# FOURTEENTH BIENNIAL REPORT

OF THE

## SUPERINTENDENT

OF

# PUBLIC INSTRUCTION

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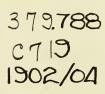
# STATE OF COLORADO

DECEMBER, 1904

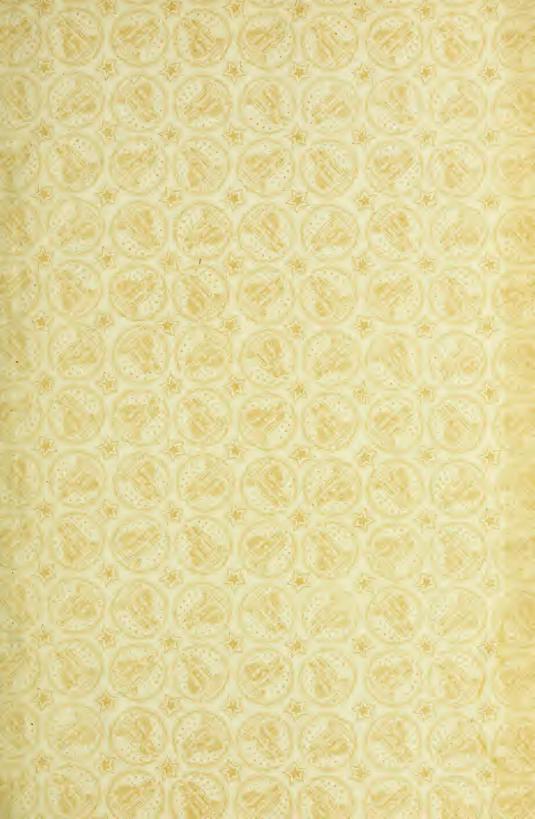


DENVER, COLORADO: THE SMITH-BROOKS PRINTING CO., STATE PRINTERS, 1904

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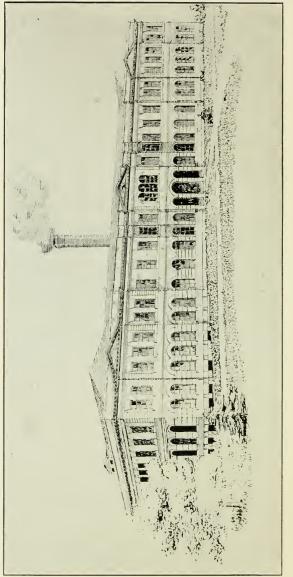
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## FOURTEENTH BIENNIAL REPORT

OF THE

## SUPERINTENDENT

OF

# PUBLIC INSTRUCTION

Compliments of

## MRS. HELEN L. GRENFELL

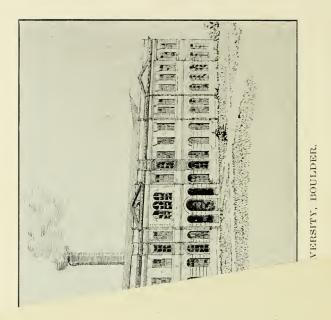
State Superintendent of Public Instruction

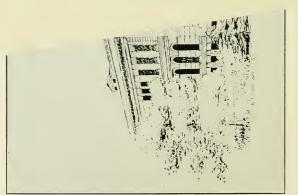
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DECEMBER, 1904



DENVER, COLORADO: THE SMITH-BROOKS PRINTING CO., STATE PRINTERS, 1904





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## FOURTEENTH BIENNIAL REPORT

OF THE

## SUPERINTENDENT

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# STATE OF COLORADO

DECEMBER, 1904



DENVER, COLORADO; THE SMITH-BROOKS PRINTING CO., STATE PRINTERS, 1904

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### LETTER OF TRANSMITTAL.

## STATE OF COLORADO. OFFICE OF

THE SUPERINTENDENT OF PUBLIC INSTRUCTION.

To His Excellency, HON. JAMES H. PEABODY, 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 Fourteenth Biennial Report of the Superintendent of Public Instruction for the two years ending November 30, 1904.

Very respectfully, your obedient servant,

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HELEN L. GRENFELL, Superintendent of Public Instruction.

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

1903-1904.

### HELEN LORING GRENFELL, Superintendent of Public Instruction and Ex-Officio State Librarian.

## CELIA OSGOOD PETERSON,

Assistant Superintendent of Public Instruction.

MARY FENTON MILLER, Assistant State Librarian.

MINNIE B. W. BAKER, Clerk and Stenographer in the Office of the Superintendent of Public Instruction.

### STATE BOARD OF EDUCATION, 1903-1904.

HELEN LORING GRENFELL, Superintendent of Public Instruction.

> JAMES COWIE, Secretary of State.

NATHAN C. MILLER, Attorney General.

# CATLINSTER CALL FOURTEENTH BIENNIAL REPORT

### OF THE

### SUPERINTENDENT

OF

# PUBLIC INSTRUCTION

### INTRODUCTION.

In printing this volume it would be a pleasure to give, in the fullest and most complete manner, a record of the educational work of the State for the last two years, and also the present condition of affairs pertaining to that work. Such a report has been submitted in typewritten form to his Excellency the Governor, but could not be published owing to existing restrictions.

The Thirteenth General Assembly enacted a law limiting the reports of officers required to report to the Legislature, or to the Governor, to 300 pages. The statutes require the Superintendent of Public Instruction to embody in his report biennial accounts of the previous two years' work of the State University, State Agricultural College, State School of Mines, State Normal School, State Industrial School, State School for the Deaf and Blind, and of the State Library, as submitted to him by the heads of these institutions. The Constitution of our State requires the heads of the executive departments to make "full and complete report of their actions to the Governor." To comply with this constitutional requirement and the requirement of the law relative to the publication of the reports of the State institutions, and at the same time conform to the limitations fixed by the Thirteenth General Assembly, is a manifest impossibility, and it has been held by Attorney Generals that the statutory limitation was not mandatory as to reports of executive officers.

An act of the Fourteenth General Assembly relative to public printing still further restricts the scope possible to this report. It not only limits the number of pages of executive officers' reports, but requires them to be printed entirely in "solid long primer," save for tabular work, thus materially reducing the number of words to the page. The present Attorney General, N. C. Miller, has ruled that the limitations of size and number of pages and style of type employed must be observed, regardless of the impossibility of complying with the constitutional requirements under such restrictions.

The growth of education in Colorado for the past two years has kept pace with that of the state in all industrial lines. There has been a great increase in the percentage of children attending the schools, owing to our compulsory laws, and the expenditure for the support of the schools has grown in proportion to the added requirements. A greater demand for professionally trained teachers is noticeable, and our citizens in general continue to show the marked interest in the educational affairs of the state that has been characteristic of Colorado from the earliest period of its existence.

School Population—The rapid growth in the school population during the last four years, especially in the localities affected by the rise and progress of the sugar-beet industry, has taxed the powers and the patriotism of our boards of school directors to the utmost. They have very generally met the need promptly. A large number of new, modern, well-equipped school buildings have been erected, and new schools opened, while at the same time a high standard in teachers has been maintained, and the efficiency of the schools thereby increased.

State Institutions—The last two years have been a period of great growth for our state educational institutions, their influence being manifest in the life of our state, and their good work attracting numbers of students from other states as well as our own. New buildings and additions to each one of these institutions attest their growing success.

State School for Deaf and Blind and State Industrial School for Boys—The State School for the Deaf and Blind has demonstrated its excellence more convincingly than ever during the last two years. Its students are fitted to do work in the business world not inferior to that done by people in full possession of the five senses, and the assistance towards enjoyment of life and the broadening of their spheres which these pupils gain from the training of the school is inestimable.

The State Industrial School for Boys is doing a grand work in its training in habits of industry and study, and in its equipping its pupils for honorable self-support.

Colorado Exhibit, Louisiana Purchase Exposition—The exhibit of Colorado public schools at the Louisiana Purchase Exposition received well-merited praise from all parts of this country and from abroad. The evidences of thorough elementary work, of broadly educating secondary training and of the incorporation in our public school system of the progressive methods and results of the best educational research of our day, have justly attracted much attention and commendation. The work in manual training was of marked excellence, the abundance and quality of the material presented in the exhibits showing the important place which this branch occupies in our best schools.

The grand prizes, and gold, silver and bronze medals awarded our exhibit, gratifying testimonials to its superiority, are enumerated elsewhere in this report.

Normal Institutes-Since the law was passed for the payment of a one dollar fee from all applicants taking the county teachers' examinations, and applying of the fee fund to the use of the thirteen normal institute districts—a measure suggested by the State Superintendent in the Twelfth Biennial Report, and enacted by the Thirteenth General Assembly, going into effect in August, 1901, a great growth has been noticeable in these institutes. Each district is given, by the increased fund available, the ability to employ a high order of professional tal-The Normal Institute instructors, who are certificated by ent. the State Board of Education upon recommendation of the State Board of Examiners, are chosen from the ranks of the most able and progressive educators not only of our own state, but throughout the country. A high standard of professional training has been inaugurated in the institutes, and with the present sound financial basis, will assuredly be maintained. The meaning of this opportunity to our teachers for professional study and improvement, and especially to those who are remote from the centres of population and consequently of progress, can not be overestimated, and the increasing attendance and interest manifest the appreciation of these teachers of the larger opportunities.

The County Superintendent-The upbuilding and uplifting of the rural school can come only through the work of the County Superintendent. As his qualifications are eminent and his standard high, so will the qualifications of the rural teacher be eminent and his standard high. Over the country school more than over any other should supervision be close and skilful. It is here that the new and inexperienced teacher acquires that practice which is a sine qua non to employment in the graded or city school. The action of the Twelfth General Assembly in fixing the salary of the County Superintendent has been of great disadvantage to this line of educational work. The salary ranges from \$100, in some counties, to \$2,800 in others, with the proviso that the county commissioners may pay mileage not in excess of \$300 per vear. In some counties mileage is paid; in others, not. To expect a qualified person to assume the duties and responsibilities of the office for \$100 a year is unreasonable. To expect

an officer on a salary of \$500, or even \$800 a year, to pay from that salary the expenses necessarily incurred in visiting each school in a large county once during each quarter it is in session, is manifestly absurd; and the practical outcome of such expectation is to those under whose interested observation it comes, painfully apparent. Supervision under the old per diem law was much closer and more efficient. A return to that law, or a fixing of the salary in some degree commensurate with the character of officials desired and duties required is the most immediate and urgent need of the country school. Further to increase the efficiency of the office, the county superintendent should be vested with some authority over directors who fail in the performance of their duties, or who wilfully violate the law. He should also have the power of an auditor over school districts' finances, being required to keep an account with each district, and to see that warrants are properly drawn and the funds properly expended. With salary rightly adjusted, with authority extended as herein suggested, and with authority on the part of the State Superintendent to enforce a proper performance of duties, the county superintendent might be, as it should be, the most potential factor in an excellent system of rural schools.

County and Union High Schools-It is a matter of congratulation that the educational sentiment in rural communities has demanded the establishment of high schools among them. A number of such high schools have been established, supplying the once missing link in our system of free education from the kindergarten to the university. This feature of our public school system is, however, new, and requires the careful consideration of its friends. In some instances the ideas of those who viewed only local conditions have been embodied in laws of general application with the result that not a little of misunderstanding and confusion have followed. By considering the high school situation as a whole, together with the conflicting and indefinite laws that have at different times been enacted to satisfy local wants, a plan may be devised which will conserve the interests of all our rural chidren and obviate the difficulties sure to be encountered under county and union high school laws as they exist.

The State School Fund—Attention is again called to the condition of our State School Fund due to the investment of said fund in the excess warrants of 1887, 1888 and 1889. The State owes the school fund a million dollars, over one-half of which is accrued interest that should have been available for the support of the schools each year as it was earned. The warrants in which this fund is invested were issued in payment of the State's debts lawfully incurred. They are technically illegal only because issued in excess of the revenue for the year whose date they bear. Not to reimburse this impaired fund is an open and direct violation of our State Constitution, as well as a rank injustice to both pupil and taxpayer. That this debt will sometime be paid there is no question. But it is now, during the period of Colorado's development, when every dollar her people can spare is employed in opening up new sources of wealth, that this money is needed to educate the children of to-day. Longer to defer the action herein urged is only to add to the burden and unnecessarily to delay the day of justice.

Our School Pcople—The Department of Public Instruction desires to publicly pay its tribute of praise and appreciation to the great body of school workers—the school boards, city and county superintendents, principals and teachers of Colorado for the cordial and earnest co-operation amongst them in all work for the betterment of the schools, by this office during the past six years. The valuable assistance given this Department in the preparation of examination questions, the extension of the use of the state course of study, the promotion of humane work in the schools, the furtherance of patriotic education, and many other lines of work has been that without which nothing could have been accomplished, and to which our indebtedness is acknowledged with pride and gratification.

### RECOMMENDATIONS TO THE FIFTEENTH GEN-ERAL ASSEMBLY.

The subjoined subjects of needed legislation are submitted for the consideration of the Fifteenth General Assembly:

1. The improvement of the school election laws of the State.

2. The extension of the powers of the county superintendent, so that he may act as auditor of school warrants.

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

4. The revision of the law prescribing the county superintendent's salary.

5. A revision of the laws governing union high schools and county high schools.

6. Fixing the minimum salary of a public school teacher at \$50 per month, and requiring as a necessary qualification the possession of a diploma of some high school or other institution of like rank, showing at least four years of secondary education.

7. Making provision for the reimbursement of that portion of the State School Fund invested in the so-called excess warrants of 1887, 1888 and 1889.

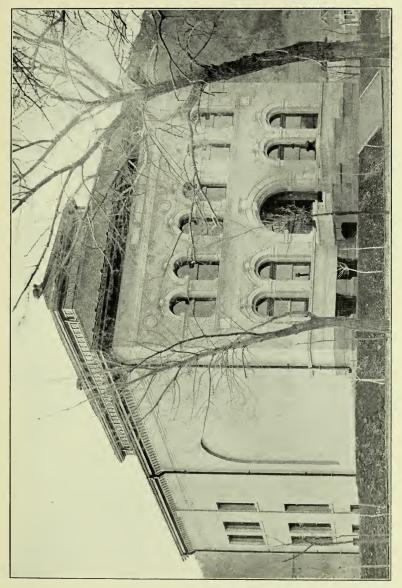
### REPORT OF STATE LIBRARY, 1903-1904.

Mrs. Helen L. Grenfell, State Superintendent of Public Instruction and Ex-Officio State Librarian, Denver.

Dear Madam—I have the honor to submit the biennial report of the State Library for the years 1903 and 1904.

Number of bound books in library, Dec. 1, 1902	13,899
Number of bound books added by purchase.	
1903-4	378
Number of bound books added by gift	183
Number of bound books added by exchange with	
United States	643
Number of bound books added by exchange with	
States and Territories	1,249
Number of bound books added by exchange with	
foreign countries	32

Total number in library.....



### UKIVERSITY OF ILLINGIS OF THE LIBRARY

Number of unbound books and pamphlets in library, Dec. 1, 1902	$6,\!352$
Number of unbound books and pamphlets added	
by purchase, 1903-04	10
Number of unbound books and pamphlets added	
by gift	433
Number of unbound books and pamphlets added	
by exchange with United States	731
Number of unbound books and pamphlets added	
by exchange with States and Territories	1,219
Number of unbound books and pamphlets added	
by exchange with foreign countries	1,069
Total number in library	

Three hundred and forty-nine bound books and 105 pamphlets have been turned over to the Law Library; 1,500 books have been sent to other libraries and societies. About 18,000 volumes are on the shelves of the duplicate room.

### FINANCIAL STATEMENT.

The State of Colorado, in Account with the State Librarian.

1903.	$\mathbf{Cr}$	Dr.
Appropriation		\$ 500.00
Paid for books	\$ 424.00	
Paid for shelving	76.00	
	\$ 500.00	\$ 500.00
1904. Appropriation	Cr.	\$ Dr. 500.00
Paid for books	\$ 287.80	
Paid for binding	122.20	
Paid for assistance	90.00	
	\$ 500.00	\$ 500.00

The accessions to the library have been made almost entirely by means of the exchange system. Nearly twenty thousand bound books and pamphlets, consisting of reports of the various officers of the State government, were gathered from many sources and arranged in order. With this material at our disposal for exchange, we have been able to complete a number of valuable sets of documents, as well as to add many new publications, the editions of which will be exhausted within a short time. In fact, these duplicates are a mine of wealth, for the 1,500 books sent out to various libraries, educational institutions, geological sur-

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veys, historical and other societies have been the means of greatly enriching our own library. They have also enabled the librarian to put many Colorado State publications in the libraries of the other states. Knowing that this is to the interest of Colorado, we have made special efforts to complete sets of Colorado reports for other librarians.

Owing to the failure to collect and preserve such publications in earlier years, there is not a complete set of Colorado departmental reports in our own library. Much time has been spent trying to supply deficiencies, and many gaps have been filled, but it is a work of great difficulty, and it may be years before it can be successfully completed.

The pioneer citizens and officeholders of Colorado can help in this matter more than any other of our citizens. No doubt there are stored away in out-of-the-way places reports and other publications referring to the early history of Colorado, which are of no account to the owners, but in the State library would be of inestimable value.

The work in the library has more than doubled during the last two years. Many important duties have to be neglected because it is a physical impossibility for one person to attend to them all. The time of those temporarily employed has been chiefly given to the old newspapers of ten and twenty years ago. All have been arranged in order and thousands have been mended. Sixty volumes of these papers have been bound and seventy more are ready for the bindery.

Through the courtesy of the editors twenty-eight Colorado newspapers come regularly to the library.

The books can not be arranged as they should be, because of the lack of proper shelving, which greatly handicaps the library. Two small rooms have been shelved and several cases have been added to the main library. But these are not enough to accommodate the twenty-five thousand and more books and pamphlets which are waiting for shelf room, consequently there are many books filed on tops of cases, on tables, and on the floor in the work room.

Electric lights should be put into the library. The room is wired, so fixtures only are needed. It is impossible to read in the back part of the room by the latter part of every afternoon and on cloudy days. In fact, during December, January and February the library is in total darkness before it is time to close the doors.

Among the important and interesting additions to the library are a set of the Abridgment of Specifications, from the English patent office, London, in exchange for Colorado publications; Leeds' American Almanac, 1713, and the Ulster County Gazetté, published at Kingston, New York, January 4, 1800, both gifts from Mr. W. M. Moore, of Empire, Colorado.

Respectfully submitted,

MARY F. MILLER, Assistant State Librarian.

### DONORS.

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	Vols.	Pms.	Maps
Agriculture, Board of	1		
Alderson, Dr. V. C	• • • •	6	
American Bar Association	2		
American Pharmaceutical Association	1		
Anthony, Miss S. B		10	
Armour Institute of Technology		4	
Armstrong, Mrs. R. T	1		
Atlanta University		1	
Beardsley, A. E		2	
Bell, H. W	1		
Bonynge, Hon. R. W		2	
Bostwick, Mrs. S. E.	1	1	
Bridge, J. H	I		
Broderick, J. T		1	
Butters, G	1		
Carpenter, L. G	1		
Case, A. P	1		
Clason, G. S.			1
Clark, Rev. E. W	1		
Colorado Press Bureau of Information	1		
Colorado Promotion and Publicity Committee		30	
Colorado Scientific Society			
Colorado Society of Colonial Wars			
Concord Public Library	1		
Cripple Creek Times	1		
Davis & Harvey	1		
Davis, W. A	5		
Dawson, W.	1		
Delaware Society of Philadelphia	1		
Estes & Co			1
Fay, W. C	I		

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	Vols.	Pms.	Maps
Fernald, C. A			1
Field, M	2		
Gates, C. O	1		
Gimby, A. A	1		
Grenfell, Mrs. H. L	1		
Hagar, C. E		2	
Haines, Jones & Cadbury Co	1		
Harper & Brothers	1		
Hartford Theological Seminary		3	····
Herrick, W. P	1		
Hine, C. D		142	
Hoffman, Dr. H. T		6	
Home Market Club		3	
Hyde, Mrs. Vivian	2		
Immigration, Superintendent of	1		
Indiana Bar Association	2		
Institute of Technology, Boston		2	
Iowa State Bar Association	1		
Jewish Publication Society of America	1		
John Crerar Library		2	
John Hopkins University		3	
John Slater Fund for the Education of Freedom		2	
Kansas Academy of Science			
Ladycliff Academy, Highland Falls, N. Y		1	
Lake Mohonk Arbitration		2	
Lake Superior Mining Institute		1	
Langley, J. C		1	
Lee, H. A	1		
Leonhardy, G.		2	
Lewis and Clark Centennial Exposition		2	
Library Company		5	
Louisiana Historical Society		2	
MacCarthy, J. (Fitż-Mac)	1		
Medico-Legal Society		1	
Mines and Minerals	2		
Moore, W. M.	1		
National Live Stock Association	1		
Newberry Library		1	
TO TROUBLY LADRELY		-	

### DONORS.—Concluded.

	Vols.	Pms.	$\mathbf{Maps}$
Nutshell Publishing Company	1		
Parks, Commissioner of	1		
Peck, W. A		11	
Peterson, Mrs. C. O	1		
Pierce & Zahn	4		
Portland Gold Mining Company		1	
Presbyterian Hospital	1		
Robinson, W. P	1		
Rossignol, J. E. Le		1	
Richardson, F. W	1		
Rowell, R	1		
Sante Fe Passenger Department	2		
Scotch-Irish Society of America	1		
Searight, J. A	1		
Siamese Royal Commission	1		
Slayton, E. M	1		
Society of Colonial Wars, D. C		5	
Socorro School of Mines	••••	1	
Steele, R. W	1		
Stromberger, J. B		4	
Syracuse Public Library		3	
Taylor, E. T		1	
Tulane University		1	
United Water Improvement Company		1	
Universalist Publishing House	1	·	
Vaile, J. F			1
Vanderbilt University		1	
Vermont Historical Society		1	
Vroom	1		
Wahlgreen, G. A	1		
Wentworth, M. J	3		
Wetzel, M	3		
White, Miss M. L	1		
Willcocks, Sir William		1	
Williams, Mrs. Henry	56	40	
Winget, W	1		
Wright, W. W.	1		

### LIST OF MAGAZINES AND NEWSPAPERS.

Business Woman's Magazine, Denver, Colo.; Club Woman, New York City, N. Y.; Crucible, Greeley, Colo.; Engineering and Mining Journal, New York City, N. Y.; Farmers' Reminder, Cheyenne, Wyo.; Industrial School Magazine, Golden, Colo.; Lewis and Clark Journal, Portland, Ore.; Literary News, New York City, N. Y.; Medical Book News, Philadelphia, Pa.; Mines and Minerals Denver, Colo.; Mining Reporter, Denver, Colo.; Miners' Magazine, Denver, Colo.; New York News Letter: Outdoor Life, Denver, Colo.; Polly Pry, Denver, Colo.; Plant and Camp, Pueblo, Colo.; Protectionist, Boston, Mass.; Rocky Mountain Endeavor, Colorado Springs, Colo.; Revue Politique Parlementaire. Paris, France; Sister Republics, Denver, Colo.; Sound Currency, New York City, N. Y.; Suggestion, Chicago, Ill.; World's Events, Dansville, N. Y.; Youth, Philadelphia, Pa.

#### NEWSPAPERS.

Boulder County Herald; Brighton Blade; Canon City Times; Colorado Springs Gazette; Cripple Creek Times; Denver Post; Denver Republican: Denver Times; Durango Semi-Weekly Herald; George's Weekly; Georgetown Courier; Greeley Sun; Gunnison News-Champion; Gunnison Republican; Herald Democrat, Leadville; Longmont Ledger; Mancos Times; Ouray Herald; Plaindealer, Ouray; Rocky Mountain News, Denver; Routt County Sentinel, Steamboat Springs; Steamboat Pilot; Silverton Weekly Miner; Southern Miner, Trinidad; Telluride Journal; Walsenburg World; Weekly Times, Pagosa Springs; Weekly Register-Call, Central City.

### LIST OF PURCHASES.

Adams & CoMap of Colorado
Adams, C. CCommercial Geography
Aldridge, RLife On a Ranch
Allen, O. PDescendants of John Fairman
Andrews, AAndrews Memorial
Ashley, R. LAmerican Government
Atkinson, EGanot's Physics
Bartlett, JFamiliar Quotations
Bartow, J. S., and Simmons, P. AFirst Annual Colorado Mining Directory
Baskin & Co., PublishersHistory of Clear Creek and Boulder Counties
Beveridge, A. JRussian Advance
Bigney, T. OColorado Tales and Legends
Blackmar, F. WEconomids
Blackmore, WColorado: Its Resources, Parks and Prospects
Boccaccio, GDecameron
Booth, J. C., and Faber, W. L., EditorsRegnault's Elements of Chemistry
Bowie, A. J., Jr Mining
Bowles, SIn the Parks and Mountains of Colorado
ColoradoAuditor's Report, 1885-86

### LIST OF PURCHASES.—Continued.

ColoradoBrief Sketch of, 1883
ConnecticutHistorical Society Collections (six volumes)
Cope, GSmedley Family
Cones, EExpeditions of Zebulon M. Pike (three volumes)
Cram, G. F., PubStandard American Railway System Atlas of the World
Cullum, R. SHistory of the United States Marine Corps
Dana, E. SFirst Appendix to System of Mineralogy
Darley, G. MPioneering in the San Juan
Dodge, R. LWild Indians
Dunn, J. P., JrMassacres of the Mountains
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Eissler, MMetallurgy of Silver
Everett, J. DDeschanel's Natural Philosophy (four volumes)
Fernow, B. EEconomics of Forestry
Fossett, FColorado
Fresenius, C. RManual of Qualitative Chemical Analysis
Furman, H. Van FManual of Practical Assaying
Gayley, C. M., EditorClassic Myths in English Literature
Gilder, J. B., CompilerAmerican Idea
Graham, G. ESchley at Santiago
Halloway, ECrag and Pine, 1893
Hayden, F. VAtlas of Colorado
Hazeltine & Co., PublishersHistory of Cripple Creek
Hess, A. R., CompilerUnited States Government Documents
Hollister, U. SNavajo and His Blanket
IllinoisGeological Survey Reports (volumes 4 and 5)
Irish, F. VAmerican and British Authors
Jackson, CConcordance of Bible Topics
James, C. CPractical Agriculture
James, J. A., and Sanford, A. HGovernment in State and Nation
KansasGeological Survey Reports (volumes 1 and 2)
Keeler, B. CWhere to go to Become Rich
Kemp, J. FHand Book of Rocks
Keyser, LBirds of the Rockies
Lake, AProspecting for Gold and Silver in North America
Mackall, S. SEarly Days of Washington
McMurry, C. ASpecial Method in the Reading of English Classics
Majors, ASeventy Years on the Frontier
Mathews, SFrench Revolution

### LIST OF PURCHASES.—Concluded.

Mayflower Descendants(Five volumes)
Mendelieff, IPrinciples of Chemistry
Merrick, G. BGenealogy of Merrick, Merick, Myrick Family
Morris, M. O'CRambles in the Rocky Mountains
National Cyclopaedia of American Biography(Eleven volumes)
New England Historical and Genealogical Register(Forty-seven volumes)
Newell, F. HIrrigation
Page, D. PTheory and Practice of Teaching
Pattee, F. LHistory of American Literature
Peters, E. D., Jr
Philips, J. A., and Bauerman, HElements of Metallurgy
Porter, F. C., and Coulter, J. MSynopsis of the Flora of Colorado
Remsen, JInorganic Chemistry
Richardson, A. DBeyond the Mississippi
Rollandet's Map of the Mining Claims Adjoining Leadville
Sherey, E. M. and Sampson, CAngels' Diary and Celestial Study of Man
Stanton, E. C., and othersHistory of Woman Suffrage (Four volumes)
Starr, FPhysical Characters of Indians of Southern Mexico
Starr, FNotes Upon the Ethnology of Southern Mexico
Statistician and Economist, 1903-04
Stoddard, J. LLectures, 1898 (Ten volumes)
Struthers, J., EdMineral Industry
Thayer, H. LMap of Colorado
Thwaites, R. GRocky Mountain Exploration
Towle, A. FDescendants of Jonathan Towle
United States(183 miscellaneous documents)
United StatesTenth Census (volume 9)
United StatesTenth Census (atlas)
United States Official Postal Guide
Universal Cyclopaedia and Atlas(Thirteen volumes)
Van Schaak, H. CManual for Corporations
Van Wagenen, T. F
Wason, H. LLetters from Colorado
Wheelright, E. MSchool Architecture
White, E. EArt of Teaching
White, F., EditorOur Wonderful Progress
Whitney, E., JrLegends of the Pike's Peak Region
Who's Who in America
Wilson, G. G., EditorGreat Commanders, 1897-98 (Thirteen volumes)
Wilson, WHistory of the American People

### SUPERINTENDENT OF PUBLIC INSTRUCTION.

### THE STATE BOARD OF EXAMINERS AND THE STATE BOARD OF EDUCATION.

The State Board of Examiners consisted, from September, 1902, to September, 1903, of State Superintendent Helen L. Grenfell, chairman; James H. Baker, president of State University; Barton O. Aylesworth, president State Agricultural College; Z. X. Snyder, president State Normal School, and Charles S. Palmer, president State School of Mines. Since September, 1903, the board has consisted of the first four officials named in the foregoing and Victor Alderson, president of State School of Mines.

This board held meetings on the following dates: March 19, 1903; May 5, 1903; December 10, 1903; January 30, 1904; November 30, 1904.

The State Board of Examiners passed upon applications for normal instructors' and conductors' certificates and recommended to the State Board of Education that the following applicants be granted such certificates:

1903-J. Lawson Alford, instructor; Miss Jennie Archibald, instructor; C. W. Bigelow, conductor and instructor; F. A. Boggess, instructor; Miss Maud Butts, instructor; J. E. Campbell, instructor; Miss Mary G. Carson, instructor; Charles E. Chadsey, conductor and instructor; Miss Elizabeth B. Church, instructor; Miss Alice F. Coffey, instructor; Edward E. Cole, conductor and instructor; Philip M. Condit, conductor; Miss Myla Cooke, instructor; Miss Mary K. Cramer, instructor; Mrs. Mary E. Tanner Croswell, instructor; Joseph F. Daniels, instructor; Miss Helen A. Dewey, instructor; Simon S. Dow, instructor; M. E. Eagleton, instructor; Andrew W. Elder, instructor; E. L. Enloe, instructor; Philip P. Farnham, Jr., instructor; Miss Anna Laura Force, instructor; Miss Mary E. Giffin, instructor; George G. Groff, conductor and instructor: Miss Kate I. Hansen, instructor: Geo L. Harding, instructor; Miss Mabel Helms, instructor; A. D. Hoenshel, conductor; U. W. Keplinger, instructor; C. Valentine Kirby, instructor; R. A. Leisy, instructor; Miss Nora Malonev, instructor; Miss Emily Miles, instructor; H. T. Mitchell, instructor; W. A. Oliphant, instructor; B. D. Parker, instructor; Miss Lura D. Patrick, instructor; Jacques W. Redway, instructor; Wilson M. Shafer, instructor; H. L. Shantz, instructor; J. E. Snook, instructor; Mrs. Luella S. Stocks, instructor; D. P. Taylor, instructor; W. C. Thomas, instructor; Mrs. Bertha Kruger Tracy, instructor; J. P. Treat, instructor; Miss Evelyn Walker, instructor: Miss Elizabeth Walsh, instructor,

1904—Miss Georgia Alexander, instructor; Robert J. Aley, instructor; J. Lawson Alford, instructor; J. H. Barker, instructor; Miss Lulu Barnes, instructor; H. M. Barrett, conductor; Miss Olive Beroth, instructor; Miss Olive Burton, instructor; Miss

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Nettie M. Carev, instructor; D. D. Culler, instructor; E. M. Cunningham, instructor; Mrs. Mary E. Tanner Croswell, instructor; Ira E. Cutler, instructor; Joseph F. Daniels, instructor; O. S. Davis, instructor; Miss Eugenia Deamer, instructor; Miss Marie A. Dean, instructor; Andrew W. Elder, conductor; E. L. Enloe, instructor; R. Ernesti, instructor; W. A. Fidler, instructor; Miss Fonetta Flansburg, instructor; A. J. Floyd, instructor; Miss Nannie E. Forry, instructor; Miss Charlotte Gauss, instructor; Miss Anna L. Greist, instructor; Miss Luella A. Hall, instructor; Miss Minnie B. Hand, instructor; Miss Kate I. Hansen, instructor; William M. Heiney, instructor; M. P. Helm, instructor; A. T. Hesnard, instructor; George L. Hess, instructor; F. A. Hyde, instructor; Miss Martha Hyde, instructor; Miss Ella M. Jones, instructor; E. R. Jones, conductor and instructor; Miss Nuna Kenton, instructor; Miss Ida Kruse, instructor; Miss Mary Adeline Lamb, instructor; Mrs. Emma G. Leake, instructor; Louis Lepper, instructor; Miss Carrie Lindley, instructor; Charles J. Ling, conductor and instructor; J. William Mahin, instructor; Miss Nora Maloney, instructor; J. Bruce Mather, instructor; H. V. Matthews, instructor; Miss C. D. A. McChesney, instructor; Miss Emily Miles, instructor; Miss Emma Mitchell, instructor; George R. Momyer, conductor and instructor; W. A. Oliphant, conductor; J. F. O'Malley, instructor; Miss Adelaide M. Parsons, instructor; Milton C. Potter, instructor; Miss Eva V. Riggs, instructor; Frank H. H. Roberts, conductor and instructor; Dr. Henry R. Sanford, conductor and instructor; Mrs. H. Scott Saxton, instructor; Miss Lizzie S. Sebree, instructor; M. E. Shuck, instructor; James E. Snook, instructor; Miss Estelle Stinchfield, instructor; Max Strass, instructor; Mrs. Bessie N. Taylor, instructor; Miss Annie Walsh, instructor; Miss Grace M. Wilson, instructor; Daniel Ward, instructor; Miss Gertrude F. Wood, instructor.

