noonday Halted there to dine. Then her kids came nipping Round the little tree; All his leaves could scarcely Make a meal for three. Every tender bud was nipped, Every branch and twig was stripped.

"Then the wretched pine-tree Cried in deep despair, 'Would I had my needles; That were green and fair.

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Never would I change them,' Sighed the little tree, 'Just as nature gave them They were best for me.' Then he slept, and waking, found All his.needles, safe and sound."

-Translated in St. Nicholas.

"In fact, there's nothing that keeps its youth So far as I know, but a tree and truth."

-O. W. Holmes.

"Every flutter of the wing, Every note of song we sing, Every murmur, every tone, Is of love and love alone."

-Longfellow.

To me the meanest flower that blows can give Thoughts that do often lie too deep for tears.

-Wordsworth.

"And this our life * * * * Finds tongues in trees, books in running brooks. Sermons in stones, and good in everything."

-Shakespeare.

"One impulse from the vernal wood May teach you more of man. Of moral evil and of good, Than all the sages can."

-Wordsworth.

"Give fools their gold; give knaves their power; Let fortune's bubble rise and fall; Who sows a field, or trains a flower, Or plants a tree, is more than all."

---Whittier.

"The thick roof— Of green and stirring branches is alive And musical with birds."

-Bryant.

"Summer or winter, day or night, These woods are an ever new delight; They give us peace and they make us strong, Such wonderful balms to them belong; So, living or dying, I'll take mine ease Under the trees, under the trees."

-R. H. Stoddard.

"He prayeth well, who loveth well, Both man and bird and beast. He prayeth best, who loveth best All things, both great and small; For the dear God who loveth us, He made and loveth all."

-Coleridge.

Still dear to each bosom the bluebird shall be His voice, like thrillings of hope, is a treasure;

For, through the bleakest of storms if a calm he but see

He comes to remind us of sunshine and pleasure.

-Alexander Wilson.

"'Tis always morning somewhere, and above, The awakening continents from shore to shore, Somewhere the birds are singing evermore."

Time is never wasted listening to the trees; If to heaven as grandly we arose as these, Holding to each other half their kindly grace, Haply we were worthier of our human place.

-Lucy Larcom.

The little birds fly over, And O, how sweet they sing! To tell the happy children That once again 'tis spring. Here blooms the warm red clover, There peeps the violet blue, O, happy little children, God made them all for you.

-Celia Thaxter.

"'Tis merry in the greenwood, thus runs the old lay In the gladsome month of merry May When the wildbird's song on stem and spray Invites to forest bower; Then rears the ash his airy crest, Then shines the birch in silver vest, And the beech in glistening leaves is drest, And dark between shows the oak's proud breast,

Like a chieftain's frowning tower."

-Seott.

FURTHER SELECTIONS RECOMMENDED.

Among the Trees, William Cullen Bryant; Arab to the Palm, Bayard Taylor; Ariel's Song (from the Tempest), Shakespeare; Bireh Tree, James Russell Lowell; Birds of Killingworth, Longfellow; Brave Old Oak, Townsend's Echoes of Life; Chestnut of Brazenose, Longfellow; Dandelion, Metcalf's Elementary English, page 55; Discontented Yew Tree, Coate's Children's Book of Poetry; Have You Heard the Waters Singing, Metealf's Elementary English, page 49; In Mareh, Wadsworth; I Come, I Come; Ye Have Called Me Long, Mrs. Hemans; I Wandered, Lonely as a Cloud, Wordsworth; Jack in the Pulpit, Whittier; Know Ye the Land, Byron; Lines to a Water-Fowl, Bryant; Little Bell, Thomas Westwood; Ode to a Sky-lark, Shelley; Old Apple Tree, Coate's Children's Book of Poetry; Palm Tree, Whittier; Planting of the Apple Tree, Bryant; The Bee and the Flower, Tennyson; The Brook, Tennyson; The Humble Bee (first three verses), Emerson; The Seed (found in Sarah Arnold's Waymarks for Teachers); The Fairy Folk, Allingham; The Mountain and the Squirrel, Emerson; To the Dandelion, Lowell; To a Field Daisy, Burns; To a Pine Tree, Lowell; Robert of Lincoln, Bryant; What We Owe to Trees, Egleston; Woodman, Spare That Tree, Morris; Wonderful Apple Tree, Mulock (h); Yew Trees, Wordsworth.

ARBOR DAY, 1900.

To the Educational Workers of Colorado:

In accordance with the law, the 20th day of April will be observed throughout the state as Arbor Day, and it is also earnestly suggested to the educators of the state that the same date be kept as Bird Day. There is the greatest need for protection of the forests, and an almost equal need for the preservation of the bird life of the country. Patriotic regard for our nation, and sympathetic appreciation of nature, alike demand able and systematic teaching of our children upon these subjects. To insure intelligence, care and protection of both birds and trees by our boys and girls, we must implant in their growing minds knowledge upon which to base their principles. That the forests collect water, forming great rivers which fertilize the soil, and that the birds destroy millions of injurious insects and insect eggs, are facts which should be made clear. The wanton sacrifice of both these important aids to the life of man has been largely due to ignorance; and the arrest of such sacrifice can only be secured through enlightenment.

This especial holiday is one whose spirit must be lived up to throughout the year, and its observance not confined to the program of the day, although this should be made as valuable as possible. It should be prepared for by a continuous and thorough system of instruction in the line of nature study, and will richly repay the teacher for her efforts, for if this special study is a fashion, as some one has said, "God bless a fashion that makes people happy—that makes rough natures gentle, careless people careful, stupid people bright, and, best of all, that leads the soul through nature up to nature's God."

A brief descriptive summary of the principal trees and birds of this state is offered in the hope that it may prove useful as a basis for a full and comprehensive plan, adapted by each teacher to the needs of his own field of work. In the preparation of the following outline the assistance is gratefully acknowledged of the following books: Professor W. W. Cook's "Birds of Colorado," Apgar's "Birds of the United States," the Colorado Department of Public Instruction Arbor Day circular of 1892, "The History and Observance of Arbor Day," by N. H. Eggleston, and "Our Common Birds," by C. L. Hodge, Ph. D.

> HELEN L. GRENFELL, State Superintendent of Public Instruction.

PROCLAMATION ARBOR DAY.

The establishment by statute of a day devoted to the planting of trees and the adornment of nature crystallized a beautiful and useful custom into law. Its annual approach is always joyfully anticipated and its requirements cheerfully observed. Its practical results are already with us; for our children its benefits are beyond calculation. The citizen who plants the tree and watches its constant growth, must love the land that nourishes it, the country that protects it, and the government that is over all.

In compliance, therefore, with the provisions of the statute, and pursuant to the authority in me vested, I do hereby direct public attention to the act of the general assembly designating Friday, the20th day of April, A. D. 1900, as Arbor Day, and recommend and enjoin the due observance thereof in the planting of forest trees for the benefit and adornment of public and private grounds, places and ways, and in such other efforts and undertakings as shall be in harmony with the general character and purpose of the day.

In witness whereof I have hereunto set my hand and caused the great seal of the state to be affixed this second day of April, A. D. 1900.

By the Governor:

(Seal) CHARLES S. THOMAS. ELMER F. BECKWITH, Secretary of State.

TREES.

For effective and intelligent work in the direction of encouraging tree planting and care of the forests, opportunity must frequently be made to instill in the minds of the pupils the true spirit of love and zeal for the cause. The value of Arbor Day will be slight, if its influence is restricted to a short time in the spring. A thorough explanation from the teacher, and frequent studies of tree and plant life throughout the year are necessary to a proper understanding of the situation, by which alone we can hope to inspire in the children the right sentiment. The subject appeals to us and can be presented from both the practical and the aesthetic sides. The children should learn the facts in regard to the past wholesale destruction of the forests and its disastrous results. One instance will serve as an example of many. In the Sierra Nevadas the largest and finest trees of a certain locality were needed for the use of the miners, and in order to obtain these quickly the entire forest was leveled to the ground. The trees not desired for usew ere set on fire, and not only themselves, but the soil beneath them, containing the accumulation of rich leaf mould for centuries, were burned, and in the intense heat even the rocks were crumbled. Hitherto, the even flow of water from the slowly melting mountain snows had made fertile the land in the adjacent valleys, but now, when the rains came and the swiftly melting snows of spring, a devastating torrent swept over the farms, covering them with ashes and gravel, and rendering them so unfit for cultivation that the settlers were forced to abandon their homes.

Nature's wonderful solution of the problem of irrigation can not fail to interest all learners. The forests are her great storehouses. Under their beneficent shade the moisture sinks into the rich, spongy soil, the overflow gradually finding its way to the water-courses, while through underground channels the accumulated water reappears in springs and lakes for the refreshment of distant meadows and valleys. The trees are the most successful of wind-breaks, and happy is the farmer who has early planted such a "shelter belt" for his orchards and gardens.

The uses of woods in manufactures and arts are too many to be here enumerated, but should be well reviewed in connection with the practical study of the matter.

How much of our enjoyment of nature and our appreciation of its beauty, how much of the universal exhilaration in the abounding life of spring, are due to the trees it would be impossible to estimate. Let us not neglect the cultivation of the aesthetic and moral perceptions of the subject, while impressing the practical. Ruskin speaks of men so practical that they would turn the human race into vegetables, make the earth a stable and its fruit fodder. "There are vine dressers and husbandmen who love the corn they grind and the grapes they crush better than the gardens of the angels upon the slopes of Eden; hewers of wood and drawers of water who think that the wood they hew and the water they draw are better than the pine forests that cover the mountains like the shadow of God, and the great rivers that move like His eternity."

A great, refining, ennobling influence is brought into a child's life with an enthusiasm for planting, tending and watching the growth of flowers, vines and trees, and sympathetic inspiration to such work on the teacher's part can hardly fail to communicate this enthusiasm.

TEN THINGS WE MAY DO TO HELP PLANT LIFE.

First—In transplanting a tree, first prepare the ground where it is to have its new home, by digging a hole sufficiently large to receive all the roots of the tree, with space enough beyond to allow their unimpeded growth for some time, carefully reducing the earth to such fine condition that it can be brought into close contact with the smallest roots. Then take the tree from the ground carefully, so as to preserve all the threadlike roots, and replace them as soon as possible in the prepared soil. Many trees live but a short time on account of having their roots twisted or hacked off, and then having hard, lumpy earth thrown hastily around them.

Second—Refrain from hitching horses to trees, swinging on branches of young trees and cutting their bark. In taking bark from mountain trees always leave one portion intact for the circulation of the sap, instead of cutting the piece of bark all around the trees.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

Third—Pluck flowers carefully, so that the roots are not harmed. It has been noted that in some places in Colorado our beautiful columbine has vanished because tourists have pulled up so many plants by the roots.

Fourth—Furnish support to young and struggling trees, and to the vines whose tendrils seek something on which to climb. A simple cage built around the tree often saves its life by protecting it against animals and passers-by, heavy winds, etc., and a few strings and tacks will aid our climbing vines to cover walls and fences with beauty.

Fifth—In gathering flowers exercise care to take such as are matured, without taking buds.

Sixth—Remove a weed here and there, as we see in passing, that it may not hinder the growth of more useful or beautiful plants.

Seventh—Collect and burn the dry and undesirable weeds from our vacant lots and roadsides. If we would all do our duty by such places as are nearest ourselves, a pest like the Russian thistle could not gain such headway as it has in the state.

Eighth—Observe and minister to the different needs of the different species of plants around us. Too much water kills evergreens, cacti and other natives of dry soil, while too little is fatal to violets, pansies, cottonwood trees and other moisture-loving varieties.

Ninth-Refrain from trampling on young and tender grass.

Tenth—Use our influence toward beautifying school grounds with trees, shrubs and grass.

COLORADO TREES.

CONIFERS.

1. PINE FAMILY.

Yellow or Bull Pine covers more ground than any other pine in America, growing from Mexico to Canada, from plains to the Pacific, 100 to 300 feet tall. heavy wood, good windbreak. Altitude of growth, 6,000 to 7,000 feet.

Western White Pine is 50 to 75 feet high, has handsome, dark, compact foliage and soft wood, much used in furniture. Altitude, 6,000 to 9,000 feet.

Black or Lodge Pole or Tamarack Pine is 40 to 50 feet high, has straight trunk, with smooth bark, wood coarse and tough, not used for boards—used by Indians for lodge-pole. Altitude, 8,000 to 10,000 feet.

Fox-Tail or Hickory Pine is seldom over 40 feet high, has thick trunk, reddish-gray bark, tough, hard wood and tufted foliage, giving name of Fox-tail. Form varies from pyramidal in sheltered spots to a straggling bush. Altitude, timber line (11,000 feet).

Pinon or Nut Pine is a round-topped tree, 20 or 30 feet high, branches from base, has resinous wood, best for fire wood, hence such quantities are used for making charcoal as threaten extermination of the tree. Seeds are pinon nuts. Grows in valleys and foot-hills.

II. SPRUCE FAMILY.

Red or Douglas Spruce or Mountain Hemlock may be 300 feet high, has reddish-yellow wood, heavy and strong, used for railroad timber. Grows in foot-hills.

White or Englemann's Spruce is 100 feet high on lower mountains, and diminishes gradually until at timber line it becomes a creeping shrub. Has light green to steely foliage, strong wood, good for timber.

Colorado or Blue Spruce is found only in Colorado, and under the best circumstances grows to a height of 100 feet. Has a beautiful bluish lustre. Has been selected as the state tree. Altitude of growth, 6,000 to 9,000 feet.

III. FIR FAMILY.

White Fir is the most widely distributed of North American firs; 100 to 150 feet high. Has long leaves, curved upward and inward, of light green color, giving it a magnificent silvery appearance in the sunlight. Altitude, 6,000 to 7,000 feet.

Balsam fir is 100 feet high, rather uncommon, of no value for timber, but its spicy, fragrant leaves are much sought for pillows. Grows on slopes and in canons, near timber line.

IV. CEDAR FAMILY.

Red Cedar is the only tree that has traveled here from the East, growing everywhere on this continent. Grows 100 feet high in bottom lands, small and low on hills. Has light, soft wood, which lasts long in contact with soil, so is principally used for fence posts and railroad ties.

White Cedar or Rocky Mountain Juniper is about 30 feet high, a scraggy, stunted tree. Grows on low, dry hills of Colorado, chiefly in company with nut pine. Has wood similar to that of red cedar.

DECIDUOUS TREES.

Aspen Tree—called Quaking Asp, because its small, round leaves on long stems constantly shake—is the only deciduous tree in the mountains of Colorado. Of little value for timber or for ornament, but very useful in preparing the ground for more valuable trees, as it springs up after a forest fire, and later gives place to others.

Cottonwood is the best known tree of the West, and the great shade trees of the semi-arid regions. Grows along water courses on the plains, and so rapidly that it was extensively planted with new settlements.

Box Elder, or Ash-Leaf Maple, is a small, handsome tree, of graceful, rounded masses of soft foliage; a rapid grower; much used for decorating lawns. Grows along streams on the plains.

Willow grows along streams, has slender, pliant branches; usually grows as a bush, but under favorable circumstances becomes a large tree.

Poplar grows in some varieties in Colorado. Has soft wood, capable of many uses.

The spirit of Arbor Day is benevolent. Its aim is the public good in some form, and it has a wide outlook. There is nothing narrow or selfish about it. If it plants trees, it is not for the benefit of any individual alone, but for all who may see them and have the benefit of them, whether soon, or centuries hence. It plants for those who are to come, as well as for those now living.—N. H. Eggleston.

BIRDS.

No less important than intelligence regarding trees is intelligence regarding birds, and a systematic course of instruction throughout the school year is indispensable with both subjects. The interest now awakened all over the country in the preservation of our native birds is most encouraging. The many philanthropic plans for the increase and protection of bird life are sure to bring speedy results, if, as we are told, it is true that "A pair of living bird's eggs, with proper care by the children of the country, could produce in ten years a pair of birds for every child in the land."

To stop the ravages made upon bird life by the demands of millinery, the passion for collecting, and the love of hunting, competent instruction in our schools will avail far more than occasional newspaper tirades. Teach the children the reasons for cherishing this precious life, and methods of doing so, and there will be less need of preaching against human destructiveness. We learn that the common birds of our country have been produced by nature through a long course of geological epochs and adapted to the conditions of the continent so wonderfully, that man made an almost irreparable mistake in arbitrarily introducing the English sparrow into this "vast living harmony."

In the problems that confront the birds in their struggle for existence, that of food supply is the greatest. This is the chief cause of their migration to the tropics in winter. Students of ornithology have prepared charts indicating the foods of the various birds, and all lovers can materially assist the little creatures by supplying a part of their food in times of scarcity. Another great problem is that of meeting the natural enemies of the birds. Numbers of birds can be saved yearly from perishing in cold storms, by furnishing sheltered nooks and boxes about the houses, barns and trees for their use. During the nesting season, children can do much by watchfulness to prevent the capture of the young birds by cats.

The collecting of bird skins, eggs and nests can best be discouraged by impressing the value of the living birds and turning interest upon cultivating their acquaintance. Wordsworth said, "Natural history is taught in infant schools by pictures stuck up against walls, and such like mummery. A moment's notice of redbreasts pecking at a winter's hearth is worth it all," but Wordsworth did not know the fine reproductions given by our modern pictures, which are decidedly preferable to the use of dead stuffed specimens of that one of all God's creatures whose greatest charm

is its bright intensity of life. A child will not learn to value and love birds by becoming acquainted with these stiff caricatures. One of the most painstaking and experienced students of our American birds, Professor Hodge, of Clark University, says: "Bird collecting and skinning and stuffing is at best but sad drudgery, and I speak from dreary, though in many respects, successful experience. I hope almost enough of it has been done to last the country for the next thousand years, and what remains should be done by experts, and the results should be preserved in moth-proof tin boxes in museums and not on exhibition; for scientific reference and not for show. Bird study afield or through an opera glass is at best for the few who have money and leisure. Like the flowers of our homes, the kind of bird study which aims to attract birds about our homes should become part of our ordinary home life, an equal delight to parents and children, rich and poor, busy and idle, alike. * * * A board by the window for crumbs and all sorts of bird food appropriate to the seasons should become as much a household institution as the window garden inside, and promises to be a source of even more interest and pleasure. * * * Water may be supplied by placing a shallow dish, always kept fresh and clean, on a short post under a tree, merely high enough up to be out of reach of cats. The water should not be more than two inches deep. Few people who have not tried it can have any idea of the satisfaction there is in seeing the thirsty birds come down to bathe and drink. Nothing adds more to the comfort of birds in hot weather."

The numerous influences for destruction to the birds have decreased their numbers at an alarming rate in recent years, and no more worthy aim for the work of nature study in our schools could be proposed than that of changing this decrease to increase in the bird population. In order to be intelligent directors of the children, teachers should study this line of work, and give systematic lessons leading to a genuine understanding of the need and sincere interest in its fulfillment.

Among the many interesting and instructive books upon birds which will be enjoyed by teachers and their pupils, the following may be mentioned:

Our Bird Allies-Theodore Wood.

Bird Ways-Olive Thorne Miller.

Bird World-Grier & Co.

Birds and All Nature.

Birds in Village and Field—Florence Mirriam.

Home Studies in Nature-Mrs. Treat.

Birds, Bees and Other Studies-John Burroughs.

Bird Life—Chapman.

The Birds About Us-C. C. Abbott.

Bird-Land Echoes-C. C. Abbott.

TEN THINGS WE MAY DO TO HELP BIRD LIFE.

First—Set out about our home and school grounds trees, shrubs and other plants most valuable to attract birds and furnish them food from their fruits, berries or seeds.

Second-Scatter crumbs and grains where the birds can get them.

Third—Place shallow dishes of water at convenient heights for the birds to drink and bathe.

Fourth-Place nesting material in their way at the time of nest building.

Fifth—Where cats are kept, train them to keep away from the nesting regions.

Sixth—Watch for opportunities to help and protect the fledgelings until able to fly. Thousands of young birds every year leave their nests a day or two before their wings are quite strong and fall an easy prey to cats or other enemies. We can place them in a cage near the nest, and often the old birds will continue to feed them. If not, they should be fed and watered regularly about every hour during daylight until they become able to help themselves. Caged birds should be liberated as soon as it is evident that they can not be made happy and contented in captivity.

Seventh—Provide bird houses and sheltered nooks for the nests. Dr. Hodges says the proper size for a bird house is six inches square floor space and eight inches high. A single opening near the top should be made two inches in diameter for most birds, although for wrens, chickadees and the smaller birds, one inch is sufficient and will serve to keep out the English sparrow. Houses may be made with several compartments of these proportions.

Eighth—Arrange safe places of shelter about our houses and barns, in order to save as many birds as possible during the storms.

Ninth—Refuse to wear birds and the plumage that is obtained by slaughter. If you must wear feathers, remember that made wings, quills and ostrich plumes cost no bird its life. The wings are made from the feathers of fowls used for food.

Tenth—If you have a bird to tame, place it in a clean cage, supply it with water and food for the first day, being careful not to frighten it. By the morning of the second day, when all the food in the cage has been eateh or removed, offer it suitable food on the end of a slender wand, perhaps several feet long at first, and gently approach until the morsel is in reach of his bill. If he takes it, try another, moving up a little closer. If not, let his appetite sharpen a little, or get a longer stick. By this method and a little patience any young bird can, in three days, be tamed to take things from your hand.

COLORADO BIRDS.

WATER BIRDS.

Duck family is the largest family of swimming birds, numbering over 150 species. These birds are web-footed, and belong to the great order of tooth-billed swimmers. They are furnished with ridges or teeth, along the edges of the bill, which serve as strainers for removing the mud, sand, etc., from the food. Twenty-five varieties are found in Colorado, among which are the Canvasback, Redhead, Wood Duck, several Teals, Ring-necked, Old Squaw, Harlequin Duck and Ruddy Duck.

Swan family, the largest birds of the tooth-billed swimmers, are the smallest group, numbering about ten species. They are very long-necked, white, with a strip of bare skin from eye to bill; graceful in swimming, but awkward on land on account of the position of their legs, far back along the body. In feeding they do not dive, but tip up the body, or simply thrust the head and neck under water. Their food is in part vegetable, but they eat snails, also. Swans are rare in Colorado, but two varieties, Trumpter Swan and Whistling Swan, are found here in migration.

The Geese form a group intermediate between the swans and the ducks. They are large, long-necked, long-legged birds, with the space in front of the eye feathered. They spend less time in the water than ducks, and being longer legged, are better walkers. Their food is almost entirely vegetable. Hissing, when interfered with, is a trait common to geese and swans. About half a dozen varieties are found in Colorado, the most common being the Canada Goose. Others are Greater Snow Goose, Lesser Snow Goose, American White-fronted Goose.