The State Board of Examiners passed upon reports of the annual State teachers' examinations, and upon applications for teachers' complimentary State diplomas, and recommended to the State Board of Education that State Life Diplomas be issued to the following applicants:

Mr. H. M. Barrett, Mr. James B. Ragan, Mr. Edward C. Elliott, Mr. George W. Gould, Mr. John B. Morgan, Mr. Jesse R. Morgan, Mr. H. E. Smith, Mr. Edward M. Traber, complimentary; Mr. Chester E. Giblin and Mr. W. H. Oliphant, upon examination.

The State Board of Education of 1901-1902, consisting of Mrs. Helen L. Grenfell, State Superintendent of Public Instruction; David A. Mills, Secretary of State, and Charles C. Post, Attorney General, held meetings upon the following dates: December 16, December 19, December 20, December 26, 1902, and January 5, January 6, January 10 and January 12, 1903.

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During the period covered by the foregoing dates, four appeal cases were considered.

The State Board of Education of 1903-1904, consisting of Mrs. Helen L. Grenfell, Superintendent of Public Instruction; James Cowie, Secretary of State, and Nathan C. Miller, Attorney General, held meetings upon the following dates: March 16, March 24, June 25, August 10, October 22, October 26, October 29 and December 8, 1903, and February 3, June 8, November 12 and November 21, 1904.

(On Saturday, December 26, 1903, owing to the fact that a holiday throughout the State departments had been proclaimed by Governor J. H. Peabody, the regular meeting of the State Board of Education was postponed.)

The Board has considered sixteen appeal cases, and has acted upon the recommendations of the State Board of Examiners and issued ten complimentary State diplomas.

The cases of appeal considered and acted upon by the State Board of Education during the administration of 1901-1902 are as follows:

December 26, 1902—In the matter of the appeal of S. B. Dyer, of School District No. 61, Arapahoe county, from the action of Miss Emma Herey, superintendent of schools, Arapahoe county, the appeal was sustained.

January 5, 1903—In the matter of the appeal of David P. Howard for the Board of Directors of School District No. 1, Teller county, from the action of Mrs. Thera H. Satterlee, county superintendent of schools of Teller county, the appeal was dismissed.

January 6, 1903—In the matter of the appeal of John Altevogt et al. from the action of Miss Ida L. Crawford, county superintendent of schools of Jefferson county, the appeal was dismissed.

January 10, 1903—In the matter of the appeal of Sarah C. Farrell et al.—legal electors of School District No. 31, Routt county—from the decision of Miss Verna Bartz, superintendent of schools of Routt county, the State Board of Education held the matter in abeyance, not declaring the election or non-election of any candidate in said school election of May 15, 1902.

March 16, 1903—In the matter of the appeal of Miss Edith Parke, of Flagler, from the action of John F. Stott, county superintendent of schools, Kit Carson county, the appeal was dismissed.

June 25, 1903—In the matter of the appeal of A. B. West, La Jara, from the action of George W. Irwin, county superintendent of schools, Conejos county, the appeal was dismissed. December 8, 1903—In the matter of the appeal of Clarence Allen, of Woodland Park, from the action of Mrs. Thera H. Satterlee, county superintendent of schools of Teller county, in revoking, upon statutory grounds, his certificate to teach, the appeal was dismissed.

In the matter of the appeal of Miss Sara M. Jordan, Fort Morgan, from the action of J. E. Snook, county superintendent of schools of Weld county, the appeal was dismissed.

In the matter of the appeal of Miss Bertha Kramer, Denver, from the action of Miss Emma Herey, county superintendent of schools of Denver county, the appeal was dismissed.

In the matter of the appeal of John B. Nelson from the action of Miss Ida L. Crawford, county superintendent of schools of Jefferson county, the appeal was dismissed.

November 12, 1904—In the matter of the appeal of Miss Mabel Henry, Burdett, Washington county, from the action of Mrs. Alta M. Tuttle, county superintendent of schools of Washington county, the appeal was dismissed.

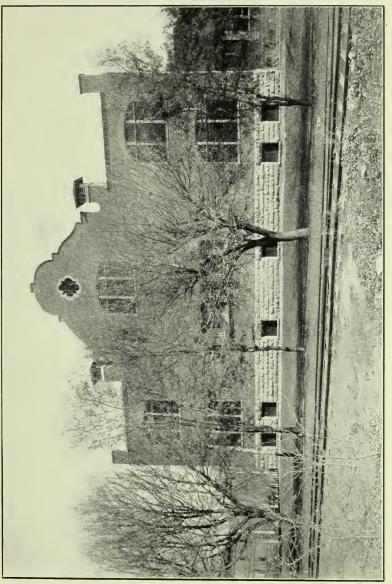
In the matter of the appeal of Ernest M. Parker, Akron, from the action of Mrs. Alta M. Tuttle, county superintendent of schools of Washington county, the appeal was dismissed.

In the matter of the appeal of Miss Carrie N. Johnson. Sterling, Logan county, from the action of J. E. Snook, county superintendent of schools of Weld county, the appeal was dismissed.

In the matter of the appeal of Miss Ada Gardner, Yuma, from the action of Miss Minnie Cunningham, county superintendent of schools of Yuma county, the appeal was dismissed.

In the matter of the appeal of William Todd and Frank Duncan, of School District No. 34, Jefferson county, from the action of Mrs. Ida Crawford Kelly, county superintendent of schools of Jefferson county, in deciding that the regular school election of May, 1904, in said district was illegal, and in appointing a different board of directors from that claiming to be elected, the appeal was dismissed.

In the matter of the appeal of Eli Mahannah, B. T. Wright, R. T. Shropshire, et al., of School District No. 3, Mesa county, from the action of Z. B. McClure, county superintendent of schools of Mesa county, in renewing the second grade certificate of J. W. Tyler, as teacher in said district, the appeal was sustained and the teacher's certificate ordered cancelled.



AUDITORIUM, STATE AGRICULTURAL COLLEGE, FT. COLLINS.

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#### SUPERINTENDENT OF PUBLIC INSTRUCTION.

#### SUMMARY OF SCHOOL LEGISLATION OF THE FOUR-TEENTH GENERAL ASSEMBLY.

Appeals—An act, approved April 10, 1903, provides that in case of appeal from the county superintendent to the State Board of Education, said board shall have power to issue subpœnas and compel witnesses to attend and testify.

Compulsory Education—An act approved March 7, 1903, extends the operation of the compulsory education law, formerly applicable to districts of the first and second classes, to all school districts of the State; increases the maximum age from fourteen years to sixteen years, in cases where the child has not completed the eighth grade or is not eligible to enter high school, or whose help is not necessary for his own or his parents' support, or whose best interests do not demand relief from the operation of the act; and makes it incumbent on the county superintendent, in districts where there is no district superintendent, to hear and determine applications for exemption from the operation of the act.

The definition of a juvenile disorderly person is made to embrace all children under the operation of the act.

Any school teacher or other reputable person, as well as the truant officer, may complain of juvenile disorderly persons to the County Court, and commitment may extend to attainment of majority instead of to the age of sixteen, as formerly.

Districts United—An act approved April 8, 1903, provides that when a first-class district is united with a district or districts of a lower class, the directors of such first-class district shall be the directors of the new district, and that the directors of the lower-class district shall "cease and determine" on notice from the county superintendent that such districts have been united.

*Examination*—An act approved April 11, 1903, changes the time of the county examination to the third Thursday of August, December and March, and requires examination in the Constitution of Colorado, in addition to the subjects formerly prescribed.

New Districts—An act approved April 6, 1903, forbids the division of a district for the purpose of forming a new one unless it has an assessed valuation of \$20,000 and a school population of forty, and unless, after division, the district shall contain not fewer than twenty persons of school age.

Union High School—An act approved April 11, 1903, provides for the organization of union high school districts by districts adjacent to an incorporated town or city; provides for support of the high school by taxation of the property in the high school district thus formed; provides qualifications of pupils entering such high schools, and provides for the preparation of a course of study for such schools.

#### GENERAL NOTES.

Colorado Educational Exhibit, Louisiana Purchase Exposition--In preparing this exhibit the school system as a whole was the basis, every phase of public education being represented.

An exhibit of manual work was presented, arranged upon over one hundred framed boards, and comprising models and patterns, made with scissors, knife, bench and carving tools. forge, lathe, needle and loom, in addition to basketry or raffia and reed, bent iron, bead work and bookbinding. Upon the walls were shown photographs of school buildings, paintings and maps of geological and topographical surveys, and also two large art windows imitating stained glass, but designed and made from tissue paper and cardboard by pupils.

A prominent feature of the exhibit was a series of six models of school buildings, called "The Evolution of the School House in Colorado," and including a "dug-out," a sod house, a log house, a model rural school house, a modern graded school building and a high school building, these being exact copies of buildings in the State, which are in use to-day.

Sixty-four leaf cabinets were filled with photographs of buildings, grounds, classes illustrating special work or methods, with free-hand and instrumental drawing, brush and pen work, arranged for reference by grades. Specimens of carved boxes, sewing, metal work, clay modeling and shoes were displayed in show cases. A massive carved settee, made by pupils in the Denver manual training high school, showed work in carving and polishing.

The sociological department of the Colorado Fuel and Iron Company was represented by constructive work from the camp kindergartens, sewing by children's classes, and photographs of hospitals, reading rooms, schools, etc.

One hundred and fifty bound volumes—about fifty thousand pages—of written work in reading, arithmetic, language and other common branches were exhibited, illustrating the every-day work of the pupils.

The Colorado Federation of Women's Clubs had in the exhibit a sample box of the traveling library, a box from the traveling picture gallery, and pictures of public libraries, decorated school rooms and other phases of their work in general education.

Ten thousand folders were distributed as a "Souvenir from the School Children of Colorado," containing the blue columbine, the State flower, gathered, pressed and mounted by children in the mountain districts.

The prizes awarded the Colorado educational exhibit were the following: Grand prizes to collective exhibit, State of Colorado, department of public instruction; Colorado School for the Deaf and Blind (copy of grand prize given to the American Association of Instructors for the Deaf and Blind). Gold medals to Colorado School for the Deaf and Blind, Lottie Sullivan (deaf, blind girl), collaborator; Denver public schools, collective exhibit, elementary education; Denver public schools, collective exhibit, secondary education; Denver public schools, manual training and art, secondary education; Colorado Springs public schools, collective exhibit, elementary education; Colorado Springs and Leadville, collective exhibit, secondary education; Colorado Fuel and Iron Company, camp kindergartens; Colorado Fuel and Iron Company, collective exhibit—camp kindergartens, women's clubs, girls' clubs and boys' clubs; "Evolution of the School House in Colorado;" State Industrial School for Boys; department of public instruction; Juvenile Court of Denver; State Normal School, Colorado School of Mines, collective exhibit; Colorado School of Mines, laboratory work, James B. Ragan, collaborator, State exhibit. Silver medals to University of Colorado, general exhibit; University of Colorado, special exhibit; Colorado College, general exhibit; State Agricultural College, mechanical engineering department; Pueblo public schools, District No. 20, elementary education; Denver schools, tissue paper art window; Pueblo and La Junta public schools, collective exhibit, secondary education: Colorado Fuel and Iron Company, housing working classes; State Industrial School for Girls, State Home for Dependent Children, Z. X. Snyder, collaborator; Normal School exhibit. Bronze medals to Leadville public schools, La Junta public schools, Black Hawk public schools and Weld county public schools, elementary education.

Colorado Teachers' Reading Circle—The members of the State Reading Circle Committee for the year 1903-1904 were Mrs. Helen L. Grenfell, Superintendent of Public Instruction, chairman; Dr. B. O. Aylesworth, president State Agricultural College, and Professor James H. Hays, of the State Normal School. Mr. James E. Snook, county superintendent of schools, Greeley, Weld county, was the business manager. The books adopted for this period were McMurry's "Elements of General Method," and "Jean Mitchell's School," by Angelina W. Wray.

The members of the State Reading Circle Committee for the year 1904-1905 were Mrs. Helen L. Grenfell, Superintendent of Public Instruction, chairman; Professor James H. Hays, State Normal School, and Joseph F. Daniels, Librarian, State Agricultural College. Mr. W. P. Herrick, Denver, was the business manager. The books adopted for this year were White's "Art of Teaching," and Brigham's "Geographic Influences in American History."

There are 1,533 school districts in the State, divided as follows: First class, 20; second class, 41, and third class, 1,472. In 1903, eighty school houses were built, and in 1904, seventyeight were erected. In 1903, 107 teachers' associations were held, and in 1904, 110 were held. There are 10 counties in the State reporting manual training, making a total of twenty-seven school districts, as follows: Bent, Boulder, Clear Creek, Denver, El Paso, Lake, La Plata, Mesa, Montezuma and Pueblo.

Domestic Science is reported from four districts—Denver, Aspen, Pueblo No. 1 and Pueblo No. 20.

Kindergartens are reported as established in twenty districts, found in the following counties: Conejos (1), Denver (1), El Paso (1), Gunnison (1), Huerfano (1), Larimer (2), Las Animas (7), Mesa (1), Otero (1), Pitkin (1), Prowers (1), Pueblo (1) and San Miguel (1).

Supervisors of Music are reported as employed in thirty-one districts, as follows: Bent (1), Boulder (2), Clear Creek (1), Denver (1), El Paso (4), Gilpin (2), Jefferson (2), Lake (1), La Plata (1), Larimer (2), Las Animas (1), Logan (1), Mesa (1), Morgan (1), Otero (1), Phillips (1), Pitkin (1), Pueblo (2), San Miguel (1), Teller (2), Weld (2).

Supervisors of Drawing are reported as employed in twentythree districts, as follows: Boulder (2), Clear Creek (1), Denver (1), El Paso (4), Gilpin (2), Jefferson (2), Lake (1), La Plata (1), Las Animas (1), Logan (1), Morgan (1), Otero (1), Pitkin (1), Pueblo (1), San Miguel (1), Weld (2).

Organized high schools have been reported as follows:

County High Schools, 9—Bent, Douglas, Gunnison, Logan, Montrose, Phillips, Rio Blanco, Saguache, Sedgwick.

Union High Schools, 4-Mesa, Morgan, Otero, Prowers.

District High Schools, 59—Adams (1), Boulder (2), Chaffee (2), Cheyenne (1), Clear Creek (3), Conejos (1), Denver (4), Delta (3), El Paso (4), Fremont (3), Garfield (3), Gilpin (1), Hinsdale (1), Huerfano (1), Jefferson (3), Lake (1), La Plata (1), Larimer (3), Las Animas (1), Mesa (1), Montezuma (1), Morgan (1), Otero (1), Ouray (1), Pitkin (1), Prowers (1), Pueblo (2), Rio Grande (2), Routt (1), San Juan (1), San Miguel (1), Teller (2), Washington (1), Weld (2), Yuma (1).

County teachers' examinations were held at each county seat on the following dates: December 19-20, 1902, March 20-21, 1903, August 20-21, 1903, December 17-18, 1903, March 17-18, 1904, and August 18-19, 1904. At each of the above March and December examinations the State Superintendent's department of the Colorado bar examination was also given and six certificates were issued. Examinations for State certificates were held on August 26-27-28, 1903, and August 24-25-26, 1904. These dates also cover the State kindergarten examinations, two applicants receiving diplomas. Dental college entrance examinations were held October 1, 1903, and October 1, 1904, and six certificates were granted.

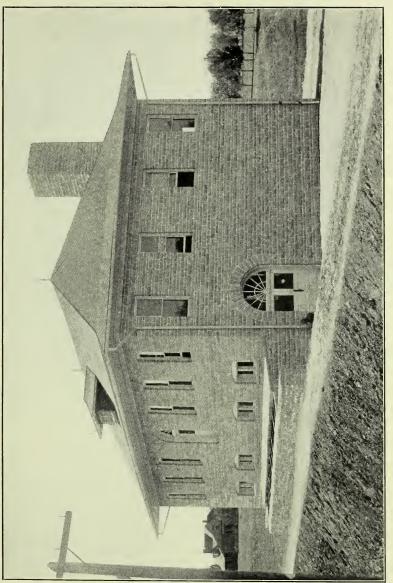
Annual educational meetings were held as follows: The Colorado Teachers' Association, Colorado Springs, December 22-23-24, 1902, and Denver, December 28-29-30-31, 1903. The educational council of the Colorado Teachers' Association met at Denver on April 3-4, 1903, and December 28, 1904. The Superintendents' and Principals' Round Table of the Colorado Teachers' Association met at Denver April 3-4, 1903, and at Pueblo March 31-April 1, 1904. The County Superintendents' Association held two meetings, one at Pueblo May 12-13-14, 1903, and one at Glenwood Springs May 10-11-12, 1904.

The Normal Institute districts of the State held sessions as follows: District 1, Wray, July 13-24, 1903; Fort Morgan, June 20-30, 1904, and Holyoke, July 11-23, 1904. District 2, Greeley, August 3-14, 1903; Boulder, August 1-12, 1904. District 3, Denver, August 3-14, 1903; Denver, June 20-July 1, 1904. District 4, Golden, June 8-14, 1903; Golden, June 8-17, 1904. District 5, Colorado Springs, August 9-22, 1903; Colorado Springs, August 1-12, 1904. District 6, Cheyenne Wells, August 24-September 5, 1903; Burlington, June 20-July 1, 1904. District 7, Pueblo, August 10-21, 1903; Canon City, June 6-18, 1904. District 8, La Junta. August 3-14, 1903; Las Animas, June 6-17, 1904. District 9, Trinidad, August 10-21, 1903; Trinidad, August 8-19, 1904. District 10, Monte Vista, August 10-21, 1903; Saguache, July 18-30, 1904, and Alamosa, August 1-12, 1904. District 11, Mancos, August 24-September 4, 1903; Durango, June 20-July 1, 1904. District 12, Delta, July 27-August 8, 1903; Grand Junction, June 20-July District 13, Glenwood Springs, August 10-21, 1903; 1, 1904. Salida, August 1-12, 1904.

id 14 Total	. 1.160	645	480	3U.	498	3,601	1.184		811E 188	1.597	IA E	406	1.317 T. T. T	23,500	6 8	408	403	• 593	6,426	2,427	1,038
Between 8 and 14 Female	571	308	234	8	238	1,833	584	39	415	793	365	181	662	11,843	9 <del>1</del>	199	195	282	3, 237	1.226	500
Male	589	337	246	0.2	260	1.768	600		416	804	408	. 219	(55)	- 11,657	44	209	208	311 -	3,189	1,201	538
3. Total	2,457	1,414	888	266	1,019	7,199	1,981	150	1,980	3,676	1.608	887	2,650	, 44.050	186	921	753	1,155	11,053	5,333	1,945
Between 6 and 21 Female	1,161	699	467	118	489	3, 649	1,003	22	964	1,859	776	414	1, 320	22,436	68	445	353	549	5,567	2,668	945
Male	1.296		421				978						$\dots \dots 1.330$		26				5.486		1.000
COUNTIES	Adams	Arapahoe	Archuleta	Baca	Bent	Boulder	Chaffee	Cheyenne	Clear Creek	Conejos	Costilla	Custer	Delta.	Denver	Dolores	Douglas.	Bagle	Blbert.	El Paso	Fremont	Garfield

TABLE I.

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ELECTRICAL ENGINEERING BUILDING AND CENTRAL HEATING PLANT, STATE AGRICULTURAL COLLEGE, FT. COLLINS.

939	920	1,889	399	409	808
	113	227	73	60	133
	628	1,271	314	294	608
	178	343	65	86	151
	1,535	3,306	893	830	1,723
	1,626	3,407	862	175	1,637
	84	175	47	25	92
	330	635	148	197	345
	1.673	3,190	101	759	1,460
	1,634	3,202	883	. 871	1,754
	2,692	5,472	1,519	1,476	2,995
	4,352	8,636	2,206	2,376	4,582
	176	351	81	74	155
	502	1,046	252	222	474
	1,807	3,705	026	868	1.868
	161	325	69	88	157
	483	947	234	. 223	457
	608 .	1,662	425	436	861
	£09	1,272	314	295	609
	2,337	4.925	1,128	1,106	2.234
	464	1,019	303	253	556
	351	702	143	131	274
	295	579	139	146	285
	854	1,672	417	482	868
	856	1,758	524	419	943

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CENSUS, 1903-Concluded.

COUNTIES	Male	Between 6 and 21 Female	Total	Male	Ectween 8 and 14 Female	Total
Pueblo	7,633	7,572	15,205	3,729	3,675	7,404
Rio Blanco	303	235	538	143	108	251
Rio Grande	780	821	1,601	339	* 394	733
Routt	715	633	1,348	477	440	216
Saguache	661	636	1,297	351	319	029
San Juan	224	198	422 👞	98	90	188
San Miguel	475	431	906	211	201	412
Sedgwick	220	208	428	104	104	208
Summit	288	252	540	128	108	236
Teller	$\dots 2,793$	2,758	5,551	1, 254	1,231	2,485
Washington	323	251	574	100	103	203
Weld	3,277	3,071	6, 348	1,556	1,451	3,007
Yuma	595	546	1,141	222	185	407
Totals		89,122	179,186	45,585	45,180	90,765

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		S	UP	ERI	NT	EN	DE	NT	0]	FI	PUI	BLI	C 1	INS	TR	UC	TIC	DN.				31
	Total	838	832	470	124	219	3,617	954	16	816	1,736	202	347	1.605	21,360	87	382	354	585	4,527	2.299	1,178
	Between 8 and 14 Female	424	400	238	19	301	1,827	498	41	391	879	348	164	788	10,836	43	195	177	273	2,335	1,172	562
	Male	414	432	232	63	316	1,790	456	50	425	857	357	183	817	10.524	44	187	177	618.	2,192	1,127	616
	Total	1,595	1,545	975	268	1,084	7,686	2,058	178	1,888	3,790	1,635	826	2,890	45,166	139	899	746	1,110	10,132	5.053	. 2,117
CENSUS, 1904.	nd 21																	)				
CENS	Between 6 and 21 Female	773	740	504	711	532	3,861	1,088	86	912	1,830	784	388	1,428	, 23,015	69	445	348	529	5,211	2,515	1,031
	Male I	822	805	471	151	552	3,825	970	92	926	1,960	851	438	1,462	.22,151	02	454	398	581	4,921	2,538	1,086
	COUNTIES	Adams	Arapahoe	Archuleta	Baca	Bent	Boulder	Chaffee	Cheyenne	Clear Creek	Conejos	Costilla	Custer	Delta	Denver	Dolores	Douglas	Eagle	Elbert	El Paso	Fremont	Garfield

TABLE II.

Totol	. 814	146	670	154	2,002	1,600	87	282	1,368	1,479	2,791	3,876	164	492	2,026	162	461	922	104	2.213	502
Between 8 and 14	1 CHIMIC 393	02	329	7.6 °	961	. 780	45	157	269	752	1,333	1,990	70	s H-2	1,027	67 67	203	125	335	1.074	142
A fold	421	92	341	28	1,041	820	42	125	129	727 -	1,458	1,886	94	248	666	89	228	451	369	1,139	261
Lator	1.757	296	1,365	280	3,535	3,525	177	598	3,043	2,908	6, 292	7,890	335	1,109	4,146	319	966	1,708	1,415	4.314	1,052
CENSUS, 1904. Between 6 and 21	221 921	. 135	229	141	1,700	1,723	89	304	1,575	1,434	3,063	3,834	167	522	2,057	152	497	830	678	2,058	- 265
			Gunnison 688	Hinsdale 139	Huerfano1,835	Jefferson	Kiowa	Kit Carson 294	lake 1,468	La Plata1,474	Larimer 3,229	Las Animas 4,056	Lincoln 168	Logan 587	Mesa 2,089	Mineral 167	Montezuna 469	Montrose	Morgan 737	Otero	Ouray 555

TABLE II.—Concluded.

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				SU	PE	RII	NTI	eni	DEN	T	OF	P	UB	LIC		ISI	RU	CTION
292	248	865	. 958	7,966	287	785	756	622	194	407	183	236	2,375	286	3,295	290	86,984	
144	129	443	409	3,823	125	416	367	292	100	195	92	. 116	1,153	135	1,572	377	43,192	
148	119	422	549	4,143	162	369	389	330	94	212	91	120	1, 222	151	1,723	413	43,792	
710	536	1,655	1,786	14,704	599	1,617	1,537	1,310	392	887	411	467	4,942	574	7,026	1,512	179,475	- 1
348	266	847	834	7,323	265	830	731	630	190	411	. 213 .	219	2,325	252	3, 347	721	89,012	
Park	Phillips	Pitkin	Prowers	Pueblo	Rio Blanco	Rio Grande	Routt 806	Saguache 680	San Juan 202	San Miguel 476	Sedgwick 198	Summit	Teller	Washington	Weld	Yuma 791	Totals	

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			THUNDER	NTY INTED	ENNOLLMENT AND ATTENDANCE, 1300	VANCE, 130	.o.					
COUNTIES,	Enrolled in High Schools.	Enrolled in Graded Schools Below High Schools.	Enrolled in Rural Schools.	Enroll Male.	Whole Number Bnrolled in Public Schools. Male. Female. Total.	nber s Schools. Total.	Xumber Completing Eighth Grade.	Number Completing Full Four-year Course in High School.	Xumber Between 8 and 14 Enrolled in Public Schools,	Average Daily Attendance,	Private Schools. Private Schools.	
Adams	20	412	1,248	842	838	1,680	40		824	268	31	
Arapahoe	43	543	323	484	425	606	31		• • •	ā82	:	
Archuleta	:	214	313	275	252	527	:	:	234	* 312	4	
Baca	:	:	162	82	80	162	°° ,	:	66	109	:	
Bent	36	364	419	422	397	819	24	60	489	527	:	
Boulder	423	3,655	1,873	2,958	2,993	5,951	191	:	3,610	4,026		
Chaffee	57	813	1,168	984	1,054	2,038	50	9	915	1,059	:	
Cheyenne	4	53	65	61	61	122	9	:	56	28	:	
Clear Creek	119	1,194	186	750	749	1,499	74	16	965	1,105	42	
Conejos	:	1,294	1,102	1,298	1,098	2,396	14	:	1,284	1,446	140	
Costilla	15	490	592	585	512	1,097	14		623	611	122	
Custer		279	362	339	302	641	16	:	422	479	38	
Delta	124	1,107	686	1,067	1,153	2,220	- 82	10	1, 137	1,356	:	
Denver	2,600	27,760	*1,921	14, 828	15,532	30,360	1,203	515	18,207	21,222	•	

\*Enrolled in kindergartens.

## TABLE III.

ENROLLMENT AND ATTENDANCE, 1903.

34

				$\mathbf{s}$	UP	ER	[N]	EN	DE	NT	0	FI	PUI	BLI	CI	INS	TR	$\mathbf{UC}$	TIC	DN.			e, e	35
	:	:	•	:	182	:		139		::	•••••	:	•	:	1	:	98	:	265	:	:	184		:
	109	516	403	. 530	6,212	3,012	1,147	888	131	723	196	1,213	1,820	112	298	1,572	1,399	3,235	3,080	144	. 614	2,170	200	462
	89	445	. 351	517	4,993	3,405	1,091	784	115	576	151	1,330	1,520	105	293	1,188	1,296	2,496	3,539	155	550	1,941	130	408
•	::	5	••••	:	:	38	2	4	:	1	τœ	:	16	:	:	14	~	42	13	:	8	14	:	:
•	2	15	4	15	160	120 '	38	51	10	39	4	21	94	:	ũ	47	29	139		10	44	110	:	20
	186	814	676	873	8,700	3,375	1,777	1,262	159	1,066	279	2,103	2,495	159	534	2,093	2,146	4,403	5,604	264	196	3,210	313	812
	88	408	307	418	4,511	1,717	887	647	29	543	153	1,030	1,228	79	287	1,083	1,078	2,218	2,748	125	479	1,588	152	391
	26	406	369	455	4,189	1,658	890	615	92	523	126	1,073	1,267	80	247	1,010	1,068	2,185	2, 856	139	482	1,622	161	421
	47	632	404	715	1,179	577	206	152	159	470	62	934	1,185	159	344	299	. \$80	1,771	1,891	82	573	1,448	69	427
	139	146	262	158	6,887	2,533	1,020	1,040		564	184	1,137	1,125	:	190	1, 555	1,131	2,358	3,562	182	303	- 1,592	244	358
	÷	36	10	:	634	265	51	20	:.	32	16	32	185	÷	÷	239	135	274	151	:	85	170	÷	27
	Dolores	Douglas	Eagle	Elbert	El Paso	Fremont	Garfield	Gilpin	Grand	Gunnison	Hinsdale	Huerfano	Jefferson	Klowa	Kit Carson	Lake	La Plata	Larimer	Las Animas	Lincoln	Logan	Mesa	Mineral	Montezuma

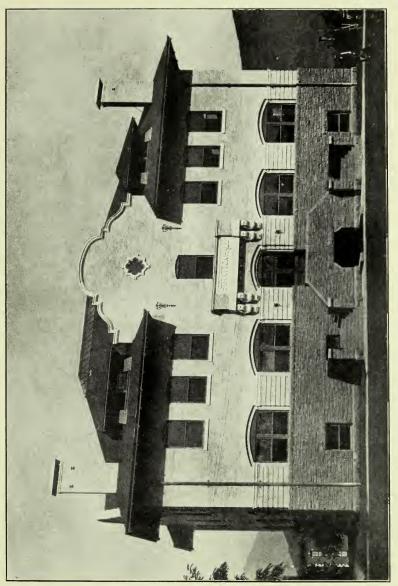
Private Schools.	r i	:	21	:	63	:	:	:	600					:		
ni Dəllər Enrolled in		•		•		•	•	•		·				·		
Average Daily. Attendance.	980	756	2,249	584	292	325	1,179	856	5,974	230	915	675	493	239	121-	
Number Between 8 and 14 Enrolled in Public Schools, ,	800	547	1,949	158	297	337	1,068	622	5,431	218	7.67	647	536	183	444	
Number Completing. Full Four-year Course in High School.	Ē	2	14		•	:	25	4	56	:	18	:	1	1	1	
Zumber Completing Bighth Grade	47	33	43	13	31	11	34	51	206	11	30	16	26	:	27	-
ber Schools. Total.	1,391	1,168	3, 863	803	453	547	1,600	1,465	8,997	400	1,334	1,052	S87	342	804	
Enrolled in Public Schools. Male. Female. Total.	269	559	1,886	394	226	277	827	740	4,629	181	619	516	453	194	382	
Enroll Emale.	694	609	1,977	409	227	270	773	725	4,368	219	715	536	434	148	422	
Enrolled in Rural Schools.	653	459	269	285	268	380	322	716	1,355	185	540	595	554	41	292	
Enrolled in Below High Schools, Below High School	664	629	2,864	503	185	146	1,147	710	7,084	194	705	399	271	281	492	
dziH ni bəllod Schools.	74	80	302	15	÷	21	131	39	558	21	68	58	62	20	20	
COUNTIES.	Montrose	Morgan	Otero	Ouray	Park	Phillips	Pitkin	Prowers	Pueblo	Rio Blanco	Rio Grande	Routt	Saguache	San Juan	San Miguel	

# TABLE III.-Concluded.

ENROLLMENT AND ATTENDANCE, 1903-Concluded.

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**У**ЯЯАЯЯ ог тне 10 УГИСТ 10 УТИСТЗУИНИ 21 УГИСТЗУИНИ

		159				2,018					
266	302	3,074	244	3,219	438	87,996					
151	259	2,325	211	3,077	324	76,841				·	
1	••••	24	:	24	:	696					
11	11	181	Ŧ	156	24	3,682					
378	435	4,458	364	5,176	598	131,200	N.				
205	203	2,217	177	2,522	264	65,847					
173	232	2, 241	187	2,654	334	65, 353					
229	205	344	210	2,030	319	36,584					
123	230	3,810	144	2,855	248	88,532					
26	:	304	10	291	31	8,005					
Sedgwick	Summit	Teller	Washington	Weld	Yuma	Totals					

SUPERINTENDENT OF PUBLIC INSTRUCTION.

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umber Enrolled in Private Schools.	N	:	:	:	:	:	:	:		39	115	15	29	:	1,020	:
verage Daily Attendance.	V	657	865	311	145.6	299	4,213	1,155.5	94	1,105	1,565	649.7	395.87	1,659	23,529	66
umber between 8 and 14 Enrolled in Public Schools.		629	300	359	117	442	3,789	186	69	951	1,338	594	376	1, 522	17,547	2.8
umber Com- pleting full four- year Course in High School.		:	:	:	:	4	45	11	:	18	:	:	:	12	. 347	:
umber Com- pleting Eighth Grade.		53	48	5	1	44	237	56	Ŧ	69	5.8	13	6	82	1,303	:
ber Schools,	Total.	1,241	1,248	592	192	905	6,223	1,708	140	1,418	2,369	1,062	262	2,288	29,508	142
Whole Number Brrolled in Public Schools.	Female.	585	724	311	98	438	3,156	863	99	725	1,077	489	278	1,150	15,099	6 <u>1</u>
Enrolle	Male.	656	524	281	94	467	3,067	845	74	693	1,292	573	319	1,138	14,409	69
nrolled in Rural Schools.		209	366	365	192	413	1,669	470	68	96	1,111	579	343	952	:	39
nrolled in Graded Schools Below High Schools.		516	839	227	:	448	4,122	1,138	29	1,184	1,238	468	254	1,169	26, 725	103
ntolled in Righ Schools.		16	43	:	:	44	432	100	13	138	20	15	:	167	2, 783	÷
COUNTIES.		Adams	Arapahoe	Archuleta	Baca	Bent	Boulder	Chaffee	Cheyenne	Clear Creek	Conejos	Costilla	Custer	Delta	Denver	Dolores

ENROLLMENT AND ATTENDANCE, 1904.

TABLE IV.

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				st	PE	RI	NTI	eni	DEN	۲V	OF	' P	UB	ы	5 L	NS.	rrt	JCI	SIO.	N.			é	39
i	4	:	:	:	į	122	:	÷	:	:	:	:	÷	:	100	:	460	:	:	80	:			:
504	427	563	5,945.9	2,568	1,264	920	152	774	163	1,166	1,844	104	222	1,386	1,259.55	3,056	3,493	170.9	629	2,420	176.5	437.6	1,011	208
456	477	571	5,256	2,577	1, 227	748	11.7	690	129	1,276	1,622	83	315	1,089	1,486	2,975	3,836	172	511	2.206	152	433	885	674
00	:	:	:	56	**	10	:	00	:		25	:	:	12	14	45	15	:	13	6		:	:	13
46	20	32	165	140	64	22	4	25	15	27	124	1	20	64	68	129	Ľ	1	29	122	•	8	51	47
743	683	837	8,493	4,604	1,928	1,172	192	1,106	219	2,195	2,628	128	486	1,917	2, 220	4,983	6,149	288	976	3,568	280	208	1,464	984
361	329	402	4,377	2,341	939	593	89	576	109	1,021	1,280	70	252	1,002	1,149	2,484	3,019	159	473	1,778	137	369	741	430
382	351	435	4,116	2,263	686 .	579°	103	530	110	1,174	1,348	58	234	915	1,071	2,499	3,130	129	503	1,790	143	339	723	- 554
591	303	674	1,137	492	807	106	140	485	62	888	1,270	128	295	258	792	2,007	1,862	115	447	1,809	64	330	652	374
120	380	163	6,678	3,756	1,030	1,005	52	574	146	1,280	1,096	:	191	1,442	1,283	2,651	4,132	173	427	1,615	216	366	725	517
32	:	÷	678	356	91	61	:	47	11	27	262	:		217	145	325	155	:	102	144	÷	12	28	93
Douglas	Eagle	Elbert	El Paso	Fremont	Garfield	Gilpin	Grand	Gunnison	Hinsdale	Huerfano	Jefferson	Kiowa	Kit Carson	Lake	La Plata	Larimer	Las Animas	Lincoln	Logan	Mesa	Mineral	Montezuma	Montrose	Morgan

Number Enrolled in Private Schools.	•		:	•		:	700	:	:	:	:	•	:	•••••	
Average Daily Attendance.	2,500	611	311	349	1,128	1,065	6,123	280	912	813	665	232	493	256	247
Number between 8 and 14 Enrolled in Public Schools.	1,996	470	225	311	866	259	6,356	265	837	. 661	563	183	406	222	225
Number Com- yest Course in High School.	:	9	••••	2	10	-	58	:	12	:	2	:	:	60	:
Number Com- pleting Eighth Grade.	111	19	60 	13	48	50	156	13	49	4	30	:	21	15	15
ther 5 Schools. Total.	4,082	815	414	541	1,451	1,617	9,123	431	1,248	1,190	934	344	282	370	377
W hole Number Enrolled in Public Schools. Male. Female. Total.	2,044	. 397	207	281	747	786	4,755	194	654	591	. 484	168	371	205	194
Enroll. Male.	2,038	418	207	260	704	831	4,368	237	594	599	450	176	414	165	183
Enrolled in Rural Schools.	793	419	226	379	288	662	1,344	173	484	587	÷ 630	31	330	236	185
Enrolled in Graded Schools Below High Schools.	3,041	353	188	139	1,075	914	7,169	235	658	541	245	295	425	98	181
Enrolled in Ligh Schools.	248	43	÷	23 -	88	41	610	23	106	62	59	18	30	36	11
COUNTIES.	Otero	Ouray	Park	Phillips	Pitkin	Prowers	Pueblo	Rio Blanco	Rio Grande	Routt	Saguache	San Juan	San Miguel	Sedgwick	Summit

TABLE IV.—Concluded. ENROLLMENT AND ATTENDANCE, 1904.—Concluded.

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STATE NORMAL SCHOOL, GREELEY, COLO.

LIBRARY of the University of 1.1.1 '019 Of the

				SOL	
145	:		:	2,889	
2,714.25	354.7	3,380	899	95,117.07	
2,682	357	3,348	718	80,748	
27		29	:	814	
131	8	306	23	4,322	
4,728	539	5,410	1,277	134,260	
2,537	253	2,615	602	67,697	
2,191	286	2,795	675	66,563	
347	386	2,135	986	34,081	
3,846	138	2,957	226	91,240	
Teller 535		Weld 318		Totals	

\*

SUPERINTENDENT OF PUBLIC INSTRUCTION. 41

#### FOURTEENTH BIENNIAL REPORT

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TABLE V.

SUPERINTENDENT OF PUBLIC INSTRUCTION.

Dolores	Ţ	67	3 1	110.00	75.00	÷	5	5	:	42.50	1	\$7	60	÷	es e	c0	2,940.00
Douglas	ч	5	ŝ	00.77	55.00	9	30	36	51.00	44.16	-	67	ಾ	9	32	38	13,260.00
Eagle	ŝ	0	~	82.50	64.50	4	17	21	62.50	58.80	ç0	2	10	0	26	31	12,761.50
Elbert	5	2	4	20.00	52.50	4	40	44	47.50	34.06	4	00	2	4	22	26	12,299.54
El Paso	18	148 1	166	95.57	71.35	14	44	58	49.44	43.36	19	148	167	16	51	67	151,389.19
Fremont	22	02	92	83.75	58.25	9	24	30	56.66	50.15	23	72	95	2	29	36	69, 289.75
Garfield	9	18	24	94.00	66.50	00	26	29	61.00	50.80	9	19	25	4	28	32	25,967.25
Gilpin	ĿО	22	27 1	112.43	66.50	÷	10	10		45.47	ъ	22	27	÷	18	18	21,872.25
Grand		:	:	:	÷	Т	4	ŗĢ	60.00	36.00	:	:	:	1	6	10	1,603.00
Gunnison	ю	~	13	81.50	56.50	10	23	33	50.00	43.00	ŝ	11	16	10	40	50	17,901.19
Hinsdale		4	5	100.00	65.00	1	ŝ	4	75.00	53.33	Ţ	4	ro	г	t	×	5,145.00
Huerfano	G	16	21	82.20	56.09	12	19	31	50.58	43.95	LO.	25	30	11	23	34	17,983.25
Jefferson	6	17	26	82.24	55.64	ß	49	54	49.44	44.49	6	20	29	9	29	73	37,156.85
Kiowa	:	:	:	:	:	4	6	13	49.00	47.00	÷	÷	÷	4	6	13	4,536.25
Kit Carson	e0	10	~	46.66	43.75	9	30	36	36.40	36.47	~	ß	8	9	34	40	1,105.21
Lake	~	38	46	98.07	50.43	2	6	11	70.00	75.94	10	39	. 49	67	6	11	44,085.20
La Plata	:	23	23	:	67.75	1~	20	27	62.91	50.14	ŝ	27	30	12	34	46	10,031.08
Larimer	10	41	51	68.00	57.80	12	51	63	53.00	43.80	10	42	52	14	55	69	51,292.97
Las Animas	16	48	64	70.83	54.87	27	30	57	43.50	43.00	16	53	69	30	41	17	53,863.31
Lincoln	60	2	10	66.66	46.66	÷	10	10	:	37.64	60	2	10	÷	10	10	5.765.00
Logan	4	9	10	66.66	53.33	6	26	35	39.44	36.56	4	9	10	6	27	36	13,064.12
Mesa	~	30	38 1	105.72	63.00	12	29	41	57.10	52.00	6	35	44	12	32	44	37.851.00
Mineral	2,	ŝ	5 1	100.55	69.33	:	c0	69	:	55.00	e0	3	9	÷	۰۵.	ရာ	4.225.80
Montezuma	60	9	6	73.33	50.80	9	11	17	51.66	47.63	4	9	10	8	14	22	9,722.00
Montrose	5	13	15	93.05	65,00	4	17	21	56.25	52.35	5	13	15	4	17	21	16.790.00

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#### FOURTEENTH BIENNIAL REPORT

	TEA	CHEI	RS AN	TEACHERS AND SALARIES, 1903-Concluded.	ARIE	S, 1903	-Cor	icluded	J.					)		
		Æ	eacher	Teachers Employed at One Time.	oyed a	at One	Time	di.		Nu	Number of Different Teachers	of Dif	feren	t Tea	chers	SJ
		Grade	Graded Schools.	ols.		Rt	ural S	Rural Schools.			ลี	Luring the Year	rne 1	ear.		sə X əyər nou
COUNTIES.			Mon	Average Monthly Salarv.				Average Monthly Salary	Average Monthly Salary	Grae	Graded Schools.	hools		Rural Schools	hools.	те, Ат вэТ эйт ;
	.9IBM	Female.	Total. Male.	Female.	.9IsM	Female.	.IstoT	Male.	Female.	.9IBM	Female.	.ІвтоТ	.9IsW	Female.	.IstoT	Aggrega bisq gninuU
Morgan	10	8 13	3 64.20	63.75	8	10	18	50.07	47.00	9	8	14	6	10	19	16,645.00
Otero 1	19 59	9 78	88.50	57.31	ŝ	22	25	53.33	49.63	19	59	78	ço	22	25	36,106.50
Ouray	1 10	11 (	1 125.00	00.22	4	11	.15	63.75	61.59	1	11	12	:0	14	17	14,968.94
Park	ero	, 	6 90.00	60.00	5	20	25	54.00	44.50	00	60	9	t	26	33	11,216.05
Phillips		00	3	50.00	4	25	29	37.50	34.66	:	60	00	÷	34	38	8,203.50
Pitkin	9 23	32	2 53.90	13.75	1	13	14	60.00	56.25	10	26	36	1	19	20	27, 728.59
Prowers	3 16	3 19	92.00	56.00	~	20	28	44.00	42.00	33	17	20	ø	20	28	18,818.50
Pueblo 1	11 193	3 204	131.50	65.50	19	40	59	50.00	48.00	11	209	220	23	47	70	169,051.75
Rio Blanco		4	4	62.20	4	9	10	50.00	54.00	÷	5	ro	4	9	10	5,117.80
Rio Grande	5 14	1 19	9 88.00	63.60	~	17	25	52.00	44.12	£	15	20	6	21	30	20,320.75
Routt	ro	8 13	3 69.16	50.00	6	25	34	46.38	46.10	2	10	15	13	42	55	11,443.17
Saguache	4	10	9 72.50	55.00	6	21	30	50.00	47.00	4	9	10	14	22	36	11,522.00
San Juan	63	9	8 117.50	77.50	:	4	ł	:	65.00	-01	9	~	÷	5	5	8,288.75
San Miguel	c2	8 11	1 126.66	92.00	2	10	12	67.33	63.67	**	x	11	\$F	16	18	20,453.50
Sedgwick	67	c.1	4 - 65.00	50.00	4	17	21	41.25	36.37	\$1	e0	12	7	17	21	7,284.75

TABLE V.—Concluded.

#### SUPERINTENDENT OF PUBLIC INSTRUCTION. 45

7,363.00	38,139.10	6,967.50	77,757.91	9,030.10	,495.93
7,	98,	6,	77,	6	\$2,048
15	16	25	80	28	1,802
13	13	23	69	22	1,425
5	00	01	11	9	377
9	126	8	86.	10 6	2,217
4	112	t	68	\$	1,850
2	14	1	18	2	367
11 72.50 45.56	57.77 14	36.66 31.82	48.85	38.75 35.38	\$45.10
72.50	57.50	36.66	54.00	38.75	\$46.14
11	14	23	71	23	1,549
6	11	21	61	17	1,207
2	60	67	10	9	342
73.33			59.20	42.00	<th< td=""></th<>
32.50	119 109.23	75.00	85.65	65.00	\$76.63
9	119	00	81	6	2,087
4	105	L	65		.359 1,728
5	14	-	16	5	359
discussion of the second s	14	Tener	Washington	Weld	ruma

#### FOURTEENTH BIENNHAL REPORT

	ar srs ar	Graded Schools Rural Schools Acords Acords Cree Ye	Female Total Male Female Total Total Faid During	14 16 2 24 26 $\$$ 16,999.99	<b>33 39 1 20 21 19,852.60</b>	4 5 3 13 16 4,975.36	6 7 13 2,373.50	12 14 2 16 18 14,855.41	90 102 8 67 75 81,312.47	26 34 10 22 32 28,063.25	2 3 1 6 7 3.975.00	29 37 1 6 7 26,377.50	18         27         11         16         27         16.815.48	4 14 14 14 28 10.185.70	4 5 19 19 6,319.50	22 26 12 20 32 30 <u>.</u> 666.89	659 760 628,598.51	2 3 1 2 3 6,090.00	
			əlsM	67	9	1	÷	©1	12	8	1	8	6	10	1	4	101	1	
		chools Average Monthly Salary	Female	\$51.21	45.00	51.25	35.71	45.00	46.10	52.52	40.00	53.89	43.05	40.42	41.11	51.10	:	45.00	
4	PIME.	ools Avei onthly	9[sM	\$50.00	60.60	55.00	41.51	55.00	61.00	56.66	50.00	60.00	47.26	42.00	:	53.86	.:	55.00	
S, 190	ONE	Rural Schools Av Month	Total	26	21	10	12	17	62	28	7	9	24	25	18	32	:		
ARIE	AT (	Rur	я Гепія І	24	20	80	9	15	56	20	9	5	14	12	18	20	:	\$1	
SAL	KEL	ry	эlяM	67	-	61	6	¢1	9	~		1	10	13	:	12	:	_	
AND	OIII	erage y Sala	F'emale	\$58.68	59.50	60.00	:	64.00	55.67	57.50	50.00	60.00	53.75	55.00	66.25	59.79	80.00	75.00	
TEACHERS AND SALARIES, 1904	TEACHERS EMPLOYED AT ONE TIME.	Graded Schools Average Monthly Salary	ыяM	\$90.00	67.60	85.00	:	80.00	87.62	95.00	65.00	101.00	64.65	53.00	80.00	108.66	103.26	110.00	
FEACE	ACHE	raded	ІвјоТ	15	39	ro	÷	13	90	30	00	35	26	11	10	26	744	60	
5	TE	Ċ	əlsməA	14	33	4	÷	11	78	23	Ċ,	27	17	4	4	22	645	¢1	
			9[sM	1	9	Ч	÷	67	12	2	1	80	6	t-	1	4	66	1	
			Counties	Adams	Arapahoe	Archuleta	Baca	Rent	Esculder	Chaffee	Cheyenne	Clear Creek	Conejos	Costilla	(Juster	Delta	Denver	Dolores	

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TABLE VI.

			X	UP	ER	IN'I	FEN	<b>UDE</b>	IN I	° 0	F	PU	BLI	с	INS	STR	UC	TIC	)N.				47
15,574.98	12,391.00	167, 817.92	76,257.00	31.652.50	22,358.25	2,254.00	18,912.21	5.022.50	20,948.75	37,463.30	4.125.00	10,982.00	42,169.30	12.171.10	52,056.66	60.058.36	6,402.50	15.954.00	43, 757.35	4.159.00	12.791.75	18.365.00	19.048.00
27	18	65	34	33	17	8	50	2	34	30	13	38	11	44	29	68	14	35	56	e0	15	20	21
25	16	55	28	27	16	- ا	47	9	20	27	10	33	11	35	57	49	12	27	39	60	11	15	17
¢1	61	10	9	9	Ţ	1	ಿ	-	14	c0	ಾ	ŗõ	÷	6	10	19	¢1	8	17	÷	4	ŝ	म्म
12	4	183	66	32	28	Ţ	15	r0	28	24	÷	~	50	34	60	62	6	15	41	ũ	13	16	83
6	ŝ	161	78	21	23	÷	10	Ŧ	23	16	÷	5	41	29	52	63	t~	6	60 00	60	6	13	19
60	H	22	21	11	10		10	-	5	×	÷	ŝ	6	10	×	16	\$1	9	×	¢1	4	00	4
55.50	32.88	46.00	51.00	51.14	45.15	42.50	53.22	49.16	45.47	50.00	48.00	37.50	76.50	57.05	50.20	46.00	40.00	37.46	54.00	55.00	52.50	51.66	47.20
65.00	48.45	51.00	56.00	65.83	60.00	60.00	64.16	80.00	50.77	55.00	48.00	37.75	:	60.80	53.47	47.50	50.00	39.33	52.00	:	53.75	58.00	52.50
20	48	09	28	30	11	~	50	4	32	50	13	35	11	26	61	61	11	63	51	¢0	15	20	19
18	43	50	22	24	10	2	47	eo	19	45	10	30	11	18	53	40	6	26	36	00	11	15	15
î٦	5	10	9	9	1	-	~	1	13	LC.	ŝ	ŝ	:	×	×	21	¢١	2	15	:	4	5	4
64.50	51.25	66.60	62.00	64.17	71.58	:	67.00	49.16	55.35	57.25	÷	41.00	66.75	57.64	59.16	56.50	47.50	50.41	66.50	69.30	54.12	70.76	60.00
82.50	65.00	100.00	93.00	87.41	113.00	65.00	79.00	80.00	82.25	81.00	:	52.00	90.37	80.40	95.00	74.20	72.50	67.63	91.50	95.00	74.15	87.37	76.00
12	4	175	26	30	26	1	14	ъ	25	31	÷	~	46	30	59	73	6	15	39	10	12	16	22
6	00	155	76	20	21	÷	10	4	20	20	:	5	38	26	47	58	7	6	32	00	90	13	19
60	1	20	21	10	r0	Ŧ	4	1	١Q	11	÷	00	~	4	12	15	¢1	9	2	¢1	4	0	ణ
Eagle .	Elbert	El Paso	Fremont	Garfield	Gilpin	Grand	Gunnison	Hinsdale	Huerfano	Jefferson	Kiowa	Kit Carson	Lake	La Plata	Larimer	Las Animas	Lincoln	l.ogan	Mesa	Mineral	Montezuma .	Montrose	Morgan .

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#### FOURTEENTH BIENNIAL REPORT

	SJ	the Yes	Aggregate Paid During	51, 129.80	15, 762.32	11,314.00	9,577.50	27,079.60	14, 451.80	173, 574.40	$6_2601.25$	20, 327.50	14,718.35	21.848.00	8,903.00	20.184.67	6,002.00	7,920.00
	ţu		11 RYOT'SY Å	51	15	11	6	27	14	173	.6	20	14	21	S	20	9	1-
		l Scl	IstoT	31	22	34	32	15	28	70	10	30	56	30	4	18	20	15
		Rural Schools	⊎ism9H	25	16	29	28	15	21	51	2	26	17	$^{50}$		17	35	11
		ools	2lsM	9	9	10	4	:	1-	19	60	4	6	10	÷	Ţ	13	C 1
		Selle	IstoT	$\overline{70}$	10	9	5 LO	35	26	229	9	20	19	12	10	10	13	[
		Graded Schools	Female	58	6	ŝ	4	28	22	215	9	15	14	9	6	8	ţ	L3
			9lsM	12	ч	ę	1	2	4	14	i i	ŝ	10	9	-	¢1		¢1
		schools Average Monthly Salary	Female	49.17	47.10	44.00	37.50	56.53	41.88	43.61	53.33	45.70	46.34	54.00	65.00	71.00	38.00	50.00
04.	TIME.	Rural Schools Aver Monthly	9[sM	47.00	65.00	48.00	36.25	:	45.40	64.00	56.66	48.66	49.00	59.00	:	100.00	36.00	75.00
S, 19	E E Z	ul Sch Ma	IstoT	26	16	23	32	14	28	70	9	24	34	29	4	12	$\overline{20}$	10
ARIE	AT OI	Rura	Female	20	11	18	28	14	21	51	9	21	29	20	4	11	15	×
SAL	ED	×.	Male	9	ß	2	+	:	2	19	ŝ	ŝ	13	6	:	1	13	¢1
AND	РГОҮ	ools Average ithly Salai	Female	52.22	73.44	60.00	43.75	71.16	53.00	60.00	61.50	61.00	54.00	56.00	80.00	79.00	55.00	73.12
TEACHERS AND SALARIES, 1904.	TEACHER'S EMPLOYED AT ONE TIME	Graded Schools Average Monthly Salary	θĺßΜ	86.11	125.00	86.66	110.00	94.75	82.00	127.00	÷	89.00	74.16	86.66	150.00	79.00	111.00	92.50
TEA(	CHE	aded	Total	02 -	11	9	5	30	26	206	ß	20	15	12	8	10	13	2
	TEA	Gr	Female	57	10	ę	4	23	22	193	ß	15	11	9	2	8	4	LC.
			əlsM	13	Ч	ŝ	Ţ	2	4	13	÷	10	4	9	Ч	67	-	¢1
			Counties	Otero	Ouray	Park	Phillips .	Pitkin	Prowers	Pueblo	Rio Blanco	Rio Grande	Routt	Saguache	San Juan	San Miguel	Sedgwick	Summit

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TABLE VI-Concluded.

#### SUPERINTENDENT OF PUBLIC INSTRUCTION. 49

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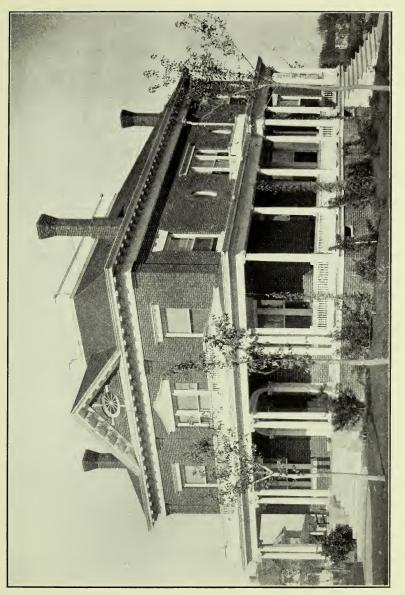
3 16 19 101,731.11	5 48 53 9,941.25	9 68 77 84,189.53	2 52 64 1,490.50		910 1 900 1 710 00 001 001 1
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139.00	80.00	89.35	58.66		\$88 14
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104	က	69 ±	6		9 049 9
13	Ţ	16	4		ADS
Teller .	Washington	Weld	Yuma		013

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TABLE VII.

PER CAPITA EXPENSES AND SCHOOL HOUSES, 1903.

	roominnu	11	1711	4144			1415	1 01							
	ni) noitsulsV dollars.)	\$ 56,145.00	45,000.00	7,130.00	5,493.00	30,965.00	111, 397.00	66,500,00	7,080.00	83,014.00	44,427.00	15,528.00	11.285.00	40,010.00	2,801,535.74
	Number of School- rooms both Owned and Rented.	98	48	13	16	29	137	22	10	41	46	38	29	F:	161
	Hous sex. Total.	06	30	12	13	20	14	30	1	17	88	66 6	60 67	:6	64
	X Chool Number of Brick ol or Stone. Total.	$^{20}$	20	:	00	ro	31	11	:	2	t	:	4	4	62
1903.	Number of Frame.	88	10	12	10	14	35	12	9	9	9	16	13	16	¢1
JUSES,	Xumber of Sod, Adobe or Log	37	:	:	:	• 1	×	7	1	4	20	17	9	13	:
IOUL H	Zumber Volumes in Libraries.	703	1,050		•	881	5,270	1,208	124	2,390	1,130	400	340	1,459	42,000
ND SCE	Number Libraries	16	12	1	:	11	31	2	Ŧ	6	10	10	00	14	·
PER CAPITA EXPENSES AND SCHOOL HOUSES, 1903	Average Cost per Month for Each Pupil by Average Attendance.	\$ 5.79	:	3.75	5.51	4.30	4.68	15.71	10.18	7.98	4.80	6.33	3.90	3.39	4.55
TA EA	Average Cost per Month . for Each Pupil by Enrollment.	\$ 3.90	:	2.93	3,85	2.41	2.74	10.81	7.58	5.09	2.40	4.37	2.68	2.26	3.34
SK CAFI	Number of Days of School During the Year in Rural Schools.	106.37	:	153	110.77	146	146	146.30	141	149.37	114	112	95.29	134.27	:
7	Number of Days of School During the Year in Graded Schools.	171.66	:	160	:	180	175	178.50	175	180	159	139	140	166.33	186
	, COUNTLES.	Adams	Arapahoe	Archuleta	Baca	Bent	Boulder	Chaffee	Cheyenne	Clear Creek	Conejos	Costilla	(*uster	Delta	Denver



### UNIVERSITY OF ILLINOIS OF THE **LIBRARY**

			s	UP.	ERI	LN'I	EN	DE	NT	01	F I	'UI	BLI	C I	NS	TR	UC'.	FIO	N.				51
8,250.00	28,550.00	24,425.00	22,768.00	743,690.00	186,050.00	82,322.00	68, 335.00	3,000.00	45,825.00	24, 250.00	47,415.00	500,995.00	9,475.00	23,385.00	133,600.00	105, 755.00	162, 475.00	176, 350.00	14,675.00	39,582.00	95,200.00	3, 750,00	18,950.00
9	37	29	49	231	114	56	37	8	48	6	54	22	16	40	54	59	155	116	21	50	8	6	29
00	33	23	47	83	54	35	16	8	89	10	35	50	15	35	16	33	64	99	14	39	42	ĿŌ	23
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12	580	1,467	30	12,863	1,605	2,406	4,314	100	1,125	500	1,311	2,778	•	885	4,011	1,544	3,511		627	734	6,355	••••••	410
60	ro.	6	5	88	9	16	10	1	12	1	10	14	÷	28	ro	6	28	÷	2	10	19	1	4
6.97	7.58	7.39	5.78	6.20	7.04	5.45	6.60	3.49	6.45	6.04	4.16	5.89	10.80	10.15	8.19	2.76	5.78	3.40	6.96	10.02	3.15	6.58	3.78
4.73	5.26	4.36	4.22	4.02	5.05	3.26	4.38	2.68	4.53	4.12	2.50	4.03	9.00	7.83	5.70	4.85	3.78	2.07	3.68	6.90	2.15	5.75	2.17
140	140	132.68	142.13	175.23	130	127	124	100.75	132.50	147.50	103	142	140	123	164	126.14	133	112.50	144	138	138.25	136.33	122.66
180	180	180	180	185	180	164	167.25	:	180	180	153	180	:	160	187.50	177.50	180	182	170	180	172.50	158.50	166.33
Dolores	Douglas	Eagle	Elbert	El Paso	Fremont	Garfield	Gilpin	Grand	Gunnison	Hinsdale	Huerfano	Jefferson	Kiowa	Kit Carson	Lake	La Plata	Larimer	Las Animas	Lincoln	Logan	Mesa	Mineral	Montezuma

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# PER CAPITA EXPENSES AND SCHOOL HOUSES, 1903.

	ni) nottsulsV (tasllob).	42,640.00	27,200.00	140,095.00	41,400.00	21,025.00	19,883.00	97,260.96	72,536.00	696,207.00	17,550.00	36,850,00	19,610.00	27,055.00
	Vumber of School- rooms both Owned and Rented.	37	32	90	29	99 99	34	-48	49	238	16	48	51	42
ouses.	.[вјоТ	19	22	35	17	29	31	20	30	80	11	29	40	38
School Houses.	Number of Brick or Stone.	4	2	18	2	Į	1	4	14	50	¢0	9		¢1
02	Number of Frame.	12	20	16	14	24	24	12	16	46	60	. 18	10	28
	Number of Sod, Adobe or Log.	60	:	1	1	4	9	4	:	10	Ъ	i.o	30	8
	Number Volumes in Labraries.	3,355		3,507	1,573	1,450	236	2,971	1,154	2,405	315	2,065	553	1,000
	Number Libraries.	17	:	13	11	12	63	12	12	19	2	∞	•	2
	Average Cost per Mo for Each Pupil by Average Attendanc	4.38	4.26	3.31	7.55	8,08	6.38	5.93	6.48	6.24	6.44	4.73	4.87	4.70
կյս	Average Cost per Mo for Each Pupil by Enrollment,	3.00	2.41	2.02	4.03	5.68	4.39	3.71	4.01	4.60	3.70	3.12	2.92	2.48
твэ)	Number of Days of School During the J In Rural Schools.	141	° 169	143	153	141	133	160	141	130	122	140	94.44	149.33
169J	Number of Days of School During the J in Graded Schools.	150	170	176	180	174	180	180	165	190	170	180	111.50	180
	COUNTIES.	Montrose	Morgan	Otero	Ouray	Park	Phillips	Pitkin	Prowers	Pueblo	Rio Blanco	Rio Grande	Routt	Saguache

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# SUPERINTENDENT OF PUBLIC INSTRUCTION. 53

12,000.00	89,639.00	20,888.00	13,800.00	324, 195.00	22,035.00	215, 755.00	15,912.00	,868,117.70
12	27	28	18	111	33	141	33	3,644 \$7
								°3
9	15	25	13	33	. 27	06	27	1,891
:	1	1	:	4	1	26	:	438
9	13	20	2	25	26	64	27	1,088
:	1	4	9	4	÷	÷	:	365
400	2,042	375	1, 140	1,045	325	5,392	800	135,726
1	6	0	10	10	e0	40	69	537
7.38	6.53	12.30	7.13	6.68	9.15	4.85	6.34	\$ 6.19
5.34	2.92	7.40	4.98	3.12	3.61	2.98	3.41	\$4.08
160	158	127	107	139	117	169.20	123.50	130
185	167.60	180	180	180	146	1.78.25	149	. 159
San Juan	San Miguel	Sedgwick	Summit	Teller	Washington	Weld	Yuma	Average

	-fob ni) noits .(s	lar Valu	85,735.00	48,500.00	20,850.00	6,564.00	43, 750.00	276,275.00	67, 392.00	6,720.00	83,520.00	29, 232.00	15,825.00	10,905.00	66, 425.00	3,380,660.94	8,250.00
			<del>60</del>													6.5	
DUSES.	ber of School oms, Both ned and Rent-	B 0	38	48	16	15	38	155	57	6	41	43	38	29	62	495	2
SCHOOL HOUSES.	Τ.	etoT	36	31	12	13	21	26	32	2	16	29	88	33	34	65	4
SCH	ıber of Brick Stone.	ot MuN	18	20	1	00	9	33	12	•	1-	9	:	4	10	63	1
- 1904.	iber of Frame.	un N	17	11	10	10	14	39	17	9	9	8	16	13	17	¢1	\$
egen nu	nder of Sod, obe or Log.	py un <mark>N</mark>	1	:	1	:	щ	4	**	1	ŝ	15	17	9	12	• • • •	:
TOOHO	ıber Volumes Libraries.	ui unN	1,349	1,000			1,071	6,096	1,956	218	2,423	926	349	340	1,836	42,000	500
	-hI îo Idr aries.	pra nuN	19	16	:	:	11	35	17	4	6	9	5	17:	18	1	2
	rage cost per puth for Each pil by Average tendance.	DM MC	\$ 7.96	:	3.01	5.56	4.00	5.00	11.36	9.19	11.26	4.75	3.37	4.48	3.28	4.91	14.95
	rage cost per prih for Each pil by Enroll- ent.	n M	\$ 5.29	:	1.42	4.12	2.56	3.25	6.36	6.59	1.61	2.45	2.06	2.94	2.20	3.61	14.83
AND SCHOOL BUDGE AND SCHOOL FULLES WILL	nder of Days School During sar in Rural hools.	10 Ye	168	150	138.5	94	154	149	139.5	139	143.3	110	115.8	95.5	。 146	• • • • •	150
-	nder of Days School During Araded Schools.	10 Ус	178.5	190	158	:	180	169.5	177	175	180	160	145.2	160	165.6	189	180
	O C N C C C C C C C C C C C C C C C C C	an <sub>N</sub>	Adams	Arapahoe	Archuleta	Baca	Bent	Boulder	Chaffee	Cheyenne	Clear Creek	Jonejos	Costilla	Custer	Delta	Denver	Dolores

TABLE VIII.

PER CAPITA EXPENSES AND SCHOOL HOUSES, 1904.