Gull family are hoarse-voiced, large, long-winged, sea and shore birds, usually with square tails. They are good swimmers. They procure their food by gathering it from the surface of the water with their strongly hooked bills, and their diet is varied—manmals, birds, eggs and fish. Their nests are almost always on the ground. Strange as it seems, at this distance from the occan, gulls are found about our lakes. The following varieties have been seen here: Western Gull, American Herring Gull, California Gull, Ring-billed Gull, Laughing Gull, Franklin's Gull, Bonaparte's Gull, Sabine's Gull.

Terns belong to the same order as Gulls, but are smaller and have forked tails, while those of gulls are square; also hold their heads pointing downward in flight, while gulls hold theirs in line with the body. 'The Arctic Tern, Black Tern and Forester's Tern have been observed in Colorado.

LAND BIRDS.

The grouse, partridges, etc., belong to a large family of game birds. They live almost entirely on the ground, and have malnly brown and gray colors. They have the habit of hiding rather than flying to escape the gunners. Their flight is rapid, accompanied by a whirring noise caused by the beating of their small concave wings. Like hens, they scratch the ground to obtain their food, which consists of worms, ln-



sects, seeds, etc. Are generally large birds with short bills, heavy bodies, short, more or less feathered legs, and rather long tails.

The Dusky Grouse is a Rocky Mountain variety, which nests as high as timber line.

White-Tailed Ptarmigan or Mountain Quail nest entirely above timber line, are white in winter, darker in spring, and close in color to the moss and rocks in summer.

Sage Grouse is an inhabitant of sage brush plains; nests on plains and as high as 8,000 feet altitude.

The Falcon family, including hawks, eagles, vultures, etc., is the largest family of birds of prey. Hawks are medium or small in size, with short, stout bills, long, nearly square tails, and long, bare legs. Have wonderful powers of flight. Several varieties occur in Colorado.

Eagles are large, with heavy bodies and mainly toothless bills. They are inferior in power of flight, and usually capture their prey by stealth rather than by open fight. The Golden Eagle is a blackish-brown bird, with almost golden back head and back neck. It is more common in the mountains of Colorado than anywhere else in the United States.

The Bald Eagle is very large, dark colored, with white head, neck and tail. It is the variety which has the honor of being our national bird, and is fairly common in Colorado.

The Owl family also belongs to the birds of prey. The owls differ from all other birds, in having the face so broadened that both eyes look forward instead of sidewise, and the eyes are so surrounded by radiating feathers as to make them seem larger. The Short-Eared Owl, Long-Eared Owl, Barn Owl, Screech Owl, Horned Owl, Snowy Owl and Burrowing Owl are some of the varieties found in Colorado.

The Crow family, including Jays and Magpies, is represented by numerous specimens in Colorado. They are heavy-billed, peculiarly intelligent birds, with the nostrils generally well covered with bristly feathers. The Jays are large, brightly colored, saucy, noisy birds. The Long-crested Jay and the Rocky Mountain Jay, which latter is well known to miners and campers for its thieving propensities, are the most common in our mountains. The Magpie, also a very cunning bird, is found here.

The Oriole family is represented in Colorado chiefly by the Red-Winged Blackbird, principally on the plains and about cornfields, the Yellow-Headed Blackbird of the foothills, the Western Meadowlark, found on the plains and in the foothills, and whose beautiful song is the welcome harbinger of spring, and the Bobolink, which is found here but rarely.

The Sparrow family is the largest of bird families, numbering 550 species, and found everywhere (except in Australia) at all seasons of the year. They have short, conical bills, with the corners of the mouth bent downward. Those usually called Sparrows have plain colors arranged in more or less streaky manner. The Grosbeaks number about a dozen species, are larger, with heavy, stout bills, and are bright colored with bright markings of red or yellow. The Finches are very much like the

Sparrows. Nearly all the family are seed-eaters (our cage Canary is a member), and for this reason are not so migratory as the insect-eaters, the migration of birds being due more to lack of food than inability to stand cold. No less than fifty varieties of this large family are found in Colorado.

The Swallow family comprises eighty species of long-winged, small birds. They spend most of the time in the air in pursuit of insects, and on account of their weak, small feet, perch on slender twigs and telegraph wires. They are usually black and white. Six varieties occur in Colorado, the most common being the Barn Swallow, which nests in barns, using mud and grass for building.

The Thrush family is a large one, containing 300 species. They are noted for their song, plain colors and usually spotted breasts. The tail is nearly square-tipped, of wide, soft feathers. They are woodland birds, of migratory habits. The varieties in Colorado are chiefly the Hermit Thrushes, the Willow Thrush, the American Robin and the Bluebird.

BIRD CLUB SUGGESTIONS.

A movement started in Worcester, Mass., in April, 1899, aroused so much enthusiasm among children and their parents, and proved so successful for the first year, that it is hoped the plan may be adapted to practical use in the Colorado schools. A copy of the constitution of the Worcester club is given at the close of these suggestions. In the Worcester schools these organizations are called "Ten to One Clubs," indicating that the object was to have ten of our valuable native birds where we have but one now. No objection would be made to either the adoption of this name or some other appropriate one-the Bird Lovers' club, the Young Audubon club, are suggested—to be organized in every school in the state. It should be clearly understood that the object of the club is to use every means possible to increase the number of our native wild birds by providing them, when necessary, with food, water and shelter, by treating them with uniform kindness, and especially by protecting in every way their nests, eggs and young. A most wholesome channel would be opened to the natural activities of the children, and the crulety sometimes practiced by the young in ignorant thoughtlessness, be greatly lessened.

The plan and object of such work should be thoroughly explained to the children and their sympathies won, and then the club should be placed in their hands. They should hold regular meetings for making individual reports of what has been accomplished, exchanging experiences and helping one another from what has been learned. A central club might be arranged in each county—under the guidance of the county superintendent—which should receive and keep reports from all the other clubs in the county, and report to the State Superintendent's office from time to time, which office would then have material to issue a yearly report for the encouragement of the youthful workers.

It is sincerely believed that such a movement is greatly needed in our state, and that a little concerted effort on the part of the teachers would start in motion an idea whose growth would bring about great prac-

SUPERINTENDENT OF PUBLIC INSTRUCTION.

tical advantages to our state, as well as exercising a most broadening and ennobling influence upon the hearts and minds of our boys and girls. The study of birds is now engaging the minds of some of the greatest scholars of America, and richly repays even the most humble student.

CONSTITUTION TEN TO ONE CLUBS.

Motto: Pro Avibus et Patria.

ARTICLE I.

Name and Purpose.

ARTICLE 11.

Membership.

ARTICLE 111.

Officers.

Section 1. The officers of the club shall be a president, eight vicepresidents, a secretary and four assistant secretaries, and a committee of five on charts and statistics.

Duties of Officers.

Sec. 2. The duties of the president and secretary shall be those usually attaching to such offices.

Sec. 3. Vice-presidents and assistant secretaries shall perform the duties of their respectice chiefs during their absence, or when the club meets in sections.

Sec. 4. The committee on charts and statistics shall make a map of a certain district, to be determined by the club, and keep a record of the number of birds' nests reported and the history of each nest, and shall make a report on said map and record at the last meeting of the club in June and November of each year, and at any other time that the club may direct.

ARTICLE 1V.

Meetings.

Section 1. The regular meetings of the club shall be held on ______ afternoon of each week at ______ o'clock during the school year.

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Sec. 2. Special meetings may be held at any time at the call of the president and secretary, with approval of the principal and all the teachers, during the school year, and if held in the school building.

Sec. 3. Ten members shall constitute a quorum.

ARTICLE V.

Amendments.

Section 1. This constitution may be amended by a majority vote of those present at any regular meeting, provided that notice of proposed amendment be given at a previous regular meeting.

BY-LAWS TEN TO ONE CLUBS.

Order of Business.

1. Minutes of previous meeting.

- 2. Reports of committee on charts and statistics (if called for).
- 3. Reports of special committees.
- 4. Reports of birds' nests newly discovered.
- 5. Records of nests previously discovered.

6. Suggestions by members as to ways and means for protecting birds' nests and young.

7. Miscellaneous business.

Let but a bird—that being so free and uncontrolled, which with one stroke of the wing puts space between you and himself—let him but be willing to draw near and conclude a friendship with you, and lo, how your heart is moved! No one can be insensible to the claim which confidence imposes; it is, so to speak, a freeman's right. The stork of the north builds its nest on your roof and everybody envies you and seeks the same favor in the coming spring. The swallow of the south makes our open house her own, and joy enters with her; her presence is a promise of happiness.

-MME. MICHELET.

ANNIVERSARY OF DEATH OF WASHINGTON.

Denver, Colorado, November 22, 1899.

The attention of the educational workers of the state is called to the approaching centennial anniversary of the death of Washington, as a day which should be observed by our schools in a reverential spirit.

The George Washington Memorial Association urges upon the people of every state the appropriate commemoration of the 14th of December, and it is earnestly recommended by the Governor of the state, and by this office, that all teachers of Colorado interest their pupils in a brief program of exercises calculated to stimulate their patriotism and gratitude as citizens of the country to whose interest Washington's grand life was devoted.

It may be suggested that the teacher of each school should so review the magnificent character, deeds and achievements of our first president that his memory be not a cold abstraction to the young people, but inspired in their thoughts with the glowing heroism and devotion to duty of his actual eareer.

A feature befitting the day's program with older pupils can be the reading of Washington's Farewell Address, while in all the classes a few declamations and songs can be added to such other recitations as the individual teachers may find most helpful and impressive.

In the nature of this anniversary there is no suggestion of holiday making, but the consideration of the desirablity of impressing our children with the historic interest and importance of the day.

Compliance with this request will be greatly appreciated by this office.

Fraternally yours,

HELEN L. GRENFELL, Superintendent of Public Instruction.

WASHINGTON'S BIRTHDAY, FEBRUARY 22, 1899.

To the Teachers:

Perhaps none of the recurring anniversaries of the birth of Washington, within our recollection, ever afforded a better opportunity to impress the lesson of patriotism upon our pupils.

Our beloved country is but just coming out from the shadow of war and her emergency has called forth the same spirit of devotion to duty and love of liberty shown by the patriot fathers.

The last lingering traces of sectional prejudice have melted away in the common trial. To-day the government planted by Washington and his noble coadjutors, on the broad basis of the equality of men, stands more firmly and proudly than ever, before the world as the champion of human liberty.

You are earnestly requested to make the 22d of February, 1899, memorable in your school annals, and of real value to your pupils by the most impressive and interesting exercises of commemoration.

A stereotyped program would be a dead letter, but a few suggestions by the way may be helpful.

Explain what is meant by honor, loyalty and justice, through stories and historical illustrations which in themselves are sufficiently interesting to hold attention. Endeavor to make every child feel that his citizenship has already begun and the responsibility to his country is only a larger form of his responsibility to his home and his school, and that in order to have men and women who can stand steady under fire, our boys and girls must be growing in the self-control which develops that superb courage.

Make your actual period of eelebration enthusiastic with patriotic songs and with the simple decoration of the flags brought by the children themselves. A few appropriate and stirring declamations are more effectual than many platitudes.

The earnest interest of the teacher and evident appreciation of the sacred character of the day's lessons are the surest means of conveying them fully to the pupils.

Let us all join in the work towards bringing out a high standard of citizenship, confident in the success of the united efforts of educators throughout the state

> Fraternally yours, HELEN L. GRENFELL, Superintendent of Public Instruction.

BIRTHDAYS OF WASHINGTON AND LINCOLN. 1900.

RECOMMENDATIONS FOR THE OBSERVANCE OF THE BIRTHDAYS OF WASHINGTON AND LINCOLN, FEBRUARY 22D AND FEBRUARY 12TH.

FOR THE PUBLIC SCHOOLS OF COLORADO.

To the Educational Workers of the State:

The need for training in patriotic citizenship is especially evident in our country to-day. Upon all instructors of children rests a duty to their country, no less than to their individual charges, to contribute the best of which they are capable, toward the development in intelligent patriotism of the men and women of the future.

In our school work this is a season of especial opportunity for promoting growth in civic virtue and pride, since it brings within the same month the birthday anniversaries of the two greatest Americans.

The study of the lives and deeds of heroes, and the active payment of honor to their memories, contains a powerful influence for good and a true incentive to the broadest patriotism. It is therefore recommended that a special program be prepared by teachers for either the 12th or the 22d day of February, in joint celebration of those notable days, and towards such a celebration the following suggestions are contributed. The brief sketches of Washington and Lincoln may be read by or to the pupils if desirable, and any of the selections given or named are thought appropriate to the various grades for declamation and song. Wherever practicable, the interest and value of the program may be greatly enhanced by brief remarks from a member of the school board or other citizen. Portraits of Washington and Lincoln are easily obtained and make more significant the exercises of the day.

"Love of country," it has been said, "is the expansion of filial love," and through the efforts of our public school teachers may this noble sentiment be extended.

> HELEN L. GRENFELL, Superintendent of Public Instruction.

WASHINGTON.

George Washington was born on February 22, 1732. He sprang from an illustrious family, one which had been justly honored for generations in England, yet destined to be made more illustrious and to be more lastingly honored by its representative in the New World. All the advantages that a home of culture and education, of firm and efficient training, could give, were Washington's, and all the native worth and ability to profit by such environment were his fortunate endowment.

At the age of twenty-one, George Washington was so well known in his own state as an absolutely trustworthy and fearless young man, that he was selected by Governor Dinwiddle, of Virginia, for a dangerous and delicate task. This was to visit the commander of the French forts south of Lake Erie to warn him that the encroachments of the French upon territory claimed by England must advance no further, and this meant a winter journey of a thousand miles through the wilderness, amongst hostile Indians. The story of this journey is thrilling with romantic adventure, and the mission was splendidly performed. In the following year Washington was sent, in command of a regiment of Virginia troops, to hold possession of the same region, but at his newly started Fort Necessity was assailed by an overwhelming force of the French, and compelled to surrender, General Braddock was then sent from England with two regiments of regulars, and his ill-starred expedition would have met total destruction, had it not been for Washington's judgment and knowledge of woodcraft and of Indian warfare. When the Revolutionary war began, in 1775, congress appointed Washington commander-in-chief of the American army, and on July 3d he took command at Cambridge, Massachusetts. A less resolute and patriotic man would have been discouraged at the outset over the prospect of leading against the strongest nation of the world that undisciplined crowd called the Continental army. But discouragement was unknown to Washington's vocabulary and his character. He spent eight months patiently organizing and drilling his troops and keeping the British penned up in Boston, so that on the arrival of cannon and ammunition, he seized Dorchester Heights and gave General Howe his choice between evacuating the city or fighting, and the British left Boston, never to return. From this time on the history of Washington is the history of the war for independence and the founding of our country. Whether we follow him in his skillful escape in the fog from Long Island, on his masterly retreat across the Jerseys, in the sudden brilliant descent upon Trenton, through the cruel winters at Valley Forge, and at Morristown, or in that astonishing march of his army from the Hudson river to Yorktown, Virginia, to hem in Cornwallis by land and sea and compel the surrender that closed the war, we learn that the world has never seen more magnificent generalship, and that no country has ever brought forth a grander hero. The common ambitions, occupations and cares of ordinary life were shared by Washington and it was his own dearest wish to retire to Mount Vernon at the close of the war and spend the remainder of his days in the domestic and business round of life. But this was not to be.

He was chosen to preside over the deliberations of one of the most important assemblies ever gathered—the convention for framing the American Constitution—and was then manimously elected president of the new nation. For eight years more he must toil and think for the lasting benefit of millions of his fellow countrymen, and millions to come after them, and his death on December 14, 1799, soon followed the close of his public duty. How nobiy, devotedly and faithfully his gigantic work was done, every one of ns who live in the freedom, the comfort, the grandeur of opportunity of the United States of America in the nineteenth and twentieth centuries, should be proud and glad to remember. In our close and loving gratitude, no less than in our deep and heartfelt veneration, there can never be a man whose name stands above that of Washington.

LINCOLN.

Abraham Lincoln was born February 12, 1809, in Hardin county, Kentucky, in a home so humble that the dwelling could not be called a cabin, but only a camp, as it was made of poles. His father, Thomas Lincoln, was a pioneer, of not the most energetic type, and so unlettered that to barely write his name was his utmost accomplishment. His mother, Nancy Hanks Lincoln, was a delicate woman, sensitive, inclined to melancholy, with some education and natural institucts of refinement. When Abraham was nine years old, his frail mother died, and by this time his father, who seems to have been always moving from one farm to another, had settled in Indiana, whither, a year later, he brought a new wife, Sarah Busch Johnson, and her three children.

To his own mother, doubtless, Abraham owed his passionate love of study and his ability to learn, and to his step-mother he owed the few opportunities of his boyhood for acquiring an education. His schooling was all comprised in about one year's time, but he eagerly read, ciphered and wrote by himself, stretched out on the cabin floor in the firelight, and no trouble was too great for him to take in order to obtain the use of a book.

Lincoln's association with the state of Illinois began when he was twenty-one and accompanied his father to another new home, near Decatur. He worked at splitting rails, keeping store, taking supplies down the river to sell, and nearly all the various industries of a new country. From childhood he had been acquiring a reputation as a debater and speech-maker and also as a great joker and teller of apt stories.

As he was able to find opportunity, he studied law, and his first experience in public office was in the state legislature, to which he was elected as one of the four representatives from Sangamon county, in 1834. While in this work he was able to prosecute more diligently the study of law, and thereafter removed to Springfield to practice. It was there that his marriage to Miss Mary Todd took place in 1842. He was four times elected to the state legislature, and in 1846, to the national legislature. Lincoln was opposed to slavery all his life, and in the Illinois legislature of 1837 had so gone on record. In the summer of 1858 he and Stephen A. Douglas held debates upon the question throughout the state, and the fame thus gained by Lincoln's true and powerful arguments greatly helped his candidacy for the office of president in 1860.

After his election excitement ran high. The Southern leaders knew that a man had been chosen who would tolerate no weakening on the part of the government. Lincoln's loyalty to the Constitution was fully equal to his conviction against slavery, and not for a moment did he admit the possibility of peaceable secession. His journey to Washington began with his making speeches at the principal cities, but closed with a secret and sudden railroad ride on from Baltimore, as evidence was furnished of a plot for his assassination. Thus in gloom and apprehension began the administration of the greatest president since Washington.

Throughout the trouble and tumult of the succeeding years, Abraham Lincoln, the man of the people, never flinched from his heavy task, never wavered in his adherence to principle and with every crisis reached and passed, the confidence of his fellow countrymen deepened and strengthened. The climax of his noble work was the Proclamation of Emancipation, on the 22nd of September, 1862, announcing that from the following New Year's Day the slaves should thenceforth and forever be free.

When the cause of union and freedom had been won, and the president, who had stood firm throughout all the cares and sorrows of that heart-breaking time, had been triumphantly re-elected, at the very hour when a greater hope than ever had dawned for our nation's life, the presence of our leader was taken from us. Lincoln was assassinated on the 14th of April, 1865, and the loss to the country was irreparable. But Lincoln's name and character could not be reached by the assassin's bullet. As long as the Union which he preserved shall endure, he will live in the hearts of the people. Thou, too, sail on, O Ship of State! Sail on, O Union, strong and great! Humanity, with all its fears, With all the hopes of future years, Is hanging breathless on thy fate! We know what master laid thy keel, What workmen wrought thy ribs of steel,

Who made each mast, and sail, and rope, What anvils rang, what hammers beat, In what a forge, and what a heat,

Were shaped the anchors of thy hope!

Fear not each sudden sound and shock; "Tis of the wave and not the rock; "Tis but the fiapping of the sail, And not a rent made by the gale! In spite of rock and tempest's roar, In spite of false lights on the shore, Sail on, nor fear to breast the sea!

Our hearts, our hopes, are all with thee; Our hearts, our hopes, our prayers, our tears, Our faith triumphant o'er our fears,

Are all with thee-are all with thee!

-Longfellow.

THE LOVE OF COUNTRY.

Breathes there the man with soul so dead, Who never to himself hath said,

This is my own, my native land? Whose heart hath ne'er within him burned, As home his footsteps he hath turned From wandering on a foreign strand?

If such there breathe, go, mark him well! For him no minstrel raptures swell;

High though his titles, proud his name, Boundless his wealth as wish can claim, Despite those titles, power and pelf, The wretch, concentrated all in self,

Living, shall forfeit fair renown,

And, doubly dying, shall go down To the vile dust, from whence he sprung, Unwept, unhonored, and unsung.

-Sir Walter Scott.

CONCORD HYMN.

Sung at the completion of the Battle Monument, April 19, 1836.

By the rude bridge that arched the flood, Their flag to April's breeze unfurled, Here once the embattled farmers stood, And fired the shot heard round the world.

The foe long since in silence slept; Alike the conqueror silent sleeps; And Time the ruined bridge has swept Down the dark stream which seaward creeps.

On this green bank, by this soft stream, We set to-day a votive stone;

That memory may their deed redeem, When, like our sires, our sons are gone.

Spirit, that made those heroes dare To die, and leave their children free, Bid Time and Nature gently spare The shaft we raise to them and thee.

-Ralph Waldo Emerson.

WARREN'S ADDRESS TO THE AMERICAN SOLDIERS AT BUNKER HILL.

Stand! the ground's your own, my braves! Will ye give it up to slaves?
Will ye look for greener graves? Hope ye mercy still?
What's the mercy despots feel?
Hear it in the battle peal!
Read it on yon bristling steel! Ask it, ye who will.

Fear ye foes who kill for hire? Will ye to your homes retire? Look behind you! they're afire! And before you, see Who have done it!—From the vale On they come!—And will ye quail? Leaden rain and iron hail

Let their welcome be!

In the God of Battles trust! Die we may,—and die we must; But, O where can dust to dust Be consigned so well. As where Heaven its dews shall shed On the martyred patriot's bed. And the rocks shall raise their head, Of his deeds to tell.

-John Pierpont.

O Land of lands! to thee we give Our prayers, our hopes, our service free; For thee thy sons shall nobly live,

And at thy need shall die for thee!

-Whittier.

THE SCHOOLHOUSE STANDS BY THE FLAG.

Ye who love the Republic, remember the claim Ye owe to her fortunes, ye owe to her name, To her years of prosperity past and in store, A hundred behind you, a thousand before. 'Tis the schoolhouse stands by the flag.

Let the Nation stand by the school; 'Tis the schoolbell that rings for our Liberty old.

'Tis the schoolboy whose ballet shall rule. The blue arch above us is Libert's dome. The blue arch above us is Liberty's dome. But the schoolroom to-day is Humanity's friend, Let the people the flag and the schoolhouse defend. 'Tis the schoolhouse stands by the flag.

Let the Nation stand by the school: 'Tis the school bell that rings for our Liberty old.

'Tis the schoolboy whose ballot shall rule.

-Butterworth.

Bright flag at yonder tapering mast,

Fling out your field of azure blue: Let star and stripe be westward cast,

And point as Freedom's eagle flew! Strain home! O lithe and quivering spars, Point home, my country's flag of stars!

-N. P. Willis.

Where may the wearied eye repose When gazing on the great;
Where neither guilty glory glows, Nor despicable state?
Yes--one—the first—the last—the best—
The Cincinnatus of the West, Whom envy dared not hate,
Bequeathed the name of Washington, To make man blush there was but one!

-Byron.

BATTLE HYMN OF THE REPUBLIC.

Mine eyes have seen the glory of the coming of the Lord, He is trampling out the vintage where the grapes of wrath are stored; He hath loosed the fateful lightning of His terrible swift sword: His truth is marching on.

I have seen Him in the watch-fires of a hundred circling camps; They have builded Him an altar in the evening dews and damps; I can read His righteous sentence by the dim and flaring lamps: His day is marching on.

1 have read a fiery gospel writ in burnished rows of steel: "As ye deal with my contemners, so with you my grace shall deal; Let the Hero, born of woman, crush the serpent with his heel, Since God is marching on."

He has sounded forth the trumpet that shall never call retreat; He is sifting out the hearts of men before His judgment-seat: Oh, be swift, my soul, to answer Him! be jubilant, my feet! Our God is marching on.

In the beauty of the lilies Christ was born across the sea,With a glory in His bosom that transfigures you and me;As He died to make men holy, let us die to make men free,While God is marching on.

-Julia Ward Howe.

HOROLOGUE OF LIBERTY.

The world heard: the battle of Lexington—one; the Declaration of Independence—two; the surrender of Burgoyne—three; the siege of Yorktown—four; the treaty of Paris—five; the inauguration of Washington six; and then it was the sunrise of a new day, of which we have seen yet only the glorious forenoon.

O CAPTAIN! MY CAPTAIN!

Abraham Lincoln, 1865.

O Captain! my Captain! our fearful trip is done; The ship has weather'd every rack, the prize we sought is won;

The port is near, the bells 1 hear, the people all exulting,

While follow eyes the steady keel, the vessel grim and daring;

But O heart; heart! heart!

O the bleeding drops of red

Where on the deck my Captain lies,

Fallen cold and dead.

O Captain! my Captain! rise up and hear the bells;

Rise up-for you the flag is flung-for you the bugle trills;

For you bouquets and ribbon'd wreaths-for you the shores a-crowding;

For you they call, the swaying mass, their eager faces turning;

Hear, Captain! dear father!

This arm beneath your head;

It is some dream that on the deck You've fallen cold and dead.

My Captain does not answer, his lips are pale and still;

My father does not feel my arm, he has no pulse nor will;

The ship is anchor'd safe and sound, its voyage closed and done;

From fearful trip the victor ship comes in with object won;

Exult, O shores, and ring, O bells!

But I will mournful tread,

Walk the deck where my Captain lies,

Fallen cold and dead.

-Walt Whitman.

READY.

Loaded with gallant soldiers, A boat shot into the land, And lay at the right of Rodman's Point, With her keel upon the sand.

Lightly, gayly, they came to shore, And never a man afraid; When suddenly the enemy opened fire From his deadly ambuscade.

Each man fell flat on the bottom Of the boat; and the captain said: "If we lie here, we all are captured, And the first who moves is dead!" Then out spoke a negro sailor, No slavish soul had he: "Somebody's got to die, boys, And it might as well be me!"

Firmly he rose, and fearlessly Stepped out into the tide; He pushed the vessel safely off, Then fell across her side;

Fell, pierced by a dozen bullets, As the boat swung clear and free; But there wasn't a man of them that day Who was fitter to die than he!

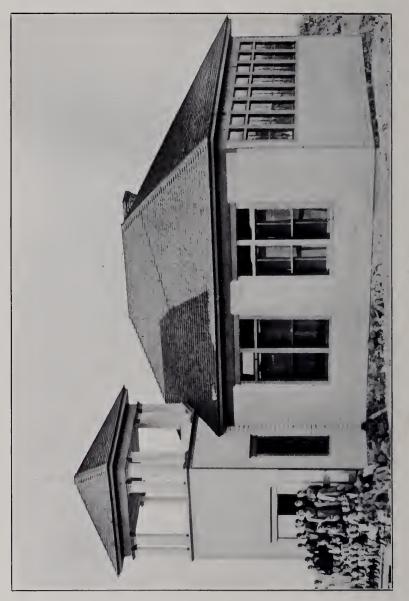
-Phœbe Cary.

EXTRACTS

From Washington's Farewell Address to the People of the United States, September 17, 1796.

Interwoven as is the love of liberty with every ligament of your hearts, no recommendation of mine is necessary to fortify or confirm the attachment. The unity of government which constitutes you one people. is also now dear to you. It is justly so, for it is a main pillar in the edifice of your real independence, the support of your tranquility at home. your peace abroad; of your safety, of your prosperity, of that very liberty which you so highly prize. But as it is easy to foresee that, from different causes, and from different quarters, much pains will be taken. many artifices employed, to weaken in your minds the conviction of this truth, as this is the point in your political fortress against which the batteries of internal and external cnemies will be most constantly and actively (though often covertly and insidiously) directed, it is of infinite moment that you should properly estimate the immense value of your national union to your collective and individual happiness; that you should cherish a cordial, habitual and immovable attachment to it, accustoming yourselves to think and speak of it as of the palladium of your political safety and prosperity, watching for its preservation with jcalous anxiety, discountenancing whatever may suggest even a suspicion that it can in any event be abandoned, and indignantly frowning upon the first dawning of every attempt to alicnate any portion of our country from the rest, or to enfeeble the sacred tics which now link together the various parts.

With slight shades of difference, you have the same religion, manners, habits and political principles. You have in a common cause fought and triumphed together; the independence and liberty you possess are the work of joint counsels and joint efforts, of common dangers, sufferings, and successes. But these considerations, however powerful they address themselves to your sensibility, are greatly outweighed by those



CEDAR EDGE SCHOOL, DISTRICT NO. 22, DELTA COUNTY.

which apply more immediately to your interest. Here every portion of our country finds the most commanding motives for carefully guarding and preserving the union of the whole.

Of all the dispositions and habits which lead to political prosperity. religion and morality are indispensable supports. In vain would that man claim the tribute of patriotism who should labor to subvert these great pillars of human happiness, these firmest props of the duties of men and citizens. The mere politician, equally with the pious man, ought to respect and to cherish them. A volume could not trace all their connections with private and public felicity. Let it simply be asked: Where is the security for prosperity, for reputation, for life, if the sense of religious obligation desert the oaths, which are the instruments of investigation in courts of justice? And let us with caution indulge the supposition that morality can be maintained without religion. Whatever may be conceded to the influence of refined education on minds of peculiar structure, reason and experience both forbid us to expect that national morality can prevail in exclusion of religious principle.

Promote, then, as an object of primary importance, institutions for the general diffusion of knowledge. In proportion as the structure of a government gives force to public opinion, it is essential that public opinion should be enlightened.

AT VALLEY FORGE.

H. A. Brown.

The wind is cold and piercing on the old Gulf road, and the snowflakes have begun to fall. Who is this that toils up yonder hill, his footsteps stained with blood? His bare feet peep through his worn-out shoes, his legs nearly naked, his shirt hanging in strings, his hair disheveled, his face wan and thin. his look hungry. On his shoulder he carries a rusty gun, and the hand that grasps the stock is blue with cold. His comrade is no better off, nor he who follows.

A fourth comes into view, and still another. A dozen are in sight. Twenty have reached the ridge, and there are more to come. See them as they mount the hill that slopes eastward into the great valley. A thousand are in sight, but they are but the vanguard of the motley company that winds down the road until it is lost in the cloud of snowflakes that have hidden the Gulf hills. Yonder are horsemen in tattered uniforms, aud behind them cannon lumbering slowly over the frozen road, half dragged, half pushed by men.

Are these soldiers that huddle together and bow their heads as they face the biting wind? Is this an army that comes straggling through the valley in the blinding snow? No martial music leads them in triumph into captured citadel. No city full of good cheer and warm and comfortable homes awaits their coming. No sound keeps time to their steps save the icy wind rattling the leafless branches, and the dull tread of their weary feet on the frozen ground. In yonder forest must they find their shelter, and on the northern slope of these inhospitable hills their place of refuge. Trials that rarely have failed to break the fortitude of men await them here. The congress whom they serve shall prove helpless to protect them, and their country herself seem unmindful of their sufferings. Disease shall infest their huts by day, and famine stand guard with them through the night. Frost shall lock their camp with icy fetters, and the snows cover it as with a garment; the storms of winter shall be pitiless, but all in vain. Danger shall not frighten nor temptation have power to seduce them. Doubt shall not shake their love of country, nor suffering overcome their fortitude. The powers of evil shall not prevail against them; for they are the Continental army, and these are the hills of Valley Forge.

ADDRESS AT GETTYSBURG.

Abraham Lincoln, November 19, 1863.

Four score and seven years ago our fathers brought forth on this continent a new nation. conceived in liberty. and dedicated to the proposition that all men are created equal. Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure.

We are met on a great battlefield of that war. We have come to dedicate a portion of that field as a final resting place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this.

But in a larger sense we can not dedicate, we can not consecrate, we cannot hallow this ground. The brave men living and dead, who struggled here, have consecrated it far above our poor power to add or detract.

The world will little note, nor long remember, what we say here, but it can never forget what they did here. It is for us, the living, rather to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced.

It is rather for us to be here dedicated to the great task remaining before us, that form these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion; that we here highly resolve that these dead shall not have died in vain; that this nation, under God, shall have a new birth of freedom, and that government of the people, by the people, for the people, shall not perish from the earth.

FOR PRIMARY PUPILS.

The stars and stripes a hundred years Have floated towards the sky; We will be proud of our country's flag. And love it till we die.

Our country is the fairest land On which the sun shines down; Our flag is loved three thousand miles, In country and in town.

From city homes and country homes, From mountain and from plain, We hear the echoes of our praise. And praise our flag again.

A PUZZLING QUESTION.

If all the trees were cherry trees, And every little boy Should have, like young George Washington, A hatchet for his toy, And use it in a way unwise, What should we do for cherry pies?

WHO KNOWS?

I wonder if George Washington, When he was nine years old,
Turned out his toes and brushed his hair, And always shut the door with care And did as he was told.
I wonder if he never said
"Oh dear!" when he was sent to bed.

-Youth's Companion.

GEORGE WASHINGTON.

"How did George Washington look?" asked Nell, "What was he like? Won't you please to tell?" Thus I answered: "A courtly man, Wearing his honors as heroes can. Erect and tall, with his six feet two; Knee-breeches, buckles, frills and queue; Powdered brown hair; blue eyes, far apart; Strong-limbed and fearless, with gentle heart; Gracious in manner toward every one— Such, my Nellie, was Washington."

THE GOOD OLD TIMES.

When Washington was president, He saw full many an icicle; But never on a railroad went, And never rode a bicycle.

He read by no electric lamp, Nor heard about the Yellowstone; He never licked a postage stamp, And never saw a telephone.

His trousers ended at the knees; By wire he could not send dispatch; He filled his lamp with whale oil grease, And never had a match to scratch.

But in these days, it's come to pass. All work is with such dashing done— We've all those things; but then, alas! We seem to have no Washington.

-Beden.

FOR FIVE BOYS.

1732.

In seventeen hundred thirty-two
George Washington was born;
Truth, goodness, skill and glory high
His whole life did adorn.

1775.

In seventeen hundred seventy-five The chief command he took Of all the army in the state And ne'er his flag forsook.

1783.

In seventeen hundred eighty-threeRetired to private life,He saw his much loved country freeFrom battle and from strife.

1789.

In seventeen hundred eighty-nine The country with one voice Proclaimed him president to shine Blessed by the people's choice.

1799.

In seventeen hundred ninety-nine. The nation's tears were shed. To see the patient life resign And sleep among the dead.

ALL.

As "first in war and first in peace," As patriot, father, friend, He will be blessed till time shall cease, And earthly life shall end.

-Young People's Speaker.

1

WASHINGTON AND I.

A little street Arab was Johnnie McGee, Ragged and friendless and homeless was he; But Johnnie, though ragged, was clever and bright, And he knew the difference between wrong and right. Now it happened one morning that Johnnie felt gay, And ready for all kinds of mischief and play; His little strong arms were tossing up stones, Regardless of danger to heads and to bones.

But alas for poor Johnnie! for what do you think? It happened that one stone, as quick as a wink, Went whack! 'gainst the window of Squire B's house, And poor, frightened Johnnie wished he were a mouse, To be able to hide in the first hole he found, And keep himself hidden away under ground. For the beautiful window was cracked right in two, And John, if discovered, would suffer, he knew.

But hark! he hears music away down the street! He knows there are soldiers, he hears the drum beat, And Johnnie remembers whose birthday it is, And a sudden resolve lights his pale little phiz. "They say Mr. Washington ne'er told a lie When he was a little chap—neither will I! And maybe some day, when I'm grown up and dead, Folks will build a big monument over my head!"

Only just a few moments of mute hesitation, Then, feeling as grand as the head of the nation, In walked little Johnnie straight up to the Squire, And while he was speaking his courage rose higher. And presently, when he was back in the street, Speeding after the soldiers with fast, eager feet. "Hurrah!" he cried gayly, "for Washington—and I, For we are the chaps that would not tell a lie!"

-Youth's Companion.

FURTHER SELECTIONS RECOMMENDED.

PROSE.

Rules of Behavior, Washington.

Washington (Lights of Literature, book V.), Thomas Jefferson.

Washington's Character (Heart of Oak, book VI.), Edward Everett.

Supposed Speech of John Adams (Baldwin's Seventh Reader, and many others), Webster.

Liberty and Union; Our Sacred Obligations (Baldwin's Fifth Reader), Webster.

Talleyrand and Arnold (Our Country in Poem and Prose), Persons.

The Minute Man of the Revolution (Franklin Fifth Reader), George William Curtis.

The Revolutionary Alarm (Our Country in Poem and Prose, Franklin Fifth Reader and others), George Bancroft.

The Declaration of 1776 (Franklin Fifth Reader), J. Q. Adams.

Second Inaugural Address (Heart of Oak, book VI., and others), Lincoln.

Abraham Lincoln (Heart of Oak, book VI.), The London Spectator.

The Soldier's Reprieve (Rights to Literature, book IV., Our Country in Poem and Prose, and others), Mrs. Robbins.

Our Reunited Country (at Peace Jubilee, Chicago, October 19, 1898, Lights to Literature, book V.), Clark Howell.

POETRY.

Lexington, Oliver Wendell Holmes.

The Green Mountain Boys, William Cullen Bryant.

The Centennial Hymn, John Greenleaf Whittier.

Union and Liberty, Oliver Wendell Holmes.

The Sword of Bunker Hill (Our Country in Foem and Prose), William R. Wallace.

The Independence Bell (Our Country in Poem and Prose).

The Rising of '76 (Our Country in Poem and Prose, and others), T. B. Read.

To Freedom, James Russell Lowell.

Song of Marion's Men, William Cullen Bryant.

Nathan Hale (Our Country in Poem and Prose, and others), Francis M. Finch.

Sheridan's Ride (Our Country in Poem and Prose, and others), T. B. Read.

Under the Old Elm, James Russell Lowell.

King's Mountain (Our Country in Poem and Prose), W. G. Simms.

The Storming of Stony Point (Our Country in Poem and Prose), Fannie E. Greenleaf.

Poem to Lincoln (Heart of Oak, book VI., and others), Tom Taylor in London "Punch."

Barbara Frietchie, John Greenleaf Whittier.

Old Ironsides, Oliver Wendell Holmes.

Kearny at Seven Pines (Our Country in Poem and Prose, E. C. Stedman.

John Burns of Gettysburg, Bret Harte.

The Battle Above the Clouds (Our Country in Poem and Prose), William Dean Howells.

The Picket Guard (Our Country in Poem and Prose), Ethel Lynn Beers.

The Cavalry Charge (Our Country in Poem and Prose), B. F. Taylor. Lincoln's Passing Bell.

Death of Lincoln (Our Country in Poem and Prose), William Cullen Bryant.

SONGS.

America, Star-Spangler Banner, Columbia, the Gem of the Ocean. Hail Columbia, Happy Land, O for the Sword of Former Times (Sons of All Lands), Washington's Birthday (Songs of All Lands), Battle Hymn of the Republic.

CONSTITUTION DAY, OCTOBER 19, 1900.

To the Superintendents and Teachers of Colorado:

The 19th of October having been selected as "Constitution Day," and the proposal of the Society of Daughters of 1812 to collect funds for the rebuilding of the old frigate Constitution having received the sanction of congress, I desire to call your attention to the request made by the society to the Governor that the schools of our state devote some part of the day to exercises commemorative of the events of 1812, especially to the part taken by "Old Ironsides," and that the pupils assist in raising the fund by contributing money on that day, and to the approval of the plan expressed by our chief executive.

A short program of patriotic verse and song, wherever practicable, will be helpful in arousing the interest of the children and encouraging the requested financial aid.

Let us see to it that the public school pupils of our state have the opportunity to appreciate their share in the inheritance of the honor and pride descending to us all from the achievements of the Constitution, and the brave men who led her to victory.

Yours fraternally,

HELEN L. GRENFELL, Superintendent of Public Instruction.

Teachers should forward contributions received to the county superintendent, and the county superintendent, after sending the amount raised to Messrs. Kidder, Peabody & Co., bankers, and treasurer of Constitution fund, Boston, Mass., will please report results to the State Superintendent of Colorado.

The following letter, recently received at the executive chamber, explains the origin and purpose of the movement to restore the Constitution: His Excellency, Charles S. Thomas, Denver, Colorado:

Dear Sir—I have the honor to present to your notice and to ask your favorable consideration for the work which the Massachusetts State Society, United States Daughters of the War of 1812, has undertaken, to raise the fund for the rehabilitation of the famous old U.S. Frigate Constitution.

A brief statement of how this matter has been brought about may be of interest to you. For many years this famous old frigate, so dear to the hearts of the American people, had been lying at the Portsmouth navy yard, gradually going to decay.

At a patriotic meeting in Faneuil hall, Boston, on February 22, 1897, Mrs. Nelson V. Titus, the president of the Massachusetts State Society, United States Daughters of 1812, offered a resolution that the old ship be brought to Boston to celebrate the one hundredth anniversary of her birth. The petition was presented to the Secretary of the Navy, who ordered the ship brought to Boston, and the celebration on October 21, 1897, awakened much interest for her preservation. The president of the society then presented a petition to congress, urging that an appropriation be made to rebuild this famous man-of-war. This was duly presented to congress by Hon. Henry Cabot Lodge, and was referred to the Committee an Appropriations, who voted it "inexpedient." The matter then rested a year. The society was not disheartened, however, and with the cordial cooperation of the Secretary of the Navy, the necessary anthority to rebuild the ship has now been obtained from congress.

The following bill was passed by both houses of congress and approved by President McKinley on February 14, 1900:

An act for the preservation of the Frigate Constitution. Be it enacted by the senate and house of representatives of the United States of America in congress assembled, that the Secretary of the Navy is hereby authorized to place the Frigate Constitution, now lying at the Boston navy yard, as near as may be consistent with her preservation, in the same condition as regards her hull and rigging as she was when in active service; Provided, that before beginning on such work a sufficient sum of money to complete such work shall be raised through the agency of the Massachusetts State Society, United States Daughters of 1812, and placed at his disposal for the purpose.

Approved February 14, 1900.

Having now received the necessary permission from congress to raise the fund for the rebuilding of the ship, this society desires to ask the cordial co-operation of every state in the Union to unite in raising the money needed to rebuild this historic man-of-war. According to the estimate submitted to the society by the bureau of construction and repair at Washington, the amount needed will be \$400,000. While this at first seems a large sum, it is not so much when divded among the different states in the Union. The preservation of this famous vessel is a matter of national interest, and the purpose of this letter is to ask your excellency to present this matter to the proper authorities in your state and advise the society if we may look for your co-operation in this patriotic work. It has been suggested that October 19 next be made "Constitution Day" in every public school throughout the land, when every child may on that day contribute something for the rebuilding of the ship. Will you not present this matter at once to your State Board of Education, and to such of the authorities as may seem best to you? Any suggestions that you care to offer as to the best method of raising this fund will be gladly received. Messrs. Kidder, Peabody & Co., bankers, Boston, have consented to act as treasurer of the fund. May we not count on the aid of the citizens of your state in this great patriotic work to preserve and hand down to posterity this famous old ship, whose guns in the war of 1812, in the space of fifteen minutes' time, raised the United States from a second class to a first class power and established the Independence of the United States of America forever?

Hoping that this patriotic work will receive your favorable consideration, and that you will unite with us to raise the amount desired as quickly as possible,

Very respectfully yours,

MRS. NELSON V. TITUS, President Massachusetts State Society, U. S. D. 1812.

> State of Colorado, Executive Chamber,

Denver, August 20, 1900.

Mrs. Helen L. Grenfell, Superintendent Public Instruction, Denver, Colorado:

Dear Madam—The enclosed letter was received some days ago and should have received earlier attention. Its contents need but little elaboration at my hands. I think the object sought to be attained by the Daughters of the War of 1812 a most commendable and patriotic one, and I have assured the writer of the communication that in my judgment the people of our state will contribute more than their proportion toward preserving "Old Ironsides." If the suggestion of Mrs. Titus meets your approval I shall be glad to join you in any communication you may see fit to make, if you so desire, to the teachers and pupils of our public schools to make Constitution Day of October 19 next, so that every one on that day may contribute something toward the repair of the ship. It will also gratify me to contribute \$25.00 to the purpose of the society.

I have the honor to be your most obedient servant,

C, S. THOMAS, Governor.

THE CONSTITUTION'S GREAT BATTLE.

During the war of 1812 one of the first ships to set forth from a United States port was the Frigate Constitution. The vessel was one hundred and seventy-three feet long and forty-four feet wide, carrying thirty-two "long 24s" and twenty "32-lb." carronades, in all fifty-two guns. The Constitution, commanded by Captain Isaac Hull, sailed from Boston, and on the 19th of August, 1812, engaged the British frigate Guerriere in that combat which astonished the world, and immediately raised the United States into the position of one of the naval powers of the nations.