FOURTEENTH BIENNIAL REPORT

				su	PE	RIN	TE	ND	EN	т	OF	ΡU	JBL	10	IN	ST	RU	CTI	ON.				55
32,600.00	31, 850.00	21,915.00	768, 820.00	226,600.00	86,675.00	70,260.00	3,400.00	48,630.00	8,450.00	48,100.00	1,568,365.00	8,000.00	21,155.00	128,900.00	110,536.00	155, 575, 00	178,490.00	19,925.09	41,662.00	124,050.00	3.750.00	20, 235.00	-13, 340.00
41	32	52	228	123	63	22	10	47	6	53	15	15	Ił	19	63	104	116	20	50	91	8	30	37
36	24	50	83 _	56	36	16	6	36	10	53	51	13	37	19	37	65	67	13	39	42	4	5	19
10	1	60	19	23	∞	ŝ	:	4	67	4	20	1	c0	ł	2	20	15	1	e0	9	:	63	শ
29	14	40	60	25	18	11	61	17	1	13	28	12	24	14	23	37	14	11	35	32	57	16	12
5	6	t. <del>-</del>	÷	8	10	5	2	15	5	16	ŝ	:	10	1	(~	8	38	1	1	4	5	LO.	60
680	2,156	:	16,295	2,191	3, 358	4,625	260	1,545	500	1,251	3,264		850	4,420	1,150	3,940		627	1,162	. 5,680	522	595	4,035
ro	15	4	30	r0	19	6	5	13	1	ro	12	:	27	1	ro	27	:	7	15	20	2	r0	17
8.08	8.41	6.64	6.68	5.22	5.73	9.80	3.15	5.92	7.83	3.17	5.16	10.70	9.04	10.87	5.20	6.16	3.66	6.34	7.59	3.65	6.23	5.83	3.61
6.15	4.26	4.79	4.44	3.65	3.8)	6.38	2.31	4.18	5.83	1.68	<b>3.</b> 01	8.10	6.63	8.03	3.10	3.60	1.78	4.00	5.43	2.39	3.59	3.65	2.42
138	149	103	115	138	134	113	111.6	136	142	107	134	142	129	170	135	144	112	140	138.3	148	11	123.5	125
180	176	170	176.3	178	177	190	156	180	180	174	180	:	160	186	170	180	180	180	175	175	170	156.6	170
Douglas	Eagle	Elbert	El Plaso	Fremont	3arfield	Gilpin	Grand	Gunnison	Hinsdale	Huerfano	Jefferson	Kiowa	Kit Carson	Lake	La Plata	Larimer	Las Animas	Lincoln	Logan	Mesa	Mineral	Montezuma	Montrose

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PER CAPITA EXPENSES AND SCHOOL HOUSES, 1904-Concluded.

SCHOOL HOUSES.

138,904.00 20,340.00 20.045.00 99.169.48 60,491.00 379,000.00 39,500.00 399,173.00 17,250.00 21,875.00 11,050.00 22,225.00 30, \$10,00 2,000.00 39,639.00 (sist -lob ni) noitsulsV •pə Number of School Rooms, Both Owned and Rent-8 96 ŝ 32 33 45 250 1 44 To 42 2633 19 29 85 2 28 39 15 Total. 24 or Stone. 00 16 2 17 32 10 AbirE, lo JaquinN Number of Frame. 23 20 16 26 48 16 6 8 24 Adobe or Log. 00 2 10 10 lo JaquinN 'pog in Libraries. 2,500800 1,000 .623 3,378 255 5,098 ,783 700 2,689 seunioV Jadmun braries. 10 2 4 10 4 -!'I JaqmuN 10 Attendance. Average cost per Month for Each Pupil by Average 2.674.902.80 7.79 5.935.36 .57 .39 5.00 3.209.00 3.61 8.64 5.07 .juəm 1.722.76 1.18 3.13 Pupil by Enroll-Nonth for Each Verage cost per 2.87 5.05 3.37 5.68 4.35 3.33 7.90 7.204.91 3.14 Average Schools. 146.66[E1UA ui Year 145 33 87 ŝ 140 135 150 150 138 28 34 Number of Days of School During Schools. Graded Tear in 180 180 183 180 180 160 190 189 175 150 180 180 168 Number of Days of School During COUNTIES Rio Grande Rio Blanco San Miguel Saguache San Juan Sedgwick Prowers Morgan adillihe Pueblo litkin Routt uray Otero  $^{ark}$ 

#### FOURTEENTH BIENNIAL REPORT

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# SUPERINTENDENT OF PUBLIC INSTRUCTION.

	180	108.9 130	4.57 3.49	5.93 5.50	10 e	1,124 1 969	9 13	7		13 36	122	13,675,00 325.661.00
180		123.6	5.70	8.28	c <b>c</b> 1	250		41	, H	43	50	19,782.00
177.5		168.8	3.47	5.88	51	6,329	:	69 °	27	96	157	264,500.00
164		114	3.47	6.66	13	831	19	49	67	70	75	28,070.00
. 174.6		134.24	\$4.33	\$6.29	607	153,720	336	1,148	462	1,946	3,668	\$10,265.046.42

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# RECEIPTS 1903.

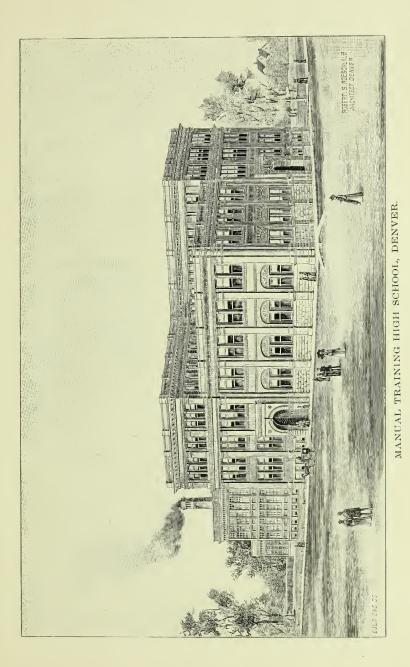
Received during the year ending June 30, 1903.

	Amount on	navianavi	received unring the year ending june of, 1905.	uing June ou, 1905.	
COUNTIES.	hamour of hamour July 1, 1902, held by county and District Treasurers	From general fund by appor- tionment	From special tax	From all other sources including funds raised for library and tem- porary loans	Total Receipts
Adams	\$ 18,232.32	\$ 3,006.96	\$ 15,698.06	•••••••••••••••••••••••••••••••••••••••	\$ 36,937.34
Arapahoe		9,670.44	19,768.76	834.57	30, 273.77
Archuleta	4,020.01	6, 147.86	5,083.81	595.67	15,847.35
Baca	2,751.94	2, 264.44	2,566.24		7,582.62
Bent	3,104.74	6,657.56	9,098.40	18,498.68	37, 359.38
Boulder	16,028.11	31,165.79	83,103.96	16, 623.88	146,921.74
Chaffee	12,614.44	5,181.82	34,889.12	3,424.29	56, 109.67
Cheyenne	570.86	5,301.48	5,767.02	•••••	11,639.36
Clear Creek	7,409.57	7,167.60	32,717.34	2.971.49	.50, 266, 00
Conejos	7,741.79	6,817.36	18,069.67	2, 349.63	34,978.45
Costilla	8,207.82	6,128,50	9,572.71	•••••••	23,909.03
Custer	3,430.51	2, 212.38	6,701.80	2,090.91	14,435.60
Delta	4,365.39	7,890.99	21.973.40	3.377.46	37,607.24
Denver	50,667.40	363, 210.89	707.030.65	120.813,09	1, 241, 722.03
Dolores	1.620.81	1,034.99	4.992.89 *	31.05	7.679.74
Douglas	4,939.70	12,680.65	12,794.25		30,414.60
Eagle	8,764.47	3,816.75	21,346.33	5.762.18	39,689.73
Elbert	5,226.62	8,660.64	7,876.79	1,663.23	23, 427, 28

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FOURTEENTH BIENNIAL REPORT

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404,205.67 185.062.25	101,861.29	42,277.87	3,418.61	43,626.12	10, 373.72	43,478.18	82.050.16	12,252.69	27, 277.56	89,556.73	60,945.88	108,746.37	149,083.85	18,435.21	58,587.85	102, 334.71	16,203.33	25,790.83	36,984.86	34,667.84	105,947.07	32,875.64
.91 94	.03	.03	:	.04	.52	.00	.86	.62	.51	.35	.94	.69	.47	:	.45	.16	.52	.15	12.	.24	.88	.15
43,138,91	30,331.03	4,461.03	:	4,781.04	1,972.52	2,107.00	16,591.86	410.62	2,532.51	3,749.35	2,082.94	19,968.69	41,948.47		18,806.45	9,238.16	3,022.52	162.15	2,865.71	1,388.24	26,380.88	3,028.15
130,110.32 91 899 34	21,032.37 42.334.09	26,956.41	627.21	18,653.81	5, 232.23	21,204.20	30,796.76	6,565.86	13,076.38	43,957.98	31,042.12	46,129.48	55,332.05	10,876.67	26,556.08	55,875.64	6,760.55	12,068.17	21,961.34	18,096.62	54,708.39	17,488.59
														i.								
97,072.70 97 898 95	14,763.49	6, 348.83	2,069.03	7,801.90	1,877.35	9,678.65	28,050.00	3,535.37	6,873.60	24, 341.80	13,033.00	27,669.00	29,985.27	5,692.87	7,502.44	13,947.47	2,750.91	6,272.15	5,648.88	9,846.22	15,914.80	5,743.46
133,883.74 90.759.79	23, (32. (2 14, 432.68	4,511.60	722.37	12,389.37	1,291.62	10,488.33	6,611.54	1,740.84	4,795.07	17,507.60	14,787.82	14,979.20	21,818.06	1,865.67	5,722.88	23, 273.44	3,669.35	7,288.36	6,508.93	5,336.76	8,943.00	6,615.44
:	: :	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
Bl Paso	Fremont Garfield	Gilpin	Grand	Gunnison	Hinsdale	Huerfano	Jefferson	Kiowa	Kit Carson	Lake	La Plata	Larimer	Las Animas	Lincoln	Logan	Mesa	Mineral	Montezuma	Montrose	Morgan	Otero	Ouray

		FU	UR	те	EN	TH	B.	IEN	NI I	AL	RI	EPC	)RT						
	Total Receipts	24,091.29	21,527.00	46,945.30	65,927.45	384, 385.72	16,219.57	40, 228.08	29,663.16	31,963.03	21,613.20	67.932.06	13,608.94	18,777.14	239,849.44	15,655.96	198, 592, 04	18,752.64	\$4,898,577.24
nding June 30, 1903.	From all other sources including funds raised for library and tem- porary loans	724.71	1,907.07	1,481.25	27,811.12	44,059.68	5,364.04	6,489.06	2,658.83	2,484.24	•	31,935.60	715.15	1,173.00		2,802.91	35,887.43	225.05	\$619.302.44
Received during the year ending June 30, 1903	From special tax	10,090.53	7,626.79	25,398.45	21,084.72	245,687.08	3,702.58	21,371.25	12,380.36	15,077.35	7,755.50	18,322.60	7,549.56	7,513.16	197, 676. 48	6,350.64	98,244.06	10,110.46	\$2,523,296.06
Received	From general fund by appor- tionment	7,013.20	5,123.22	13, 193.72	10,210.84	58, 362.07	3,814.16	7,564.34	7,033.42	7,892.29	8,507.24	9,731.32	2,178.00	3,780.00	30,622.21	3,679.26	38,750.25	5,467.56	\$1,086,197.64
	Amount on hand July 1, 1902, held by county and District Treasurers	6, 262.85	6,869.92	6,871.88	6,820.77	36, 276.89	3,338.79	4,803.43	7,590.55	6,509.15	5,350.46	7,942.54	3,166.23	6,310.98	11,550.75	2,823.15	25,710.30	2,949.57	\$669,781.10
	COUNTIES.	Park	Phillips	Pitkin	Prowers	Pueblo	Rio Blanco	Rio Grande	Routt	Saguache	San Juan	San Miguel	Sedgwick	Summit	Teller	Washington	Weld	Yuma	Totals

TABLE IX.—Concluded.

RECEIPTS 1903-Concluded.

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FOURTEENTH BIENNIAL REPORT

SUPERINTENDENT OF PUBLIC INSTRUCTION. 61																		
Total Receipts	\$ 62,771.13	56,693.53	17,537.03	8,107.74	50,636.36	199,568.18	75,119.36	6,938.51	50,106.99	38,382.86	22,677.95	13,432.89	60,518.70	1,259,397.08	7,630.86	33,273.31	38,782.51	25,084.12
From all other sources including funds raised for library and tem- porary loans	\$ 28,034.43	433.94	1,265.67	735.68	6,045.22	62,505.38	6,654.84	14.72	4,536.30	2,716.72	16.00	1,499.06	17,692.88	36,973.06	1,917.01		4,089.03	1,618.42
From Special tax	\$ 13,880.09	28,502.73	5,453.04	2,042.93	15,270.61	86,342.95	40,295.60	1,450.56	28,635.09	18,123.88	9,088.22	6,119.94	28,404.03	834,067.81	2,746.58	10,162.64	13,508.44	8,548.78
From General fund by appor- tionment	\$ 3,488.26	8,004.06	4,333.39	2,584.92	11,140.31	32,625.53	13,051.41	1,978.69	6,672.60	7,493.79	4,585.31	$^{\circ}$ 2,545.69	9,398.91	298, 293.12	1,669.05	11,363.80	4,516.00	8,997.33
Amount on hand July 1, 1903, held by County and District Treasurers	\$ 17,368.35	19,752.80	6,484.93	2,744.21	18, 180.22	18,094.32	15,117.51	3,494.54	10,263.00	10,048.47	8,988.42	3,268.20	5,022.88	90,063.09	1,298.22	11,746.87	16,669.04	5,919.59
COUNTIES.	Adams	Arapahoe	Archuleta	Baca	Bent	Boulder	Chaffee	Cheyenne	Clear Creek	Conejos	Costilla	Custer	Delta	Denver	Dolores	Douglas	Eagle	Elbert

TABLE X.

RECEIPTS 1904.

Received During the Year Ending June 30, 1904.

Total Receipts	341,934.48	145, 614.20	69, 571.16	42,371.86	3,923.74	41,403.43	11,437.53	40,617.44	67,304.33	11,265.60	29,929.53	106, 259, 92	82,372.48	98,768.84	145, 734.08	19,997.86	39,803.38
From all other sources including funds raised for fibrary and tem- porary loans	56,788.16	15,110.27	9,761.11	3,059.60		2,745.71	1, 843.30	498.40	63.52	266.61	1,718.16	· 3,800.88	4,918.53	5, 194.37	15,878.57	758.01	922.11
ine 30, 1304. From Special tax	113,030.99	74,663.46	29,716.91	27,093.29	653.50	18, 232.13	6,207.89	21,525.42	29,644.96	4,715.99	11,127.46	47,620.16	39,860.21	49,975.81	65, 680. 61	9,770.79	17.771.54
Received During the Tear Ending June 30, 1904. and July 1, 3, held by From General From 5 District fund by appor- From 5 reasurers tionment ta:	131,182.75	21,513.06	9,612.18	7,250.87	2,087.07	, 7.719.76	1,623.69	9,674.47	27, 298.46	2,498.80	8,155.93	36, 272.11	14,636.12	26,544.50	29,725.27	6,597.99	8,888.95
Received Dur Amount on hand July 1, 1903, held by County and District Treasurers	40,932.58	34,327.41	20,480.96	4,968.10	1,183.17		1,762.65	8,919.15	10,297.39	3,784.20	8,927.98				34,449.63	3,871.07	
COUNTIES.	El Paso	Fremont	Garfield	Gilpin	Grand	Gunnison	Hinsdale	Huerfano	Jefferson	Kiowa	Kit Carson	Lake	La Plata	Larimer	Las Animas	Lincoln	Logan

TABLE X.—Concluded.

RECEIPTS 1904-Concluded.

Received During the Year Ending June 30, 1904.

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# FOURTEENTH BIENNIAL REPORT

	SUPERINTENDENT								T (	ЭF	PU	JBL	IC	11	ISI	RU	JCI	.10	N.				63	
105,913.00	14,355.67	27,064.39	35,135.85	38, 245.57	125,875.26	33,446.62	23, 315.56	25,000.95	53,415.57	67,612.37	403, 370.08	12,836.35	37, 353.47	31,152.53	38,950.80	$17_{x}814.22$	47,822.63	13, 220.24	13,599.87	248, 322, 23	21,944.45	180,699.13	30, 192.38	\$4,971,628.16
	3																							
9,924.69	1,666.01	2,368.16	2,090.81	2,961.04	10,744.39	3,091.00	52.78	1,874.39	4,954.11	9,165.99	33,429.21	2,773.43	1,828.73	1,995.58	1,598.33		8,516.33	1,501.17	•	4.765.49	847.02	22,075.31	1,585.97	\$429,885.61
51,836.48	5,947.81	10,005.64	20,363.94	20, 421.12	65, 428, 64	14, 158.89	7, 237.62	7,924.83	29,604.69	22, 124.39	281,995.52	4, 324.65	20,463.71	10,383.37	18,105.91	4,168.36	21,919.36	5,739.05	5,066.53	189,847.69	9,352.55	83,086.01	17,121.34	\$2,646,563.14
14,158.63	2,712.36	5,946.30	5,921.86	9,788.41	26,562.66	5,827.99	7,948.36	5,636.07	13,192.08	12,383.42	65,439.91	3,423.18	8,536.10	6,638.15	6,530.43	8,351.91	10,646.65	2,113.93	4,098.60	26,425.72	3,765.41	50,174.93	6,797.68	\$1,096,044.89
29,993.20	4,029.49	8,744.29	6,759.24	5,075.00	23, 139.57	10,368.74	8,076.80	9,565.66	5,664.69	23,938.57	22,505.44	2,315.09	6,524.93	12, 135.43	12, 716.13	5,293.95	6,740.29	3,866.09	4,434.74	27, 283.33	7,979.47	25, 362.88	4,687.39	799,134.52
Mesa	Mineral	Montezuma	Montrose	Morgan	Otero	Ouray	Park	Phillips	Pitkin	Prowers	Pueblo	Rio Blanco	Rio Grande	Routt	Sagauche	San Juan	San Miguel	Sedgwick	Summit	Teller	Washington	Weld	Yuma	Totals\$799,134.52

# FOURTEENTH BIENNIAL REPORT

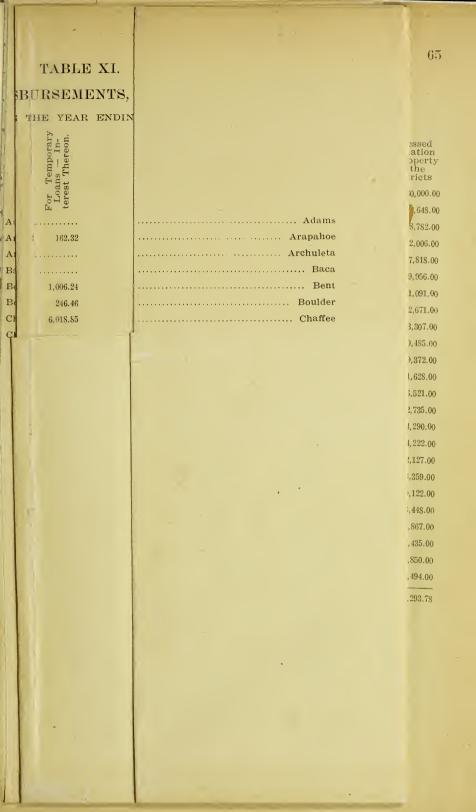
# TABLE XIII.

# SCHOOL BOND ACCOUNT, 1903.

#### School Bond Account

Assessed

COUNTIES.	Amount School Bonds Issued This Year	Amount School Bonds Outstanding	Assessed Valuation of Property in the Districts
Adams		\$ 7,500.00	
Arapahoe			\$ 1,234,996.00
Archuleta	\$135,600.00	19,000.00	1,300,000.00
Baca	2,800.00	3,800.00	589,593.78
Bent	12,000.00	27,200.00	1,859,012.00
Boulder	30,000.00		9,974,829.00
Chaffee		4,900.00	3,115,688.00
Cheyenne			1,096,686.00
Clear Creek	••••	19,686.00	2,986,024.00
Conejos		13,370.00	2,148,435.00
Costilla		3,200.00	1,629,005.00
Custer		9,650.00	955,855.00
Delta	7,800.00	17,300.00	2,347,018.00
Denver	94,000.00	630,500.00	108,859,085.00
Dolores	••••	1,000.00	450,000.00
Douglas	••••	8,000.00	3,283,000.00
Eagle	5,000.00	6,400.00	1,984,700.00
Elbert			2,586,743.00
El Paso	15,000.00	477.000.00	24,049,465.00
Fremont	25,000.00	71,200.00	4,129,102.00
Garfield	24,000.00	27,300.00	3,736,511.00
Gilpin		20,000.00	2,487,242.00
Grand			452,674.00
Gunnison		27,250.40	3,029,639.00
Hinsdale		9,000.00	660,057.00
Huerfano	2,000.00	11,200.00	3,135,508.00
Jefferson		10,000.00	4,607,710.00
Kiowa		2,500.00	2,707,284.00
Kit Carson		2,500.00	1,847,488.00
Lake		45,000.00	6,509,864.00
La Plata	1,200.00	45,500.00	3,504,746.00
Larimer		100,400.00	5,900,534.00
Las Animas	17,000.00	109,800.00	9,970,950.00
Lincoln			1,913,350.00
Logan	1,500.00	1,500.00	2,566,266.00



# TABLE XI.

DISBURSEMENTS, 1903.

	PAID DURING THE YEAR ENDING JUNE 30, 1908													
COLUTITIES .	For Teachers Salaries	For Fuel, Ren. Instrume and All Current Expenses.	For Sites, Rubbnes, Fan niture, Pernat neuf Improv ments,	For Library Purposes,	Redemption of Bonds	For Interest in Bonds in	And The Year Fear Fear Provident Program (1997) and Provident Prov	For Interest on Regulation Margalered Margalered	For Abatement and County Treasurers Collection Press	Total Poel (or) During Year	Balance in Rudance in Rudand Dis- treasmer District District Jane 20, Pag.	Amuunt District Warransa Rose- Riserrat and Tapada Juno 30, 1962	Wararuts not Regulared and Other Forms of Indebrohie	
A lams	\$ THE 22	§ 6,150,23			\$ 125-3°	\$ 8,70		\$ 21.29	\$ 307.23	\$ 9,819.9	\$ 27,117-44 19,902.89	\$ 5. 18 ag		. Adams
Arapulme	7,733.50	2, 25 ± 16				225-001	162.32	19.53 57.56	127.07 167.26	10,350,88	7,931.04	1,155,41 6,812 (s)	\$ (40,000	Arapahor Archuleta
Archuleta	4,851-75	654.21	2.03.50		41.2 - 1	120,000 Vec 36		188.52	272.97	4,846 \3	2,735.79	2,016,00	38-00	Baca
B ica	2,510-37	682 - 45 2,456 - 52	2,750 41		1,190,15	i	1.085.61	326,52	127.01	19,216.17	18,143.21	8,603.78	31.23	Bent
Bent	16,812,75 (7,942,71	15, 67 3, 10	1.168.77	76-03	11,0 % 35	4,072.44	216-46	1,016.62	1,181,65	128, 503, 14	18,218,60	27,483-54	204.75	Boulder
Boulds ( Classee	25, 526 ×1	5,056-14	5,540-04			1,725-39	6 94× Ni	187.97	2 65	40,964.03	15,145.64	12,775,45	125,20	Chaffer
Cluyesto	1,025-12	1,430-31	1,482.38					306-71		\$,134.82	3,494.54	708×25		Cheyenne
Plear Preek	21,813-70	11,376.29	22.65		2/117/15	777.66	22.92	11.58	511.05	40,003,00	10,263.00 9,776.39	114 174 45	281,001	Conclos
Canelos	17,454 22	3,018,91	1,0.0.16	100,25	1	1, 147-04	290.58	1,472 M	367, 43 95, 64	25,202.06 14,920.61	8,988,42	24, 578-43 98, 45	133,15	Costilla
Costilla	10-161-50 6.517-58	1, 210 83 1, 070 58	1,780/02 (227/23)		1,000000	255.50 544-26	24,00	42/086	71.26	11,167,40	3,268,20	5.527.58	58,54	r'nster
Cioter Dilti	20,062-87	6,270,23	\$,206 21	1,055 fi.	600.9%	6-6,19	4.77	1,020,53	111.52	33.238.93	1,368.31	18,518,87	g10 70	Della
1 neover	581, 123 95	211,011-95	280,018.35	2,151.74	1.500.000	24, 5500 100	11,736,72	2,604.18	44,690.97	1,167,033,89	74,688.14			Denver
Dolores	4,280.00	1,601.360		77.50	300,00	771-00		169.72		6,200.21	1,479.53	1,000,000	2,700,00	Dulores
Doughes	13,230,00	2,770,46	1, 338-46			4scou		265.71	123,10	18,667.73	11,746.87	872-24		Douglas
Eagle .	10, c43, 00	2,580 45	7,680,68		122-35	316.48	116-75	152-30	274.03	22,304,67	17,385.06	3,526 10		Elagle Ellig) (
Elbert	8,013.59	7,057,81	656-02		1,017.58	639.02 21,121.35	15,864,80	1,739.35		17,414.02	6,013.25 40,101.28	5, 254, 70 23, 234, 99	904.34	. El Paso
RI Paso	151,000,69 67,614,25	46,063.09 16,080-17	113,316.00 35,535,58	5,361,81	6,500,00 13,549,81	9,792,78	1. 188.02	6,462.18	2,236,10	364,101-39 151,596,96	33,465,29	107,616,92		Francul
Fremout Garfield	32,110.69	10,878.15	13, 453, 35	57 05	2,452.18	2,996.41	17 717.48	941.64	731.71	\$1,308.99	20,462.30	5,068.39	3 85	Garfield
Glipfo	21,871.25	6,091-95	2,220 48	11/25	pation.	1,155-25	4,523.01	207.65	195-84	36,849,68	5,428,19	1,509,60		
Ovaral	1,603,000	132,23						14-58	130.75	2,180-51	1,238.07	243.00		Brund
Gunulson	17,201,10	1,0,99.82	3,682-24	68.62	3,060,310	1,347-18	30.93	50,09	234.05	30,944,09	12,682.03	1,6.3.70	17.50	
Hinsdale	3,042-21	3,507.51	79.05		700,00	1,017.33		175.76	78.61	\$ 601 07	1,752.65	5,356,05		Hinsdale
Hnerfuna	10,278.85	3, 139, 28	4,000,12		6,100,00	934,45		750, 00	56.33	34,559.03	8,919.15	11,687.62		Huerfano Jefferson
defferson	38,611.17	10,423,43	1,938,990		10,1001,001	2,856.34	289-81	639.34	355.75	68,180,83	13,869,33	4,353.65	314-10 40,50	Klowa
Klowu . Kli Carson	6,235.103 10,761/08	1,327-65 3,636,11	614-32 619-68	16.13 31.00	2,200.00	300,00 527,87		228.60 284.26		8,353.25 18,032.20	3,899.46 0,275.36	616,80 1,385,94	40,50 .	Kij Carson
Lake	43,805,20	18,318-21	4,612.11	20(000	6, 6 <sup>, 6</sup> , 6 <sup>, 6</sup> , 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7, 7,	2,296.49	2,39	119.59	532.87	69,916,89	19,639.84	2,683,98		Lake
La Plata	10,090.08	1,868.71	11,351.20			2,612.80	11,454.00	268.81		37,679.50	23,266.38	33, 423. 81	4,800.75	Lu Phuta
Louimer	48,282,37	16,716,50	6, 193, 54		13,240,00	3,328.70	2 410.18	1,067.40	21.29	91,559.98	17,186.39	18,836,05	4.25 .	Lorimer
Laus Anlinus .	62,1012,80	12,855,28	39,255,42		2.400,000	4,120.81	1,844.51	902/87	264.10	114,705.82	34,378.03	7,827/12		Las Animas
blucoln	5,620,00	2,783,40	3,506-10					715,50	151.89	12,867.22	5,547.99	12,469,05		Lincoln
Logan	14, 113, 37	4,305-91	22,217 04	32.76	1,060.40	666.25	138,89	225.77	106.06	46, 166, 45	12,421,40	3,853,41	227.25	. Logan Mesu
Mosa , .	41,10655	18,079.03	11,785-18	35\$.00	786,01	4,459.77	and the second second	187.05	1,269.35	73, 391, 24	28,943.47	932.64	260.24 s	Minorat
Montezano	10,525,75	2,6.8 61	1,158-19		1,546.09	428.12	10.50	104.36	79.83	16,811,56	8,979.27	2,872.20	97 75	Montexuma
Montrose	16,790,000	7,131 76	2,811.63		2,000,000	1,116.67		\$5,63	286,87	34,225.56	6,759,30	6,126,40		Montrose
Morgan	12,295,43	6,697,62	1,620 34			1,380,00	- 91	752.35		28,645.72	6,022.12	16,399.00		Morgan
Ofern	. 38,671.990	27,865.91	8,150,29	460,08	1,444,86	379,26	1,524.37	1,578.55	1,426,79	84,492,10	21,452.97	41,207,12		Otero
Ourny	11,005,94	5,641.51	139.70	165/02	364.73	977.10		331,50	201.53	23,090,96	9,784.68	$3.97 \pm 27$	\$90,84	
Park	11,216.05 7,533.70	4,563, 17 1,658,79	\$3,10			18,00			132,85	16,013,47	\$,077.85	1,870,06		Purk
Pitkin	27,728 59	8,683,25	132.21 1.208.25		1,507,00	490.67		117,85	18.78	11,979,00	9,548,00	3,528,47	221.50	Phillips Pitkin
Prowers .	17,426,60	1,596,56	1,205,20	132.75	5080.13	1,510,00 950.69	21.79 9,512,43	144.66	337.55	39,664,09	7,281.21	1,742 65	349.27 . 63.25	Prowers
Pueblo	154,738,01	16,329.87	85, 367, 19	371.71	12,554.00	15,219.56	407.72	703.00 9.120.69	55,13 41,563,10	42,217,94 360,571,85	23,709.51 23,813.87	20,336.69 176,751.04	30,025.97	Pueblo
Rho Blanco	8,895,00	1,233.09	2,556,37		3,0000,00	255.55	893.96	117,57	\$8.61	14,041.05	2,178.52	3,919,97	that amount a	Rio Blanco
Rio Grande	18,337.82	2,881.09	8, 181,080		2,103,00	820,11	52.40	158,44	229.68	33,361,54	6,846,54	12,272.25	11.27	Blo Grunde
Rout a second	11, 158-17	1,857,45	3.148.68			651.00	104.27	238.33	170,53	17,631,43	12,031.73	5,330.78	754.51	a Routt
Sugurate Sun Jung	14,3017,02	2,804,63	1,217.24		104, 68	923.77		273,05	165.89	20,436,31	11,526.72	4, 353, 69	262.61 .	Saguache
San Mignel	8,288 7 r 20,450,50	2,085,37 8,330,66	5,915-13			******				16,319.25	5,293.95			San Juan
Seilgwick .	7,173.03	1,846.67	23, 196, 79 568, 65	257.81 2.50	G. (669) (8)	1.882.00	979,20	94, 81		61, 191, 77	6,740,29	14,829,28	128.30	San Miguel
Summit	10,719,35	2,831.21	Const Chin	2.012		270,00	1	\$1.61	**********	9,952,16	3,656,48	840,59		. Sedgwick
Teller	108, 365, 55	53,027,99	24,017,28	10,00	5,119,78	300.00 10,378.70	L4 413.66	9,014.19	75.13 2,688,12	14,342.40 212,621.61	4,434.74 27,227.83	128,586.65	1,0:0.09	Bummit
Washington	7,831,900	1,401.04	465.18	24.25	548.00	546.15	j 279.22	81.76	2,688,12	11,270.89	4,355.07	303,06	16.11	Washington
Weld	76,941,28	22,048.06	41,730.92 (	103,39	1,300.00	3,298,81	4,001,00	1,003,81	22,516.66	173,244.46	25,347.55	23,024.07	6,300.28	
Yuma	10,878,25	1,927.72	5,110.28		133.00	27.86	28,90	127.57	132.05	14,385.66	4,366.98	530-20		Yuma
Totals	\$2,082,247,68	\$ 684,503,58	\$ 825,694.65	\$ 11,128,58	\$ 129,953.97	\$ 141,117.51	\$ 97,758,63	\$ 47,876.69	\$ 129,651.04	\$4,101,562.24	\$ 796,613.03	\$ \$45,111,75	\$5,0×1,339.00,	Totals

65 TABLE XII URSEMENTS THE YEAR ENDI For Tempo-rary Loans and Interest Thereon. sed tion erty e cts )00.00 .00 2.00 Adams 21.35 )00.00 ..... Arapahoe \$18.00 ..... Archuleta 156.00 ..... Baca 51.09 191.00 ..... Bent 240.67 \$71.00 ..... Boulder 9,492.17 07.00 ..... Chaffee 85.00 72.00 28.00 21.00 35.00 90.00 22.00 27.00 59.00 22.00 48.00 67.00 35.00 50.00 94.00 93.78

# TABLE XII.

DISBURSEMENTS, 1904. PAID DURING THE YEAR ENDING JUNE | 1964.