Captain Hull and Captain Dacres of the Guerriere were both skillful commanders and brave men, but the British ship suffered complete disaster. Her loss was seventy-nine killed and wounded, while that of her despised American opponent was fourteen. Within thirty minutes after the first fire the Guerriere struck her colors and lay a wreck on the waters. The Constitution sustained but triffing injury and was ready for another encounter.

OLD IRONSIDES.

Ay, tear her tattered ensign down! Long has it waved on high, And many an eye has danced to see That banner in the sky; Beneath it rung the battle shout, And burst the cannon's roar;-The meteor of the ocean air Shall sweep the clouds no more. Her deck, once red with heroes' blood, Where knelt the vanquished foe, When winds were hurrying o'er the flood, And waves were white below. No more shall feel the victor's tread, Nor know the conquered knee;-The harpies of the shore shall pluck The eagle of the sea! Oh. better that her shattered hulk Should sink beneath the wave; Her thunders shook the mighty deep, And there should be her grave; Nail to the mast her holy flag. Set every threadbare sail, And give her to the god of storms. The lightning and the gale!

-Oliver Wendell Holmes.

The following may serve as a suggestive program: Song, "Columbia, the Gem of the Ocean." Recitation, "The Centennial Hymn," Whittier. Recitation, "Old Ironsides," Holmes. Essay, "Great Deeds of Our Navy of Former Times." Song, "The Star Spangled Banner." Reading, "Perry's Victory." Recitation, "Old Ironsides at Anchor Lay." Essay, "Great Deeds of Our Navy of To-day." Song, "America."

STATE COURSE OF STUDY FOR THE COMMON SCHOOLS OF COLORADO.

To the County Superintendents and Teachers of Colorado:

During the school year recently ended I invited Ira M. DeLong, Frank D. Ball, William Triplet, F. H. Clark, A. B. Copeland, Fred M. Shaw and J. H. VanSickle to assist me in the preparation of a new course of study for all schools in the state which are not working under courses specially made for them.

At the initial meetings of the committee, after a full discussion of the general problem, the plan of the course was definitely laid out, the subject matter chosen, and the various parts distributed to appropriate sub-committees. At later meetings the sub-committees made preliminary reports, which were thoroughly sifted and gradually brought into their final form. The result is more or less unique in this class of literature; it is also, as I believe, good.

I urge upon all teachers a conscientious observance of the course. Its form, its matter, and its many practical precepts, have all been canvassed with painstaking care by recognized educators. Granting that there may be errors or defects, it should hardly be expected that either additions or omissions, or even changes of order, could ordinarily be extemporized with advantage. If in any case some deviation seems needful, study the matter well and secure the approval of the county superintendent. In no case should there be any material departure from the course without the co-operation of the county superintendent.

In behalf of the schools for the welfare of which alone this course has been made, in behalf of the alert teachers who will with fidelity use it on plain and hill, I publicly thank the gentlemen of the committee, and also the experienced and able superintendents and grade teachers of the state, who have given to its construction so freely of their time, their labor, and their accumulated professional knowledge, and with a firm belief in our schools and a sincere wish to promote their efficiency, I am,

Very truly yours,

HELEN L. GRENFELL, Superintendent of Public Instruction.

July, 1900.

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INTRODUCTION TO THE COURSE.

1. The county superintendent should provide every teacher under his supervision with a copy of the course, and should insist also upon an intelligent compliance with its requirements. He should prepare all examinations for promotion, gauging them by the contents of the course, and making them uniform throughout the county. He should also see that pupils are not excused from particular subjects without consultation with their parents, nor without the formal permission of the board, which alone has power under the law to grant such permission.

2. In carrying out the provisions of the course, the teacher should be careful to preserve intact his own individuality, any slavish adherence being specially detrimental to him and to his pupils. In its right use it is his guide, not his master; and he should be so familiar with its essential provisions that his compliance will be instinctive rather than mechanical, leaving ample room for that vital sense of freedom without which good teaching is impossible.

3. The teacher should keep an accurate record of the work of his pupils, grading carefully and promoting cautiously, being sure that the results of the examination combined with the record of the class work justify promotion; premature promotions are always injurious. Yet, be not over exacting in details; mature pupils may often be wisely advanced even though deficient in minor points. Note the word "review" as used in the course. It does not mean set lessons on the previous work of a term, a week or a day; but rather such a continual resurrection and use of the old in developing and presenting the new as will keep all the essentials of the subject fresh and available for future advances.

4. The course, as offered, is mostly intellectual, only two of the eleven subjects bearing directly upon the physical and the moral natures; these, and more especially the latter, elude cold print; yet, every true teacher knows that intellectual development is barely a third of his whole duty to his pupils. The truth is that the best part of any school course is. like the English Constitution, unwritten,—that part, namely, which through the teacher consciously aims at well rounded men and women fitted for citizenship and life. He who can not read between the lines, he who does not see and heed that a sound mind in a sound body, including health, strength, skill and high character, is the ideal goal, belongs in another sphere; whatever else he may do well, he can not teach, he must not teach.

COURSE OF STUDY FOR THE COMMON SCHOOLS OF THE STATE OF COLORADO.

MUSIC AND PHYSICAL CULTURE.

It is sometimes felt by the teacher of the country school that there is no time for music; that the time should be given to something more "practical." Whatever contributes largely to the value of the individual as a member of society is certainly of sufficient practical value to demand and receive recognition. Time should be found for the practice of the art of music, and for the teaching of the rudiments of the science. The fact that some teachers are not "musical" is no excuse; some teachers are not "arithmetical," but they teach arithmetic. Teach music, Valuable suggestive material will be found in the Educational Music Course (Ginn & Co.), the Natural Series of Music Readers (American Book Co.) and other recent publications.





RURAL SCHOOL, DISTRICT NO. 1, MONTROSE, COUNTY,

Physical culture, looking toward the development of bodily powers and good health, should be systematically given. Imperfectly developed bodies can never support sound minds. No education is complete which ignores the importance of physical culture.

Music and simple gymnastic exercises are often effective means of discipline. When the school becomes restless and noisy, a few minutes given to singing, or to vigorous calisthenic exercises, with windows open, will general restore order and industry. Such intermission is in reality a great time saver.

WRITING AND DRAWING.

Drawing Is of so great help in developing ideas of form, space and relation, that it has distinct value in supplementing the work in writing. The power to picture what is seen, whether it be from a copy or an object, means much in the co-ordination of the muscles of the hand and in the development of the power to make the hand and eye work in unison—a power which is essential to a legible writer.

Prang's drawing cards and models, Augsburg's Elementary Drawing Simplified (Educational Pub. Co.), are full of suggestions easily adapted to the ability and experience of teachers untrained in either free-hand or industrial drawing.

Writing is an art which, while it demands a certain amount of uniformity, should ever permit individuality in detail.

Grade One.

Use the vertical system. In teaching reading from the blackboard, use the script forms with every superfluous line eliminated. Do not teach the child to print. The transition from the script form of the blackboard to the printed form of the page will cause little trouble, as the child unconsciously recognizes and accepts their identity in value. Do not attempt to confine the beginner to the narrow spaces of ruled paper; let him use the board and crayon freely. Teach form and relation rather than exact proportion.

Grade Two.

Make the writing incidental to other work, rather than a formal exercise in itself. Strive more for form and movement than for nicety and exactness in detail. Emphasize legibility and neatness.

cises, making each a writing lesson.

Grade Three.

Use copy book, or suitable copies for formal exercises. Endeavor to secure correct sizing and spacing. Insist on neatness in all written exer-

Grades Four and Five.

Continue as in grade three, seeking to develop full, round, legible handwriting in all written work submitted. Insist on this and accept no careless, slovenly work.

Grades Six, Seven and Eight.

Many of the pupils will by this time be beyond the benefit of copybook work. Let individuality assert itself, directed by suggestions from the teacher. Only those pupils whose penmanship is poor should be required to devote time to formal writing exercise.

If the child possesses a hand well-formed under the slant system do not attempt a change to the vertical; but if the hand is slovenly or illegible, nothing will more improve it than a change to the vertical system.

Give special attention to business forms, such as notes, bills, receipts, etc. Require all written work to be neat and legible.

READING.

Inasmuch as reading is the key to all book knowledge and to nearly all knowledge of current events, its proper teaching is of highest importance. Reading is thought-getting and thought-giving. As the power to get thought from the printed page is that power which makes the child independent, the development of ability thus to get thought should be the teacher's chief aim. The first requisite is the mastery of words, and the ideas which words convey. Associate the word with the symbol, the sentence with the thought. Abundant material is found in story, song, poem and nature study, for the cultivation of a taste for good literature, while developing a power to read. A large suggestive list is given at the close of the reading outline.

Use a combination of all methods, adapting the method to the child's immediate needs. If not a good story teller, cultivate the art. While telling a story, write the words you wish to teach on the board. When a word thus written is again used in the narration, point to the written word, waiting for the child to pronounce it. In this way words with their meanings are strongly impressed on the mind. Natural expression will come with this mastery of thought combined with a desire to give it to others. Phonics and word-building soon lead to independence. Lead the child to see the characteristic element in *type-words: at* in mat, *ing* in sing, etc. Knowing the value of the consonants and the syllable *ing*, the child will experience no difficulty in pronouncing words ending in *ing*. This same practice should be given to other combinations. Through wordbuilding and word analysis lies the shortest road to self-help.

Grade One.

Begin by teaching words on the blackboard. Interest the pupils in simple stories about common things, using the words you wish to teach. Begin the use of the book as soon as the pupil knows a sufficient number of words to make the book an object of interest. Use a part of the recitation period in studying the lesson to follow. Drill on the new and nufamiliar words before dismissing the class, that the children may be enabled to prepare the next lesson. Teach *the* and *a* in conjunction with the word they precede. Complete the first reader, but do not be confined to one book. Read everything available that is snited to the understanding of the child. Strive from the beginning for natural expression. There is a yast distinction between *naming words* and *reading*.

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Grade Two.

Complete the second reader and accomplish as much supplementary reading as possible. Insist on clear and distinct articulation. Have the pupil understand the meaning of what he reads and express it in a natural manner. Take the class carefully over the difficulties of the lesson to follow. A lesson properly assigned and well prepared requires but little time for recitation.

Grade Three.

Complete the third reader and increase the amount of supplementary reading. Create such an interest in good literature adapted to the age and development of the child that he will be induced to read at home, and to choose only good reading. When the pupil is sufficiently interested to read for his own anusement there is no more drudgery in the teaching of reading. Call attention to the common marks of punctuation and give the rules which goven their use. Teach use of dictionary. The "dictionary habit" should have a constant growth from this on.

Grade Four.

Complete the fourth reader. Do much supplementary reading. Call for reports on current events and subjects of general interest which will necessitate outside reading. Require knowledge of rules for use of capitals and punctuation marks found in lessons.

Grade Five.

Selections from fifth reader. Make a study of a few suitable masterpieces of American literature. Continue requirements as suggested under grade four.

Grades Six, Seven and Eight.

Make reading a study of literature. No child should finish his common school work without an appreciative knowledge of our best American authors. Develop expressive readers. Cultivate full, round tones of voice. Set good models for pupils.

The Riverside Literature Series (Houghton, Mifflin & Co.), English Classics (Maynard, Merrill & Co.), and similar publications by nearly every book publisher, furnish a wealth of material at nominal cost.

SUPPLEMENTARY READING.

This list of books has been carefully compiled. Most of them have been tested by actual use in the schoolroom, and the committee feels safe in commending them strongly. At the same time it is not pretended that the list is complete; doubtless many other books, equally good, can be obtained.

In the supplementary reading always endeavor to impress the humane and ethical lessons contained in the stories read. To read simply to kill time or to name the words is supplemental to nothing of value and is of very little value in itself; it is an educational waste. For supplementary work the reading should be slightly easier than that of the regular work, and books given for one grade are often as valuable in grades higher, and may be so used.

Grade One.

The Werner PrimerW.
A First Year Nature ReaderW.
Riverside PrimerH. M. & Co.
Golden Rod Series of Readers-IU. P. Co.
Child Life (A First Reader)McM.
Lights to LiteratureR. & McN.
New Century First ReaderR. & McN.
Stories for ChildrenA. B. C.
Our Little Book for Little FolksA. B. C.
Cyr's PrimerG. & Co.
Little Classics-Franklin, Columbus, etcE. P. Co.
Krackowizer's First ReaderB. S. Co.
Hiawatha PrimerH. M. Co.
Butterfly BabyE. P. Co.

Grade Two.

Golden Rod Series of Readers-IIU. P. Co.
Child Life in Tale and FableMcM.
Cyr's First ReaderG. & Co.
Cyr's Second ReaderG. & Co.
Baldwin's Second ReaderA. B. C.
Grandfather's StoriesA. B. C.
Stories of Heroic DeedsA. B. C.
Graded Literature Readers-I and IIM. & M.
Rhymes and FablesU. P. Co.
Songs and StoriesU. P. Co.
Steppings Stones to Literature, First, SccondS. B. & Co.
Twilight StoriesS. B. & Co.
Wakc Robin SeriesP. & P.
Seaside and Wayside-ID. C. H.
Little Nature Studies-IG. & Co.
Mew-Mew and Bow-BowM. M. & Co.

Grade Three.

Golden	Rod	Series-III	U. P	. Co.
Child I.	ife in	Many Lands	1	мсм.
Aii the	Ycar	Round	.G. 8	& Co.

Story of Columbus,-of Penn,-of LincolnE. P. Co.
Boston Tea PartyE. P. Co.
The Golden TouchE. P. Co.
Cyr's Third ReaderG. & Co.
New Century Second ReaderR. & McN.
Hearts of Oak-IID. C. H.
Through the Year-IS. B. & Co.
Falry LifeU. P. Co.
Stepping Stones to Literature-IIIS. B. & Co.
Bralded Straws
Wake Robin-IIP. & P.
Little Nature Studles-IIG. & Co.
Storles of the Red ChildrenE. P. Co.
Baldwin's Third ReaderA. B. C.

Grade Four.

Golden Rod Series-IVU. P. Co.	
Child Life in LiteratureMcM.	
Seaside and Wayslde-IID. C. H.	
Wake Robin-IIIP. & P.	
New Century Reader-IIIR. & McN.	
Baldwin's Fourth Reader	
Heart of Oak-IIID. C. H.	
Ballads and TalesU. P. Co.	
Stepping Stones-IVS. B. & Co.	
Heart Culture (for humane teaching)W. R. & Co.	
Alice and Tom, A Nature StoryD. C. H.	
Through the Year-IIS. B. & Co.	
Friends and Helpers (for humane teaching)G. & Co.	
My Saturday Bird ClassD. C. H.	
Child Life, Book 3McM.	

Grade Five.

Riverside Literature Series, No. 29H.	M. & Co.
Child Life in Literature	МсМ.
Seaside and Wayside-III	D. C. H.
Legends of the Red Children	W.
Hawthorne's Tanglewood TalesH.	М. & Со.
King's Geographical Reader-II	L. & S.
Selections from Longfellow	A. B. C.
Black Beauty	E. P. Co.

TWELFTH BIENNIAL REPORT

Baldwin's Fifth ReaderA. B. C
Cyr's Fourth ReaderG. & Co
Western Series-Pacific Nature Stories-IIW. R. & Co
Stepping Stones-VS. B. & Co
Old Norse StoriesA. B. C
Alice and Tom-Nature StudyD. C. H
Stories of Animal LifeA. B. C
Our Feathered FriendsD. C. H

Grade Six.

Stories of the Greeks (Guerber)A. B. C.
Riverside Literature Series, No. 10
Pioneer History Stories (McMurray)P. S. P. C.
Paul Revere's Ride and Other Poems
Beginner's American HistoryG. & Co.
Baldwin's Sixth ReaderA. B. C.
Seaside and Wayside-IVD. C. H.
Western Series-Nature Stories-IIIW. R. & Co.
Stepping StonesVIS. B. & Co.
Ways of Wood FolkG. & Co.
Cyr's Fifth ReaderG. & Co.

Grades Seven and Eight.

H. M. & Co., G. & Co., A. B. C., E. P. Co., M. & M. and other houses each issue series of books of excellent character along similar lines. Teachers can hardly go astray in consulting their lists.

ORTHOGRAPHY AND ORTHOEPY.

Bear in mind that the teaching of orthography means something more than hearing pupils spell lists of words from a spelling book, and that there would be better spelling if more real orthography were taught. Much mispelling is due to careless pronunciation on the part of the teacher as well as the pupil. Endeavor to impress on the mind of your pupils the importance of learning to pronounce accurately and spell correctly.

An unabridged dictionary should be found in every schoolroom and should be frequently consulted by teacher and pupils, for spelling and pronunciation as well as for meaning of words. Diacritical marking should be a feature of the spelling exercises, increasing the list of marks as the grade work advances.

Grade One.

Teach the phonetic value of the consonants, and the common value of the vowels, with the marks by which they are indicated. Drill daily in word-building. Teach the spelling, both by sound and by letter, of all words added to the child's vocabulary. Begin early to drill in visualizing. The power to reproduce the image, not memory, makes good spellers.

Grade Two.

Teach the principal sounds of the vowels and the marks that indicate them. Continue the work of word-building, beginning to discriminate between simple and compound words. Teach simple word-analysis. Spell new words encountered in the pupil's reading. Continue the drill in visualizing, and make it interesting and effective by all the devices at your command.

The second and third years are especially important in laying the foundation for accurate spelling through life.

Grade Three.

Analysis and synthesis of words as in the preceding grades. At least half the work of this grade should be written. Give occasional dictation exercises. Some of the most common prefixes and suffixes should be taught. Pay special attention to the division of words into syllables, and teach accent. Insist upon the correct pronunciation and enunciation of every word learned.

Grade Four.

Distinguish between primative and derivative words. Teach and apply the rules for doubling the final consonant and for dropping the silent final *e*, and call attention, wherever found, to examples illustrating the rules. Increase the proportion of written work and diminish the amount of oral spelling. Give frequent dictation exercises throughout the course. Continue the work in syllabication and accent.

If not previously used, a speller should now be introduced. Reed's Word Lessons (M. & M.) and The American Word Book (A. B. C.) are among the excellent texts now published.

Remember that the proper teaching of spelling involves more than the mere placing of letters in correct order, therefore the use of words in sentences should form one of the most important parts of the work throughout the grades.

Grade Five.

Give thorough drill on the common English prefixes and suffixes, with their significance, and the formation of derivative words. Teach the rule for derivatives formed by adding a suffix to words ending in y, and illustrate its application. Do not limit your teaching of spelling to the period assigned in the program, but whenever possible, call attention to the spelling of peculiar and uncommon words, words commonly misspelled, and illustrations of rules of spelling learned. Let each pupil keep a list of words commonly misspelled by him, and whenever you give him an oral drill, select some from that list. Continue drill in the use of words in sentences.

Grade Six.

Teach the common Latin prefixes and suffixes with their significance. Learn and apply the rules of spelling not already learned. Drill on the individual lists of misspelled words and upon hard words and those ordinarily mispronounced. The meaning, derivation, and growth of words should continually receive attention. Do not accept misspelled exercises in any line of work, but insist upon the correction by the pupil of any mistakes he may make.

Grade Seven.

Give frequent exercises in analysis of words. Call frequently for the rules of spelling, and illustrations of their application. Call for the spelling of new words encountered in all branches of study, and especially of geographical names. Continue the work with individual lists of misspelled words, dictation exercises, use of words in sentences and other points emphasized. Have an occasional exercise in oral spelling.

Grade Eight.

Teach the subdivisions of consonants; cognate sounds and letters; diphthongs; triphthongs; digraphs; trigraphs; accent, primary, secondary, etc.; syllabication, penult, antepenult, etc. Teach the common rules of orthoepy and their application. In all grades let orthography and orthoepy go hand in hand, for they are twin subjects. Insist upon correct spelling in all written work.

LANGUAGE AND GRAMMAR.

In all grades, particularly the lower, have great care that correct language forms are kept before the pupils. The language of the teacher should be exemplary in diction and syntax. As errors occur, correct them, but never present for correction false forms or constructions, either in language, spelling or punctuation. The teaching of language involves ample preparation on the part of the instructor, together with faithful, patient attention to the oral and written work of the individual pupils.

In the lower grades the material for stories and exercises should be largely gathered from the work given in other branches. Draw freely and fully from the nature study and history studies for language drills, also from the daily experiences of the child. Remember that to hold the willing interest of the children you must have the stories presented characterized by action. Tell about people and animals and the things they do. Narration and description are valuable in this connection only when full of life.

As pupils advance, the reasons for the common constructions should be developed and learned. Meaningless rules and definitions are to be avoided; but, the meaning being understood, the rule and definition possess distinct and real value. Technical grammar becomes then the science which gives stability and character to the art of language. The pupil completing the sixth grade should have ready command and facile use of grammatical English, and should be able to give a reason for the form used. All true art is based on a fundamental science.

Grade One.

Cultivate the power of expression of ideas, in drawing, paper-cutting, actions, conversations or written language. This involves careful leading and much practice.

Reproduction of short stories and the telling of original stories. This necessitates the presentation of abundant material (such as will be readily found in the information lessons of the grade), that the pupils may not lack ideas when called upon to give expression in either written or spoken language.

Have all written work neatly executed. Have the beginning and ending of sentences properly made. Individual names and addresses. Short poems copied. Simple memory gems committed. A suggestive list is given at the close of the language outline.

Grade Two.

Some good text book (such as Metcalf and Bright's Language Lessons, Part One, A. B. C., and The Mother Tongue. Book One, G. & Co.), which is alive with suggestive material, should serve as a guide from which the simple essentials may be selected by the teacher. Story writing from pictures and objects. Reproductions in story form from selections read or stories told by the teacher. Utilize material provided in other studies in the grade work, particularly nature study and history work. In all this seek for freedom and facility in expression of thought.

During the year bring out the following: Correct forms of oral and written expression, declarative and interrogative sentences, proper names, initials and simple abbreviations, days of the week, the months, dates, etc.

Distinguish between meanings of words and their correct use in sentences, such as is—are—were, those—them, to—too—two, there—their,

pair—pare—pear, through—threw, and others, as circumstances manifest the need and furnish the opportunity.

By means of sentences, oral and written, fix the uses of the singular and plural forms; the present and past tense and the participle forms of the verb; and in a similar manner, the proper use of adjectives, and adverbs, such as good, better, best, quick, far, sweet, sweetly, quickly, nicely, etc., etc.; also, common contractions, such as don't, isn't, doesn't, wern't, etc., etc. Common and proper nouns should be distinguished. Teach the use of the sign of possession. Require the copying of choice selections and much writing from dictation and memory, being careful that only selections of ethical value and elevating character are memorized. Five or six selections should be committed during the year. "Come, Little Leaves" is one of many quite suitable.

See list.

Grade Three.

The fixing of correct and accurate forms of expression and the cultivation of general good English is the particular aim of the work of this grade. It is to be best secured by abundant practice in talking and writing, and by frequent oral and blackboard drills. The language text which has hitherto been used by the teacher as a guide may now be placed in the hands of the pupils and the first third of it completed during the year. Metcalf and Bright's, and Arnold and Kittredge's texts are good for this class of work, and Maxwell, Long, DeGarmo and others have excellent texts of similar scope. Note the suggestions in the previous grade, and give in addition thereto especial attention to the following:

Simple forms of writing, including punctuation, indentation, capitalization, abbreviations, titles, addresses, signatures, letter writing, headings for written exercises, etc., etc. An abundance of suggestive material may be selected from nature study, history and other information lessons.

Distinguish the forms and uses of the personal pronouns. Use of who—whom, like—as, and similar forms. Common verbs, forms taught by use in sentences. Use of synonyms. Combinations of simple sentences. Review declarative and interrogative sentences, and teach the use of imperative and exclamatory sentences. The subject and the predicate as essential parts of the sentence. Continue reproductions and memorizing selections of value. See list.

Grade Four.

Read carefully the suggestions for previous grades and adapt for use in this. The second third of the language book should be taken during this year.

Reproduction work based on material provided in nature study, history, and other information lessons, together with material given or suggested in the text, should be freely used. If the pupils are full of material, this work will greatly interest them. It only remains for the teacher to guide them into correct forms of expression.

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Parts of speech should be recognized, and very simple forms of sentence analysis should be given, thus laying the foundation for additional drill in upper grades. Simple essentials of formal grammar have their place and should become more prominent as the work progresses. Memorize selections of real value. Do not encumber the mind of the child with useless or meaningless jingles. See list.

Grade Five.

Complete the text book during the first half-year. (If Metealf and Bright's Language Lessons is used, begin Part Two and complete the first third of it during the remainder of the year. If some other text is used, plan to complete the book. or books, that are preliminary to advanced grammar in this and the sixth grade.)

Continue the correction of errors as they occur, and carry on sentence analysis, avoiding difficult or doubtful constructions.

Require composition work—always remembering to provide and use freely the abundant material furnished in the science, history and other information lessons outlined in this and preceding grades. Require all written work to be neatly executed, with due regard to correct punctuation, capitalization, contractions, abbreviations, etc. Blackboard and oral drills are valuable in this connection.

Practice using the dictionary. Develop independence in thought and eapacity for expression.

Memory work as indicated in the text, or as given by the teacher, provided selections of standard merit only are used. See list.

Grade Six.

Complete text, ready for entering upon the study of technical grammar in the next grade. Note plan suggested under grade five.

Give some attention to formal grammar, especially in sentence analysis. (In sentence analysis use only the main divisions of the outline given under grade eight.) Do not use diagrams until after sentence analysis is well in hand, and then only as a means to economize time. Declensions, comparisons and conjugations should be emphasized, preparing the way for a full mastery of all forms of inflection in succeeding grades.

Continue reproduction and composition work as before indicated, and require some simple paraphrasing.

Memory work. See list.

Grade Seven.

Use some standard author, such as Metcalf, Maxwell, Park or The Mother Tongue, Part 2, and have two or three authors for daily references.

Complete orthography and etymology.

Practical use of good English is of primary importance, but definite and logical forms of parsing the different parts of speech, and abundant practice therein, must not be neglected. Do not be afraid of technical grammar, but omit meaningless rules and forms. Continue practice in sentence analysis, but avoid intricate constructions.

Insist on use of correct English in all recitations. Encourage freedom of speech and give much drill, developing the power to think readily and speak freely while standing in the presence of classmates. Essay and composition work, involving paraphrasing, continued, to develop easy and accurate expression of thought with the pen. Subjects for essays and composition to be selected from the work in other branches of the grade. Require frequent use of dictionary. Insist upon pupils making constant additions to their vocabulary.

Memory work. See list.

Grade Eight.

Review etymology and complete syntax. Drill thoroughly on conjugation of verbs, and on the inflectional forms of other parts of speech. Continue work on sentence analysis, following some well arranged and systematic form.

(The form given below has been thoroughly tested and has yielded excellent results.)

Review letter writing and include business forms and correspondence. Use dictionary freely, seeking to fix the habit of reference to that and other authorities for correct and accurate meanings of words.

Reading of current and standard literature.

Memorizing choice selections. See list.

It has been well said that "grammar is the logic of the common branches." Logical thinking finds expression in well-chosen and logically arranged English—indeed, drill in the latter is of great value in developing the former; hence the emphasis placed on forms of parsing and analysis of sentences. Each pupil should be required to have and to use definite forms, thus acquiring facility in clear and accurate thinking and expression.

Forms of parsing are readily outlined.

A form for sentence analysis is herewith suggested:

- 1. Read the sentence.
- 2. State kind:

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- (a) According to form—whether simple, complex or compound.
- (b) According to use—whether declarative, interrogative, exclamatory or imperative.
- 3. Logical (or complete) subject.
- 4. Logical (or complete) predicate.
- 5. Grammatical (or simple) subject.

6. Its modifiers:

- (a) According to form-whether simple, complex or compound.
- (b) According to use—whether adjective, substantive, appositive, etc.
- (c) According to class—whether first class (a word), second class (a phrase), or third class (a clause).
- 7. Grammatical (or simple) predicate.
- 8. Its modifiers:
 - (a) According to form-whether simple, complex or compound.
 - (b) According to use—whether adverbial, attributive or objective.
 - (c) According to class—whether first class (a word), second class (a phrase), or third class (a clause).
- 9. Connectives.
- 10. Independent elements.

SELECTIONS FOR LANGUAGE WORK.

It is urged that the memorizing of choice selections be one of the features of language work throughout the grades. Such will be a source of pleasure and profit to the child throughout life. The following are given as a basis for memorizing, for reproductions and for conversation lessons. Note suggestions in the outline of language work. The list is in no sense complete, nor is it exclusive. The texts referred to contain many others equally good, and various other excellent collections are obtainable. Select only work of standard merit and worth. Titles, authors, where found, are given as fully as possible.

Grade One.

All Things Bright and Beautiful-Mrs. Alexander; Land of Song, I. (S. B. & Co.).

How the Leaves Came Down-Susan Coolidge; Land of Song, I. (S. B. & Co.). Come, Little Leaves-George Cooper; Land of Song, I. (S. B. & Co.).

The Baby-Geo. MacDonald; Songs of Tree-top and Meadow (P. S. P. Co.).

My Shadow-Robert L. Stevenson; Songs of Tree-top and Meadow (P. S. P. Co.).

Seven Times One-Jean Ingelow; Songs of Tree-top and Meadow (P. S. P. Co.). Hang Up the Baby's Stocking-Emily H. Miller; Songs of Tree-top and Meadow

(P. S. P. Co.).

Kind Hearts-Emily H. Miller; Songs of Tree-top and Meadow (P. S. P. Co.). The Chickens-Emily H. Miller; Songs of Tree-top and Meadow (P. S. P. Co.). The Magic Vine; Emily H. Miller; Songs of Tree-top and Meadow (P. S. P. Co.). Didn't Think-Phoebe Cary.

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Easy Lessons-Phoebe Cary.

Suppose-Phoebe Cary.

The Dutch Lullaby-Eugene Field.

Baby Bye-Theo. Tilton.

Answer to a Child's Question-Coleridge.

A Bunch of Golden Keys-Coleridge.

October's Party-George Cooper.

Just a Little–Ella W. Wilcox.

Grade Two.

Those given for grade one, with the following in addition: September (for September)—Helen Hunt.

O Sun and Skies and Clouds of June (for October)-Helen Hunt; first, fourth, fifth and eighth stanzas.

Talking in Their Sleep (for November)-Helen Thomas; Little Flower Folks, by Mara L. Pratt.

The Little Brown Seed in the Furrow (for November)—Ida W. Benham; Little Flower Folks, by Mara L. Pratt.

What Robin Told (for March)--George Cooper; Little Flower Folks, by Mara L. Pratt.

The Secret (for March)-George Cooper; Little Flower Folks, by Mara L. Pratt. The Brown Thrush (for March)-Lucy Larcom; Whittier's Child Life.

An April Welcome (for April)-Phoebe Cary.

The Children's Hour-Longfellow.

The Fairies-William Allingham; Land of Song, I.

Little by Little-Luella Clarke; Songs of Tree-top and Meadow.

The Bright Side-Geo. MacDonald.

Christmas Song-Eugene Field; Songs of Tree-top and Meadow.

I Love You Mother-Eugene Field; Sougs of Tree-top and Meadow.

Nursery Song-Mrs. Carter; Songs of Tree-top and Meadow.

Lady Moon-Lord Houghton; Songs of Trec-top and Meadow.

Over in the Meadow-Lord Houghton; Songs of Tree-top and Meadow.

What Do the Daisles Say?-Edith Thomas.

He Prayeth Well Who Loveth Well-Coleridge.

Great, Wide, Beautiful, Wonderful World-Matthew Brown.

The Lost Doll-Chas. Kingsley; Land of Song, I.

Grade Three.

Nobility-Alice Cary.

The Arrow and the Song-Longfellow.

The Barefoot Boy-Whittier,

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The Mountain and the Squirrel-Emerson. Who Stole the Bird's Nest?-Lydia M. Child; Land of Song, I. Robin Redbreast-William Allingham; Land of Song, I. Good-Night and Good-Morning-Lord Houghton; Land of Song, I. A Boy's Song-James Hogg; Land of Song, I. A Farewell-Whittier; Land of Song, I. Little May-Mrs. Miller; Land of Song, I. Jack-in-the-Pulpit-Mrs-Miller; Whittier's Child Life. Little Brown Hands-Mrs. Miller. Where Shall the Baby's Dimple Bc?-J. G. Holland. Beamiful Hands-J. G. Holland; Baldwin's Third Reader. Little Boy Blue-Engene Field. Our Country-Eugene Field. Little Goldenhair-Carleton.

Grade Four.

The Village Blacksmith-Longfellow.

Robert of Lincoln-Bryant.

Paul Revere's Ride-Longfellow.

The Old Clock on the Stairs-Longfellow

Winter-Summer-Lowell; Vision of Sir Launfal.

The First Snowfall-Lowell; Land of Song, 1.

Our School Days-Whittier.

The Poet and the Children-Whittier.

Landing of the Pilgrims-Mrs. Hemans; Land of Song, H.

Bugle Song-Tennyson; Land of Song, I.

The Yellow Violet-Bryant; Land of Song, 1.

I Remember, I Remember-Hood; Land of Song, I.

The Brook-Tennyson; Land of Song, I.

Song of the River-Kingsley.

Independence Bell-Kingsley.

The Mariner's Dream-Kingsley.

Draw freely from previously suggested selections.

Grades Five and Six.

Vision of Sir Launfal-Lowell; selections from preludes I.-H. Snowbound-Whittier; selections. Corn Song-Whittier. Birds of Killingworth-Longfellow; selections. Christmas Carol-Longfellow. The Day is Done-Longfellow. The Rainy Day-Longfellow. The Castle by the Sea-Longfellow. Sandalphon-Longfellow; Land of Song, II. Old Ironsides-Holmes. The Last Leaf-Holmes. The Huntsman-Scott; Lady of the Lake. The Chase-Scott; Lady of the Lake. The Skylark-James Hogg; Land of Song, 11. Rest-Translation from Goethe; Land of Song, II. Over and Over Again-Josephine Pollard. The Heritage-Lowell; Land of Song, II. Abou Ben Adhem-Leigh Hunt; Land of Song, I. Better Than Gold-Leigh Hunt; Appleton's Supplementary Fourth Reader. The Crow's Children-Alice Cary. Young Lochinvar-Scott. Battle Hymn of the Republic-Julia Ward Howe. A Sermon for Young Folks-Alice Cary. Planting of the Apple Tree-Bryant. The Fringed Gentian-Bryant. December Twenty-second-Bryant. The Gladness of Nature-Bryant.

Previously suggested selections may also be used.

Grades Seven and Eight.

An Order for a Picture-Alice Cary.

The Blue and the Gray-Frances Finch.

Song of Spring-Mrs. Hemans.

The Concord Hymn-Emerson.

Sheridan's Ride-T. B. Read.

Barbara Frietehie-Whittier.

New Year-Tennyson.

The Chambered Nautilus-Holmes.

Song of Marion's Men-Bryant.

Thou, Too, Sail On, O Ship of State-Longfellow.

The Centennial Hymn-Whittier.

Heaven Is Not Reached at a Single Bound-J. G. Holland.

Love of Country-Scott.

Marmion and Douglas-Scott.

The American Flag-Drake.

The Gettysburg Address-Llncoln.

Marco Bozzarls-Fltz-Green Halleck.





RURAL SCHOOL, FRUITVALE, MESA COUNTY.

Crossing the Bar-Tennyson.

Casablanca-Tennyson.

How Sleep the Brave-William Collins; Land of Song, H.

Midnight Mass for the Dying Year-Longfellow.

Walting-John Burroughs.

The Quality of Mercy Is Not Strained-Shakespeare; Merchant of Venice.

The Man that Hath No Musle in His Soul-Shakespeare; Merchant of Venice.

Sweet Are the Uses of Adversity-Shakespeare; As You Like It.

The use of the above selections in any particular grade will vary greatly as the ability of the pupils demand. Do not force unsuitable work on any class. Use good judgment in making selections, but make it a point to have pupils memorize choice material freely.

A. F., A. C. Mc. or any general book dealer can supply books containing above selections.

NUMBERS AND ARITHMETIC.

Suggestions.

1. Study the mental processes of the pupil (especially if he be dull or backward) and aim to secure for him a real basis in thought for all of his attempts at expression, making sure that he has something in his mind to correspond to the oral and written number symbols.

2. Require all pupils above the first grade to make and solve original problems, these problems in all cases being only such as are within the range of their personal experience or observation.

3. In the lower grades objects are invaluable; they are very desirable also for the upper grades in the beginning of such subjects as mensuration, denominate numbers, evolution; use them freely at first; but for the later work, gradually dispense with them, especially in the reviews, aiming at a clear, strong grasp of number relations in the abstract, which implies the ultimate power of thinking and comprehending mainly without objects.

4. Study closely the pupil who persists in finger-counting and other substitutes for mental effort—it may be that he is in need of further object teaching. (See suggestions above.)

5. Drill the lower grades daily in the fundamental operations, at least until reasonable accuracy and skill have been acquired. In the grammar grade be sure that the pupil is able to give a correct analysis of multiplication and division in concrete problems, making the analyses brief yet logically complete.

6. Use only small numbers in problems intended to illustrate new principles or subjects, remembering that large numbers needlessly waste mental energy, and also divert attention from the logic of the solution to its drudgery.

7. Guard constantly against the strong native inclination to substitute process for analysis, rule for reason, as nothing else so stifles the spirit of inquisitiveness, so paralyzes the power of real comprehension. Therefore teach all or nearly all rules by development, independently of the book, drawing upon the latter after the development for the best order of arrangement and the tersest form of expression.

8. Pupils fail in business arithmetic chiefly because they do not clearly and vividly comprehend the commercial dealings involved in the problems. Therefore do not be satisfied with mere facility in the manipulation of numbers; facility, though valuable, is far inferior to practical understanding. Teach the pupil to image, to think everything he attempts to express, thus forestalling in him the all-too-easy habit of mechanical repetition. Require him to think out the terms and processes involved in all concrete problems and to imagine clearly the objects and business transactions named in them. Remember that the cognitive imagination of most pupils is weak, that when weak it acts vividly only under a sharp outside stimulus, and that (when thus made to act) it rapidly acquires strength and vigor.

9. Unless the pupil is already a master of some good method, teach him a neat form for the arrangement of all written work, require him to become familiar with it and to use it. Insist upon having written work neat and systematic.

10. Drills, reviews and much mental arithmetic are indispensable; indeed, a good text book in mental arithmetic should be regularly used from the fourth grade up and may profitably be used in the third grade. Some time for these necessities may be secured by allowing pupils in the upper grades merely to indicate the solution of long problems, and then to proceed at once to the oral analysis without stopping to work out the indicated operations.

11. In the following outline, all reference to text books assumes the use of a two-book series (the elementary and the practical), according to the common practice in this state. The teacher should have at hand several good text books in addition to the one in regular use by the pupils. The following list (which might easily be enlarged) is suggested:

Atwood, Milne, Prince (each book in the set to be used about one grade in advance of its name—the second book in the third grade, etc.). Ray, Robinson, Speer, Wentworth, White, Cook & Cropsey's Normal Course in Number and Fish's Arithmetical Problems.

Grade One.

Train the senses daily throughout the year, and for the first few weeks almost exclusively, this being more important than any specific number work. Pay especial attention to sight and touch, yet do not neglect hearing. Develop the simpler ideas of comparison—large, small, larger, smaller, largest, smallest, long, short, etc.—using well known concrete objects and leading up gradually to the more abstract idea of equality. Develop the ideas of direction, position, solids, surfaces, lines and edges. Use only very familiar objects (beans, tooth-picks, splints, rectangles, oblongs, blocks, etc.), and allow them all to be freely handled under direction. Spend much time in simple manual exercises, such as

cutting and drawing; have great variety in the exercise with a view to a corresponding variety of correct expression in telling what is done. Teach all possible combinations and separations of numbers from 1 to 10, and such simple fractional parts as $\frac{1}{2}$, $\frac{2}{3}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{1}{4}$, $\frac{3}{4}$, $\frac{1}{4}$, $\frac{3}{2}$, $\frac{1}{3}$, $\frac{5}{2}$. Teach inch, foot, yard, in linear measure; and pint, quart, gallon, in liquid measure. Teach cent, nickel, dime, quarter, half and dollar, in United States money; and circle, oblong or rectangle, square, triangle, and ball or sphere, in geometry. In all this teaching use the objects freely and regularly for the advance work, trying to lay them aside more or less in the reviews. (See Suggestions.) Teach words representing numbers, the clock face, and such other Roman numcrals as appear in the reading lessons.

Grade Two.

Build on the first grade work. Develop addition and subtraction relations from 10 to 20, thoroughly drilling on all the combinations and separations, and having pupils use objects freely under direction. Have many original problems, for all mental solution, some coming from the teacher, others from the pupils. Continue work in simple fractions, denominate numbers and familiar geometrical forms. In all counting by 2's, 3's, 4's, etc., "break the step." by beginning the 2's at 1, the 3's at 1 or 2, the 4's at 1, 2 or 3, etc.; this is a drill in addition, not in multiplication. Teach multiplication and division operations by construction; products and dividends not to exceed 72, and no factor to exceed 9. Drill daily in original mental numbers. Gradually lessen the use of objects, except in concrete problems and for advance work. (See Suggestions.) Begin the regular use of written work, teaching all necessary signs, and reading and writing in numbers.

Grade Three.

Begin the regular use of an elementary text book, reviewing in it the second grade work under new forms and devices. Drill on addition and subtraction, and on multiplication, and on division with one figure. Teach the combinations, separations and comparisons of the simplest fractions. In counting by 2's, 3's, 4's, etc., continue to "break the step." Finish the multiplication table by construction, and drill thoroughly as the construction proceeds. Continue the original mental problems, and the oral drills for accuracy and rapidity.

Grade Four.

Continue written work in the fundamental operations, emphasizing multiplication with more than one figure, and long division. Insist upon a correct analysis of concrete problems involving multiplication and division. In division lead the pupil to distinguish between "partition" and "measurement" (but do not teach these technical terms).

Spend much time upon the fundamental operations as applied to fractions, illustrating with paper circles, blocks, rectangles and lines, and using only such simple fractions as the pupils already well know. (See Suggestions.) Drill daily upon the fundamental operations for accuracy

and rapidity, and make constant use of mental arithmetic for quick thought and ready speech.

Grade Five.

Introduce problems involving fundamental operations. Continue work with geometrical forms and denominate numbers. Complete elementary book, covering the following points: factors, divisors and multiples; common and decimal fractions, introducing percentage, and supplementing largely from other sources. Develop the processes by using small numbers almost wholly (see Suggestions), and insisting that the pupil shall obtain his results without the use of either chalk or pencil, that is, mentally; determine thus, by inspection, the C. M., C. D., L. C. M., and G. C. D., using numbers less than 100.

Teach the prime numbers to 100, and the prime factors of the composite numbers less than 100, and the simple rules for divisibility. Require all factoring to be done by inspection. In reduction of fractions most pupils will be able to learn the process from the analysis—that is, learn the "how" through the "why," these analyses being very simple and direct; but in multiplication and division of fractions it is better to teach the process thoroughly before laying any emphasis on the analysis. Be sure to teach the process beyond the chance of forgetting it. Give increasing attention to the neat and systematic arrangement of all written work, especially in fractions. (See Suggestions.)

Grade Six.

In this grade begin the second book of the series (see the last suggestion). Review partitive and metric division, the rules for divisibility by 2, by 3, etc., G. C. D. and L. C. M. Explain inversion of the divisor. Teach the squares of numbers up to 20, and the cubes to 12. Confine the advance work chiefly to decimals and denominate numbers. Teach decimal pointing, particularly in multiplication and division. Teach the reductions-decimals to common fractions, common fractions to decimals. Dictate decimals for writing and review frequently. Drill in the changing of denominate numbers from one denomination to another. Teach the pupil to use the meter, liter and gram, making models for the purpose. Teach addition and subtraction of denominate numbers, using casy combinations; do likewise in multiplication, calling special attention to the relative advantages of the common and the metric systems. Drill thoroughly on plastering, papering, carpeting, using many original problems. (See Suggestions.) Give numerous simple problems in areas and volumes, using land, sidewalks, street-paving, boards, bins, chimneys, cellars, etc., introducing repeatedly all the simple surfaces and solids. Teach the form and use of simple accounts and bills. Ask pupils for original problems and drill upon the solutions. Make constant use of mental arithmetic.

Grade Seven.

With special reference to their uses in percentage, review common and decimal fractions.

Teach longitude and time in connection with mathematical geography.

Teach the percentage equivalents of such simple fractions as $\frac{1}{2}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{1}{4}$, $\frac{3}{3}$, $\frac{1}{6}$, $\frac{1}{3}$, $\frac{3}{3}$, $\frac{3}{4}$, $\frac{3}{3}$, $\frac{1}{6}$, $\frac{3}{3}$, $\frac{3}{3}$, $\frac{3}{3}$ and $\frac{3}{3}$ and vice versa, drilling incessantly from both standpoints.