POUN CIES	for Teacher. Salarle	For Fuel, Rent, Insu- ance, and an Current, Expenses	For Sites, Buildings, Perinture, Insprove monts	For Library Purposes	Redemp flom of flombs	For Interest on Bomis	For Tempo- tary Leans and futerest Thereou.	For Interest on Regis- istered War- rants	For Abate- ment and County Treasures Foos	Total Paid out Durby Year	Balance In Itands of County Co	Arrount District Warmuts Registered and Unpeid June 20, 190	Warrants Not Rogis- tered and Other Formo of Indebted- ness	
	8 16,1661.16	\$ 10, 48 10	\$ 2.892.29	\$ 22.00	\$ 187.12	\$ 977.15		\$ 1,267.37	\$ 65.35	\$ 35,061.07	\$ 27,710.06	\$ 1.564.22	\$ 133.54	Adams
Ad=ms	19,852.60	10,890.66	4 975 82	45.12		512.00	21.35	122/51 39/88	.45.6)	36,765.82 11,230,58	19,927,74 6,306,45	1,365,86 5,760,89	5.00	<ul> <li>Arnohoe</li> <li>Archuleta</li> </ul>
Ariquite e Archuicta	1,980-36	4.8.2 %	660 82		717.21	2000-2001		159.71	25.18	1,688.67	3,419.07	2,180, 22	157-10	. Paca
Baca	2,6,4,48	\$70,76	788,10		250,52	329.32 463-75	51.09	719.69	260.52	41,822 67	8,813.69	4,886-61	101 10	Bent
Bent	16,678,98	6.072.59	16,190.77		1,185.00 6,147.00	5,838.04	240.67	\$99,46	1,174-27	180,263.05	19,305,13	28 143 11	3,772.01	Roulder
Boulder	s_ 1.81.72	20,728-75	63,911,71	s,(π) \$7,((	0, 011,000	2,101.68	9,492.17	1,626,18		52,137,49	22,981.87	4 772 17	71,36	Chañee
Chaffee	25,083,54	7,750.30	2,0633,41 (669,00	# 1				24.61		5,885,44	1,053,07			Cheyenne
Pheyenne	3,977 00	1,216 83 6,807, P	1,307,84		2,363.77	1,169.79	618.89		367.83	13,203,09	10,903,90	3 - 00	1,295-31	Clear Creek
Chean Cr. (R	14 345 - 344 144 - 254 - 55	2,242.50	678-91		1,141.01	150,00	632.00	1,727.06	761-08	26,563.26	11,819.60	15,181/39	92.75	. Conglos
Conclos	HQ150.58 10.018/95	1,511 87	1 11.87			263.00		10.38	90.85	13,182,92	9,495.03	167.77		. Costilla
Cos)IIIa Charlen	6,805,55	\$37.38	532.03		1,275.00	46,00		221.27	78-00	9,798,23	3,634,66	5,578 25	76-25	CUSTER
Custer Dolta	28,113.04	5,975, 19	18,467-06	19		1,731.71		1.049-77	68-97	55, 186, 22	5,032.47	23, 30 2, 79	1,659.16	Delta
Denver	628,5598-54	271,214.68	131.47 (80	(50) 25	3,005,00	28,349-50	871.75	19,31	36,319,26	3,106,408/06	152,989-02	120.00		Dinver
D dores	2.740.00	812-15	\$5.20		.2001-000	753.00		106,900		4.797.31	2,823.55	2,184.91	2,400,00	Dulaces
Dougla	14,025.00	2,126,19	2,6 5 51	.oD, 00		480.00		17.68	68-85 177 co	19,333,53	13,889,78 9,361,26	917.91 3.087-76	1.50	. Doughts Eagle
Eagle	14,611-71	2,212,67	10,199-73	20120	288-10	305.18	1,400.62 488.04	92,32	157.60	29,121,25 15,003,09	9,361.25 7,081.03	6,528,45	1.00	Engre
EBtert	7, (91-34	9,018,61			500,00	172.10 20,848.30	1,559.74	1,793.84	2,051.15	303,784.04	38,150.44	26,862,04	5,392.02	. El Puso
El Paso	167,817,92	16,615.02	42,623-27	0,872,80	16,600 00 8,312.16	7, 189, 75	1,298.19	6,740.18	827.55	107, 104, 84	35,209-36	127,626.00		Fremont
Fremont	17,020,25	11,280.89	13,5,5,54	539.57	2,502 74	187.84	2,316.62	211.36	319.98	53,130.07	16,441.09	8,294,74	236.10	Garfield
Garfield	28,717 50	11,270.75 5,618-54	7 (63, 7) 1,151 (3)	10.00	2,002 TI	900,00	3,541.86	59,00	278-03	33,813,99	8,527.87			Gliphi
Glipin	22, 294, 25 1, 962, 54	126 36	262.60							2,751.47	1,172.27	1,214,10		Grand
Grand	18,912.21	6,730,59	6.38 (29)		1,000,000	1,681.35		39,15	208.76	29,270.35	12,133.08	(942.10)	65.00 .	. Guunison
Comilson Hinsdale	2,802.50	4,407.18			1,102.50	701.30	361.57	120.76	80, [1	9,576,70	1,860.83	3,(6).81		HInsdale
Huerfano	18,263.67	3,581.53	1, 953 93		2,200,00	669.91		571.22	24.33	29,680,59	10,936.85	14, 440, 69	17.20	Huerfana
Jefferson	36,568 94	8,933,82	3,637,38	2,993.04				230-64	373.50	52,727,32	14,577.01	2,515,93		Jefferson
Khawa	3,855.60	1,821.51	190.79			200,00		112.43		6,4×3,33	4,782.27	\$0,00		
Kit Curson	10,182 25	3,117,87	1,134.81		1,500,00	243.33		77.17	136.36	16,391.79	13,537.74	354.15	320,00	Kit Cuesan
Lake	12,169.30	22,752.17	1,967.83	10.00		2,394 69	10, 52	4 65	506,90	69,816,06	36,443.86	195.00		i
La Plata	34,917.49	11.608/01	\$ 757.04	184,98	600,00	2,495,52	1,237.30	1,764 88	1,289.95	65,835,17	16,517.31	27,092,45	3,177.04	La Plata
Larlmer	41, 116, 81	22,064 68	7,725,56		700,00	3,280.86	705.58	1,421,76	312.21	80,690,46	18,078.35	32,244.89	17.25 .	Latimer
Los Anlnois -	60,282-32	13,419.62	27,398-20	291,28	\$,001.53	1,002.50	4,050,00	315.77	770.25	115,761.47	29,972,61	8,380,99 10,846-91		Las Animus
Lincoln	7,131.00	2,860/28	1,557,49	6.75			52.19	596.52 199.98		12,152.04 28,619.75	7,845.82 11,183.63	3,101.69	529.86	Lincoln Logan
Logan -	15,979,15	3,823-45 12,058,71	6,932,64 10,035,49	214.50 44-74	1,407,84 9,707-96	5,064.66	9.54	40,40	1,447.41	82,167.05	23,745.95	445,50	95.75	
Mesu	43,758-14	- 17 77	100000.00		0,101.00	1,200.00	453.46	3,819. *•	72.67	11,870.68	2,484.99	12,558 85		
Montezuma	. 12,627.00	1,179.02	2,266,92		2,500,00	305.53	1.461.56	196.34	115.83	20,652.20	6,412.19	2.531.93	170.08	Montezuma
Montrose	18,172.00	5,640,19	1,790 %6			933,40	60.64		221.70	26,818,79	8,317.06	7,261.06		
Margan	20,801.97	6,622.13	2,174.28	190.10		1,380,00		1,001.01		32,167.49	6,078.08	14,551,00		Morgan
Otero .	51,188.59	24,108/30	16,365.20	136.87	6,391-34	4,388.34	4,891,43	2,162 45	892.04	110,614.56	15,260,70	23,946.64	232.14	····· Olero
Ouray		4,358,87	2,075,48		2,015.91	921, 80		194-40	164.13	25,492.91	7,953.71	2,434,15	141.71	··· ··· ··· ··· ··· ··· ··· ··· ··· ··
Park	. 11,311.00	2,109,50	1,113.57						69.67	14,607.14	\$,708.42	1,853.31		Park Park
Phillips	9,835.10	2,048,32	1,792.95	70, Na	702,00	586.16		221.24		15,056.62	9,944.33	3,311.40	356,75	Phillips
Pitkin	. 27,079.60	10,396.91	783.36	66,30	1,540.00			91.86	428.18	40,356.24	13,029.33	140,00	330.50	Pltkin
Prowers	23,348.37	6,726.87	12,206.14	502.74	1,472.03	1,566.30	6,885.07	1,204.64	102.67	54,011.83	13,597.54	11,257.68	166,90	Provers
Pueblo	194,417,15	59,124.95 1,461.76	76,793.32 1,837.86		12,081.90	15,118.35	1,483.53	13,205.70	5,156 90	377,381,80 10,515.61	25,988,28 2,320,74	185,287,93 2,608.76		Puebla Rlo Blanco
Rio Blaucu	20,384.81	3,319.01	3,056 23		3,204,181	977.94	1,040.70	208.50 569.98	125.64 246.93	32,132.64	5,220.83	10,465,41		Rio Grande
Routt	14.724.28	1.327.58	4,299,31		1,578.70	705.80	347.71	247.01	670.30	23,553.98	7,598.55	3,756.32	268.83	Routt
Saguache	15,980.44	2,972.22	1,976.55	\$0,00	2,150,00	726.73	105.44	319.26	141.92	27,452,56	11,198.24	125.00	303.16	
San Juan	8,903.00	3,205.14	1.517.80			1-9.10	103.44	010,00		13,625.91-	4,188.25			
San Miguel	20,184.67	5,310,15	9,711.09			2,497.00		469 59	2.50	38,175.00	9,647.63	18, 166, 18		San Miguel
Sedgwick	G,002,00	1,855,92	552 76			345.00	71.75	78,98		5,90G.41	4,313.83	446.26	40,00	
Summit .	6,323.97	2,134,45			1,000,00	300.00		18.35	70.50	9,827.30	3,772.57	\$45.39		
Teller	138,674.08	61,028,50	1,040.02	72, 36	5,000,00	8,595.95		7.121.10	3,630.65	228,170.68	20,151.55	75,611.63	84.15	
Washington	9,958,75	2,883,93	304.11	24.24	674.87	41,93	901.97	42.26	132.45	14,964.58	6,979.87	299.04		Washington
Weld	\$3,551.88	26,265,18	27,777.13	284.73	3,974,55	8,560,81	119.65	1,736.19	2,525,00	154,795.12	25,904.01	22,630,00	4,954.85	··· ··· Weld
Yuma	14,632,58	3,871,06	2,887.81	207.25	255,94	15.93	2.74	13.59	331.65	22,218.55	7,943.83	2,005.15	4.55	
Totals	\$2,288,718,62	\$ \$03,629,43	\$ 573,881.03	\$ 13,137.98	\$ 118,662,41	\$ 139,910.20	\$ 46,835.34	\$ 55,302,65	\$ 63,492.22	\$4,103,639,88	\$ 867,985.28	\$ 781,207.02	\$ 25,985.45	

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and the second

### SUPERINTENDENT OF PUBLIC INSTRUCTION.

# TABLE XIII.—Concluded.

# SCHOOL BOND ACCOUNT, 1903-Concluded.

#### School Bond Account

65

Assessed

COUNTIES.	Amount School Bonds Issued This Year	Amount School Bonds Outstanding	Assessed Valuation of Property in the Districts
Mesa	36,900.00	87,130.00	4,330,000.00
Mineral		18,000.00	774,648.00
Montezuma		4,475.00	1,158,782.00
Montrose		18,292.00	2,312,006.00
Morgan		23,000,00	2,807,818.00
Otero	45,400.00	70,900.00	5,509,956.00
Ouray		14,530.00	2,211,091.00
Park			2,432,671.00
Phillips		4,200.00	1,083,307.00
Pitkin	3,000.00	· 32,000.00	3,240,485.00
Prowers	14,350.00		2,589,372.00
Pueblo		304,955.00	24,321,628.00
Rio Blanco	····		1,196,521.00
Rio Grande	6,000.00	16,400.00	1,872,735.00
Routt	2,000.00	9,100.00	2,694,290.00
Saguache	,	7,900.00	2,324,222.00
San Juan		······	1,972,127.00
San Miguel	20,000.00	45,500.00	3,323,359.00
Sedgwick		4,500.00	920,122.00
Summit		4,000.00	1,598,448.00
Teller		150,000.00	12,915,867.00
Washington		4,500.00	1,482,435.00
Weld	1,200.00	85,900.00	14,315,850.00
Yuma			1,360,494.00
Totals	\$501,150.00	\$2,636,938.40	\$326,357.293.78

3

# TABLE XIV.

# SCHOOL BOND ACCOUNT, 1904.

COUNTIES.	Amount School Bonds Issued This Year	Amount School Bonds Outstanding	Assessed Valuation of Property in the Districts.
Adams	. \$ 12,000.00	\$ 18,500.00	\$ 2,916,083.00
Arapahoe	15,000.00		4,777,010.00
Archuleta		19,500.00	1,060,383.92
Baca		3,550.00	531.799.86
Bent		20,680.00	1,451,640.00
Boulder	. 20,000.00		10,064,400.00
Chaffee	. 3,650.00	28,250.00	3,115,688.00
Cheyenne			941,426.00
Clear Creek		17,344.00	2,759,089.00
Conejos		10,649.00	1,944,791.00
Costilla		3,200.00	1,629,005.00
Custer		9,000.00	840,050.86
Delta	. 25,300.00	37,400.00	2,379,742.00
Denver		627,500.00	108,598,510.00
Dolores		10,000.00	435,895.00
Douglas		8,000.00	3,017,675.00
Eagle	. 2,500.00	7,500.00	1,799,981.00
Elbert			2,284,335.00
El Paso		462,900.00	24,172,986.00
Fremont	. 16,000.00	82,000.00	6,365,940.00
Garfield	. 4,000.00	33,100.00	3,633,697.00
Gilpin		20,000.00	2,533,891.00
Grand			454,293.00
Gunnison		25,700.40	3,017,719.00
Hinsdale		7,000.00	660,057.00
Huerfano		9,700.00	3,135,508.00
Jefferson		17,200.00	5,043,057.00
Kiowa		2,500.00	1,464,615.00
Kit Carson		1,000.00	1,872,496.00
Lake		45,000.00	5,989,385.00
La Plata	. 1,000.00	45,200.00	3,394,540.00
Larimer	. 6,000.00	90,200.00	6,452,239.00
Las Animas		99,000.00	9,901,780.00
Lincoln			1,594,708.00
Logan	. 15,000.00	15,000.00	2,801,959.00
Mesa	. 1,200.00	86,530.00	4,000,000.00

# TABLE XIV.—Concluded.

#### SCHOOL BOND ACCOUNT-Continued.

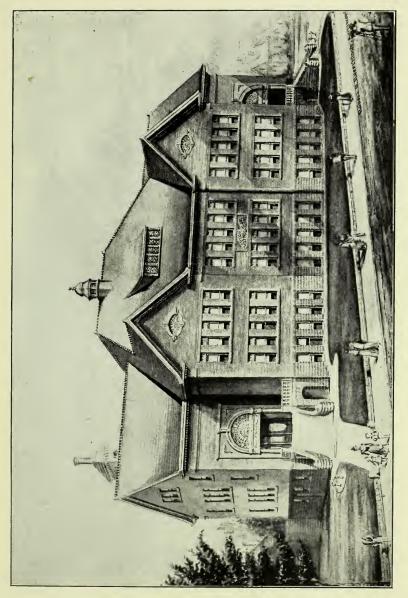
COUNTIES.	Amount School Bonds Issued This Year	Amount School Bonds Outstanding	Assessed Valuation of Property in the Districts.
Mineral		18,000.00	764,114.00
Montezuma		1,975.00	1,213,112.00
Montrose	10,000.00	28,292.00	2,077,132.00
Morgan	. 15,000.00	44,000.00	2,807,818.00
Oterc		92,050.00	5,851,280.00
Ouray		8,500.00	2,617,910.00
Park			2,222,727.00
Phillips		3,500.00	991,918.00
Pitkin		32,000.00	2,870,830.00
Prowers		23,400.00	2,185,700.00
Pueblo	4,600.00	298,650.00	25,324,356.00
Rio Blanco			1,097,750.00
Rio Grande		12,600.00	1,940,436.00
Routt		11,000.00	3,145,795.00
Saguache		7,500.00	2,324,222.00
San Juan			1,972,127.00
San Miguel		45,500.00	3,084,686.00
Sedgwick		4,500.00	853,229.00
Summit		3,000.00	1,298,076.00
Teller		145,000.00	11,623,292.00
Washington		4,000.00	1,071,864.00
Weld	. 6,800.00	86,200.00	12,020,983.00
Yuma	··	·····	1,860,047.00
Totals	\$161,050.00	\$2,714,270.40	\$330,116,705.64

# FOURTEENTH BIENNIAL REPORT

# TABLE XV.

# EXAMINATION OF TEACHERS, 1903.

COUNTIES.	I Male	First Gr Female	ade. e. Total.	Sec Male.	ond Gra Female.	ade. Total.	Thire Male, Fe	l Grade emale. 'I	'otal.
Adams	1	24	25		26	26	2	6	.8
Arapahoe		9	9	1	6	7		2	2
Archuleta		3	3		4	4			
Baca	2	1	3	1	1	2			
Bent	2	8	10	1	8	9	1	3	4
Boulder		15	15	4	51	55	1	16	17
Chaffee	1	5	6	1	17	18		5	5
Cheyenne		1	1		1	1	••••	3	3
Clear Creek	2	3	5		7	7		1	1
Conejos		3	3	. 4	6	10	3	. 8	11
Costilla	2	1	3	7	3	10	8	4	12
Custer	3	4	7	·•••	8	8		3	3
Delta	5	9	14	4	15	19	4	5	9
Denver	8	8	16	10	69	79	1	32	33
Dolores		••••			1	1			
Douglas	3	2	5	1	11	12	1	4	5
Eagle	1	3	4	1	6	7	2	6	8
Elbert		9	9	1	23	24	1	ī	8
El Paso	1	9	10		22	22	3	20	23
Fremont	5	11	16	3	17	20			
Garfield	1	8	9	3	13	16	1	4	5
Gilpin		10	10		6	6			
Grand		1	1	••••	5	5			
Gunnison	3	6	9	1	9	10		7	ī
Hinsdale				•••	2	2			
Huerfano	2	8	10	1.	1	2	1	3	4
Jefferson	3	8	11	5	50	55	••••	15	15
Kiowa	1	2	3	1	5	6		2	2
Kit Carson	1	5	6	4	8	12	3	7	10
Lake		1	1	1	12	13		1	1
La Plata	2	10	12	2	9	11	1	ī	S
Larimer	9	11	20	5	25	30		11	11
Las Animas	7	10	17	16	16	32	4	8	12
Lincoln		3	3	1	9	10	••••	2	2
Logan	5	8	13	2	16	18		1	1
Mesa	2	6	8	7	23	30		ï	7
Mineral	1	2	3		1	1			



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# TABLE XV.—Concluded.

# EXAMINATION OF TEACHERS, 1903-Concluded.

COUNTIES.	F Male.	'irst Gra Female	lde. . Total.		ond Gra Temale.	ade. Total.	Third Grade. . Male. Female. Total.			
Montezuma	2	4	6	2	6	8				
Montrose	1	2	3	1	9	10	1	5	6	
Morgan	1	2	3	3	9	12	1	6	7	
Otero	4	12	16	6	16	22		3	3	
Ouray	2	2	4	1	9	10		2	2	
Park	1	5	6	2	9	11		1	1	
Phillips	1	2	3		6	6		5	5	
Pitkin	1	2	3	2	12	14		5	5	
Prowers	3	8	11	6	18	24	2	5	7	
Pueblo	10	7	17	4	23	27		9	9	
Rio Blanco	3	4	7	1	4	5		1	1	
Rio Grande	5	8	. 13	3	14	17	4	5	9	
Routt		9	9	3	10	13	1	4	5	
Saguache	3		3	5	9	14	1	6	7	
San Juan	•••	1	1		4	4		1	1	
San Miguel	1	1	2	2	4	6	••••	3	3	
Sedgwick	2	1	3	1	ĩ	8	1		1	
Summit		2	2	1	•••	. 1				
Teller	1	2	3	1	4	5		1	1	
Washington		4	4		9	9	1	8	9	
Weld	õ	11	16	4	40	44	1	14	15	
Yuma	4	6	10	3	10	13	1	.7	8	
Totals	123	322	445	139	744	883	51	291	342	

# FOURTEENTH BIENNIAL REPORT

# TABLE XVI.

#### EXAMINATION OF TEACHERS, 1904.

		irst Grad		Sec	ond Gra	de.	Third	l Grade.	
Counties.		. Female		Male. 1	Female.		Male. Fe		
Adams		18	19		16	16	•••	1	1
Arapahoe		9	11	1	40	41	1	7	8
Archuleta		4	4	1	3	4	•••		
Baca				1	1	2	•••		
Bent	. 1	3	-1		10	10	1	1	2
Boulder	. 1	6	ī	4	52	56		15	15
Chaffee	. 3	õ	8	1	11	12	2	3	5
Cheyenne	• •••	2	2		3	3		1	1
Clear Creek	. 1	5	6		4	4	1	1	2
Conejos	. 5	.2	10	2	10	12	`2	10	12
Costilla	. 1	2	3	-4	8	12	5	9	14
Custer		2	2		4	4		2 *	2
Delta	. 6	8	14	õ	10	15	3	3	6
Denver	. 2	42	44		20	20			
Dolores		1	1				1		1
Douglas	. 1	õ	6		13	13		4	4
Eagle		4	4	1	8	9		2	2
Elbert		ō	5	2	27	29	1	10	11
El Paso	. 5	9	14	1	36	37	2	14	16
Fremont	. 5	11	16	1	15	16		3	3
Garfield		8	13		6	6		6	6
Gilpin		5	8		11	11			
Grand				2	4	6			
Gunnison		6	ī	2	17	19		2	2
Hinsdale		1	1		2	2			
Huerfano		11	14		Ŧ	7		3	3
Jefferson		10	14	4	50	54	1	19	20
Kiowa		2	2	1	2	3		1	1
Kit Carson		3	7	4	6	10	1	- 7	s
Lake		3	3	1	8	9		6	6
La Plata		9	12		10	10		2	2
Larimer		6	6	1	26	27	2	13	15
Las Animas		9	13	5	23	28	2	15	17
Lincoln		2	4		10	10		4	4
		6	7		10	10		2	2
Logan Mesa	_	10	15	5	16	21	•••*	2	2
					2	21	•••	2	2
Mineral		•••		•••	4	4		2	2

1

# TABLE XVI.—Concluded.

#### EXAMINATION OF TEACHERS, 1904-Concluded.

Counties.		irst Grad Female.		Seco Male, H	nd Gra		Third Male. Fe	Grade	Fotal.
		2	2	2	9	11		5	5
Montezuma				2			•••		
Montrose	. 1	2	3	•••	14	14	•••	3	3
Morgan	. 1	3	4	1	12	13	1	7	8
Otero		13	13	2	19	21	1	9	10
Ouray	• •••	1	1	2	11	13		2	2
Park	. 3	10	13	• • •	11	11		7	7
Phillips	. 1	••••	1	1	ī	8		4	4
Pitkin	. 1	6	$\overline{\tau}$		15	15		1	1
Prowers	. 1	10	11	4	13	17	1	9	10
Pueblo	. 8	14	22	2	26	28	• • •	8	8
Rio Blanco		5	5	1	· 2	3	1	<i>.</i>	1
Rio Grande		9	9	3	14	17	1	5	6
Routt	. 2	10	12		11	11		3	3
Saguache	. 1	4	5	9 2	10	13	••••	- 5	5
San Juan	1	2	3	•••	2	2		2	2
San Miguel	• •••	4	• 4		2	2.		2	2
Sedgwick	• • • •	1	1	2	4	6	1	3	4
Summit					2	2			
Teller	••••	1	1	•••	7	7	• • •	3	3
Washington	. 1	2	3	4	19	23	1	3	4
Weld	4	14	. 18	4	35	39	•••	11	11
Yuma	4	2	6	5	20	25	2	22	24
Totals	98	352	450	 §5	768	853	34	284	318

# TABLE XVII.

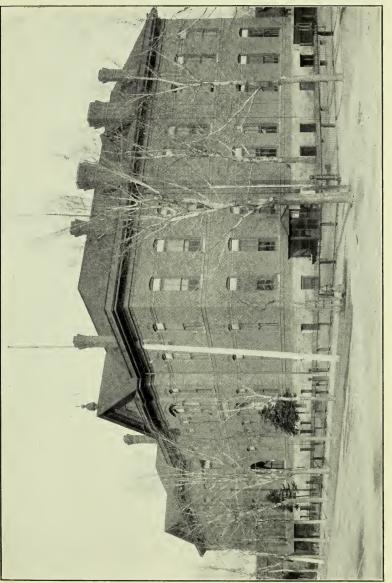
# APPORTIONMENT, 1903.

July.

January.

Counties.	Amount Ap- portioned	Deducted for Blanks	Balance Certified to Auditor	Amount Ap- portioned	Deducted for Blanks	Balance Certified to Auditor
Adams	**	**	\$ 926.54	\$ 669.77	\$ 99.89	\$ 569.85
Arapahoe	*\$18,378.99	*\$114.05	504.36	616.58	111.41	505.17
Archuleta	320.14	1.43	318.71	338.81	14.37	324.44
Baca	106.33	13.40	92.93	115.99	12.50	103.49
Bent	360,26	22.35	337.91	444.34	22.73	421.61
Boulder	2,783.14	61.53	2,721.61	3,138.26	76.03	3,062.23
Chaffee	751.28	13.50	737.78	861.64	44.07	\$17.57
Cheyenne	60.76	5.89	54.87	65.41	8.48	56.93
Clear Creek	774.65	19.88	754.77	863.38	22.73	840.65
Conejos	1,444.54	20.58	1,423.96	1,602.92	35.38	1,567.54
Costilla	681.18	15.67	665.51	- 702.91	17.99	684.92
Custer	357.53	1.51	356.02	386.78	19.85	366.93
Delta	930.44	16.20	914.24	1,155.54	53.71	1,101.83
Denver	**	**	16,834.04	19,199.34	174.12	19,025.22
Dolores	117.62	11.17	106.45	78.05	6.99	71.06
Douglas	385.18	11.23	373.95	380.67	35.94	344.73
Eagle	283.14	7.16	275.98	327.47	26.01	301.46
Elbert	424.52	19.84	404.68	. 503.64	56.06	447.58
El Paso	4,267.79	65.41	4,202.38	4,787.84	86.60	4,701.24
Fremont	2,060.67	58.19	2,002.48	2,325.46	69.46	2.256.00
Garfield	750.50	7.43	743.07	848.12	42.39	\$05.73
Gilpin	782.83	37.47	745.36	823.70	12.17	\$11.53
Grand	83.35	1.89	81,46	98.98	6.85	92.13
Gunnison	497.35	18.28	479.07	554.22	33.81	520.41
Hinsdale	134.76	5.29	129.47	149.13	6.43	142.70
Huerfano	1,298.10	29.36	1,268.74	• 1,465.57	32,22	1,433.35
Jefferson	1,284.08	25.88	1,258.20	1,485.19	\$5.21	1,399.98
Kiowa	71.27	10,24	61.03	76.31	15.52	60.79
Kit Carson	244.59	21.59	223.00	276.89	24.95	251.94
Lake	1,283.69	12.83	1,270.86	1,389.26	29.00	1,360.26

\*Covers all territory formerly embraced in Arapahoe county.  $\ast\ast$  Included in amount.



ELMWOOD SCHOOL, DENVER.

\*

# TABLE XVII.—Concluded.

# APPORTIONMENT, 1903-Concluded.

#### January.

July.

Counties.	Amount Ap- portioned	Deducted for Blanks	Balance Certified to Auditor	Amount Ap- portioned	Deducted for Blanks	Balance Certified to Auditor
La Plata	1,138.02	42.77	1,095.25	1,395.36	40.96	1,354.40
Larimer	1,873.34	50.47	1,822.87	2,383.02	84.20	2,298.82
Las Animas	2,912.44	52.18	2,860.26	3,768.36	81.85	3,686.51
Lincoln	114.89	14.34	100.55	144.33	22.59	121.74
Logan	389.86	15.83	374.03	455.67	47.99	407.68
Mesa	1,315.23	44.30	1,270.93	1,615.57	50.54	1,565.03
Mineral	152.67	2.81	149:86	141.72	13.19	128.53
Montezuma	332.99	15.46	317.53	411.20	18.11	393.09
Montrose	646.52	30.79	615.73	724.72	22.23	702.49
Morgan	481.77	16.37	465.40	554.22	24.76	529.46
Otero	1,688.73	37.87	1,650.86	2,146.68	48.78	2,097.90
Ouray	402.71	20.91	381.80	443.03	31.57	411.46
Park	276.91	4.15	272.76	305.67	38.57	267.10
Phillips	240.69	12.22	228.47	252.47	24.91	227.56
Pitkin	702.60	18.51	684.09	727.77	23.36	704.41
Prowers	660.93	44.03	616.90	766,58	38.89	727.69
Pueblo	5,436.19	116.00	5,320.19	6,627.11	115.42	6,511.69
Rio Blanco	201.74	2.48	199.26	234.60	31.80	202.80
Rio Grande	592.77	19.49	573.28	698.56	26.85	671.71
Routt	454.12	4.78	449.34	587.36	41.50	545.86
Saguache	540.19	50.97	489.22	565.12	41.62	523.50
San Juan	155.79	6.59	149.20	184.02	12.47	171.55
San Miguel	373.50	10.36	363.14	393.32	17.26	376.06
Sedgwick	171.37	11.59	159.78	171.81	20.98	150.83
Summit	209.53	7-81	201.72	235.47	18.54	216.93
Teller	2,137.40	3.92	2,133.48	2,419.65	39.22	2,379.73
Washington	158.12	10.69	147.43	· 219.86	18.76	231.10
Weld	2,209.84	63.67	2,146.17	2,572.27	84.41	2,487.86
Yuma	259.78	25.48	234.3)	497.54	37.87	45 .6.
Normal School	187.72		187.72	225,00	2.38	• 222.62
, Totals	\$ 67,337.04	\$1,406.09	\$ 65,930.95	\$ 77.630.23	\$2,495.15	\$ 75,225.08

# FOURTEENTH BIENNIAL REPORT

# TABLE XVIII.

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2,792.59

106.78

2,685.81

July.

# APPORTIONMENT, 1904.

January.

		oundur,	, •		oury.	
Counties.	Amount Ap- portioned,	Deducted for Blanks,	Balance Certfied to Auditor,	Amount Ap- portioned,	Deducted for Blanks,	fsalance Certfied to Auditor,
Adams	\$ 883.85	\$ 14.57	\$ 869.28	\$ 706.81	\$ 67.28	\$ 639.53
Arapahoe	813.64	15.98	797.66	685.49	44.43	641.06
Archuleta	447.10	19.48	427.62	431.99	21.37	410.62
Baca	153.06	5.05	148.01	118.98	6.77	112.21
Bent	586.35	16.79	569.56	464.84	26.21	438.63
Boulder	4,141.30	77.00	4,064.30	3,416.37	125.15	3,291.22
Chaffee	1,137.03	21.88	1,115.15	909.70	63.16	846.54
Cheyenne	86.31	6.81	79.50	79.03	8.52	70,51
Clear Creek	1,139.33	18.36	1,120.97	836.89	38.14	798.75
Conejos	2,115.25	23,16	2,092.09	1,682.66	66.45	1,616.21
Costilla	927.58	3.87	923.71	725,45	30.23	695.22
Custer	510.40	11.33	499.07	366.72	14.19	352.53
Delta	1,524.86	26.53	1,498.33	1,283.08	68.95	1,214.13
Denver	25,335.76	33.49	25,302.27	20,044.06	317.83	19,726.23
Dolores	103.00	3.09	99.91	63.93	7.23	56.70
Douglas	502.34	18.57	483.77	398.24	43.09	355.15
Eagle	432.14	8.73	423.41	331.20	19.05	312.15
Elbert	664.61	22.67	641.94	481.27	74.31	406.96
El Paso	6,318.12	55.04	6,263.08	4,657.28	151.31	4,505.97
Fremont	3,068.72	55.39	3,013.33	2,243.40	96.58	2,146.82
Garfield	1,119.19	36.07	1,083.12	939.89	58.22	881.67
Gilpin	1,086.97	2.70	1,084.27	780.06	34.42	745.64
Grand	130.62	5.65	124.97	132.75	7.36	125.39
Gunnison	731.36	20.86	710.50	606.02	37.57	568.45
Hinsdale	196.79	6.23	190.56	123.87	11.17	112.70
Huerfano	. 1,933.99	16.18	1,917.81	1,568.56	68.34	1,500.22
Jefferson	1,959.88	32.90	1,926.98	1,543.70	74.14	1,469.56
Kiowa	100.70	5.49	95.21	78.58	10.27	68 <b>.3</b> 1
Kit Carson	365.39	26.95	338.43	265.50	22.22	243.28
Lake	1,833.29	10.94	1,822.35	1,349.23	39.52	1,309.71
La Plata	1,841.35	35.61	1,805.74	1,290.63	91.14	1,199.49

Larimer ...... 3,144.67 40.45 3,104.22

# TABLE XVIII.—Concluded.

# APPORTIONMENT, 1904—Concluded.

January.

July.

Counties.	Amount Ap- portioned,	Deducted for Blanks,	Balance Certfiled to Auditor,	Amount Ap- portioned,	Deducted for Blanks,	Balance Certfied to Auditor,
Las Animas	4,972.78	46.33	4,926.45	3,502.51	132.59	3,369.92
Lincoln	190.46	2.67	187.79	148.73	26.02	122.71
Logan	601.31	3.61	597.70	491.92	49.65	442.27
Mesa	2,131.93	44.18	2,087.75	1,835.39	61.73	1,773.66
Mineral	187.01	2.24	184.77	145.18	13.96	131.22
Montezuma	542.62	17.81	524.81	428.88	29.58	399.30
Montrose	956.35	29.76	926.59	756.53	33.73	722.80
Morgan	731.36	18.65	712.71	627.34	41.41	585.93
Otero	2,832.79	51.87	2,780.92	1,970.35	80.93	1,889.42
Ouray	584.63	7.83	576.80	467.06	43.87	423.19
Park	403.37	2.08	401.29	314.78	23.92	290.85
Phillips	333.17	12.78	320.39	237.08	24.01	213.07
Pitkin	960.38	18.13	942.25	733.89	32.35	701.54
Prowers	1,011.59	28.24	983.35	792.49	47.12	745.37
Pueblo	8,745.24	97.33	8,647.91	6,564.15	190.63	6,373.52
Rio Blanco	309.58	4.86	304.72	265.94	13.24	252.70
Rio Grande	921.82	30.15	891.67	717.46	39.02	678.44
Routt	775.09	10.24	764.85	681.94	47.92	634.02
Saguache	745.75	2.73	743.02	581.16	30.30	550.86
San Juan	342.83	18.68	224.15	174.04	12.22	161.82
San Miguel	519.03	17.27	501.76	393.36	24.58	363.78
Sedgwick	226.72	15.16	211.56	182.03	20.67	161.36
Summit	310.73	11.40	299.33	207.34	15.63	191.71
Teller	3,193.01	65.06	3,127.95	2,193.23	97.74	2,095.49
Washington	329.72	22.81	* 306.91	257.50	33.57	223.93
Weld	3,394.40	74.41	3,319.99	2,930.67	152,39	2,778.28
Yuma	656.56	41.99	614.57	653.08	55.04	598.04
Normal School	296.92	2.16	294.76	226.43	2.17	224.26
Totals	\$102,442.10	\$1,398.26	\$101,043.84	\$ 79,879.23	\$3,227.39	\$ 76,651.84

# FOURTEENTH BIENNIAL REPORT

#### NORMAL INSTITUTE FEE FUND.

#### 1963.

Receipts from county examination fees, August, 1902\$1,084.95
Receipts from county examination fees, December, 1902
Receipts from county examination fees, March, 1903 748.00
Total
1904.
Receipts from county examination fees, August, 1903\$ 596.57
Receipts from county examination fees, December, 1903 543.72
Receipts from county examination fees, March, 1904 764.79
Total

#### APPROPRIATION AND EXPENSES, 1903.

#### Contingent Fund.

To appropriation\$250.00	By traveling expenses\$250.00
Total\$250.0)	Total

#### APPROPRIATION AND EXPENSES, 1904.

#### Contingent Fund.

To appropriation\$250.00	By *raveling expenses\$250.00
Total\$250.00	Total\$250.0.)