Solve numerous easy problems based on the preceding percentages, obtaining results mentally. Give problems on what per cent. one number is of another, and on what per cent. one number is more or less than another. Have pupils give and solve similar problems.

Take up the following applications of percentage: profit and loss, commission, taxes, insurance and simple interest, including partial payments. At first use simple numbers only, all carefully chosen for the purpose, so that neither the size of the numbers nor the labor of the process may waste the energy of the pupil or distract his attention from the real principle involved. (See Suggestions.)

Have pupils propose original problems made up from their parents' tax receipts, and have the same solved in class. In simple interest, choose one good method, teaching it thoroughly and leaving all other methods for later years. Continue drills on business forms, such as accounts, bills, receipts, orders and simple notes. Urge the pupil to think out for himself the whole of the business transaction involved in each problem solved; have him describe the business transaction, and if necessary actually perform it before beginning the solution. (See Suggestions.) Emphasize work in mental arithmetic. (See Suggestions.)

Grade Eight.

Review briefly the leading principles of percentage and its applica-Teach true and bank discount, and stocks and bonds, with the tions. accompanying business forms, checks, drafts, stock certificates, and bonds with and without interest coupons attached. Study out the various stamps and endorsements on the back of canceled checks; read a certificate of ditch company stock; do these things and any others that will familiarize the pupils with business forms and cause them to comprehend business transactions. 'Teach ratio, simple proportion, and give easy examples in compound proportion. Explain description and measurement of government lands, examining local warranty deeds, village and county plats and kindred forms. Teach the mensurations of the rectangle, parallelogram, triangle, trapezoid, regular polygon and circle, showing (by models, by cutting paper or pasteboard, or by figures on the blackboard) how the area of the parallelogram depends upon the rectangle, that of the triangle upon the parallelogram, and that of the trapezoid, regular polygon and circle, upon the triangle; in the same way, teach mensuration of the prism. pyramid, cylinder, cone and sphere. Teach square root, and possibly cube root, using blocks for illustration. Omit alligation, the two progressions, and equation of payments.

There should be a thorough review of arithmetic in the high school.

PLACE AND GEOGRAPHY,

Plan of Outline.

Grades One and Two--Place, or preparatory geography (oral).

Grades Three, Four and First Half of Fifth-Primary geography.

Grades Five (last half), Six and First Half of Seventh—Grammar school geography. By alternating with history the seventh grade work in geography may continue through entire year.

Grades One and Two.

(In the country school of all, or many, grades, it will be found impracticable to give much time in these two grades to the direct teaching of geography. This outline should be followed wherever the number of classes will permit.)

Lead the pupils to make observations of their surroundings. Note the highest land in your vicinity, the slopes, steep and gentle, with effect on flow of water. Make daily observation of the weather. Note the varying length of day; seasons; months by seasons; sky and what is seen there. Teach directions, relative right and left; cardinal points; simple use of compass, weather-vane, etc. Note direction of wind, location of buildings, etc. Connect study of plants and animals with geography by emphasizing habitat, distribution, uses. Model features in sand and clay. Presentation should be through direct observation; re-presentation may well be made by use of sandboard. Drawing and planting are other modes of expression.

Grade Three.

Continue observation of the weather. Teach use of thermometer. Have daily record by the class. Make observations of your immediate neighborhood to represent as far as possible the earth in miniature. Observe forms of land, particularly slopes, and note the forces, such as running water, winds, heat and cold, upon these forms. Make use of sandmodeling and other modes of expression for same purpose as in previous grades. Teach the interpretation of globe and map as far as needed. Let the pupil map the features studied, following the plan of the standard map, so that when he comes to map reading he will have the power to interpret the map's meaning.

Present the earth as a whole (gradual development).

(a) Pictured as a ball with water and land surface; land surface consisting of world ridge with great slopes; four great highlands of the world ridge and oceans located by direction east and west, north and south; relative lengths of great slopes, and the largest rivers located; continents as homes of races of people, characteristic animals and plants.

(b) Daily rotation of the earth and results; heat belts as dependent on daily motion; axis, poles, equator, hemispheres (north and south).

During the first half of the year teach the geography of Colorado from the wall map. Note the physical features of each county, and the consequent occupations of the people. At the beginning of the second half of the year, put some suitable text in the pupils' hands and teach them how to study it.

Grade Four.

Vary weather observations by introducing the almanac kept by pupils to show time of sunrise and sunset, varying length of day and night, phases of moon. This almanac should be kept at such times of the year as best to show the periods of lengthening and shortening daylight, the time of the longest day, shortest day, and day equal to night. Show relation of these periods to northing and southing of the sun. Map the school districts or other suitable district, following the plan of standard maps. Draw to scale.

Earth as a whole:

(a) Review of world ridge, great slopes, great drainage system, four great highlands, location of oceans.

(b) Shape of earth with proofs (inductive), relative size, daily motion, belts of heat and climate, hemispheres (north and south, east and west), with location in them of continents.

(c) Study all continents according to following outline: position, relative size, general form, surrounding oceans, largest islands, principal slopes, largest river and lake, climate (warm or cold), a few large cities, people, leading products. Compare at each point with preceding continent studied.

Elementary, text completed.

Grade Five-First Half.

1. Observation and experiment.

2. Teach globe and map symbols new to pupils.

In map sketching, which should now be extended beyond the school district to the United States and its parts, have the pupils use the standard map symbols. Quick sketches with one central idea, not elaborate map making, should be encouraged.

3. The study of the United States as a whole, corresponding with the study of the United States in the earlier part of the elementary book and that given in the primary geographies.

Topics: Position, form, extent, relief (related to North America), rivers and great lakes. climate, products, waterways, railways, people, government.

4. Groups of states.

(a) Natural groups as related to the slopes; e. g., Atlantic slope states, Gulf slope states, etc.

(b) Productive groups; e. g., wheat states, cattle states, etc.

(c) Historical groups (only those of importance); e. g., original thirteen states, Northwest Territory, Mexican Territory, Louisiana Purchase.

Grade Five-Last Half.

1. Observation and experiment.

Yearly motion, revolution of the earth about the sun, taught inductively as far as possible. Almanac taught in fourth grade as a basis.

Northing and southing of stars due to earth's yearly motion, also a basis for pupils' conclusions. Teach seasons. Establish a noon line.

Globe and map reading. Teach meridian lines, parallels of latitude, ecliptic, and boundaries of zones. Practice in finding latitude and longitude. Note places on same parallel having widely different climate and causes of difference.

Typical land, ocean and atmospheric forms, and the forces acting on them. Use North America and Atlantic ocean as units of comparison with other continents and oceans.

The continental slopes and the action on them of water, wind and heat are the basis of this study. The practical results on climate, countries, people, plant and animal life should be noted. Important topics to be taught under this head are greater and lesser highlands, with effects on climate and life; valleys in their influence on trade routes; coastal plains and products; food plains and products; submerged coasts and effects on commerce; trade winds, origin and modification by land masses, with results to commerce; ocean currents and effects; relative position of continents. (Other topics will suggest themselves.)

The aim of this half year's work is to lay a thorough basis (without an exhaustive study of each continent in every detail) for the political, commercial and industrial geography of the following grades.

Grade Six.

- 1. Observation and experiment.
- 2. Current geography.
- 3. Globe, map and text study.

Study the great empires and important countries, except the United States. Refer constantly to topics treated in the last half of the fifth grade. Emphasize the controlling causes of the distribution of people. Closely connect with historical studies of the grade. Constantly compare the countries studied, and use previously acquired knowledge of the United States as unit of comparison. Emphasize the thoroughly modern features of civilization; inventions, growths of railways and manufactures, education and schools, etc. Use outlines of topics for study of countries given in standard texts.

Grade Seven-Half Year,

Either for four months or during the year, alternating with history.

- 1. Current geography.
- 2. Globe, map and text study.

General topical review. (Two months.)

United States: "International Date Line." "Standard Time." (See Arithmetic-Longitude and Time.)

Later development of manufactures and commerce, inventions, growing output of products, railroads, great ocean routes, schools, government. (One month.) Colorado. (One month.)

Let the geography of the seventh grade be a natural preparation for the study of United States history.

Note—Sand-modeling has two uses: to reproduce pupils' images of forms already objectively studied, and to aid in imaging forms beyond the child's vision.

Every field excursion should have a definite and limited aim. An excursion, no more than a room recitation, can be expected to teach "geology, minerals, plants, all at one time." Go out to note a single principle. Let the number of excursions be determined by the needs of the class. An excursion without the personal direction of the teacher will be no more successful than a recitation without the personal guidance of the teacher.

Pictures, well selected and classified, are a great aid in imaging forms of land beyond vision.

Although plant and animal study have not been often referred to, a more extended study, according to the principle laid down for the first and second grades, will be very helpful. This study need not be made a part of the geography course. Too much stress can not be laid upon the importance of experimental study of the forces of nature. (See Nature Study and Science Course.)

Without recommending any particular text book, the publications of Redway and Hinman, Alex Frye, H. S. Tarbell (The Werner Series), the Maury series, and that of Rand & McNally, are mentioned as among the leading texts adapted to the grades. Of supplementary books for the grades, such as "Seven Little Sisters" of the Jane Andrews series, there is a great and increasing supply from the leading publishers. Consult publishers' lists to find the best of helpful reference books.

BOOKS FOR USE IN CONNECTION WITH GEOGRAPHY AND HISTORY.

In the lower grades some of these books must be read to the children. As the work advances many of the books assigned to certain grades will be found of value in higher grades, and of equal interest to older pupils. All contain matter available for oral use by the teacher.

Grades One and Two. (To be read to the children.)

Seven Little SistersG. & Co.
Each and AllG. & Co.
Aunt Martha's Corner CupboardB. S. Co.
Friends in Feathers and FurA. B. C.
Wings and StingsA. B. C.
Story of PocahontasE. P. Co.
Stories of Great Americans for Little AmericansA. B. C.
Wee Ones of JapanA. B. C.
Washington (Young Folk's Library of Choice Literature)E. P. Co.
The World and Its People, I., IIS. B. & Co.
Geography for Young People, IE. P. Co.

Grade Three.

Geographical Nature Studies
Story of the NorsemenE. P. Co.
Friends and HelpersG. & Co.
Geography for Young Folks, IIE. P. Co.
Stories of the United States
Stories of the United States for Youngest Readers
Stories of the American PioneersE. P. Co.
Stories of Colonial ChildrenE. P. Co.
Story of Columbus, of Lineoln, etcE. P. Co.
Stories of Animal Life and Adventure (Eggleston)B. S. Co.
American History, Series I. and IIE. P. Co.
Story of Boston Tea PartyE. P. Co.
Liberty BellE. P. Co.
Stories of the Revolution, I., H. and HIE. P. Co.
Stories of Great InventorsE. P. Co.

Grade Four.

Zig-Zag Journeys (in various lands) (Butterworth)A. C. Mc.
Three Vassar Girls (in various lands)B. S. Co.
Water BabiesG. & Co.
Spectacles for Young Eyes-Russia-RomeD. F. & Co.
The Children of the ColdE. P. Co.
The World and Its People, IIIS. B. & Co.
American History, Series III. and IVE. P. Co.
American IndiansD. C. H.
Four Great AmericansW
Story of the Great Republic (Guerber)
The Story of Our Country (Burton)W
Primary History of the United Statesl.
Noble Deeds of Our Fathers
Pacific History StoriesW. R. & Co.
Tales of Discovery on the Pacific Coast
Discoverers and ExplorersG. & Co.
Biographical Stories of Great AmericansW.
Lafayette, the Friend of LibertyW.
Docas, the Indian BoyD. C. H.
Old Times in the Colonies

Grade Five.

Falry Lan	d of	Science	D.	Λ.
Stories of	Star	Land	P. &	Р.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

Boy Travelers in China and Japan III.
On the Banks of the Amazon A. C. Me.
Wild Llfe Under the Equator
Hans Brinker, or The Silver SkatesA. C. Mc.
The World and Its People IVS. B. & Co.
Home Geography-First BookMcM.
Our FatherlandE. P. Co.
Storyland of StarsE. P. Co.
First Steps in the History of Our CountryS. B. & Co.
Four American PatriotsW.
Children's Life of LincolnA. C. Mc.
Pilgrim and PuritanG. & Co.
The Green Mountain BoysR. & McN.
American History Serles-IVE. P. Co.
Four American Naval HeroesW.
Stories of Our Country-IIA. B. C.
From Colony to CommonwealthG. & Co.
Storles of New YorkG. & Co.
The Wampum BeltA. C. Mc.
Stories of Georgia, of Pennsylvania, of Missouri, of Indiana, etcA. B. C.

Grade Six.

Lessons in the New Geography	D. C. H.
Stories of Other Lands	А. В. С.
Alice's Visit to the Hawaiian Islands	A. B. C.
Boy Travelers in Africa	K. & H.
Stories of India	E. P. Co.
Boys of the Sierras	А. С. Ме.
The Land of the Ineas	А. С. Ме.
The Sketch Book	А. С. Ме.
Brave Little Holland	н. м. & Со.
Home Studies in Nature	A. B. C.
Stories of Australasia	E. P. Co.
Child's History of France	А. С. Ме.
Carpenter's Geographical Readers, S. A., N. A., Asia, etc	A. B. C.
The Prairie (Cooper)	А. С. Ме.
Boys Who Became Famous	А. С. Ме.
Cortez and Montezuma	E. P. Co.
Pizarro	E. P. Co.
DeSoto, Marquette and LaSalle	E. P. Co.
Stories of Our Country-III	A. B. C.
The Great West	E. P. Co.

TWELFTH BIENNIAL REPORT

Heroes of the Middle West	G. & Co.
Boys of Greenway Court	А. С. Мс.
The Pilot of the Mayflower	А. С. Мс.
A New England Girlhood	H. M. & Co.
Philip of Pokanoket	E. P. Co.
Colonial Massachusetts	S. B. & Co.
Grandfather's Chair	H. M. & Co.
See previous grade lists.	

Grade Seven.

Child's History of FranceA. B. C.
Stories of EnglandA. B. C.
Stories of Northern EuropeA. B. C. or E. P. Co.
Stories of AustraliaA. B. C.
Stories of IndustryE. P. Co.
The World and Its People-V. to IXS. B. & Co.
Fridtjof NansenD. C. H.
Boys of '76 (Coffin)A. C. Mc.
Four American PoetsW.
Washington and His CountryB. S. Co.
True to His Home (Franklin's Boyhood)A. C. Mc.
Last of the MohicansB. S. Co.
Household History of the United StatesA. C. Mc.
Boys of 1812, and Other Naval HeroesA. C. Mc.
Building of the NationH.
Men, Women and Manners in Colonlal TimesA. C. Mc.
Washington and Hls GeneralsA. C. Mc.
Washington's Farewell AddressA. C. Mc.
See previous grade lists.

Grade Eight.

A Short History of FranceA. C. Mc.
Boys of Other CountriesB. S. Co.
Forest and JungleW.
History of MexlcoW.
The Fair GodB. S. Co.
Vlews AfootB. S. Co.
The Aztecs: Their History, Manners and CustomsA. C. Mc.
Boy Travelers In Mexico and Central AmericaA. C. Mc.
Hlstory of SwitzerlandW.
What She Taught UsB. S. Co.
Two Years Before the Mast (Dana)B. S. Co.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

Australasia and the Islands of the SeaS. B. & Co	0,
Ballou's Footprints of TravelG. & Co	0,
Franklin's Autobiography, R. L. S H. M. & Co	0.
Boots and SaddlesA. C. Me	e.
From Log Cabin to White HouseB. S. Co	0.
Our BoysW	۲.
The Story of America	٢.
Young Folk's History of the Civil WarW	۲.
Hero Tales from American HistoryB. S. & Co	0.
Jesults in North AmericaA. C. M	c.
The Oregon TrailB. S. Co	0.
A Man Without a CountryB. S. C	0.
Story of Mexico (Hale)A. C. M	c.
The Making of a Nation (Walker)B. S. C	0.
The Critical Period (Burgess)B. S. C	0,
Our Great WestA. C. M	c.
How Marcus Whitman Saved OregonA. C. M	c.
Spanish PioneersB. S. C	0,

See previous grade lists.

In several instances where name of publisher is not known, A. C. Mc. or B. S. Co. has been given—they being general bookdealers; or apply to any reliable home dealer.

HISTORY.

Biography is one of the most valuable adjuncts to the teaching of history. The individuality of a noted person appeals to the pupil's interest far more than a century or epoch. The history of a country is the history of its leaders, and brief biographies should be constantly used. Books relating to the childhood of noted individuals are especially interesting to children.

The memory should not be burdened with a number of historical dates, but the most important ones should be carefully committed, the time, the event and the individual being its component parts.

Current events should be taught, but not insignificant events. Select those of value and use.

Helpful books for the teacher's use are:
Fiske's Histories. A. C. Mc.
McMaster's Histories. A. B. Co.
The Beginners of Our Nation. (Eggleston.) A. C. Mc.
Montgomery's Students' History. A. B. Co.
Channing's History of the United States. A. C. Mc.
Parkman's Histories. A. C. Mc.
The English Colonies in America. (Henry Cabot Lodge.) A. C. Mc.

TWELFTH BIENNIAL REPORT

Virginia (American Commonwealth Series). (John Esten Cooke.) A. C. Mc.

Special Methods in History. (McMurry.) P. S. P. Co. The Boyhood of Great Men. (J. G. Edgar.) A. C. Mc.

Grades One and Two.

Where time permits, history should be taught in all the grades. In the first two grades its teaching should consist of story-telling and storyreproduction, and may be made the basis of some of the language work. Make each recurring holiday the occasion of a history lesson that will sink deep into the consciousness of the child. Note the anniversaries of the birth or death of great men, introducing stories of their childhood, and anniversaries of other important historical events. Tell incidents of the early days of Colorado, emphasizing important events or personages associated with your locality.

Grade Three.

Continue the work of the first and second grades and enlarge upon it. Let at least part of the supplementary reading be historical. Teach the history of Colorado while teaching its geography. Each is a help to the other, and history and geography should be closely correlated in all the grades.

Grades Four, Five and Six.

Have such reading lessons from some primary history as you can find time for. Ask for occasional reproductions of interesting historical incidents. Plan your celebrations of holidays with a view to impressing the associated historical lesson. Talk to the pupils about such points of European history as have a bearing on the topic under consideration, and lead them, if possible, to read widely upon these themes. Discuss current events at home and abroad. Assign certain topics of current history to certain pupils, and call for reports or have bullctins of current events published daily or weekly on the board by the pupils.

First Steps in the History of Our Country, or The Story of Our Country, Montgomery's Elementary or other suitable text-books may be used, if desired, in the fifth and sixth grades.

Grade Seven.

Place complete text-book in the hands of the pupils, alternating with geography, and work through the revolutionary war. Assign lessons by topics, and let information be gained from any accessible source. It may be that in some districts no source of information will be accessible aside from the book in the hands of the pupil; but wherever other books can be had, either the property of the teacher or in the pupils' homes, or in the district library, the method suggested will be found most satisfactory. However you may suffer from lack of books, do not allow the pupil to acquire the notion that all the information to be had concerning the history of the United States is contained between the covers of the particular text in his hands.

Grade Eight.

Cover the remaining topics by the end of the first six months. The remainder of the year may be devoted chiefly to civil government. If it is desirable to minimize the number of classes, the seventh and eighth grades may pursue the study of history together for the entire year, the seventh grade alternating history with geography. Having finished the revolutionary war in the seventh grade, the eighth grade will begin the second division of the subject. Let the seventh grade take the second division of history with the eighth grade. The next year the work of the eighth grade will be the first division of history. It is not absolutely essential that the History of the United States be studied as a sequence of events.

Snitable text-books for the class are Montgomery's, McMaster's, Fiske's, Morris' and other recent publications.

CIVICS.

Every good citizen must know something concerning the principles of government and their applications. The foundations of this knowledge can best be laid in the public schools; therefore, careful and systematic instruction should be given.

The child may be led, through an understanding of the home and school government, to that of town or city, county, state and nation.

The individual responsibility of the citizen for the management of public affairs should be made apparent. There should be uo teaching of partisan politics in the public schools, but there should be a careful study of political principles in connection with public events. This can be done without discussion but as facts learned in connection with history. At the time of political campaigns, when children are interested, as are their elders, the names and functions of the offices to be filled should be impressed upon them to the extent of the work in their special grade.

Endeavor to develop an intelligent understanding of our country and its institutions, based upon an appreciation of its merits, and a sense of what we owe it in return for what it does for us. This will result in love of our country and genuine patriotism. But do not teach an unreasoning love that makes an indiscriminating acceptance of all its acts or conditions. Not "My country, right or wrong." but "My country, to be kept in the right," is the true patriotic idea.

Primary Grades—Home government—Relative duties of parent and child.

School government—Relative duties of teacher and pupil. Duty of child to community.

Names and general function of members of the school board, of mayor of town or city, of governor of Colorado, of president of the United States.

In fourth grade add term of office and time when elected.

Fifth and Sixth Grades—Review previous work. The state legislature and its functions, two branches, place of meeting. Federal congress, branches, place of meeting. How the people vote for president, governor, senators and representatives. President's cabinet, how chosen, and divisions under the several departments.

Seventh Grade—Review previous work. The Australian ballot as used in Colorado. The making of laws, functions of two houses of congress and president in making these laws.

Eighth Grade—Thoroughly review previous work of grades. Use a good text book for the study of the United States Constitution.

Dole's American Citizen, Judson's Young Citizen, Morgan's Patriotic Citizenship, or similar books may be used. Fiske's and Macy's text books upon Civil Government are excellent reference books for United States government; and for government of Colorado, Hatch's or Young's Civil Government of Colorado are excellent.

PHYSIOLOGY AND HYGIENE.

In the fifth grade make a study of hygiene from some good text. Explain why frequent bathing is necessary, why food should be eaten slowly, and why perfect ventilation is essential to good health. Impress upon the mind the evil effects of alcohol and narcotics, making clear the harm resulting to immature minds and bodics from the use of tobacco. Let formal physiology be taught as completely as possible in the cighth grade, using some good text book.

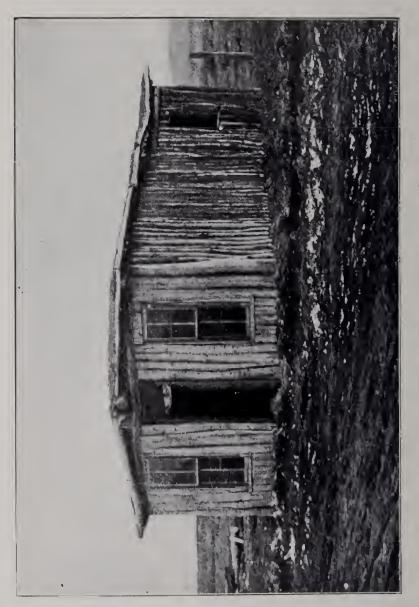
In country schools, or in small village schools where several grades are in one room, it may be well to present the subject of hygiene to the whole room in the form of general lessons. The laws of health, and such information concerning the human body as tends to promote their observance, should be presented to all alike.

In schools having a nine months' term, the following arrangement of topics for a general lesson each week during the thirty-six weeks will be found valuable, and its use is recommended:

1-Parts of the Body. 2-Parts of the Head. 3-Parts of the Face. 4-Neck. 5-Parts of the Trunk. 6-Arms. 7-The Hand. 8-Legs. 9-Feet. 10-Skin. 11-Muscles. 12-Circulation. 13-Respiration. 14-15—Eye (sight). 16—Eår (hearing). Nervous System. 17—Nose 18-Tongue (taste). 19-Touch. 20-Teeth. 21-Skeleton. (smell). 22-Digestion, 23-Food and Drink, 24-Habit (stimulants, narcotics, tobacco, alcohol). 25-Poisons (antidotes). 26-Voice (abdominal res-27-Carriage (grace, style). 28-Physical Exercise (ovcrpiration). 29-Personal Imprudence (exposure). 30-Sleep (sleeping exertion). room, ventilation). 31-Overwork (worry, violent passion). 32-Germ Theory of Disease (contagion, epidemic). 33-Sanitation (disinfectants). 34-Baths (bathing). 35-Accidents (emergencies). 36-Health, Disease.

For schools of shorter term the following outline for general lessons is recommended:

1. Food: Various kinds and their uses; regularity in eating; digestive organs; drink, need of water, effect of alcohol on lining and jnices of stomach; danger of over-cating.



2. The Skin: Number and names of parts; function of pores; need of bathing and exercise.

3. The Bones: Number; how placed, how moved; kinds of joints; vertebræ; marrow, arrangement of cartilage; necessity of erect posture.

4. The Brain: Nervous system, with communication with brain: conveying of sensation to, and orders from, consciousness; effect of narcotics.

5. The Teeth: First set; second set; different kinds for different functions; care of teeth.

6. The Blood: Composition: arteries and veins; need of pure air; need of good circulation.

7. The Heart: Structure; course of circulation; cause of quickened or slow beating; effect of alcohol and narcotics.

S. The Lungs: Structure; covering; contents; use to blood; effect of tight clothing; effect of impure air.

9. The Muscles: Function; kinds; shape; strength.

10. The Eye: Parts; delicacy of organism; harmfulness of poor light; of crying; treatment of abnormalities of vision.

11. The Ear: Parts: function of wax: how sound is conveyed to brain; connection of ear and throat; danger of blows on the ear.

Among the many good texts, the following are recommended:

Hutchinson (M. & M.).

Overton (A. B. C.).

Blaisdell (G. & Co.).

Cutter (L.).

Steele (A. B. C.). (If this author is selected. use Pathfinder, No. 2, or some similar book, in fifth grade.)

Baldwin (W.).

Colton (D. C. H.).

NATURE STUDY.

The aim of nature study is the cultivation of that scientific attitude of mind which is so necessary in our modern civilization, the formation of habits of accurate and intelligent observation and the acquisition of facts relating to the phenomena of nature which will be of use to the pupils in their further study and in life. But, above all, the aim should be to awaken love and sympathy for nature which will broaden and deepen the emotional life of the pupil.

"Facts are stupid things until brought into connection with some general law." It should therefore be the aim of the teacher to point out the relationship of the phenomena observed. Care must be taken not to overburden the pupil with technical names and dry facts. Do not attempt too much, but seek to do well what is done.

The following is offered as a suggestive ontline for nature study in the country schools of the state. The sections on plants and animals may be used for the four primary grades. A more extended treatment of these sections, together with the other two sections, may be used for the other four grades:

SEPTEMBER.

Plant Life—Part of plant and functions. Production of seeds is the object of the plant. Seeds and fruit. Dissemination of seeds. Study goldenrod, sunflower, daisy.

Animal Life—Bees, habits, uses to man and to flowers. Fly. Grasshopper.

The Earth—The earth in its relation to the solar system. Condition of interior. Surface changes.

The Sky, Atmosphere, Etc.—Weather record should be kept throughout the year. Kinds of clouds. Distinguish planets from stars.

OCTOBER.

Plant Life—Compare roots of potato, turnip, onion, sunflower, tree. Name classes of roots. Flowering plants, any of the above, and flowerless, ferns.

Animal Life—Habits of ants. Metamorphosis of caterpillars. English sparrows. Live and dead specimens may be studied for covering, structure, feet, bill, etc.

The Earth—Earth's crust. Classes of rocks; igneous, granite, lava, etc., metamorphic, marble, slate, etc., changed by heat; sedimentary. Detailed study of formation and kinds of sedimentary rocks.

The Sky, Atmosphere, Etc.—Stars are suns very far away. Star groups, as Orion, Pleiades, Big Dipper, etc. Motions of earth, causing day and night, and changes of seasons.

NOVEMBER,

Plant Life—Annuals, bicnnials, perennials. Protection through winter of seeds and plants. Falling leaves and next year's buds. Name familiar trees and kinds of wood.

Animal Life—Covering of animals; horse, sheep, rabbit, etc. Food supply for winter. Migration and hibernation.

The Earth—Wcaring away of land. Erosion. Formation of canons, valleys, etc. Formation of soil by weathering and erosion. Smooth and rough stones.

The Sky, Atmosphere, Etc.—Composition of air. Uses of each part. Uses of air and winds. Pure air is necessary. Ventilation.

DECEMBER.

Plant Life-Evergreen trees. Spruce and pine. Holly and mistletoe.

Animal Life—Dog and his relatives. Wolf, coyote, ctc. Cat, mountain lion, tiger, etc.

The Earth—Rivers and river valleys. Fertility of soil in valleys. Plains and mountains. Mountains pushed up by crumpling of carth's crust and worn down by water.

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The Sky, Atmosphere, etc.—Forms of clouds. Color of sunset and sunrise. Color of thin clouds due to ice crystals. Snow, not frozen rain, but water vapor frozen as it condenses.

JANUARY.

Plant Life—Honse plants. Germination of seeds. Pupils to plant seeds at home and report on observations. Plant peas, beans, corn, squash, etc., in school for class study.

Animal Life—Teeth and the food of animals. Feet and manner of life.

The Earth—Earthquakes, volcanoes and hot springs. Get modern text book on these topics. Earth hot but not molten inside.

The Sky, Atmosphere, Etc.—Climate and weather. Forms of water. Melting, boiling, evaporation and condensation. Boiling point and thermometer.

FEBRUARY.

Plant Life—Whcat, flour and bread. In this connection yeast and moulds may be studied. Other food grains, rice, corn, coffee, etc.

Animal Life—Watch for spring migration of birds. Study ducks, robins, etc., as they return. Story of migration of storks.

The Earth-Formation and mining of coal. Discussion of petroleum.

The Sky, Atmosphere, Etc.-Storms and their causes. Fog, mist, haze, dew, frost, rain, snow, hail. Rainfall of Colorado. Arid and semiarid regions.

MARCH.

Plant Life—Buds. Food supply of seeds. Germination and growth. Animal Life—Fish, oysters, crayfish, etc. Food fishes.

The Earth-Salt. Origin of salt beds. Methods of mining and purifying. Crystalization and crystals.

The Sky, Atmosphere, Etc.—Irrigation, sunshine and energy from sun. Waterpower, Thunderstorms.

APRIL.

Plant Life—Forests and their preservation. Evils arising from their destruction. Parts of flower, analysis and classification.

Animal Life—Birds, nesting and eggs. Value of birds to man. Extinct birds and animals.

The Earth—Outline of the geological history of the earth. Fossils. Chief features of each geological period.

The Sky, Atmosphere, Etc.-Electricity and lightning.

MAY AND JUNE.

Plant Life—Gardening and farming. Cultivated plants and weeds. Collection and classification of local plants.

Animal Life—Food animals, domestic and wild. Origin of domestic animals.

The Earth-Geological history of Colorado. Mineral veins and mining, or soils and agriculture.

The Sky, Atmosphere, Etc.-Rainbow and study of light.

Some books that are hclpful for the teacher's use are: Mrs. Wilson's "Nature Study for Elementary Schools." (McM.) Tarr's "Physical Geography." (McM.) Howe's "Systematic Science Teaching." (Appleton.) McMurry's "Special Method in Science." (Pub. Sch. Pub. Co.) "How Plants Grow," Gray. (A. B. C.) "Handbook of Nature Study," Lange. (McM.) "Elementary Lessons in Zoology," Needham. (A. B. C.) "Davis' Physical Geography." (Ginn & Co.) "Natural History Object Lessons," Ricks. (D. C. H.) "Birds of the United States," Apgar. (A. B. C.)

"Citizen Bird," Wright. (McM.)

For teachers desiring a more formal course, the outlines following have been suggested. It is intended that four lessons be given each week, one relating to each section.

The topics of sections 1 and 2 may be given as a part of the course in geography. The excursions required for the proper presenttion of the lessons in these sections may be taken at the noon hour.

Section I.

NATURAL FEATURES AND PHENOMENA WITHIN HORIZON.

1—Lines (straight, bent, crooked). 2—Lines (vertical, horizontal, oblique). 3—Square, oblong. 4—Curve, circle, ring. 5—Sphere. 6— Colors. 7—School room. 8—Blackboard. 9—Things in the school room. 10—Position. 11—Sun. 12—Moon. 13—Stars. 14—Ground. 15—Dlrection. 16—School grounds. 17—Garden, field, meadow. 18—Vacation. 19—Weather. 20—Clouds, wind. 21—Rain, rainbow. 22—Hail, snow, ice. 23—Dew, frost. 24—Day, shadow, night. 25—Seasons, months, year. 26—Plants, trees, etc. 27—Insects. 28—Reptiles. 29—Birds. 30—Wild animals. 31—Domestic animals. 32—Man. 33—Home (ownership). 34—Road (ownership). 35—School (ownership). 36—Horlzon (the world of the child).

Section II.

NATURAL FEATURES AND PHENOMENA WITHIN HORIZON.

1—Lines (perpendicular, parallel). 2—Angles, triangles, square, oblong, polygon, circle. 3—Sphere, cube, prism, cylinder, cone, pyramid. 4—Colors. 5—BuildIngs. 6—Plain, slope, hill, mountain. 7—Valley, divide, etc. 8—Springs. 9—Stream, dltch, reservoir, poud, lake. 10—



FIRST SCHOOL HOUSE, MONTEZUMA COUNTY.

Trail. road, ford, bridge. 11—Rain, hail, snow. 12—Storm, thunder, lightning, clouds, winds. 13—Time (day, night, week, month, seasons, year). 14—Distance, measures. 15—Relative positions of geographical features in the horizon. 16—Comparison of natural features in the horizon. 17—Rocks, soil. 18—Plants. 19—Animals. 20—People. 21—Occupations. 22—Productions. 23—Transportation, money. 23—Shops (money, property). 25—Stores (money, property). 26—Home (property, ownership). 27—School (ownership). 28—Churches (ownership). 29— Towns (ownership). 30—Postoffice (ownership). 31—Newspaper (ownership). 32—Officers. 33—Government. 34—City (ownership). 35—County, state (ownership). 36—United States (ownership).

Section 111.

PLANTS.

1-Seed. 2-Germination (root, stem, cotyledon, plumule). 3-Roots (kinds and uses). 4-Stems (kinds and uses). 5-Leaves (kinds, forms and uses). 6-Buds (kinds and uses). 7-Flowers (kinds, colors, uses and parts). S-Fertilization. 9-Fruits and seeds. 10-Distribution of seeds, propagation of plants. 11-Geographical distribution of plants. 12-Uses of plants. 13-Plants (domestic, wild, cultivation, grafting). 14—Annuals, biennials, perennials. 15—Herb, shrub, tree. 16—Root, sap, leaves, bark, wood. 17-Sugar. 18-Starch. 19-Tar, pitch, turpentine, resin. 20-Gum, India rubber, gutta percha, opium, camphor. 21-Fats and oils. 22-Bacteria, yeast, mould. 23-Mildew, wheat rust, smut, puff balls, toadstool. 24-Lichens, mosses, ferns. 25-Algæ. 26-Grasses. 27-Cereals. 28-Cotton, hemp, flax, jute, paper. 29-Leguminosæ. 30-Tea plant. 31-Spices and coffee. 32-Deciduous trees (oak, walnut, hickory, hazel). 33-Evergreens (pine, spruce, juniper). 34-Palm. 35-Woods (timber, lumber). 36-The Columbine and silver spruce.

Section IV.

ANIMALS.

1-Amœba. 2-Sponges. 3-Polyp. coral. 4-Snail, oyster, pearl. 5-Starfish. 6-Worm. soil. 7-Insects, homes, protective coloration. 8-Metamorphosis, silk. 9-Crayfish. 10-Tunicate, amphioxus. 11-Fish, scales, gelatin, glue, 12—Frog, metamorphosis. 13—Snake, turtle, swift, alligator, scales, leather. 14-Hibernation. 15-Pigeon, feathers, eggs. 16-Beaks, bills, feet. 17-Migration, habitation. 18-Mammals. 19-Covering. 20-Claws, hoofs, nails. 21-Fins, wings, arms. 22-Tongues, teeth, ivory. 23-Geographical distribution of animals; adaptation. 24-Protection (horns, tail, coloration, flight, armor, home). 25-Beaver, squirrel, rabbit. 26-Cat. 27-Dog. 28-Seal, walrus, whale. 29-Cow, sheep, goat, deer, bison, elk. 30-Horse, burro, zebra. 31-Camel, llama. 32-Wild boar. 33-Elephant, rhinoceros, hippopotamus, tapir, giraffe. 34-Kangaroo, opossum, armadillo, ornithorhynchus, bat. 35-Monkey. 36-Man.

Reference may be made to the following books:

An Introduction to the Study of Society, by Small and Vincent. A. B. C.

Natural Geographies. A. B. C. Guyot's Geographical Reader. A. B. C. Science Primers. A. B. C. Object Lessons in Natural Science. McM. Bowen's Astronomy by Observation. A. B. C. Todd's New Astronomy. A. B. C. Physical Geography. Davis. Ginn & Co. Eclectic Physical Geography. A. B. C. Tarr's Elementary Physical Geography. McM. & Co. Hooker's Child's Book of Nature. A. B. C. Bert's First Steps in Scientific Knowledge. Lippincott. Gray's Lessons in Botany. A. B. C. Bergen's Botany. Ginn. Bessey's Essentials of Botany. Holt. Sedgwick and Wilson's General Biology, Holt, Burnett's School Zoology. A. B. C. Packard's Zoology. Holt. Parker's Elementary Biology. McM.

ETHICS.

It has been well said that "The object of moral education is to push thought, feeling and right decision into immediate action. It is the public school teacher who must make right doing become second nature, who must so mould the plastic nerve cells of the young child that his nervous system will become a helpful moral machine, controlling self and not trampling upon others."

This is placing a great responsibility upon the teachers, yet we feel assured that they realize that it is not enough to give our children a thorough intellectual training, since the education of the heart is even more essential to the welfare of society and to individual happiness. The teacher, then, should seize every opportunity to cultivate in the child a strict regard for the rights and feelings of whatever has feelings, since this is the cardinal principle of civilization, of courtesy, of humanity and of Christianity. Kindness is essential to peace and happiness in home or school, and to inculcate it in the minds of the young is the great duty and privilege of every educator. Hiram Powers said, "The greatest need of America is more education of the heart," and the every-day life and work of the school present numberless opportunities for the establishment of the many virtues of which kindness is the underlying principle. Besides this, lessons may be given through talks by the teacher, or stories read, iliustrating some moral, or conversations with the pupils, and encouragement should be given them to relate deeds of courage or human-

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ity. Special emphasis should be given to inculcating a thorough understanding of the obligations of all mankind to mercifully use and protect those that have well been called Our Dumb Friends, upon which so much of our welfare and comfort and happiness depend. To protect them means indeed to protect ourselves. It is practically true that "as all crime is cruel, to abolish cruelty is to abolish crime." Children are naturally fond of animals, and by no other means can kindness be so thoroughly inculcated in them as by humane teaching and example. It will be found to afford the highest kind of discipline and will bring about a broad appreciation of Nature and love for her works which will be the source of happiness through life.

While this subject is pre-eminently the one which should be left to the individual genius of the teacher and which must be essentially so left, yet even in this, viewed as a branch of study in our schools, plan and system have their place, and while the daily needs of a given school must be the chief determination of the teacher's course, the following general suggestions are offered as likely to be helpful in formulating something definite upon the subject.

The subjects of the talks given briefly by the teacher, and from time to time shared by the children, may be upon such subjects as follow: Stories from history, biography and general literature, and from personal experiences, may be often contributed, illustrating the topic of discussion, and frequently an appropriate selection memorized.

Humaneness to all living creatures.

Honesty. Truth-telling.

Punctuality-due to others; essential for our own success.

Thoroughness in work.

Neatness in appearance—in care of belongings.

Politeness—treatment of the home-people, of schoolmates, of elders, of strangers.

Courtesy in conversation-interruptions, contradictions, tones.

Conduct on the street and in public places—evidences of good breeding.

Property rights-possession and use.

Personal rights—infringement upon personal rights of others; liberties taken with younger or weaker people.

Self-control—yielding to others; keeping one's temper; mastering the tongue.

MISCELLANEOUS NOTES AND REMARKS.

CLASSIFICATION-RECORDS-DIPLOMAS.

1. To avoid multiplicity of classes it is necessary that your school be classified. Base your classification chiefly on the work in arithmetic, as this is the generally accepted basis. You should, however, also be guided by the number of studies an irregular pupil may have in any one

grade. The first classification of pupils should be made with care, and then not changed without good reasons.

2. A pupil's standing should be recorded, and at the close of each term a certificate of classification and standing should be issued, a copy being retained for use of the succeeding teacher. Similar certificates should be given pupils moving to another district. Blank certificates may be obtained from the county superintendent.

3. The classification record left by a teacher should show the position and work of each pupil at the time he left the school or at the close of the term.

4. The Common School Diploma granted by the county superintendent upon examination should signify that the bearer has completed the work in the common English branches, is possessed of a good working knowledge of the same, and is prepared to enter upon a course of instruction in any secondary school in the state. The examination should be thorough and exacting, but the county superintendent should exercise a wise "professional discretion" in granting the diploma.

In some counties suitable exercises are held at some central point and participated in by the eighth grade graduates from all portions of the county; in others, the graduates of adjoining districts assemble and, after appropriate exercises, are given their diplomas. Such gatherings serve to arouse and maintain an abiding interest in education, and children in the lower grades are encouraged to continue unto the end. The possession of a well-earned diploma, which is granted only on merit and which is "worth its face," is a real honor, and children of the rural schools are entitled to the opportunity of securing such an evidence of their attainments. That the use of the common school diploma and the holding of the county graduation exercises have resulted in great good there is abundant evidence, and the practice is commended to all county superintendents.

RECITATION.

It is in the recitation that the influence of the teacher is most telling, and that his fitness or unfitness for his work becomes most evident. Many excellent plans and suggestions may be obtained from pedagogical works, and though all must be applied with careful estimation of their adaptability to the teacher's individuality, certain general principles arc useful as a guide to all. The division often given is excellent— Preparation, Presentation, Recapitulation, Application. The teacher should never undertake a class recitation without thorough preparation for the lesson of the day, and especially in such branches as geography, history, nature study, should have no text book in hand.

In presenting the new lesson, the ideas should be compared with those already acquired, and their relations with each other determined, then the practical application of the knowledge pointed out or logically discovered by the pupils.

The third step should review in systematic order the points gained and clinch them in the understanding and memory.

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Questioning is an important feature. The teacher's questions should never be so framed as to suggest the answers, but to lead from the previous to the succeeding step. Do not ask questions in rotation, for this practice induces inattention. Ask the question of the entire class, then name some one to answer.

The maxim, "Never tell a pupil what he can find out for himself," should be used with discretion. Be sure that the point is one which the pupil's preparation makes it possible for him to find out for himself. The principle of eliciting the pupil's information by natural development is sound, but nothing can be developed which has no basis in his mind. Avoid the complaint sometimes heard: "The teacher doesn't explain to me" Devote a part of the recitation period to an examination of the lesson to follow. This gives you certainty that the pupil has the power of preparation and relieves you of the annoyance of frequent questions from studying classes.

Strive to avoid both extremes of wasting time in repetition of what is already clear and well learned, and of placing before the class work too far in advance of their present knowledge.

Remember that to succeed in interesting children the teacher's own interest must be genuine and enthusiastic. Among the good works now published are:

McMurry's General Method, and McMurry's Method of the Recitation. P. S. P. C. (The illustrative lessons in these books are very helpful.)

DeGarmo's Essentials in Method. D. C. H. Roark's Method in Education, A. B. C.

SEAT WORK AND BUSY WORK.

The most injurious habit in the school room is that of idleness. The teacher who permits a child to sit in idleness is doing a positive injury, in that the pupil is acquiring a habit which has seriously hampered many a person throughout life.

When it is remembered that from one-half to five-sixths of the school day is spent outside of the recitation, the importance of carefully arranged work for study periods will be realized. The habit of independent personal effort, of real study, is becoming fixed. The teacher is here given the opportunity to show her power of resource. She should provide sufficient material to vary the work, should have a definite plan for each period, and should economize time and strength by systematic methods of distributing and assigning material and work. All busy work should aim to develop and prepare the pupil for something which is to be measured later. Busy work which simply occupies time marks the weak teacher. The child should be held accountable for results and should feel assured that his work will be inspected. Even though the inspection should be sometimes hastily given, the child's effort must not remain unnoticed.

Some suggestive plans for seat work in primary grades:

Prepare cards with sentences containing blanks to be filled with words.

Cards of questions to which pupils can write answers.

Cards of ten or more arithmetical exercises to be worked out.

Cards containing outline maps, which pupils in copying will fill with geographical features.

Cards containing geometrical figures in different colors and groupings; pupils supplied with envelopes containing similar forms cut from colored paper, the same to be similarly and differently grouped.