#### APPROPRIATION AND DISBURSEMENTS.

#### Clerical Fund.

To appropriation for deputy,	By salary of deputy, 1903 and
1903 and 1904\$3,000.00	1904\$3,000.00
To appropriation for clerk and	By salary of clerk and steno-
stenographer, 1903 and 1904 2,000.00	grapher, 1903 and 1904 2,000.00
To clerical assistance fund 750.00	By clerical assistance 750.00
Total\$5,750.00	Total

#### SUPERINTENDENT OF PUBLIC INSTRUCTION.

# OFFICIAL VISITS BY SUPERINTENDENT OF PUBLIC INSTRUCTION.

December 22, 23 and 24, 1902. Attended Colorado Teachers' Association, Colorado Springs.

Friday, January 16, 1903. Address, Woman's Club of Plymouth Church, Denver.

Thursday, January 22, 1903. Address, Farmers' Institute, Longmont. Visited schools, Longmont.

Wednesday, February 11, 1904. Address, Farmers' Institute, Loveland.

Monday, February 23, to Thursday, February 26, 1903. Attended department of superintendence meeting, Cincinnati. Acted as chairman State superintendents' department.

Thursday, March 12, 1903. Address on forestry, Chamber of Commerce, noon-day lunch.

Saturday, March 14, 1903. Address, Woman's Club of Denver, on teachers' pension bill.

Tuesday, March 17, 1903. Address, Senate judiciary com mittee.

Friday, March 20, 1903. Address, parents' meeting, Gilpin school.

Saturday, April 4, 1903. Address, dedication McKinley school, Denver.

Tuesday, April 7, 1903. Visited schools at Brighton.

Friday, April 10, 1903. Address, parents' meeting, Edison school, Denver.

Monday, April 13, 1903. Address, evening meeting of parents, Clayton school, Denver.

Friday, April 17, 1903. Littleton school, Arbor Day address.

Saturday, April 18, 1903. Address, Woman's Club, Boulder.

Saturday, May 2, 1903. Attended Teachers' Association, evening address, Holyoke.

Tuesday, Wednesday, Thursday, May 12, 13 and 14, 1903. Attended County Superintendents' Association, Pueblo.

Friday, May 15, 1903. Acted as judge interscholastic oratorical contest, State University, Boulder.

Thursday, May 21, 1903. Examination of graduating class. State Normal School, Greèley.

Friday, May 22, 1903. Address graduating class, evening, Ft. Lupton.

Friday, May 29, 1903. Graduation address, high school, Greeley, evening.

Wednesday, June 3, 1903. Attended meeting State Normal School board of trustees, Greeley.

Thursday, June 11, 1903. Graduation address, high school. Montelair.

Friday, June 12, 1903. Graduation address, high school. Colorado City.

Wednesday, June 17, 1903. Address, Teachers' Institute, Golden. Evening, guest of honor commencement exercises, University of Denver.

Friday, June 26, 1903. Address, Denver Normal and Preparatory School.

Monday, July 6, to Friday, July 10, 1903. Attended meeting N. E. A., Boston.

Friday, August 7, 1903. Address, Teachers' Normal Institute, Denver.

Tuesday, August 11, 1903. Address, Teachers' Normal Institute, Pueblo.

Wednesday, August 12, 1903. Visited Teachers' Normal Institute, La Junta. Address, evening, La Junta.

Friday, August 14, 1903. Address, Teachers' Institute, Greeley.

Tuesday, August 18, 1903. Address, Teachers' Institute, Colorado Springs.

Wednesday, August 19, 1903. Address, Teachers' Institute, Monte Vista.

Wednesday and Thursday, August 26 and 27, 1903. Address, Teachers' Institute, Mancos.

Monday, August 31, 1903. Address, Teachers' Institute, Cheyenne Wells, evening.

Friday, September 4, 1903. Graduation address, high school, Lamar.

Saturday, September 5, 1903. Visited Cherry Tree Home and school, Amity, Colorado.

Tuesday, October 20, 1903. Discussion, North Side Woman's Club, Denver.

Friday, October 30, 1903. Address, Boulder County Teachers' Association.

Saturday, October 31, 1903. Address and assistance in or ganizing Adams County Teachers' Association.

Saturday, November 14, 1903. Address, meeting of school boards of Boulder county, Boulder.

Tuesday, November 17, 1903. Address, Woman's Club, of Longmont.

Saturday, November 21, 1903. Address. educational meeting. at Louisville.

Thursday, November 24—Address, Bee-Keepers' Association. Denver.

Friday, November 25. Address, Audubon Society, Denver.

Saturday, November 28, 1904. Address, County Teachers' Association, Grand Junction.

Friday, December 11. Address, Teachers' Association, Fort Collins.

Saturday, December 19, 1903. Address, Teachers' Association, at Gunnison.

Sunday, December 20, 1903. Address, Gunnison.

Monday, December 28, to Thursday, December 31, 1903. Attended Colorado Teachers' Association, Denver. Address, December 29.

February 16, 1904. Address, "Education in Colorado"; the National Woman's Suffrage Association, Washington.

Saturday, April 30, 1904. Address, Clear Creek Valley Teachers' Association, Idaho Springs.

Monday, May 1, 1904. Visited schools. Black Hawk and Central City.

Tuesday, May 3, 1904. Address, North Side Woman's Club, Denver.

Tuesday, Wednesday and Thursday, May 10, 11 and 12, 1904. Attended County Superintendents' Association, Glenwood Springs.

Saturday, May 14, 1904. Attended High School Day exercises, Boulder.

- Wednesday and Thursday, May 18 and 19, 1904. Assisted in conducting examination of graduates, State Normal School, Greeley.

Saturday, May 21, 1904. Acted as judge at oratorical contest, Castle Rock.

Wednesday, May 25, 1904. Address, high school graduation, Arvada.

Friday, May 27, 1904. Address, high school graduates, Brighton.

Thursday, June 2, 1904. Class address at commencement of State Normal School, Greeley.

Thursday, June 8, 1904. Atttended commencement exercises of University of Denver.

Monday, June 13, 1904. Address, Teachers' Normal Institute, Golden.

Wednesday, June 15, 1904. Address, Teachers' Normal Institute, Canon City.

Thursday, June 16, 1904. Address, Teachers' Normal Institute, Las Animas.

Wednesday, June 22, 1904. Address, Normal Institute, Bur lington.

Monday, June 27, 1904. Address, Normal Institute, Denver.

Thursday, June 30, 1904. Address, Normal Institute, evening address, Durango.

Friday, July 15, 1904. Address, Normal Institute, Holyoke. Evening address, Holyoke.

Friday, July 22, 1904. Address, Normal Institute, Saguache. Address, educational meeting, Saguache.

Thursday, August 4, 1904. Address, Normal Institute, Boulder.

Friday, August 5, 1904. Address, Normal Institute, Colorado Springs.

Thursday, August 11, 1904. Address, Normal Institute, Salida.

Friday, August 12, 1904. Address. educational meeting, Gun nison.

Wednesday, August 17, 1904. Address, Normal Institute. Trinidad.

Wednesday, September 7, 1904. Address, District Grange meeting, Harman.

Friday, September 23, 1904. Address, dedication of school building, Lafayette.

Monday, September 26, 1904. Address, educational meeting, Loveland.

Sunday, October 2, 1904. Address, Congregational Church, Harman.

Wednesday, October 5, 1904. Address, State Federation of Woman's Clubs, Fort Collins.

Thursday, October 6, 1904. Visited State Agricultural College and high school, Fort Collins.

Sunday, October 16, 1904. Address to young people, Durango. Monday, October 17, 1904. Visited schools, Mancos.

Wednesday, October 19, 1904. Visited schools, Dolores.

Friday, October 21, 1904. Visited schools, Montrose.

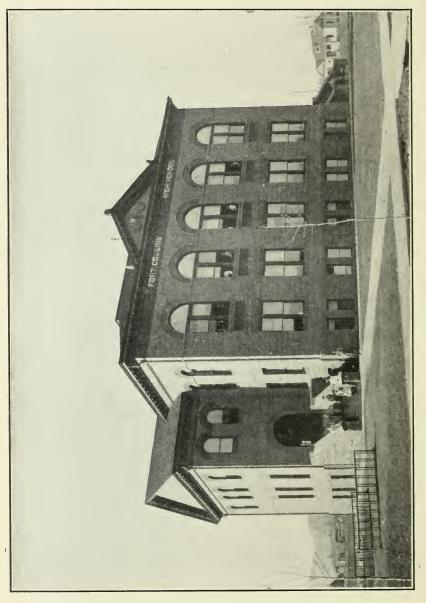
Sunday, October 23, 1904. Address, Gunnison.

Thursday, October 27, 1904. Visited schools and gave address. Leadville.

Saturday, October 29, 1904. Address, Teachers' Association, Greeley.

Saturday, November 5, 1904. Address, Teachers' Association, Del Norte.

Saturday, November 26, 1904. Address, Arkansas Valley Teachers' Association, Pueblo.



#### OFFICIAL VISIT BY DEPUTY.

Saturday, April 25, 1903. Address, Clear Creek Valley Teachers' Association, Idaho Springs.

Tuesday and Wednesday, May 19 and 20, 1903. Acted on examining board, State Normal School, Greeley.

Friday, May 29, 1903. Address to eighth grade graduating , elass, Arvada.

Wednesday, August 19, 1903. Address, Teachers' Normal Institute, Trinidad.

Thursday, June 30, 1904. Address, Normal Institute, Grand Junction.

# COUNTY SUPERINTENDENTS OF COLORADO,

# 1902-1903-1904.

Owing to the law enacted by the Fourteenth General Assembly, making the time of election of county officials simultaneous with that of State officials, the county superintendents elected in 1901 held over until the election of 1904.

Adams	Mrs. Mary C. C. Bradford, Brighton
Arapahoe	Miss Kathryn M. Maloney, Littleton
Archuleta	L. W. Smith, Pagosa Springs
Baca	Miss Margaret M. Marsh, Springfield
Bent	Miss Florence N. Sargent, Las Animas
Boulder	W. C. Thomas, Boulder
Chaffee	Gilbert A. Walker, Buena Vista
Cheyenne.	Mrs. Julia Tinsley, Cheyenne Wells
Clear Creek	Mrs. M. A. Bowman, Idaho Springs
	George W. Irvin, Sanford
Costilla	Charles Groenendyke, San Luis
Custer	Asa P. Dickson, Westcliffe
Delta	Miss Alice A. Royce, Delta
Denver	
Dolores	Mrs. Lizzie Kelly, Rico
Douglas	Frank D. Ball, Castle Rock
Eagle	Grant Ruland, Basalt
Elbert	Mrs. May A. Georgia, Kiowa
El Paso	E. M. Collins, Colorado Springs
Fremont	George E. Colgate, Canon City
Garfield	Mrs. Lucy E. DeWitt, Glenwood Springs
Gilpin	Miss Ida Kruse, Central City
	Elmer R. Bacchus, Sulphur Springs
	Miss Fannie Burnett, Gunnison
Hinsdale	Herbert G. Heath, Lake City

Huerfano	Patrick W. Sweeney, Walsenburg
Jefferson	Miss Ida L. Crawford, Golden
Kiowa	F. H. Maile, Eads
Kit Carson	John F. Stott, Burlington
Lake	Mrs. Lizzie W. Jones, Leadville
La Plata	Miss Edith B. M. Young, Durango
Larimer	Miss Mary E. Gill, Ft. Collins
Las Animas	J. W. Douthit, Trinidad
Lincoln	E. I. Thompson, Hugo
Logan	Miss Louise M. Dyer, Sterling
Mesa	Z. B. McClure, Grand Junction
Mineral	Mrs. Laura A. Van Horn, Amethyst
	H. E. Black, Cortez
Montrose	Miss Emma Willis, Montrose
Morgan	Mrs. M. A. Clifford, Fort Morgan
Otero	*Miss Mary E. Lyon, La Junta
	Miss Minnie M. Holaday, Ouray
	Miss M. V. Remington, Fairplay
Phillips	Miss Madge A. Crowner, Holyoke
Pitkin	Mrs. Edith M. Bailey, Aspen
Prowers	J. A. Rosebrough, Lamar
Pueblo	Miss Lulu J. White, Pueblo
Rio Blanco	Charles F. Brown, Meeker
Rio Grande	G. A. Carpenter, Del Norte
RouttM	iss Verna M. Bartz, Steamboat Springs
Saguache	W. E. Gardner, Saguache
	Mrs. Ellen Carbis, Silverton
San Miguel	Charles S. Watson, Telluride
Sedgwick	C. F. Parker, Julesburg
Summit	Mrs. Lulu B. Hogan, Breckenridge
Teller	Mrs. Thera Satterlee, Cripple Creek
Washington	Mrs. Alta M. Tuttle, Akron
Weld	J. E. Snook, Greeley
Yuma	Miss Minnie Cunningham, Wray

\* Died September, 1904.

# DECISIONS RELATING TO THE SCHOOL LAW OF COLORADO,

By the Superintendent of Public Instruction, July 1, 1902, to July 1, 1904.

*Bonds*—The law does not require that the twenty voters who sign the petition shall be taxpayers, although only those who are taxpayers can vote upon the question of bonding the district.

Providing the other necessary expenses of the school have been met, or providing there is sufficient money in the general fund to meet the necessary expenses of the school, the extra money in the special fund may be used to apply on bonded indebtedness.

In the case of a woman and her husband each owning property, the woman's property being real estate, and the county records showing that she is the bona fide owner of the property and pays the taxes, the fact that in listing the property of the husband and wife the assessor made only one list, and that in the husband's name, would not take away the right of the woman to vote at a school meeting called to vote upon bonded indebtedness; but the woman should be provided with a tax receipt or a certified statement from the county treasurer, showing that she has paid a tax for the year preceding the date upon which the question of the bonded indebtedness was decided.

*Certificates*—A duplicate first-grade certificate, while in force, can be renewed just as if it were the original.

A like grade certificate is not renewable and expires at the time the original issuance of the certificate is ended, or at the time the renewal expires.

A teacher's certificate obtained under an assumed name would not be a legal one, even though the teacher who wrote the papers was able to prove that she was the one who did the work.

Since the law provides that the certificates issued by the boards of districts of the first class must be of the same grades and under the same conditions as those specified in sections 15 and 16 of the School Law, it follows that equal requirements must be made in districts of the first class as in other districts, and the board would not have the right to exempt the candidates from examination in one or more of the subjects specified in section 15 of the School Law.

A fee should be charged for issuing a duplicate certificate, the same as in original issuing of certificates.

The nine months specified in issuing a third-grade certificate mean that the certificate is valid nine months from the date of the examination upon which it was issued. It does not mean that it is good for nine months' teaching, no matter when the teaching may be done. The same rule holds good for the time specified upon a first or second-grade certificate.

The time for which an endorsed certificate is good is simply that specified by the endorsement. Section 60 applies to such cases, excepting that the teacher does not have the right to take advantage of the one month provision.

A certificate of like grade from one county can not be endorsed by a county superintendent of another county, but if the first certificate upon which the like grade was issued is still in force, another like grade certificate upon it can be issued in another county.

When a teacher holds a first-grade certificate, and also one of "like grade," the fact that she fails to pass an examination in either county would not affect the standing of the first-grade already obtained by her.

The law requires that the State Normal School diploma, held by one who is to teach in a certain county, shall be presented to the county superintendent for inspection and registration by him, and until this is done the teacher is not legally a teacher in the county, and therefore should not receive her salary until she has fully complied with the law.

The law prohibiting the issuance of a third-grade certificate to a person who has already held two certificates of the third class does not apply to persons who received such certificates previous to the time the present law was enacted.

Time spent in substituting, without a certificate, must not be counted as a part of the twelve months' experience required for a first-grade certificate.

A third-grade certificate issued to one who has previously held two third-grades is invalid.

It is impossible for a county superintendent who has endorsed a certificate to issue a renewal of the same. Any renewal of a certificate must be made in the county where the certificate was first issued.

It is not legal to issue a like grade on a second grade, as the law plainly states that a like grade certificate shall only be given in lieu of a first-grade certificate, in full force, issued in another county than that in which the school is to be taught.

The School Law positively prohibits a second endorsement of a second-grade certificate which has once been recognized by the endorsement "good until the next examination."

It would be absolutely illegal to extend the time of a secondgrade certificate that expires in September until the December examination, as the laws do not recognize any such extension.

The five per cent. of general average may be added to the general average obtained in a teacher's examination for institute attendance in another normal district, if the county superintendent issuing the certificate desires to do so.

It is entirely optional with a county superintendent as to whether a first-grade certificate shall be renewed or not. If renewed, it is for the full time for which it was originally issued.

The county superintendent has the power to issue a like grade certificate upon a renewal of a first-grade certificate issued in another county; that is, a renewal made by the superintendent in the county in which the certificate was originally issued. There is nothing compulsory in regard to the issuing of a like grade certificate. If, in the judgment of the county superintendent to whom the certificate issued in another county is presented, it seems best that the applicant should take the examination rather than that the renewed certificate shall be recognized by a likegrade, he has absolute authority to do so. A college diploma is not a license to teach in any public school in this state.

It is not lawful to issue a certificate to a person under eighteen years of age.

. Compulsory Education—When a boy's parents live in a school district, they can not avoid the provisions of the compulsory law by sending their son to another locality, the child and the parents being exactly as liable to the provisions of the law as if they were keeping him in the town and he was not attending school.

The demands of the compulsory education law would not be met in case a child attended a private school in which the German language was used, as the intent of the law is that the child shall receive for the time specified equivalent instruction to that given through the public schools, which the law requires shall be taught in the English language.

*Contracts*—A contract made with the president and treasurer of a school board would be legal, providing there is a vacancy in the office of secretary. A warrant signed by the above named members, under the circumstances mentioned, should be a legal and sufficient warrant for recognition by the county treasurer.

When a teacher begins work without having entered into a definite verbal or written contract with the school board which employs her, she has a right to leave the school at any time, and the school board has the right to discharge her at the end of the first month's work, and also to employ another teacher.

A school board can hold a teacher to a contract for the time therein agreed.

In case of two members of the board, at a legally held meeting of the board, voting a certain sum as the teacher's salary, written notice of such action being sent to the teacher, the notice is binding upon the board, and equal to a contract.

If a school board makes a legal contract, either verbal or in writing, with a teacher, providing for his re-election and specifying the salary he is to receive, the board could not, at a later meeting, change its action.

County High School—It will be necessary to give twenty days' notice of the special meeting called for the purpose of voting upon the question of supplying free text books for the county high school, and notices should be posted in the various school districts composing the county high school district, as is required in the case of a special district meeting or election.

The county high school committee may declare more than one voting place in the district, fix the voting places and the limits of the voting precincts, and appoint three judges and the necessary clerks for each voting place. The county high school board would not have the authority to hire the county superintendent to teach in said high school, said superintendent still holding office as county superintendent, which makes him a member of the county high school committee.

In the case of the principal of a county high school being elected county superintendent, he could not legally hold both positions.

A county high school committee has not the authority to furnish free text books to the pupils attending the school, unless a majority vote of the electors of the county has been cast in favor of such action.

In case an appointment to fill a vacancy in a county high school committee is made, it holds only until the next election, and not until the appointee's term as director of the school district is concluded.

It is not necessary for the members of a high school committee to take an additional oath of office, the oath taken as members of the various school boards to which they were elected being entirely sufficient.

Since the powers of directors of first and second-class districts are given by law to the county high school committee, such committee has the authority to examine its high school teachers.

County Superintendent—Where a county superintendent calls a county institute or teachers' association, he has not the right to rule that the district must pay the teacher for the same, as if she had taught school, although the school board would have the right to give the teacher such a day and pay her for it, upon the request of the county superintendent. The right in the matter rests with the district board.

A county superintendent has no power whatever to remove a member of a school board under any circumstances, even though the taxpayers may petition the superintendent to make such removal.

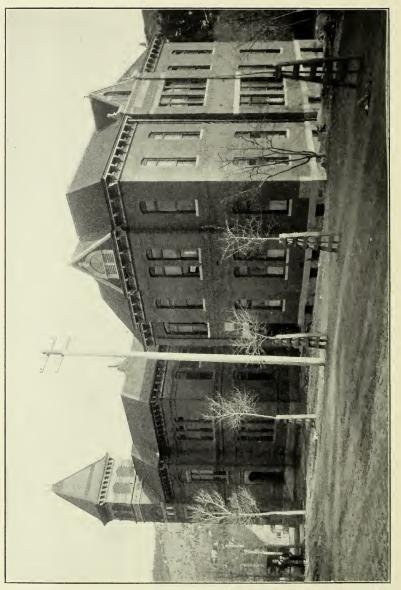
Directors—If a majority of the legal voters of a third-class district, at a special meeting, legally called, decide that a school house shall be moved, it becomes obligatory on the part of the board to move the building. If they do not, the voters can compel them, by mandamus, to move it. The school house does not have to stand thirty days after the majority of voters have decided to move it.

A board of directors of a third-class district can not sell, remove, or tear down a school house unless so directed by a vote of the electors.

As the president of the board is a member of the board, with all of the privileges to which such members are entitled, he can, although the presiding officer of the board, make or second a motion, state it from the chair, and vote on the same.

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If the president of a school board is duly elected, but fails to qualify within the legal time, the office becomes vacant and the county superintendent should appoint some one in his place.

In regard to whether a person living in a district where there are two schools has a right to send his children to either, the matter should be controlled by the local board of directors, the same as is done in cities where the boards control the sending of children to the different city buildings.

It is the right and duty of a school board to exclude from a public school a boy of school age who is an imbecile.

The secretary of a school district of the second or third class can not administer the oath of office to the president. The oath may be administered by the president of any school board, or by the county superintendent; and, of course, by any person such as notary public, justice of the peace, etc., qualified by law to administer oaths.

While the law states that district boards shall fix the amount of the secretary's salary, if the secretary rendered his services without such salary being fixed, or without demanding it at the time, he could not later claim it.

The law gives the right to the school board to say how many months of school shall be held in excess of the months required by law, and also the right to fix the salaries of the teachers employed. The electors have no right, legally, to call a meeting to vote upon either of these questions, and, if such a meeting was held, the school board could not be compelled to attend, or to act in accordance with the action taken through the meeting.

Upon showing that such action is necessary for the location and construction of a school house, and convenient use of the school, directors may, under the Eminent Domain act, condemn not more than one acre of land, and the owner must accept the amount of damage awarded.

A school board does not have to carry out all motions made and carried at the annual meeting of electors unless such motions cover matters upon which the electors are entitled to pass.

Power is given to a school board to expel any pupil for bad conduct and to refuse to permit him to re-enter the school, if in their judgment it is necessary for the welfare of the school.

If a suit is brought against a district, it is the duty of the directors to defend it, to employ an attorney, if necessary, who may be paid from the district's funds; but if the suit is against the board of directors, or any of them, for failure to comply with the law, any cost for defense must not be charged against the district.

The engagement to teach of a person who has no certificate by school directors is illegal, as no contract could be made between the school board and such a person. The fact that she draws no pay would not entitle her legally to teach the school. A school so taught could not be considered a public school, nor could the months of school so taught be counted in, or reported as, months of public school work. School directors could only, as private citizens, employ a teacher to teach a private school. There is no possible way in which the public school work and the private school work can be combined, or the private school work legalized as public school work, or a private school teacher, uncertificated, in any way be considered as a public school teacher.

A school board would have the right to require work above the eighth grade to be done, providing there was nothing in the contract made with the teacher which would give her the right to object to do such work.

Since the school board has full authority to make rules and regulations concerning the management of the schools in a district, the board would have the right to fix the time when beginners might be permitted to enter the schools.

If a member of a school board permanently removes from a district, the office which he has filled becomes vacant at the time of his removal, and he can not afterwards legally act as a member of the board during a temporary return to the district. Any action of the school board which depended upon his vote would not be a legal action.

The law gives the entire authority in regard to fixing the course of study to the board of directors; and the members of the board can not be compelled to furnish instruction in the ninth grade if, in their judgment, it does not seem best to do so.

A school board has the absolute right to engage the teacher, or teachers, for the school district. The fact that a majority of the taxpayers sign a petition making a protest against the selection made by the board can not in any way affect the legal right or the action of the board in the matter of the appointment of a teacher.

A school board of a district has the right to decide as to whether a school house shall be rented for any purpose, it being necessary, however, that the purpose be one against which no reasonable objection might be made by the electors of the district.

A school board has the right to make the regulations concerning the admittance of pupils to a certain grade of the school when the fall term commences, said pupils having failed to pass the examination given in the spring, and also to authorize the principal to make such rules and regulations and to enforce them as if made by the board as a body.

The law makes distinct specifications in regard to the separate offices of secretary and treasurer in a first-class district, making those offices as distinct as in a third-class district, where different persons must be elected to the two offices. The business of the district could not be legally transacted with one person acting in the two capacities. *Districts*—If a district is entirely deserted and has failed to make report, etc., as specified in section 30, page 30, of the School Law, the county superintendent should declare it annulled and annex it to an adjoining district, simply by declaring it so added, and making the proper record. The act of uniting the two originates and concludes with the county superintendent, subject only to the restrictions specified in the law.

A district in which there are no pupils of school age residing may keep up an organization for an indefinite time, by electing officers and making all necessary reports.

A tenant may be set over to an adjoining district, even if the owner of the land objects to it, if done in accordance with the provisions of section 29, page 29. of the School Law.

There is no way in which a district could be declared to be a first-class district simply because its census list is known, before the time of the school election of this year, to have reached the number required for a first-class district. When the census list of any year shows that a district contains the required school population to entitle it to become a first-class district, the organization as a first-class district is made through electing a board of five members at the next annual election.

A district in one county may be attached to a union high school district existing in another county.

A school district can not perfect a title to land, as this is the power of an individual only. Before the district purchases the land the patent should be issued to some one, otherwise the title would be insecure.

In the case of a petition from one district, asking to be united as a whole to another district, it is not necessary that the signers should be taxpayers, but they must be legal voters.

It is not absolutely necessary that nine square miles of territory be included in the organization of a new school district.

No old district can be divided and form a new district, unless it contains an area of more than nine square miles or has an assessed valuation of more than \$20,000 and forty children of school age, nor can it be divided if the remainder of the district is left with fewer than twenty persons of school age in it.

When a district has changed from one of the first class to one of the second class, it is necessary for the district to elect an entirely new board of three members. This action is made necessary by the fact that our laws provide only for boards of three or five or seven members in case of first-class districts, and, therefore, even though a community desired to retain, so far as possible, a board as now existing, the legality of the actions of such a board could be questioned at any time.

*Election and Electors*—Any school elector of a district has a right to take steps to have the legality of the election in a school

district tested, or to have the properly-elected officer declared a member of the board.

The electors of a district, when assembled at the regular annual school meeting, in a district of the third class, have a right to instruct the school board as to what the material of a new school building shall be.

A change in the place of election from the one specified in the notices posted can never legally be made.

When the electors of a district call for a meeting to reconsider the matter of placing a school house upon a certain site, the reconsideration can not properly be taken unless the school house has been erected on the site first selected by a majority of the voters. It is not the intent of the law that the will of the district shall be continually thwarted in regard to the placing of a school building.

The fact that a man has resided in the district the required length of time preceding election for voting, does not make his wife a legal voter unless she, also, has resided that length of time in the district.

In the case of there being a tie in the vote of two candidates for the same position at a school election, it would be necessary to hold a special election for the office, in accordance with the rules provided for special meetings.

It is not necessary that an elector voting to place free text books in a school should have been a taxpayer in the school district for the year preceding the election.

A school board can not legally appoint any one to act as judge of a school election, without requiring him to take the oath for the same.

Funds—Bonds can not be voted for sinking an artesian well, but if the district has sufficient money in its special fund, it may use that money for such a purpose, on a vote of the electors.

If any surplus funds remain in the special fund, over what is necessary to meet the regular current expenses of the district, such surplus may be used to pay past indebtedness.

The laws do not permit the transference of the pro rata of the general fund to another district, in case of pupils being listed in one district and immediately moving to an adjoining district.

A district school board has the right to use the funds of a district to pay for legal services properly engaged for the protection of the interests of the district.

In regard to the method of raising money to build a school building, the law prohibits the issuing of warrants in excess of the revenues of the district for the current year; therefore, an arrangement for issuing warrants payable in one, two and three years, the qualified voters to vote a levy to be collected in one, two and three years to pay the warrants, would not be legal. The voters have no authority to vote a levy except for the current

year. It would, therefore, only be possible to raise the money by voting bonds for the amount, if the electors do not wish to levy the whole tax in one year.

The law does not give the school board the right, without the consent of the electors, to furnish board from the special fund for pupils who live too far away to attend.

The Constitution of Colorado prohibits the use of public school money for the teaching of sectarian tenets or doctrines. It is, therefore, unlawful for a board of directors to require a teacher to devote any part of any school day to religious instruction.

*Holidays*—A teacher is entitled to have as holidays the days designated as such by the laws of Colorado, and is entitled to receive her pay for the same when occurring during her term of school.

When school opens on the Tuesday following Labor Day, Labor Day is counted as a holiday, and is not required to be made up by teacher.

It is not lawful to dismiss school on Arbor Day, since, while it is a holiday, the law plainly declares that the day shall be properly kept by appropriate exercises, tree planting, etc.

*Kindergarten*—It is illegal to pay from the public fund a kindergarten assistant who holds no teacher's or kindergartner's certificate.

A district of the first class has no authority to issue kindergarten certificates.

It would not be legal for a district of the first class to employ a teacher for kindergarten work, if the board's certificate is the only credential that she holds in connection with such work.

*Meetings*—A special meeting, if called and held in accordance with the provisions of the law, is legal, even though the county superintendent is not notified of the meeting.

When the president of a school board calls a meeting, the notice would not meet the requirements of the law unless the time and place of meeting were definitely specified.

In the case of a special meeting legally held, the business there transacted would not be invalidated through the failure of the secretary to send a formal report to the county superintendent of the business thus transacted, although it is the duty of the secretary to send such a report.

Normal Institute—Two weeks' session of the Normal Institute must be held. If the session is shorter, the county commissioners are under no obligation to pay for teachers attending from their county.

*Pupils*—The residence of the parents or guardian determines the school district in which the children's names should be listed. In case the mother has one legal residence and the father another, the residence of the mother determines the residence of the children.

When a pupil leaves a school where free text books are furnished, he has no right to take home with him and keep text books belonging to the district.

An emancipated minor has a right to declare his residence, and is entitled to all the school privileges of the district of which he is, bona fide, a resident.

The school board of a district has the right to exclude children from other districts on account of lack of room, and to require tuition from pupils who live outside the district. The board has the sole right to decide whether or not the children from other localities shall attend school in the district.

In the case of families living in one school district, but sending children to school in another district, the children must be listed in the district in which the parents reside, and not in the district in which they attend school.

The fact that one is a taxpayer in a certain county does not give him the right to send his children to any school in the county, he simply having the right to send his children to the school located in the district in which he permanently resides.

In the case of a child under school age the parent would have no legal right to send such a child to school, no matter how well advanced or capable the child might be. The board would have the right to exclude the child from school even though he obey the teacher and does the work well.

School—If a majority of the school board of a district decide that a certain number of months of school shall be held at two different places, such an action will stand if taken at a regularly called meeting of which all the members of the board had due notice. There would be nothing illegal in providing that two months of school be held in one portion of the district, and the remaining number of months at another place, and there is also nothing illegal in the school being held in a private house.

The law does not require that a school house shall be placed on a public road.

Tax—If districts are consolidated between the time of voting on the special tax and making the levy by the county commissioners, a new levy must be determined on for the new district.

In the call, or notice, of a special or annual school meeting it is illegal to specify the amount of a proposed levy and to require electors to vote for or against the levy thus proposed, without discussion or amendment.

When the electors have voted a definite special levy for building a school house, the board can not spend, in building said school house, more than the proceeds of said special levy, unless so directed by the electors. The county commissioners have no authority whatever to change levies for special school tax when certified to by the directors of a district. The levies as certified by the school directors must remain, whatever the action of the commissioners may be as regards valuation.

While the law does not permit the changing of a tax levy made at the annual meeting in May, and certified to by the school board of the district, the district would have a right to call a special meeting to vote an additional special tax of two, or any other number of mills that would be inside the limit up to which a third-class district is permitted to levy. This is not in any way to be considered changing the original levy, but simply voting an additional levy.

*Teachers*—It is absolutely illegal for the members of a school board to appoint a teacher at any time, or in any way, save through the action of a majority of the board, at a regularly called meeting of which all the members have had due notice.

While the law does not state that married women, living with their husbands, in Colorado, shall be allowed to teach, there is no law prohibiting any person eighteen years of age, who can obtain a certificate, from teaching, save when a member of the school board.

If two districts are united according to law, and a teacher holds a contract made previous to the union to teach a coming term of school in one of the districts, the newly formed district is not required to carry out that contract, since the district, as originally established, has ceased to exist, being now simply a part of another district; therefore, the contract, by its board of directors, has become null and void.

The law makes the same requirements of the principal, or teachers of a county high school, as of any school of high grade. Therefore, a special certificate covering the high school branches must be obtained by the applicant who expects to teach in a county high school. \*

A teacher can not legally teach two months after her certificate has expired. In case of the employment of a teacher under such conditions, any elector could make legal objection to her, receiving payment from the school funds, and a school board responsible for the payment of her wages under such conditions would be liable for the amount of the wages.

To be entitled to his salary for the day, the teacher should remain in the school room after the hour of opening, both forenoon and afternoon, a sufficient time to determine that no pupils will be in attendance.

A teacher can not be required to teach instrumental music in a school, as the branch is not one included in the requirements of a common school course. The fact that a parent is a director upon the school board would not prevent a daughter who has a legally issued certificate from being eligible to a position as teacher in the district.

If a teacher is not competent to conduct a school the school board is not bound by the contract.

If the directors authorize the use of the school house for election purposes, the teacher is entitled to pay for time thereby lost.

Text Books—In regard to a district board furnishing free text books, the provisions of the law mean that a majority of the votes cast upon the question of providing free text books for the district shall govern, and not a majority of all the electors residing in the district.

The fact that a district has voted to furnish free text books to its school children, and has done so for a number of years, does not permanently bind the district so to furnish the text books. If brought up in the manner prescribed by law, the district may again vote upon the matter.

Union High School—A Union High School district may be bonded for the purpose or erecting a high school building. The uniting of contiguous districts into one district for a special purpose gives such district, when properly organized, the same right to act as a body corporate as other districts possess.

The school districts that may be organized into a new union high school district with an incorporated town or city as a center must all lie in one county; but when a union high school district already exists, a school district in another county may be attached to it by vote of the electors.

*Warrants*—It is not the duty of the secretary of the board to draw a warrant unless the order for such warrant appears upon the written records of the board.

A warrant sent to, and receiving the signature of, a director while absent from the State is legal.

#### COUNTY EXAMINATION OF TEACHERS FOR FIRST. SECOND AND THIRD GRADE CERTIFICATES. DECEMBER 19 AND 20. 1902.

# FIRST DAY, A. M .--- ARITHMETIC.

1. Express in Roman notation 79, 1899, 1902. In Arabic notation, DVII, MDLXIV.

2. Divide 0.75 of  $17\frac{5}{5}$  by  $\frac{4}{5}$  of 0.035, giving the answer the form of a decimal number. Show by discussion and by examples how to teach pupils to place the decimal point correctly in the quotient.

3. Simplify 
$$\left(1\frac{3}{8}+\frac{5}{4} \text{ of } \frac{21}{11\frac{2}{5}}-\frac{5}{2\frac{1}{2}}\right) \div 2\frac{77}{114}$$

4. Change <sup>2</sup>/<sub>4</sub> of a square mile to integers of lower denominations.

5. A, on arriving in Denver, finds his watch 2 hours and 45 minutes slow. Does A live east or west of Denver, and how many degrees?

Twelve men working 10 days, 8 hours each day, can dig 6. a trench 40 rods long, 3 feet deep, and 6 feet wide; how long will it take 15 men, working 10 hours each day, to dig a trench 30 rods long, 8 feet deep, and 4 feet wide?

The interest on \$240.00 for 2 years, 6 months, 18 days, 7.at 12 per cent., is equal to the interest on what sum for 3 years, 3 months, 18 days, at 6 per cent.?

8. M receives \$2,520.00 from his principal to invest in mining stock. After deducting his commission of 5 per cent., he invests the balance in stock at 124c per share. How many shares of stock did he purchase and what was his commission?

9. How many square feet in a circle whose diameter is the same length as the hypotenuse of a right angled triangle whose base is 8 feet and whose altitude is 6 feet?

10. Define the following terms as used in arithmetic: proportion, root, ratio, factor, commission, premium, involution, exchange.

# WRITING.

1.5. Explain the principles of the system of penmanship which you teach your pupils.

6-10. Fifty credits on penmanship of all manuscripts submitted in this examination.

### FIRST DAY, P. M.-PHYSIOLOGY.

Define "hygiene," "physiology," "anatomy." 1.

What is lymph? chyle? ptyalin? trypsin? pepsin? Classify foods. Give processes of digestion. 2.

3.

4. Give composition of the blood. Distinguish between arterial and venous blood.

5. Classify muscles as to shape. Give structure of muscles.

6. Name the organs of respiration. Describe the lungs.

7. Describe the brain:

- (a) Its coats.
- (b) Parts.

(c) Composition.

(d) Use.

8. What organ is most injured by alcohol? Give effects of alcohol on the liver and on the brain.

9. What is the function of the spinal cord? Classify the nerves.

10. Write on the principles and importance of ventilation.

# CIVIL GOVERNMENT.

(Answer last question and any four of the remainder.)

1. Why was the government under the Articles of Confederation a failure? Compare the Articles of Confederation with the Constitution.

2. How may the Constitution of the United States be amended?

3. Mention seven powers of Congress; three restrictions.

4. How are United States Senators elected? Is the present method of election satisfactory?

5. Give arguments for and against the election of the President by popular vote.

6. What amendments were submitted to the electors of Colorado at the last general election? Give main features of the Rush bill.

# READING.

1. Outline, in brief, your method of conducting a recitation in reading.

2. Apply diacritical marks to the nouns and verbs found in the following:

"O! Many a shaft at random sent

Finds a mark the archer little meant;

And many a word at random spoken

May soothe or wound the heart that's broken."

3. Give synonyms for shaft, soothe, random, and wound.

4. What are the advantages of silent reading? Of oral reading? Of phonic drill?

5. Name two American poets, historians, orators, novelists, and one work of each one named.

#### ORTHOGRAPHY.

- 1. (a) Account for silent letters in words.
  - (b) What is your idea of the form and spelling, i. e., dropping silent letters in words of common use?

2. What should be taught in an ordinary spelling recitation besides the correct spelling of the words?

3. What relative importance would you place on written and oral spelling?

4. Name and illustrate the meaning of five prefixes in common use by combining them with root words.

5. Use in sentences five words, each of which has two accepted forms of spelling.

### SECOND DAY, A. M.-HISTORY.

1. Mention the principal Spanish explorers. French.

2. Why were the English not active in exploring and colonizing America during the sixteenth century?

3. Mention and explain forms of government that existed in the Colonies before the Revolution.

4. Bound the United States at the close of the Revolution.

5. What territory, by what means, and when, has been added since?

6. What states were formed from the Northwest territory?

7. Give five important events in Jackson's administration.

- 8. What was the Missouri Compromise?
- 9. (a) What event precipitated the beginning of the Civil war?
  - (b) What was the Trent Affair?

10. What caused the recent strike in the Pennsylvania coal fields? How is it to be settled?

### GRAMMAR.

1. How does language work differ from technical grammar?

2. What is meant by the statement that "English is a composite language?"

3. Give some practical rules for use of *shall* and *will* in the second person.

4. Explain, by examples, the difference between direct and indirect quotations.

- 5. (a) Give one general and two special rules for the agreement of a verb with its subject.
  - (b) Illustrate the rules which you give.
- 6. (a) Mention the ways in which a relative pronoun is distinguished from a personal pronour.
  - (b) Point out resemblances and differences between adjectives and participles.

7. Decline in singular and plural: thief, woman, it. himself and which.

8. Correct the following, and give reasons for all changes made: (a) Tomatoes are said to be healthy food. (b) Which of you boys left your books laying on the desk? (c) I don't

think that he did it. (d) Teacher, can I pass the water? (e) He declared that the world was round.

9. Parse the words in italics: (a) Who he was is a question. (b) I believed him to be the man. (c) They made the stick straight.

10. "The melancholy days are come, the saddest of the year, Of wailing winds, and naked woods, and meadows brown and sere."

Analyze or diagram the above couplet.

# THEORY AND PRACTICE.

1. Give five reasons for maintaining "parents' meetings" in connection with public school work.

- 2. (a) Give briefly five reasons for introducing nature study into elementary schools.
  - (b) How correlate "humane treatment of animals" with nature study?

3. Name briefly five important characteristics of a good school schedule.

4. Of the four operations in arithmetic, which is the most important, and why?

5. (a) What is meant by "dictionary habit?" (b) At what age should a teacher begin to fix this habit in his pupils? (c) How best do this?

# SECOND DAY, P. M.-GEOGRAPHY.

1. What is the distinguishing feature between an island and a continent?

- 2. (a) Bound Colorado.
  - (b) Give its five principal industries.
  - (c) Name its five largest cities; why so located?
  - (d) Name its four largest rivers.

3. Colorado forms a part of what acquisitions of territory? When and from whom obtained?

- 4. (a) In what river basin is your county?
  - (b) What is the largest river basin in the world?
- 5. Why are the tropics and polar circles so located?
- 6. Name and locate the largest city of each continent.

7. Name the principal river of each continent, giving its general direction and into what it empties.

- 8. (a) Give three proofs of the spherical shape of the earth.
  - (b) What causes the change of seasons?

9. What state, or group of states, excels in the production of corn, wheat, cotton, coal, gold, iron, copper, cattle?

10. Define tundra, pampas, delta, steppes, estuary, locating one of each.

#### SCIENCE.

(Answer any eight. Number answers to correspond with questions.)

1. If you have "nothing but leaves" to examine, what five facts can you determine about the plant?

2. If you could inspect a row of plants extending from the equator to the polar circle, what changes would you note?

3. Explain somewhat in detail the inter-dependence of the animal and vegetable worlds.

4. Describe tests to show that carbonic acid gas and watery vapor are products of respiration.

- 5. (a) Draw pictures of three simple mechanical powers.
  - (b) State the mechanical advantage of each power illustrated.

6. Explain the principles upon which wireless telegraphy is based.

7. (a) In what kind of rocks are caves usually found?

(b) Give reason.

8. Colorado has a greater variety of birds and plants than any other state in the Union. Give reasons.

9. Outline a nature lesson on the feather—a lesson suitable for a grammar grade.

10. (a) Why so little rain-fall in Colorado?

(b) Why so few cases of sunstroke?

11. What are tides? and give theory of cause.

12. Distinguish between perodical and variable winds, and give examples.

SCHOOL LAW.

1. What are the powers of electors of district meetings?

2. How are school taxes levied and collected?

3. How may vacancies in the office of school directors be filled?

4. How are school districts classified, and what is the basis of classification?

5. What is the law in regard to the power to prescribe text-books to be used in the public schools?

# COUNTY EXAMINATION OF TEACHERS FOR FIRST, SECOND AND THIRD GRADE CERTIFICATES, MARCH 20 AND 21, 1903.

#### FIRST DAY, A. M.-ARITHMETIC.

1. Define product, quotient, root, ratio, proportion, interest. discount, commission.

2. Multiply 48 ten-thousandths by two and one-thousandth and divide the result by two thousand.

3. What is the least number of pennies that can be arranged in 8, 12, 16, 20, or 24 equal piles?

4. If  $\frac{3}{4}$  of  $\Lambda$ 's money equals  $\frac{3}{5}$  of B's, how much of  $\Lambda$ 's money equals  $\frac{5}{8}$  of B's? Analysis.

5. A note of \$1,250 dated June 2, 1901, was paid March 20, 1903, with interest at 8%; what was the amount paid?

6. A fruit dealer lost  $33\frac{1}{3}\%$  of a shipment of apples, and sold the remainder at a gain of 50%; what per cent. did he gain or lose?

7. A suit was marked \$20. The dealer fell 10% from marked price and still made 20%; how much did the suit cost?

8. A ladder 36 feet long will reach to the top of a wall when the foot of the ladder is 16 feet from the base of the wall. How high is the wall?

9. How many times will a car wheel, 3 ft. in diameter, revolve in going ten miles?

10. How much lumber will it take to fence a square tenacre farm, with a 5-board fence, boards 6 in. wide, 1 in. thick?

#### PENMANSHIP.

1. What system of penmanship do you prefer? What advantages has it?

2. How do you teach beginners to write? Do you prefer ruled or unruled paper for them? Give your reasons.

3. How does the writing in your spelling work compare with that of the writing lesson? Do you consider the quality of the writing important in all manuscripts handed in by your pupils?

4. Should pupils of the sixth grade write as rapidly as pupils of the eighth grade? About how many words of average length should each write per minute?

5-10. Graded on permanship of all manuscripts submitted in this examination.

## FIRST DAY, P. M.-GRAMMAR.

1. Name the properties of the noun. Give three ways of distinguishing the masculine and the feminine genders. Illustrate each.

2. Form the plurals of the following nouns and give rules: Glory, bush, hoof, t, ox.

3. Tell the part of speech to which the italicized words belong: What road did he take? There is nobody here but me. He did what was right. I know that my Redeemer liveth.

4. Make sentences illustrating three ways in which *that* as a relative should be used in preference to who or which.

5. Give the synopsis of *choose* in the indicative mode, passive voice, and in the potential mode, active voice.

6. Make a sentence with a relative clause; one with an adverbial clause; one with a noun clause used as subject; one with a noun clause used as object.

7. Correct and give reasons:

(a) Every pupil should attend to their own lessons.

(b) The Supreme Court differed in its opinion.

(c) Is that book for you or 1?

- (d) I refer to my old friend, she who has visited us so often.
- (e) If my friend was in town, he would surely help me. 8. Define case; mode; present perfect tense.

9. Parse the words in italics: I saw my friend to-day.

10. Analyze: "Nay," said Richard, "I never bade man do that which I would not do myself."

#### PHYSIOLOGY.

1. Name the functions of the nerves. What provisions are made for the protection of the nerves?

2. Of what use are the olfactory, optic and auditory nerves?

3. Explain briefly the mechanism of the spinal column.

4. Locate the following: patella, fibula, phalanges, humerus, clavicle.

5. Describe the organs of the voice.

6. State what care should be taken of the voice.

7. What is the purpose of breathing? How are the nasal passages peculiarly fitted for introducing air into the lungs?

8. Why do we need extra covering during sleep?

9. Give the changes that take place in the air during respiration.

10. Discuss the subject of physical culture in the school room.

# SCHOOL LAW.

1. Give four duties of the school boards of third class districts. Give four duties of electors in third class districts.

2. From what sources is the general school fund obtained? For what purpose may it be used?

3. From what source is the special school fund received? For what purpose may it be used?

4. What powers are granted to first class district school boards, not granted to third class district boards?

5. When a pupil becomes unruly how may he be legally removed from school?

#### READING.

1. Regarding a reading lesson as a study in literature, what points are to be considered?

2. Why do children nearly always make use of correct inflection in their conversation, and fail to do so when asked to read?

3. What facts are to be taught of each new word in a reading lesson?

4. What method or methods should be used to teach children to read?

5. Name three American historians, four American poets and three American novelists. Write a short biography of one of those named.

### SECOND DAY, A. M .- NATURAL SCIENCES.

Discuss the origin of the soil. 1.

What is meant by dew-point? What is the maximum 2.density of water?

3. Explain the cause of ocean currents. Give two good results of ocean currents.

4. What is an insect?

5. Give the origin of salt deposits. Why are there so many of these in the western part of the United States?

6. To which of the seven branches of the Aryan race does each of the following peoples belong: French, Scotch, Swedes, English, Irish, Germans?

7. Define flora, fauna, zenith, nadir, crevasse, névé, peat, humidity, delta and tide.

Of what is water composed? 8.

What is pollen? Of what use is it? 9.

What chemical changes take place in the leaf before it 10. falls?

#### HISTORY.

1. Name three Spanish and two English explorers, and describe what they explored.

In which colony was negro slavery first introduced? 2.When?

Which colony first guaranteed religious freedom? Who 3. was the leader?

4. For what purpose was the Plymouth colony founded?
New Amsterdam? Virginia? Pennsylvania? Georgia?
5. Explain the Monroe Doctrine.

Name the inventor and date of the following inventions: 6. cotton gin, reaping machine, telegraph, sewing machine, screw propeller.

7. Explain state sovereignty. What bearing had it on secession?

8. Name something worthy of note connected with the following names: Anthony Wayne, David G. Farragut, Henry Clay, John C. Calhoun, William Lloyd Garrison.

9. Name the principal points in the Omnibus bill, or Compromise of 1850.

10. Name the most important acquisitions of territory to the United States in the last ten years. How was each acquired?

#### CIVIL GOVERNMENT.

1. Name the three departments of our government and define the duties of each.

2. Tell how we elect a president.

3. What is naturalization? What is meant by ex post facto?

4. Name the necessary qualifications of a senator; of a representative. By whom is each elected?

To what do the first ten amendments relate? Which 5. amendment prohibits slavery? When was it adopted?

#### SECOND DAY, P. M.-GEOGRAPHY.

1. Name the grand divisions of land, and state in what zone or zones each is located.

2. What causes rain-fall? Why is the rain-fall of Brazil so much greater than that of Colorado, Kansas and New Mexico? 3. Define zone, climate, sphere, delta and geyser.

4. Compare the United States with Europe, as to area, surface, climate and population.

5. What and where are the following: Superior, Yosemite, Guam, Atacama, Suez, Everest, Liberia, Melbourne, Luzon and Cettinje?

6. Name the exports of France, China, Brazil, England and United States.

7. Name three important products of each of the following states: South Carolina, Pennsylvania, Iowa, Texas, California.

8. Name the British possessions.

9. What territory has the United States acquired since January 1, 1898? Locate each portion.

10. Colorado: Name and locate five cities having a population of 10,000 or more. Give three counties producing gold; three fruit; three grain; three coal.

### THEORY AND PRACTICE.

1. It is claimed that teaching reading by the alphabet method secures better spelling than by other methods. Give one reason for this claim and one against it.

2. State briefly why it is objectionable to formulate a code of rules for the management of a school.

3. Describe somewhat in detail three ways of securing attention—ways in which you have been successful.

4. State main objects to be kept in view in teaching (a) primary reading, (b) advanced reading.

5. (a) State the characteristics of a model analysis of a problem. (b) Write out analysis of following problem to illustrate your answer: John has  $\frac{2}{3}$  as much money as James, and they together have \$1.40; how much has each?

#### ORTHOGRAPHY.

1. Define the following: vowel consonant, diphthong, syllable, accent.

2. Write three derivatives from each of the following 'words: perceive, govern, finance, control.

3. At what stage of the pupil's general advancement should diacritical marks be taught, and what is a good method of putting them to use?

4. Use the following in sentences: precede, proceed.

5. Spell the following, correcting when necessary: sieve, siege, neice, mischievous, indellible, representitive, sensorious, raillery, shivalrous, souvener.

6-10. Graded on spelling of all papers in this examination.

# COUNTY EXAMINATION OF TEACHERS FOR THE FIRST, SECOND AND THIRD GRADE CERTIFICATES, AU-GUST 20 AND 21, 1903.

#### FIRST DAY, A. M.-ARITHMETIC.

1. Define bond, ad valorem duty, proportion, Greatest Common Divisor.

2. What is the least sum of money that will exactly pay either for cows at \$48, oxen at \$64, or horses at \$120 respectively?

3. A room is 8 feet long, 6 feet wide and 6 feet high; find the cost of plastering the room at 12 cents per square yard.

4. Draw the following, giving the length of each side of the figure: parallelogram, rectangle, isosceles triangle, trapezoid, pentagon.

5. The longitude of Rome is 12 degrees, 27 minutes, 14 seconds East, and that of Washington 77 degrees, 2 minutes, 48 seconds West. At noon in Washington, what is the time in Rome?

6. An edge of a cube is 13 inches; find the entire surface and the volume.

7. A horse and carriage were sold for \$400, the horse bringing 3 times the price of the carriage. If there was a profit

of 20% on the horse and a loss of 20% on the carriage, what was the gain on the two?

8. An agent charged  $11/_{2\%}$  commission and \$58.60 expenses for selling my house, and he sent me \$11,761.40. For how much did he sell the house?

9. If a five-cent loaf of bread weigh 12 ounces, when flour is \$8 a barrel, how much should a three-cent loaf weigh when flour is \$9 a barrel?

10. What is the chief advantage of the Metric System over the English System? Write the table for long measure in each system.

(5 credits on first half,  $2\frac{1}{2}$  on each portion of last half.)

#### PENMANSHIP.

1. Write such an application for a school as you would use in applying for a position.

2. State in order of importance the essentials of a good handwriting.

3. Write capital letters, small letters and nine digits, grouping them in the order in which you would teach them, with reasons for such order.

4. What use, if any, do you make of the blackboard during the writing exercises?

5. What attention do you give to the general written work of your school?

6-10. Graded on penmanship of all manuscripts in this examination.

# FIRST DAY, P. M.-GRAMMAR.

1. What is Grammar? What is Rhetoric? Define Etymology; Orthography; Syntax.

2. Re-write the following, punctuating and using capitals when necessary:

that is the life for me said the small boy eagerly what a gentleman of an animal the elephant is and he has nearly a dozen men to wait upon him ha old longnose what a very happy fellow you must be oh if I were only an elephant or even the keeper of an elephant.

3. Write the words of the selection in question No. 2 in eight groups, classifying them according to their use. Suggest a name for each group.

4. Give likenesses of the infinitive and the participle to each other. Give differences between them.

5. Analyze or diagram the following:

When you *hear* the little *downy* wood-pecker begin his spring *drumming*, you may look for the first chipmunk, for I know he is then due.

6. Parse italicized words in question No. 5.

7. The infinitive is usually accompanied by what word? When is this word omitted?

8. Give an outline for the study of the adverb.

9-10. Will be graded from grammatical construction and character of English used in the manuscripts of this examination.

#### PHYSIOLOGY.

1. Name and describe the organ of the voice which is essential to all animals.

2. What tissue is the primary form of all other tissues?

3. What classes of material enter into the composition of the bones and of what use is each?

4. Is it advisable to use vigorous mental or physical exercise immediately after a hearty meal? Give reasons for your answer.

5. State the effects upon the air in a living room of the growing of house plants, and of the burning of a lamp.

6. Write what you can of the growth and power of the use of narcotics and stimulants.

7. What is animal heat and how is it produced?

8. What are the chief conditions favorable to stomach digestion?

9. Of what does the sympathetic system consist?

10. Define: biceps, bursa, carpus, choroid, lacuna, synovia, coccyx, pectoral, pylorus, assimilation.

#### READING.

1. Name the advantages to be derived from the practice of the elementary sounds.

2. Give outline for a biographical sketch, and write such a sketch of any one of the following: Roosevelt, Cleveland, Lowell, Whittier.

3. Define Reading, Language and Literature and state relation among them.

4. With what studies may reading be correlated? What grades may with profit be combined in reading classes?

5. Describe some methods for securing correct expression. .

### SCHOOL LAW.

1. State fully that portion of the school law relative to compulsory education in Colorado.

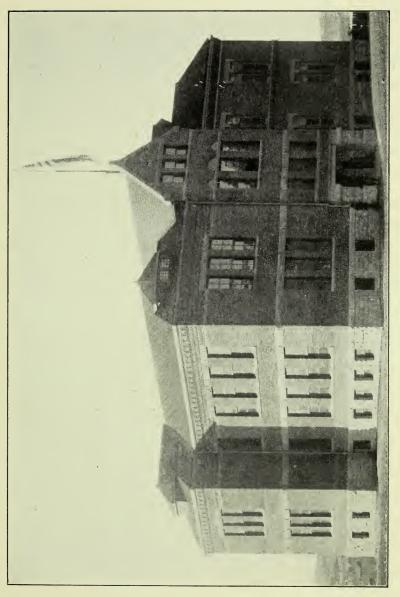
2. Give the different steps necessary in establishing a County High School.

3. Give three duties of the State Board of Education.

4. What kinds of certificates give license to teach in the public schools of Colorado? State how each may be obtained.

5. What offices does the State Superintendent of Public Instruction of this state hold *ex-officio*?

What may a County Superintendent hold ex-officio?



PARK SCHOOL, TRINIDAD.

חאואבעינוג מין גריי הדא סג נאק רופט ונא

# SECOND DAY, P. M.-NATURAL SCIENCES.

1. Give cause and frequency of tides and their effect in gulfs and bays. Draw the earth, sun and moon in a position that produces the highest tides.

2. Explain the terms low pressure and high pressure as applied to wind areas.

3. What are the essential conditions for the germination of a seed? What is chlorophyll?

4. Explain the relation of the plant to the animal and mineral kingdoms.

5. What is the effect on the rain-fall when a section of country is cleared of its forests? Give effect on erosion. Give reasons for both answers.

6. Define combustion, cohesion. Distinguish chemical action and physical change.

7. Define invertebrate, amphibious, hibernate.

8. Where do the vertical rays of the sun fall June 21st? Give limits of oblique rays. Explain the change of seasons during an entire revolution of the earth around the sun.

9. What part of the flower of the apple grows principally into the edible fruit? Name the essential organs of a flower.

10. Define mesa, alluvial, talus, geyser, estuary.

#### HISTORY.

 Show briefly the result of the following on American history: (a) Exploration of the Cabots; (b) Exploration of La Salle and Marquette; (c) Capture of Constantinople by the Turks;
 (d) Wars of Napoleon and England.

2. What battle is considered the turning point of the Revolutionary war? State fully the reasons for your answer.

3. Explain three important compromises of the constitution of 1787.

4. What is the Monroe Doctrine? Explain the condition of affairs in the Western Hemisphere which led to its announcement.

5. Show why the South opposed a protective tariff, while the North favored the same. What trouble grew out of this difference in 1832?

6. Write a paragraph on the condition of the United States when Lincoln was inaugurated president in 1861.

7. What is the Mason and Dixon line, and why is it important in United States history?

8. Explain briefly the acquisition of territory of the United States at these periods: (a) 1780 to 1800, (b) 1803, (c) 1819, (d) 1845, (e) 1867.

9. Give an important fact showing the connection of each of the following with American history: (a) Roger Williams, (b) William H. Steward, (c) J. C. Calhoun, (d) James Oglethorpe, (e) Commodore Dewey.

10. Name the leading political parties of the time of Jefferson's administration, and a leading principle of each.

What were the leading parties and main issues in the last campaign of Bryan and McKinley?

#### ORTHOGRAPHY.

1. Give two rules of Spelling and state how you would teach them.

2. Mark diacritically: surcingle, drama, area, oblique, bronchitis, coadjutor, aisle, cocoanut, courtesy, pedagogy.

3. Write the correct abbreviation for each of the following words: ounce, junior, that is, Florida, Pennsylvania.

Write in full the following abbreviations: Mme., Cr., viz., hhd., pro tem.

4. Form the present participle of the following verbs : bet, die, dye, bite, freeze, omit, benefit, hew, buy, bereave.

5. Distinguish between excuse and pardon; truth and veracity; genuine and authentic; cite and quote; valiant and heroic.

6-10. Graded on spelling of all papers in this examination.

SECOND DAY, P. M.—CIVIL GOVERNMENT AND CONSTITUTION OF COLO-RADO.

1. Wherein lies the treaty-making power of our government? The power of declaring war? Of levying taxes?

2. To what does the twelfth amendment relate? What led to its adoption?

3. Define treason, impeachment, writ of habeas corpus.

4. (a) Into what three powers is the government of Colorado divided? (b) By whom or what is each administered?
5. State the legal requirements necessary to be met to en-

5. State the legal requirements necessary to be met to enable one to become a voter in Colorado.

#### GEOGRAPHY.

1. (a) Name some of the products exchanged between North and South America. (b) Why are the products of these two continents so dissimilar?

2. (a) Name some European city whose latitude is about the same as that of Denver. (b) Give reasons for the difference in climate.

3. Of what does the Dominion of Canada consist? What is its form of government? What and where is the capital?

4. Locate the two races of men who are the chief inhabitants of Asia. Locate five peninsulas of Asia, and name the waters they separate. 5. What foreign countries have gained a foothold in Asia? What war assisted them?

6. Where is the Trans-Siberian railway?

7. Suggest ways for giving pupils realistic ideas of a country they have never seen; for example, Japan or Russia.

8. From what country in Europe does the United States import (a) silks and laces, (b) currants, (c) wine, (d) statuary marble, (e) cutlery?

9. (a) What are the chief industries of South Africa? (b) What political changes have occurred there during the past six years?

10. Draw an outline map of Colorado, indicating principal mountain ranges and peaks, rivers and cities, indicating also the boundaries.

# THEORY AND PRACTICE.

1. What should be taken as a guide in determining whether an act of a pupil is to be prohibited or not?

2. Give the formal steps in instruction according to the Herbartian idea, and illustrate their use.

3. Explain how you would teach a pupil true methods of study. What is the common fault of our schools in regard to this part of the pupils' work?

4. Can school government be made a preparation for the pupil's life as a citizen of a republic after he leaves school? How?

5. Should school management look more to correcting or to preventing breaches of school discipline? How? Why?

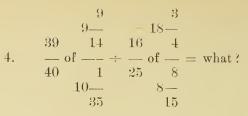
# COUNTY EXAMINATION OF TEACHERS FOR FIRST. • SECOND AND THIRD GRADE CERTIFICATES, DECEMBER 17 ÅND 18, 1903.

#### FIRST DAY, A. M.--ARITHMETIC.

1. What would be your first steps in teaching numbers to a class beginning the first grade?

2. A can walk round a race-course in 12 min., B in 15 min., and C in 18 min. If they start together and keep walking each at his own rate of speed, how many minutes will elapse before they are all three together at the starting-point, and how many times will each have made the circuit?

3. Define the following terms as used in arithmetic: Digit, denominate number, currency, minuend, integer, decimal fraction, hypothenuse, trapezoid.



5. How many acres are there in a tract of ground 400 feet wide and 545 feet long?

6. Write a negotiable promissory note from John Jones to Thomas Brown for \$300. Compute the interest for 2 yr., 3 mo., 18 da., at 7 per cent.

7. A traveler found on arriving at his destination that his watch was 1 hr. and 35 min. too slow. In which direction had he been traveling? How far had he traveled?

8. The rafters of a house are 17 ft. long, and the height of the gable 8 ft.; what is the width of the building?

9. Mr. H. sold two houses for \$3,600 each. On one he gained 25% and on the other he lost 25%. How much was gained or lost by the transaction?

10. Simpson, Brown & Co. fail in business, their liabilities amounting to \$35,000, and their resources to \$16,500. They owe A \$9,000, B \$7,500, and C \$11,000. What will each creditor receive?

#### ORTHOGRAPHY.

1. Define elementary sound, compound word, initial, final. abbreviation.

2. (a) Classify words according to the number of syllables they contain. (b) Divide into syllables and mark diacritically: Gondola, appurtenances, interstices, precedence, magnanimity.

3. What are synonyms, antonyms, homonyms? Give an example of each.

4. Use in words the following prefixes, and define each word so as to bring out the meaning of the prefix: *Pre, hyper, syn, trans, ob.* 

5. (a) Give three examples of "th" as an aspirate; (b) three as a sub-vocal.

6-10 Graded on spelling of all manuscripts in this examination.

#### FIRST DAY, P. M.-WRITING.

1. Explain to what extent and in what manner writing should be taught during the child's first year in school.

2. Briefly discuss position at desk (a) of body; (b) of arms; (c) of hands; (d) of pen; (e) of paper.

3. What should be done by the teacher (a) to prevent children from forming bad habits in writing; (b) to prevent careless work?

4. Discuss the value of preliminary drills in movement exercises and explanation of the writing lesson in connection with the formal writing by the class.

5. Write a complete letter making application for a position as bookkeeper. In this letter, penmanship, arrangement, diction, punctuation and capitalization will be considered.

6-10 Graded on penmanship of all manuscripts in this examination.

#### GEOGRAPHY.

1. Name five important agricultural products of the United States and designate locality most favorably adapted to growth of each.

2. Describe Colombia as to its location, physiography, industries, productions and climate.

3. Make a sketch map of Russia, locating principal rivers and cities.

4. Name largest country, richest country, largest city, largest lake, longest river, of the world.

5. To what states do the following apply: Pine Tree State, Palmetto State, Centennial State, Creole State, Hoosier State?

6. What and where are the following: Tchad, Po, Yangtsekiang, Hecla, Rainier, Rouen, Moscow, Seattle, Telluride, Mozambique?

7. What would probably be the cargo of a steamer going from Galveston to Naples? What would probably be its return cargo?

8. What national aid is the West now receiving from the general government? What locality in Colorado is sharing such aid?

9. Name ten cities of Europe having a population of over 500,000.

10. Name and locate the outlying territories and dependencies of the United States.

#### PHYSIOLOGY.

1. (a) What effects have the following on a pupil: A seat so high that his feet fail to reach the floor, a desk too low, a desk too high? (b) Should pupils be compelled to sit erect the greater part of the time spent in the school room or not? Why?

2. (a) Name the parts of the eye through which a ray of light successively passes to reach the retina. (b) Draw figure showing section of the eye and name the parts. (c) What is the blind spot and how would you demonstrate its existence?