Cards containing each one word, from which arrange sentences according to copies on the board.

Cards containing words in print, to be arranged to correspond with words in script on the board.

Cards containing pictures of common objects; pupils to write names of objects.

Have pupils cut paper or make drawings to illustrate objects they have seen, stories they have heard, parts of circles or other geometrical figures—thus developing knowledge of forms and of fractional units, or in any manner to develop power of expression of ideas, original or otherwise. Pupils to write account of incidents falling under personal observation.

Catalogues of school supply houses (M. B. or A. F.) will suggest many others which may be easily improvised or purchased at a nominal cost. It is surprising how much can be procured for so little.

CARE AND DECORATION OF SCHOOL ROOM.

Half a pupil's waking hours are spent in the school room. Let that room be cheerful, neat, attractive, and full of the atmosphere of a good home. Inspiration for higher things in many cases come only from the school room and during school time. In pity for the innocent, as a protection to the pure and chaste, as a means to character building, let the influence of the school room be uplifting and educative in the true sense.

Keep your own desk and belongings neatly and tastefully arranged, and require the pupils to follow your example. Let the decorations be few in number, inexpensive as to material, but artistic as to arrangement. Despise not the day of small things, and scorn not the value of the little touches, which count more in the education of the child than some of the things of "larger importance." All this counts much as a preventive of occasion for discipline.

Clean windows, clean floors, a polished stove, and flowers on the window sill, will probably come only from the teacher's industry and enthusiastic interest, but will result in a saving of worry and energy, which will more than compensate therefor. Children are far less likely to mar beautiful things, when they have been aroused to an interest in having things heautiful about them.

Teachers who accomplish such things are always sought for higher positions.

In this day of better things in school work, abundant suggestive material is not lacking to those who wish for it. The State Superintendent recently issued a monograph on Art Decoration in the School, prepared by Librarian Daniels of our own State Normal School. A suggestive list of school pictures is appended:

SUGGESTIVE LIST OF PICTURES FOR SCHOOLS.

Kindergarten and Primary Grades-

Madonna of the Chair, Raphael. Holy Night, Correggio. Rest in Flight, Knaus. Children of the Shell, Murillo, Mother and Child, Brush. Baby Stuart. Van Dyck. Age of Innocence, Reynolds. Feeding Her Birds, Millet. By the Riverside, Lerolle. Little Rose, Whistler. Shepherdess Knitting, Millet. Caritas, Thayer. Member of the Humane Society, Landseer. The Connoisseurs, Landseer. The Blacksmith, Frere. Escaped Cow. Dupre. Milan Cathedral. Leaning Tower, Pisa. Intermediate Grades-Sistine Madonna, Detail, Raphael. Madonna and Child, Dagnan-Bouveret. Virgin, Infant Jesus, and St. John, Bouguereau. Children of Charles 1., Van Dyck. Penlope Boothby, Reynolds. Shepherdess, Lerolle. Christmas Chimes, Blashfield.

Brother and Sister, Thayer.

The Gleaners, Millet.

At the Watering Trough. Dagnan-Bouveret.

Automedon, Regnault.

Horse Fair, Bonheur.

Aurora, Guido Reni.

Kabyl, Shreyer. Pilgrims Going to Church, Boughton. Paysage, Corot. St. Marks. Notre Dame.

Grammar Grades-

Virgin, Infant Jesus, and St. John, Bottieelli. Madonna of the Shop, Dagnan-Bouveret. Joan of Are, Bastien Lepage. Queen Louise, Riehter. Sir Galahad, Watts. The Haymaker, Adan. The Sower, Millet. The Water Carrier, Millet. Dance of the Nymphs, Corot. Golden Stair, Burne-Jones. Reading Homer, Alma Tadema. Portrait of Rubens, Rubens. Washington, Stuart. Capitol at Washington. Doges' Palaee. Amiens Cathedral. Westminster Abbey. High School Grades-Sistine Madonna, Raphael. Virgin Enthroned, Thayer. Angels, Forli. St. Catherine, Raphael. St. Miehael and Satan, Guido Reni. St. Miehael and Satan, Raphael. Frieze of the Prophets, Sargent. Sibyls, Miehel Angelo. Circe, Burne-Jones. Portrait of His Mother, Whistler.

Elizabeth Bas, Rembrandt.

Diana's Bath, Corot.

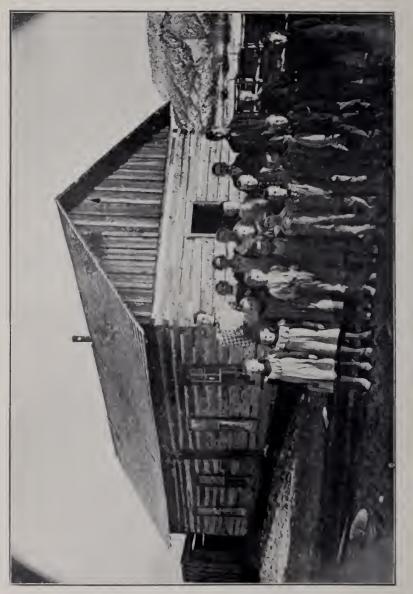
Approach to Venice, Turner.

Ulysses Deriding Polyphemus, Turner.

Vintage Festival, Alma Tadema.

Appian Way, Boulanger.





RURAL SCHOOL, DISTRICT NO. 6, MONTEZUMA COUNTY.

Castle of St. Angelo. Acropolis, Pyramid and Sphinx. Arch of Titus, Cologne Cathedral. Moses, Michel Angelo.

-From Burrage and Bailey's "School Sanitation and Decoration" (D. C. Heath and Co.).

The Perry pictures (Malden, Mass.), and those of Geo. P. Brown (Beverley, Mass.), are now published at one cent each, large ones five cents each, and each teacher can certainly afford a few of these artistic gems. The Educational Publishing Company, Boston and Denver, and A. Flanagan, Chicago, have each a fine line of this class of inexpensive art decorations.

OPENING EXERCISES.

Attractive, interesting and instructive opening exercises should be characteristic. Not only are many of the most useful lessons taught in these exercises, but they serve to bring the child to school on time, thus preventing tardiness. Music in the morning inspires to better work during the day. Lessons in ethics, illustrated by appropriate and wholesome stories from history and mythology, make an excellent opening. Five minutes each morning from an interesting book (to be continued the next morning) is much better than the unplanned, unready aimlessness with which the daily work is sometimes taken up. "Well begun is halfway won."

CO-OPERATION OF PARENTS-MOTHERS' MEETINGS.

Visit the homes of your pupils. Know them in their natural setting. If your social relations with parents are pleasant, if you are worth knowing socially, you will gain advocates near the throne. Consult freely with those who have known the children from babyhood, who are interested in their welfare, and who can give you valuable suggestions as means of reaching the inner child. This is not to be done as one who knows not his business, not as one who seeks to curry favor, but frankly and openly as one who wishes to know all the conditions of his work. Parents appreciate the idea of being co-laborers, and cease to be an antagonizing influence, either secretly or openly.

Many advocate the establishment of "Mothers' Meetings." In many districts such meetings, when properly directed, may be productive of unlimited good. Space will not permit full discussion of this topic, nor extended suggestions as to their management. It is hoped that every teacher will inform herself fully as to this matter. Educational journals and correspondence furnish the most available means for investigation of the subject.

DISCIPLINE AND SCHOOL MANAGEMENT.

If the teacher complies with the suggestions above given, the matter of discipline will cause little worry. A child occupied with useful and beneficial work will seldom cause trouble, and the teacher who keeps her pupils at work and interested is efficient in management. Every successful teacher is more or less strong along two lines: Power to govern and power to instruct. Without skill in the former, the teacher's ability in the latter will avail little. She who has the school under good control, especially if accomplished quietly and unostentatiously, has the greatest opportunity for doing effective work in all lines of instruction and development.

Punishment, when necessary, should be prompt and certain, without any exhibition of anger or strong feeling, and should be final, without subsequent "nagging." It should always be the natural and logical result of the offense, not arbitrary. Corporal punishment is deprecated, save as a last resort in special cases, and should be administered only after consultation with parents, except in a great emergency demanding immediate action.

Let the pupils feel that their welfare is your interest, and that no disciplinary measures are ever used except as a means to increase the efficiency of the school.

PROFESSIONAL READING AND TRAINING.

The importance of a professional library as an essential part of the equipment of a successful teacher can not be over-emphasized. Every teacher should be acquainted with the professional advancement of the day. Some of the best journals and the best books should be owned and read by all. Competition is becoming closer, and keener, and the day is near at hand when only those who keep in touch with the professional and progressive spirit of the day will be able to secure and retain good positions.

It should be the ambition of every one who does not possess professional training to attend the State Normal School or the pedagogical department of one of the higher institutions of learning. Plan for it, and work for it, that you may be numbered among those who teach the right thing at the right time and in the right way.

The library of a teacher should be constantly increasing. Four or five good books should be added each year. Those provided in the state reading circle course should be included, together with such books as Halleck's Education of the Central Nervous System (McM.), James' Talks to Teachers (H. H.), Roark's Applied Psychology (A. B. C.), Maun's School Recreations and Amusements (A. B. C.), and many others of recent publication.

The president of the State Normal School and the State Superintendent are ever ready to give advice as to the best books for teachers. New books of real value are coming from the press every year. Do not permit yourselves to fall behind.

TO BOARDS OF EDUCATION.

In building a rural school house, remember that all ceilings should be at least twelve feet high, that the windows should be so placed as to light the room without cross lights, and that the teacher's desk should stand at the end opposite the entrance. Have separate cloak rooms for the girls and the boys. Secure a good hard pine floor. It is the cheapest in the end. Provide for good light and ventilation. Have a cold air conductor opening underneath the stove, and ventilators for carrying off the impure air near the ceiling and close to the chimney. Provide a shield of zinc for protection of children sitting near stove.

Provide an abundance of good blackboard surface. Place it not to exceed twenty-four inches from the floor, that the little ones may reach it easily. Modern teaching demands the use of the blackboard, and the children should be given every possible advantage.

Do not waste money on the purchase of a lot of expensive and unnecessary apparatus. The four most important things for every school room are Webster's International Dictionary, a set of wall maps, a good reading chart and an encyclopedia. Give the teacher every help possible, consistent with your financial ability. It is the children who will receive the benefit.

Discourage the teaching of advanced subjects at the expense of the primary classes. The children of the primary and grammar grades are entitled to first consideration. If time permits and the demand exists, high school branches may be taught.

It should be the care of the board, as well as of the teacher, to see that proper sanitary provisions for the health and physical welfare of the children are made. The location of the school building in the midst of healthful surroundings and on suitably drained grounds; sufficient play ground for the school; pure water supply; proper disinfection of the outbuildings and premises; care that refuse and filth do not accumulate about the school property, that animal or vegetable matter is not permitted to decay under or about the building, and that suitable provisions for the cleanliness of pupils are made; all these things should be a matter of personal attention by the members of the school board, and in its official capacity the board should insist on attention to all of them. The recent exhaustive investigations by scientists, and the remarkable discoveries being made and published to the world, render it practically impossible for us to be ignorantly careless of the health of the children in our schools. When a little care and expenditure will provide healthful surroundings, it is almost criminal to permit unsanitary conditions.

HIGH SCHOOL OUTLINE.

In arranging for high school work two courses may be offered—one for students who wish to enter the university, and one for those who can hope to go no further than the high school.

The following outlines contemplate that the student may elect certain studies offered in addition to those required of all, and may thereby equip himself along either line:

English—Grammar, word analysis, rhetoric, English and American literature, and the reading outlined in the requirements of the New England Association of Colleges. Time required equivalent to about four hours per week for three years. Especial emphasis is laid upon the importance of thorough work in the English.

Mathematics—Algebra, through quadratics; plane geometry; solid geometry; and a thorough review of arithmetic, with especial attention to its commercial or business aspects. Time required, about five hours a week for two and one-half years.

History—United States history and civil government, English history, Greek and Roman history, and general history. Time required equivalent to five hours per week for two years.

Latin—Latin lessons with grammar; Cæsar, four books; Cicero, six orations; Virgil's Aenid, six books; prose composition, equivalent to one hour per week for two years. Time required equivalent to about four hours per week for four years.

Modern Languages—German, French or Spanish, one year. (German preferred.)

Sciences—Physics, one year; chemistry, one year; or biology, one year. Physical geography and physiology, each one-half year. Time required in science equivalent to five hours per week for three years.

Drawing—Free-hand and mechanical, one hour per week throughout course.

SUGGESTIVE TABULATION OF HIGH SCHOOL WORK.

First Year—English—Grammar reviewed, word analysis, rhetoric. Mathematics—Algebra. History—United States history, civics. Science physiology, physical geography. Language—Latin reader and grammar.

Second Year—English—Rhetoric and composition. Mathematics— Algebra, plane geometry. History—General history. Science—Physics. Language—Cæsar and prose composition.

Third Year—English—American literature and reading of classics. Mathematics—Plane and solid geometry. History—Greek, Roman and English history. Science—Chemistry. Language—Cicero and prose composition.

Fourth Year—English—English literature and reading of classics. Mathematics—Commercial arithmetic and algebra reviewed. History— Reviews. Science—Biology. Language—Virgil.

The above is based on the idea of four years' work. Three years would necessitate the elimination of such portion of the work as might be demanded by local needs.

German or other foreign language may be substituted for two years of the Latin, if desired.

APPENDIX.

LIBRARY LIST.

The following list comprises one hundred of the best books for young people, and is so arranged that by taking them in order from the first a suitable library may be secured, whatever the financial ability of the school district. A library of 12, 25, 50, 75 or 100 books may be selected, as means will permit.

The retail prices are given, from which discounts may generally be secured on orders for a number of books at one time.

Nearly one-half of the expressage may be saved by ordering books shipped by the special prepaid book rates allowed by nearly all express companies:

1.	Uncle Tom's Cabin; H. M. & Co	\$.45
2.	Black Beauty-Anna Sewall; T. Y. C	.40
3.	Andersen's Fairy Tales; M. M. & Co	.32
4.	Longfellow's Poems; H. M. & Co	1.50
ā.	Little Women-L. M. Alcott; R. B	1.50
6.	Tanglewood Tales-Hawthorne; H. M. & Co	.40
7.	First Jungle Book-Kipling; A. C. Mc	1.50
8.	Boys of '76-C. C. Coffin; H	3.00
9.	Robinson Crusoe-De Foe; G. & Co	.35
10.	Life of Lincoln-Noah Brooks; A. C. Mc	1.50
11.	Zig-Zag Journeys in Europe-Butterworth; E. & L	1.50
12.	A Man Without a Country-Hale; R. B	.30
13.	Ivanhoe-Scott; B. S. Co	e up
14.	Pilgrim's Progress-Bunyan; A. C. Mc20	e up
15.	David Copperfield-Dickens; B. S. Co	e up
16.	Seven Little Sisters-Jane Andrews; G. & Co	.50
17.	Hans Brinker and the Silver Skates-Dodge; C. S	1.50
18.	Boys of '61-C. C. Coffin; H	3.00
19.	By Right of Conquest-Henty; A. C. Mc	.30
20.	The American Revolution-Fiske; H. M. & Co.: 2 vols	4.00
21.	The Oregon Trail-Parkman; L. B. & Co	.75
	Or Dickens' Child's History of England; H. M. & Co	1.00
22.	Whittier's Poems of Child Life; A. C. Mc	2.00
23.	The Birds' Christmas Carol-Wiggin; H. M. & Co	.40
24.	Little Folks in Feathers and Fur-Olive T. Miller; E. P. D	1.50
25.	The Sketch Book-Irving; G. B. P	1.00
26.	Tom Brown's School Days-Hughes; G. & Co	.50
27.	Macaulay's Essays; A. C. Mc.; volume	1.50
28.	Little Lord Fauntleroy-Burnett; C. S	2.00
29.	Little Men-Alcott; R. B	1.50
30.	Second Jungle Book-Kipling; A. C. Mc	1.50
31.	Greene's Short History of the English People; H	1.20
32.	With Wolfe in Canada-Henty; A. C. Mc	.40

TWELFTH BIENNIAL REPORT

33.	Winning of the West-Roosevelt; 4 volumes; A. C. Mc	10.00
34.	Kingsley's Greek Heroes; G. & Co	.35
35.	Boy Travelers in China and Japan-Knox; H	2.36
36.	Alice in Wonderland-Carroll; McM	1.00
37.	Birds and Bees, Sharp Eyes and Other Papers-Burroughs: H. M.	
	& Co	.40
38.	Beautiful Joe; A. B. P. Co	.30
39.	The Spy-Cooper; A. C. Mc40c o	r .75
40.	Zig-Zag Journeys in the Orient-Butterworth; E. & L	1.50
41.	Rab and His Friends-Brown; H. M. & Co	.25
42.	Building of the Nation-C. C. Coffin; H	3,00
43.	Lorna Doone-Blackmore; Antique Library Edition; A. C. Mc	.75
44.	Nelly's Silver Mine-Jackson; R. B	1.25
45.	The Prince and the Pauper-Mark Twain; C. L. W	3.00
46.	History of the United States-Higginson; A. C. Mc	2.00
47.	Last Days of Pompeii-Bulwer; H	.25
48.	The Lady of the Lake-Scott; G. & Co	.35
49.	Hero Tales from American History-Cabot & Lodge; A. C. Mc	1.50
50.	Fables and Folk Stories-Scudder; H. M. & Co	.40
51.	Old-Fashioned Girl-Alcott; R. B	1.50
52.	Story of a Bad Boy-Aldrich; A. C. Mc	1.25
53.	Grandfather's Chair-Hawthorne; H. M. & Co	.40
54.	Montcalm and Wolfe-Parkman; L. B. & Co	1.50
55.	Bryant's Household Collection of Poetry; A. C. Mc	5.00
56.	Ben Hur-Wallace; H	1.50
57.	Girls Who Became Famous-Sarah K. Bolton; T. Y. C	1.50
58.	Boys Who Became Famous-Sarah K. Bolton; T. Y. C	1.50
59.	Children of the Cold-Schwatka; C. & Co	1.25
60.	Under the Equator-du Chaillu; H	1.00
61.	Historic Boys-Brooks; L. P. Co	1.50
62.	Historic Girls-Brooks; L. P. Co	1.50
63.	Henry Esmond-Thackeray; B. S. Co)c up
64.	The Mill on the Floss-Geo. Eliot; H	.75
65.	The Adventures of a Brownie-Craik; II	.90
66.	The Hoosicr School Boy; C. S	. 60
67.	Three Vassar Girls Abroad-Champney; E. & L	1.50
68.	Tom Sawyer-Mark Twain; C. L. W	1.75
69.	Huckleberry Finn-Mark Twain; C. L. W	1.75
70.	John Halifax, Gentleman-Craik; A. C. Mc2)e up
71.	Water Babies-Kingsley; G. & Co	,35
72.	The Dog of Flanders-Ouida; A. C. Mc	.75

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73.	Boys' King Arthur-Lanier; A. C. Mc	2.00
74.	Drake, the Sea King of Devon; A. C. Mc	.75
75.	Magellan on His First Voyage; A. C. Mc	.75
76.	Ralcigh; A. C. Mc	.75
īī.	Vasco da Gama; A. C. Mc	.75
78.	Scottish Chiefs; A. C. Mc	.40
79.	The Boy of the First Emplre-Napoleon; A. C. Mc.	1.50
\$0.	La Salle and the Discovery of the Great West-Parkman; A. C. Me	2.00
51.	Old Curiosity Shop-Dlckens; different publishers	0e up
82.	Ten Boys on the Road-Andrews; G. & Co	.50
\$3.	Under the Lilacs-Alcott: R. B	1.50
84.	Boy Travelers in South America-Knox; H	2.36
85.	Donald and Dorothy-Dodge; B. S. Co	1.13
86.	Ramona-H. H. Jackson; R. B	1.12
87.	Lays of Ancient Rome-Macaulay; H. M. & Co	.40
88.	Arabian Nights-Young Folks Classics; A. C. Mc	.40
89.	Tales of a Grandfather-Scott; G. & Co	.50
90,	The Talisman-Scott; G. & Co	.50
91.	Captain January-Richards; A. C. Mc	.50
92.	King of the Golden River-Ruskin; G. & Co	.25
93.	Stories of Great Americans for Little Americans; A. B. C	.40
94.	Last of the Mohicans-Cooper; A. C. Mc	.40
95.	Under Drake's Flag-Henty; A. C. Mc	.30
96.	Legends of the Red Children-Pratt; W	.30
97.	Cudjo's Cave-J. T. Trowbridge; A. C. Mc	1.50
98.	History of Our Own Times-McCarthy; A. C. Mc	1.50
99.	The Prisoner of Zenda-Anthony Hope; A. C. Mc	1.50
100.	Five Little Peppers Grown-up; L. P. Co	ie up

TABLE OF ABREVIATIONS.

H. M. & Co Houghton, Mifflin and Co., Boston
McMMacMillan and Co., New York
R. & MeNRand and MeNally, Chicago
A. B. CAmerican Book Co., Chicago
G. & CoGinn & Co., Chicago-Denver
E. P. CoEducational Publishing Co., Boston-Denver
D. C. HD. C. Heath and Co., Boston
B. S. CoBook Supply Co. (A. Flanagan), Chicago
M. & MMaynard, Merrill and Co., Chicago
U. P. CoUniversity Publishing Co., Chicago

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S. B. & CoSilver, Burdett and Co	., Chicago
E. O. VE. O. Vaile	e, Chicago
W. R. & CoWhitaker, Ray and Co., San	Francisco
WThe Werner Co	., Chicago
L. & SLee and Shepard	d, Chicago
P. S. P. CoPublic School Publishing Co., Bloomin	ngton, Ill.
M. BMilton Bradley (Kindergarten), Springfor	eld, Mass.
A. C. McA. C. McClurg and Co.	, Chicago
D. F. & CoDeWolfe, Fisk and Co	o., Boston
LJ. B. Lippincott, Ph	niladelphia
HHarper and Bros.,	New York
P. & PPotter and Putnam,	New York
DD. Appleton and Co.,	New York
C. SChas. Scribner's Sons,	New York
A. FA. Flanagar	n, Chicago
T. Y. CT. Y. Crowell and Co	o., Chicago
R. BRoberts Bro	os., Boston
E. & LEstes and Lauri	at. Boston
L. B. & CoLittle, Brown and C	o., Boston
E. P. DE. P. Duttor	and Co.
G. B. PG. B. Putnam Sons, 2	New York
A. B. P. CoAmerican Baptist Publication Co., Ph	niladelphia
C. L. WChas. L. Webster and Co.,	New York
C. & Co	
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