3. (a) What effect does cigarette smoking generally have on the growing boy? (b) What means would you use to impress on second grade pupils the evils of cigarette smoking?

4. What are the functions of the following: Eustachian tubes, sweat glands, liver, colorless blood corpuscles?

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5. (a) Define anatomy, physiology, hygiene. (b) Which of the three, if taught properly, would be most useful to a child of eight years? Why?

6. Trace in a general way the path of a red blood corpuscle as it leaves the left ventricle till it reaches the same ventricle again.

7. (a) What is the appearance of the blood just before reaching the lungs? Just after? (b) What change has taken place and how?

8. What kind of artificial light is best in a living room? Why?

9. Why should a school room be kept free from dust? Be specific in answering.

10. (a) Name the lobes of the brain in their order. (b) State the function of each in a general way.

# SCHOOL LAW.

1. Into what classes is the school fund of Colorado divided. and from what source or sources is each obtained?

2. (a) Give substance of present compulsory educational law of Colorado. (b) In your opinion, should it be so rigid, or more lenient?

3. How may a school district lose its organization?

4. Name four state schools of Colorado, with location and president of each.

5. Discuss briefly consolidation of rural schools.

# SECOND DAY, A. M.-GRAMMAR.

1. (a) What is *Good English*? (b) How would you impress fifth or sixth grade pupils with the necessity for using it?

2. What is Grammar and what are its uses?

3. Discuss the advantages and disadvantages of diagramming as a means of showing sentence structure.

4. Write sentences containing a phrase used as (a) subject, (b) the object,  $\cdot$  (c) attribute complement, (d) objective complement.

5. (a) Distinguish between verbal nouns and present participles. (b) Give illustrations of the use of each.

6. Analyze or diagram the following:

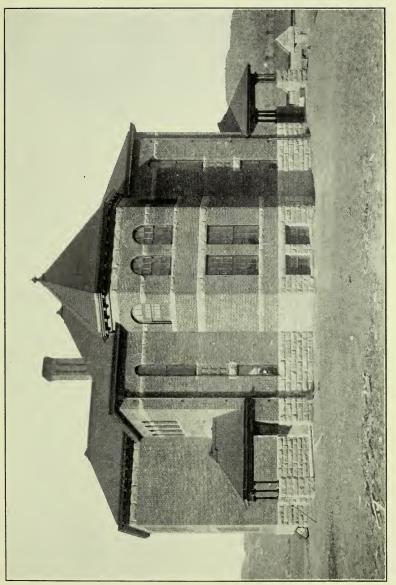
"Soon o'er the yellow fields, in silent and mournful procession. Came from the neighboring hamlets and farms the Acadian

women,

Driving in ponderous wains their household goods to the seashore."

7. Parse the italicized words in question No. 6.

8. Correct and give reasons: (a) Who do you think I saw? (b) Who do you suppose him to be? (c) It would be well for you and I to go. (d) You arriving on time was what saved the day. (e) Neither of these pencils write well.



URIVERSITY OF ILLIN OIS OF THE URIVERSITY OF ILLIN OIS 9. Compare the following adverbs: Soon, often, badly, well, far.

10. (a) Distinguish between: Affect and effect, invention and discovery, balance and remainder, aggravate and irritate.(b) Use the above words in correct sentences of your own.

# UNITED STATES HISTORY.

1. What were the limits of the territory granted to the London and Plymouth companies respectively? Who made these grants? Where were the first permanent settlements within the territory of each company?

2. What reason led the Dutch to attempt colonization in America? What were the limits of their territory? State the method adopted to establish permanent agricultural settlements.

3. Discuss three measures brought before Congress between 1820 and 1860 that caused intense feeling on the question of slavery.

4. What matters were settled by the following: The Webster-Ashburton Treaty; The Treaty of Ghent; The Geneva Award?

5. What does the last amendment to the Constitution of the United States grant?

6. What three departments of government are provided in the Constitution? Compare the Constitution with the Articles of Confederation in this respect.

7. Write a short account of the work of Robert Morris in the Revolution.

8. Who was the most noted naval commander of the Civil War? Describe briefly two noteworthy engagements in which he took part.

9. What presidents have been elected by the House of Representatives? Give an account of the election difficulty of 1876.

10. Name the invention and give the name of the inventor who competely changed (a) harvesting methods, (b) water transportation, (c) quick communication of news, (d) work in sewing, (e) cotton preparation, (f) street and house lighting.

# THEORY AND PRACTICE.

1. Discuss the subject of order in the school room. Is it a means or an end? Should it come from an outside force or from principles of action within the pupil? What is the probable effect of each plan on the later life of the pupil?

2. Of what value are examinations (a) to the teacher; (b) to the pupils?

3. In the grammar grades how much preparation and what kind should a pupil make for a reading lesson?

4. What ought to be the nature and purpose of history work in the grades below those in which a formal text is used?

5. What are the best evidences of success in teaching? What ought to be the relations between parents, teachers and pupils? How may you arouse enthusiasm among your pupils?

# SECOND DAY, P. M.-SCIENCE.

#### (Answer ten.)

1. (a) What is climate? (b) By what is the climate of a country modified?

2. Define strata, erosion, atmosphere, soil, rock.

3. (a) What is wind? (b) What causes wind? (c) Classify winds.

4. (a) What part of the plant takes in the carbon from the air? (b) Why does not the air become poor in carbon?

5. Define matter, energy, cohesion, inertia, capillary attraction.

6. From what sources do plants obtain food?

7. (a) Name ten wild flowers of Colorado. (b) Two plants of Colorado injurious to stock.

8. (a) How does the cooling of atmosphere by a mountain peak cause rain? (b) What acts as the cooling agent in a valley country?

9. Name four branches of the animal kingdom and give examples of each.

10. (a) What is the most necessary requisite of good building stone? (b) What is considered the best building stone? (c) Name five building stones of Colorado.

11. (a) What causes geysers? (b) Name two localities where famous geysers exist.

12. (a) How are coal beds formed? (b) How is limestone formed?

13. Explain cause of change of season.

14. What are the chief agents used by nature in making soil out of solid rock?

15. Why can water be syphoned a greater distance at sea level than on a mountain peak?

# CIVIL GOVERNMENT AND CONSTITUTION OF COLORADO.

1. What is the method of appointing Presidential electors? How many were appointed from Colorado at the last election?

2. What conditions as to age, citizenship and time of residence does our state Constitution require of candidates for the office of governor?

3. Define the terms: Eminent domain, patent, copyright, warrant.

4. Mention three powers denied to the states by the federal Constitution.

5. What is the difference between original and appellate powers of a court? What is the necessity for courts with appellate jurisdiction?

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#### READING.

1. (a) Name and define three methods of teaching beginners to read. (b) Give two arguments in favor of the one which you prefer.

2. How may naturalness, fluency and good expression in reading be secured?

3. Give some suggestions for breathing exercises.

4. How can you awaken a love of nature in connection with our elementary reading books?

5. (a) Give the titles of five selections that are worth memorizing. (b) Name their authors.

# COUNTY EXAMINATION OF TEACHERS FOR FIRST, SEC-OND AND THIRD GRADE CERTIFICATES—MARCH 17 AND 18, 1904.

# FIRST DAY, A. M.-ARITHMETIC.

1. Explain why one fraction may be divided by another by inverting the terms of the divisor and multiplying together the corresponding terms of the dividend and divisor.

2. Simplify:  $\frac{\frac{3}{8} \text{ of } 22\frac{1}{2}}{(1\frac{5}{6} \div 2\frac{1}{5}) - \frac{1}{3}} \times \frac{8\frac{2}{9} \div \frac{2}{3}}{69\frac{3}{8} \div \frac{3}{16}} - \frac{23}{54}$ 

3. What will be the expense of painting a roof 48 feet long and 22 feet wide at \$0.30 a square yard?

4. How long must \$240.00 be loaned at 7% to amount to  $$286\frac{2}{3}$ ?

5. How many revolutions a minute will be made by a drive wheel 6 ft. in diameter, running at the rate of 30 miles an hour?

6. An agent received \$18,540 with which to buy flour at \$6 per barrel; his commission was 3%; how many barrels of flour did he buy?

7. If a piece of cloth cost 1.20 a yard, at what price must it be marked that it may be sold at 10% less than the marked price and still make a profit of 20%?

8. A can mow a field in 10 days, B in 8 days, and C in 5 days; how long will it take them to mow it working together?

9. If \$3,600 of 4% stock be sold at 90, and the proceeds invested in 7% stock at 108, what will be the increase of income?

10. A, B and C pasture an equal number of cattle in a field, of which A and B are the owners, 9 acres belonging to A, and 15 acres to B. If C pays \$24 for his pasturage, how much should A and B each receive?

#### PENMANSHIP.

1. Describe a correct position for writing, including position of body, arm, hand, paper and pen.

2. What are the movements to be acquired?

3. Give an outline for a lesson in writing for either a second or a sixth grade class.

4. 'What is the first requisite to success in penmanship? Why will not practice alone give satisfactory results?

5. What writing habits should every child form?

6-10. Graded on penmanship of all manuscripts in this examination.

#### FIRST DAY, P. M.--GRAMMAR.

1. When is a form or use of a word in direct violation of an established rule of syntax allowable? Illustrate.

2. Write the plural or plurals of the following words and expressions, and give the applying rule: Ox, deer, memorandum, +, spoonful, manservant, Mr. Smith, Mrs. White, handkerchief, pony.

3. Give the participles and infinitives of the verb teach.

4. What determines the person and number of a verb whose subject is a relative pronoun? Illustrate.

5. Write a sentence, or sentences, illustrating the use of three classes of subordinate clauses, naming the class to which each belongs.

6. Illustrate the use of *but* as an adverb; *very* as an adjective; *that* as an adjective pronoun; *as* as a relative pronoun.

7. Correct and give reasons: (a) I get the right answer, but I don't work it like John does. (b) Agreeable to my promise, I now write. (c) A \*rose is my favorite flower. (d) Whom do men say that I am? (e) Either you or I are wrong.

8. Illustrate the correct use of the following: Ancient, obsolete; abandon, desert; banish, exile; emigrate, immigrate: expect, suspect.

9. Analyze or diagram:

"A little rule, a little sway,

A sunbeam in a summer's day,

Is all the proud and mighty have

Between the cradle and the grave."

10. Parse in full each noun, pronoun, verb and adjective in the following:

"Time at last sets all things even;

And if we do but watch the hour,

There never yet was human power

Which could evade, if unforgiven,

The patient search and vigil long

Of him who treasures up a wrong."

#### PHYSIOLOGY.

1. Name the two larger muscles between the shoulder and the elbow and state the use of each.

2. Name the three large bones of the arm.

3. Name the senses and an organ of each.

4. What is the pulse? and of what value is it to a physician?

5. State three important things with reference to eating.

6. Give two strong reasons why we should not use alcoholic beverages.

7. Why should a sleeping room always have a supply of fresh air? Be definite.

8. Which is the better exercise, walking or bicycle riding? Give reasons.

9. How frequently should a person bathe? Give reasons.

10. How should every teacher make a practical application of physiology in the school room?

#### SCHOOL LAW.

1. State fully how the Normal Institutes of Colorado are supported.

2. Name the different classes of school districts. What is the basis of classification?

3. What report is required of a teacher within one week of the opening of school?

4. (a) Under what conditions is a like-grade certificate issued?

(b) Under what conditions is a certificate renewed?

(c) Under what conditions is a certificate indorsed?

(d) Under what conditions may a certificate be revoked?

(e) What authority may revoke any certificate?

5. When is Arbor Day? How are teachers required by law to observe the day?

#### READING.

1. Of what subjects should a good text-book on reading treat?

2. How do you maintain the interest of the pupils in the study of reading?

3. Of what use are breathing exercises? How do you give them?

4. Name four pieces of literature the whole of which you would prefer giving, rather than giving selections from them to your pupils: State the advantages in giving the entire works.

5. Name three living English and three living American writers of prose, with names of their chief works.

# SECOND DAY, A. M .- ELEMENTARY SCIENCE.

# (Answer ten.)

- 1. (a) Name what you consider the four most important factors determining the climate of any given place.
  - (b) What natural causes have contributed to the rapid growth of Chicago?
- 2. (a) What part does the air play in shaping the earth's surface?
  - (b) What part does plant and animal life play in shaping the earth's surface?

3. How do you account to your pupils for the present distribution of plants and animals over the earth's surface?

4. How would you explain to upper grammar grade pupils the phenomena of the "rainbow" and the "mirage"?

- 5. Explain fully why ice floats.
- 6. (a) What is classification?
  - (b) Outline a plan for indicating the relationship of plants or animals.
- 7. How would you undertake to prove—
  - (a) That the earth is more than 6,000 years old?
  - (b) That the earth's interior is very hot?
- 8. (a) What is meant by the "Life History" of plants and animals?
  - (b) Give the Life History of some plant or animal with which you are familiar.

9. Name what you consider the most important scientific discovery or invention of the last three years, and give the name of the discoverer.

10. Define the following terms as used in the subject of Physics: (a) Motion. (b) Energy. (c) Magnetism. (d) Sonorous bodies. (e) Temperature.

11. Explain in detail the mechanism of the barometer; of the thermometer. State the uses of each.

12. Discuss the subject of commerce—

(a) From the view point of natural conditions affecting it; and

(b) From the view point of human control over it.

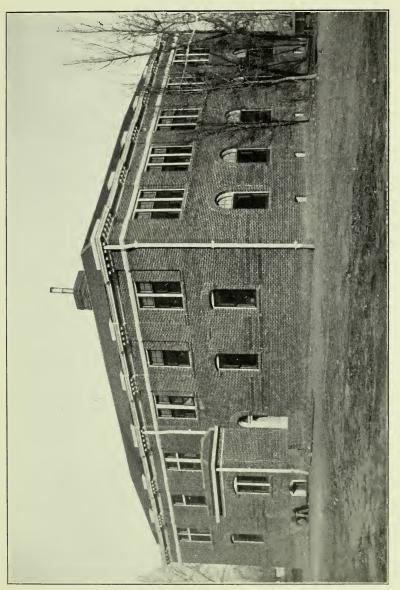
13. Explain the following terms as used in the subject of chemistry: (a) An element. (b) A solution. (c) Chemical change. (d) Combustion. (e) Fermentation.

14. What is Astronomy? Meteorology? Explain the principle of a simple telescopic instrument.

15. What is meant by "dynamic" geology? By "structural" geology? By "historical" geology?

#### UNITED STATES HISTORY.

1. Which two presidents of the United States justly hold the first rank for services rendered?



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2. Compare the early settlers of America with the immigrants of to-day.

3. Write ten dates (the year only) that are important in our country's history.

4. Name two prominent colleges established in early New England history, and give the location of each.

5. What was the decisive battle in the Civil War?

6. Name the greatest general on each side in the Civil War.

7. Associate the following names with American history: (a) Captain John Smith. (b) Henry Hudson. (c) William Penn. (d) Benjamin Franklin. (e) Lieut. Zebulon M. Pike.

8. In the study of history, what are the most important things to impress upon the minds of the young?

9 and 10. Give in detail your method of teaching history?

CIVIL GOVERNMENT AND CONSTITUTION OF COLORADO.

1. Define law, constitution, statute, legislature, congress.

2. Name a town, county, a state and a national official, and give the chief duties of each.

3. Name the officials who compose the President's Cabinet? How are they chosen?

4. Name the legal qualifications necessary to make a man eligible to the office of governor of our State? What other qualifications should he possess?

5. Name all the political subdivisions you live in, and one official in each.

#### SECOND DAY, P. M.-GEOGRAPHY.

1. Name four important industries of Colorado.

2. Compare the coast lines of the eastern United States and Brazil, and state the influence of each on settlement and civilization.

3. What mountain ranges are in the following localities:

(a) Eastern United States?

(b) Western United States?

(c) Western South America?

(d) Between Switzerland and Italy?

(e) Between France and Spain?

4. Name and bound your county. Name its county seat, products, industries, and chief physical features.

5. (a) Name all the States bounded on the east, either wholly or partly, by the Mississippi.

(b) Give their capital cities in the same order.

6. Locate: (a) Greater New York. (b) London. (c) Paris. (d) Bombay. (e) Tokyo.

7. How important is map drawing in learning geography?

8. With what section of country should the beginner in the study of geography be made familiar?

9 and 10. Answer each of the following questions with one sentence:

- (a) Why should forests be protected?
- (b) Why was the purchase of Alaska a good investment for the United States?
- (c) Aside from products, why do the Philippine Islands form a valuable possession for the United States?
- (d) How are throat and lung diseases relieved by residence in Colorado?
- (e)<sup>\*</sup> What are some important differences between the inhabitants of Japan and Korea?

# THEORY AND PRACTICE.

1. Name and discuss, briefly, some of the important functions of play in school life other than that of recreation.

2. Discuss, briefly, the following names in the light of their contributions to the discussion of important educational problems: John Dewey, G. Stanley Hall, W. T. Harris and Booker T. Washington.

3. Name three first-class books dealing with educational topics, giving the names of authors, and state the essential argument of each book.

- 4. (a) State what you consider to be the broader aims of public education from the viewpoint of the citizen of the State.
  - (b) How would you justify the introduction of Nature Study and Manual Training into the schools to the average tax-paying citizen of the State?

5. It is said, by the advocates of Trade Schools, that "the ordinary grammar school education should not be forced upon all classes of children." Do you agree, or disagree, with this contention? State the reasons for your position.

# ORTHOGRAPHY.

1. Define and illustrate each of the following terms: (a) Antonym. (b) Suffix. (c) Root word. (d) Syllabication. (e) Elementary sound.

2. Separate into syllables, mark diacritically, and indicate the accent of the followings words: (a) Revolution. (b) Possessed. (c) Indians. (d) Massachusetts. (e) Generosity.

3. Write one word opposite the following, in which are employed the characters and sounds indicated:

ā	ē	ī	ũ
ă	ĕ	ĭ.	ŭ
ä	õ	õ	ų
a	S	ŏ	00
â	X	ö	$\underbrace{\smile}_{00}$

- 4. (a) Into how many groups may the following words be classified, on the basis of common phonetic elements?
  - (b) So group them, indicating the common phonetic elements.

Assailable, obvious, decency, comfortable, object (noun), accession, amenable, obtain, licensee, creditable, obstruct, concentration.

- 5. Discuss the relative merits and demerits of the following methods of teaching spelling in the public schools:
  - (a) By daily use of the ordinary graded speller, requiring so many lessons to be covered each term.
  - (b) By use each day of lists of words selected by the teacher, or superintendent, from the daily lessons in reading, history, language, etc.

# COUNTY EXAMINATION OF TEACHERS FOR FIRST, SECOND AND THIRD GRADE CERTIFICATES, \* AUGUST 18 AND 19, 1904.

# FIRST DAY, A. M.-ARITHMETIC.

1. Define Solution, Analysis, Principle, Rule, Demonstration.

2. Simplify:  $\frac{1-\frac{1}{2-\frac{1}{3}}}{1+\frac{1}{2+\frac{1}{3}}}$ 

3. Prove that any number is divisible by 9, if the sum of its digits is divisible by 9.

4 and 5. By what decimal fraction must the principal be multiplied to obtain the interest for 7 mo. 21 days at 6%? Using this fraction, find the interest on \$125 for this time at 9%. (20 credits.)

6. A ranchman, when dividing his sheep into bunches of 36, 48, 80 or 144 each, finds that he has 35 left. How many sheep has he?

7. The number belonging to a country school is 16. Three were absent in the morning and two in the afternoon. Find the per cent. of attendance for that day.

8. Divide \$63,000 into three parts proportional to 1, 2 and 4. Give analysis as you would to a class.

9. A room 21 ft. by 19 ft. has a Turkey rug in it, a border 3 ft. wide being left all around uncovered by the rug. The border was stained at a cost of 45 cts. a sq. yd., and the rug cost \$4.50 a sq. yd. Find the total cost.

10. For time purposes, the longitude of San Francisco is taken as 120° W. When it is noon in London (on the prime meridian), what time is it in San Francisco? When it is noon in San Francisco, what time is it in London?

# PENMANSHIP.

1. What are the essentials in Writing, and how may they be obtained?

2. Give directions for position of pen, paper and pupil.

3. State the principal use of analysis in teaching writing, and analyze the following letters: h, y, O, J.

4. Give some of the movement exercises used in aiding older pupils to gain control of the muscular and combined movements.

5. State one advantage of printed copies. State one objection.

6-10. Graded on Penmanship of all manuscripts in this examination.

#### FIRST DAY, P. M.-GRAMMAR.

1. What general law guides in determining the parts of speech? What specific law determines that a word is an adjective?

2. Classify Pronouns, and use one of each in a sentence, indicating each.

3. Distinguish, by definition and example, Restrictive and Non-restrictive clauses. How is each punctuated, usually?

4. Illustrate the correct uses of *shall* and *will* in both declarative and interrogative sentences. What laws govern the use of these words?

5. Parse the infinitive and the participles in the following: He protested against being arrested.

We anticipated his coming.

He expected us to meet him.

6. Analyze: Since his return, he is continually talking about the wonders of the Louisiana Purchase Exposition.

7. Give the principal parts (present indicative, past indicative and past participle) of the following: Born, borne, grew, rang, slide, wax, throve, won, wring, sprang.



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8. Write sentences, using the verb *strike* in the—

(a) Active, indicative, present—intensive form.

(b) Active, indicative, past—progressive form.

(c) Passive, potential, present perfect-ordinary form.

(d) Passive, subjunctive, past—ordinary form.

(e) Active, infinitive, present perfect—ordinary form.

9. Analyze (or diagram):

In order to accomplish something worth while, one must put heart in his work.

10. Analyze (or diagram):

"Nothing," says Quintillian, quoting from Cicero, "dries sooner than tears."

# UNITED STATES HISTORY.

1. Name three colleges founded before the Revolution.

2. Give purpose and route of Lewis and Clark's Expedition.

3. What territory was acquired by the United States at the close of the Mexican War? Is Colorado included in this?

4. Tell of the settlement of Denver.

5. What is the present policy of the United States government in regard to an isthmian canal?

#### SCHOOL LAW.

1. Mention three specific powers of electors in third class districts.

2. What reports are required by law of the principal teacher in each school?

3. State four important duties of a county superintendent.

4. State the principal provisions of the school attendance law as amended by the last General Assembly and now in force.

5. To what person or board should each of the following matters be referred for action? A change in text books; an appeal from the decision of the county superintendent; examination for a state certificate; apportionment of general school fund to districts; the question of furnishing free text books by a district.

# READING.

1. What characteristics should especially recommend a First Reader?

2. Of the recognized "methods" of teaching reading, what one method, or what combination of methods, do you prefer? Give reasons.

3. Define modulation; quality; pronunciation; enunciation; inflection.

4. Name the authors of the following: Evangeline, Thanatopsis, The Sketch Book, Poor Richard's Almanac, the Scarlet-Letter, The Nautilus, The Battle Hymn of the Republic, The Vision of Sir Launfal, The Raven. 5. Name a book suitable for supplementary reading: (a) for the third grade; (b) for the sixth grade; (c) for the eighth grade. In each case state its particular value.

# SECOND DAY, A. M.- SCIENCE.

# (Use drawings where helpful.)

1. What is the period of the earth's rotation? (not revolution.) What phenomena result from this movement?

E. Explain (with drawing) mirages.

In what localities are they frequently observed?

3. What are the winds? What the causes? Show location and direction of Trade Winds in the Northern Hemisphere.

4. Under what conditions does dew gather? How does dew differ from frost? What is the effect of clouds or heavy smudge fires when plant life is in danger from frost?

5. Define and explain origin of each: Glacier, Iceberg, Moraine, Avalanche.

6. Explain Igneous, Metamorphic and Rudimentary Rocks.

7. Describe and illustrate the formation of a river delta. How are bars formed across the opening of ocean bays?

8. What are geysers? Explain the action of an intermittent geyser.

9. Name two plants of endogenous, and two of exogenous growth. How do endogens differ from exogens?

10. Define Insect, Thorax, Abdomen, Larva, Pupa (or Chrysalis) and Antenna.

# PHYSIOLOGY.

1. Distinguish carefully Anatomy, Physiology and Hygiene.

2. Name and number the bones of a human leg in order, beginning at the top.

3. Name six divisions of the alimentary canal in order, from the mouth.

4. Explain the two chief functions of the mucous membrane.

5. Locate the cerebrum and the cerebellum and state in a general way their difference in function.

6. Name the five senses and locate their areas or centers in the brain. Can memory and imagination be thus localized? Why?

7. Explain the necessity of sufficient and regular sleep.

8. Explain by drawing or otherwise the cause of long sight and short sight.

9. Locate and describe the three divisions of the ear.

10. Name two inorganic and three organic foods.

CIVIL GOVERNMENT AND CONSTITUTION OF COLORADO.

1. State the manner of electing a president as set forth in the twelfth amendment to the Constitution.

2. What executive function and what judicial function are possessed by the United States senate?

3. Name three classes of cases in which the federal courts have jurisdiction.

4. How are county taxes levied and collected in Colorado?

5. Name five State executive offices, with one principal duty pertaining to each.

#### SECOND DAY, P. M.-GEOGRAPHY.

1. State three proofs of the earth's sphericity.

2. Name the countries through which the 40th parallel of North latitude passes. Name the capitals of these countries and locate each with respect to this line.

3 and 4. (a) How do you account for the presence of numerous and deep harbors on both sides of the North Atlantic? (b) How has this fact influenced the distribution of population and the growth of commerce? (20 credits.)

5. Name the six continents (a) in the order of size, (b) in the order of commercial importance.

6. Name (a) 10 native wild mammals of Colorado, (b) 10 native wild birds of Colorado, (c) 10 native wild plants of Colorado.

7. What are isothermal lines? Name four causes that determine their location.

8. Explain why day and night on the equator are always equal.

9. Describe the Nile Valley, and state cause of its periodical overflow.

10. Sketch the continental divide in Colorado so as to show the drainage of North, Middle and South Parks, and the Valley of the Arkansas.

# THEORY AND PRACTICE.

1. What is your theory regarding a teacher's preparation: (a) in general, (b) for the daily lesson? Give one definite reason for your answer to each—(a) and (b).

2. Assuming that the teaching process comprises: (a) Preparation, (b) Presentation, (c) Generalization, (d) Application, state what is included in each of the four steps. Which two of the four steps are the more often neglected?

\* 3. At what ages approximately, are the following stronger in children (answer for five only): (a) Memory, (b) Reason, (c) Curiosity, (d) Will Power, (e) Cruelty, (f) Indifference to books, (g) Emulation, (h) Sense of Duty, (i) Sense of Right.

4. Give list of Incentives, and classify, (a) Whether natural or artificial; (b) Whether proper or improper.

5. To what extent should the teacher know the temperament of individual pupils? Give brief outline showing, (a) Kinds of Temperaments, (b) characteristics of each, (c) treatment of each.

#### ORTHOGRAPHY.

1. Give the vocal and the aspirate consonant sounds of the language.

2. Write five common contractions and five abbreviations.

3. Mark the following words to show correct pronunciation: Magazine, chastisement, forgery, decade, reticent, recipe, ordeal, coquetry, adult, crematory.

4. What is the especial value of a dictionary, and how should children be taught to use it?

5. Write synonyms for good, bright, high, agreeable, gentle.

6-10. Graded on Spelling of all manuscripts in this examination.

# EXAMINATION OF APPLICANTS FOR STATE DIPLOMAS, DENVER, COLORADO, AUGUST 26, 27, 28, 1903.

FIRST DAY, A. M.--ALGEBRA.

(Take any five questions. Give processes as well as results.) 1. In the following expressions, find three factors:

- (a)  $(2a-x)^4-(4x+3a)^4$ .
- (b)  $8x^4 + 18x^2 5$ .
- (c) p<sup>9</sup>+q<sup>9</sup>.
- (d)  $m^{15}+n^{15}$ .

2. A and B go into business with a joint capital of 500. A withdraws after two years, and six years later B closes out the business. Divide the net profits, 94, knowing that each man realized the same sum out of the partnership, counting both capital and profits.

3. Show by a reduction that  $\frac{1}{2}\sqrt{2+1/3} = \frac{1/3+1}{21/2}$ .

4. Develop a formula for spuaring a trinomial and express in words the corresponding rule.

5. Perform the indicated operation in  $(2\times+3\sqrt{-y})$ .  $(2x-3\sqrt{-y})$ .

6. What is the  $n^{th}$  term of  $(a+x)^m$ ?

7. Given the first term a, the ratio r, and the last term l, of a geometric progression. Find the formula for S.

What does this formula become when r < 1and the number of terms is infinite?

8. (a) Rationalize the denominator of  $\frac{1\sqrt{3}-1\sqrt{2}}{1^{3/2}+1\sqrt{3}}$ .

(b) Multiply the  $\sqrt[3]{16}$ — $\sqrt[3]{2}$  by  $\sqrt[12]{64}$ , and express the result as a radical in its simplest form.

#### CIVICS.

# (Answer any five.)

Define the legislative, judicial and executive functions 1. of government.

2. Name and give the functions of the several cabinet offices.

What rights and privileges has a citizen in this country 3. over an alien?

4. Explain the Diplomatic Service.

Distinguish between direct and indirect taxes. 5.

What are the essential features of the Australian ballot 6. and what are the benefits?

7. How are presidential candidates nominated?

# POLITICAL ECONOMY.

# (Answer any eight questions.)

1. What is Political Economy? Under what headings may its phenomena be classified?

2. What is wealth? Can it be produced by labor alone? Why?

What are the advantages of a division of labor? Are 3. its results in all respects desirable?

4. What is the law of demand and supply? Has it universal sway in our present economic system?

What is meant by real wages and nominal wages? 5.

What are direct taxes and indirect taxes? Give an il-6. lustration of each.

7. How does the economic differ from the popular meaning of rent? What is the economic law of rent?

Is a revision of the tariff of the United States desirable? 8. Why?

9. Discuss the desirability of labor organizations. How should labor disputes be settled?

10. What are trusts and monopolies? Should trusts be subjected to public control? If so, how?

#### BOTANY.

1. Into what two great divisions are plants divided? State fully three ways by which these divisions may be told.

2. \* Explain in detail how stems in both classes of plants increase in diameter.

3. How may a flower be perfect, incomplete and irregular at the same time?

4. Describe the epidermis in detail. State what you can about cuticles.

5. Explain fully the process of transpiration.

6. Contrast the germination of the bean with that of the wheat.

7. What is an embryo? Name its parts. How does it differ in exogenous and in endogenous plants?

8. How do wounds heal in endogenous plants? How may endogenous plants be propagated?

9. State the characters of the rose family. Why is this family of plants important?

10. What is the difference between a fruit and a seed? Examples.

# FIRST DAY, P. M .---- PHYSICS.

Write a short, concise essay on four of the following topics, giving explanations and illustrations:

1. Newton's Laws of Motion.

2. The Principles of Archimedes.

3. Induced Currents of Electricity (Faraday's Laws).

4. The Difference (physical) between Two Musical Tones of the Same Pitch but Differing in Quality.

5. The Dispersion of Light.

# RHETORIC.

1. Name three definite aims which you work toward in helping pupils to improve their sentences.

2. In what particular ways does study of sentence structure cultivate logical power, and in what ways the sense of rhythm?

3. Compare in two particulars prose rhythm with verse rhythm. Is the former in any way superior?

4. How, in teaching Macbeth; would you help pupils to feel the effect of portions in which Shakespeare has used other forms than blank verse?

5. Discuss the comparative effect of *structure* and *style* in determining literary values.

#### LITERATURE.

1. Give a brief outline of the history of English prose writing, touching on the sociological and the aesthetic importance of main periods.

2. To what extent do you believe in teaching, in the higher grades, the history of literature? Say in what way, if any, you believe such teaching may be made useful.

3. How should you teach Whittier's Snow-Bound?

4. What definite results should you expect from the teachin of *The Merchant of Venice* to a ninth grade class?

5. In what order would you teach examples of the epic, the drama, the novel, and what peculiar benefit should you expect your pupils to gain from each of these great forms of literature?

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#### ZOOLOGY.

#### (Answer any ten.)

1. What characters distinguish the Protozoa, the Cœlencerata, the Arthropoda and the Vertebrata? Name at least three examples of each of the above phyla.

2. Make a drawing of a slipper—animalcule (Paramœcium) and name all the parts. To what phylum or branch of the animal kingdom does the animal belong? How does it take food, and how does it respire?

3. How do the following animals increase in numbers: Amœba, sponge, hydra, earth-worm, grasshopper?

4. Give the life history of *Trachina spiralis* or any other round worm, and of *Tania solium* or any other tape-worm.

5. How do the following animals respire: Amœba, coral polyp, cray-fish, honey-bee?

6. Describe the nervous system of a jelly-fish, a clam, a caterpillar.

7. Name all the parts of the alimentary canal of a pigeon. What kind of a heart has it? How does its heart differ from that of a frog?

8. Define alternation of generations and parthenogenesis and give examples.

9. Define instinct. Give examples among insects, fish, birds, cats and men.

10. What is meant by mimicry, and protective coloration in animals? What are their uses? Give several examples.

11. What are the distinguishing characters of the reptilia, the aves, the vertebrates and the mammalia?

# SECOND DAY, A. M.-TRIGONOMETRY.

# (Answer any five.)

1. Explain, showing figure, how the various trigonometric functions of an angle in the first quadrant may be represented by lines, and state why the functions of an angle, being ratios, may be represented by lines.

2. As an angle varies from  $0^{\circ}$  to  $90^{\circ}$  trace the changes in the sine, cosine, tangent, cotangent, secant and cosecant.

3. What is the relation existing between the sine and cosine of any angle? Prove your answer.

4. The tangent of a certain angle is 3. Determine the remaining functions.

5. A barn is 40x80 feet, and the pitch of the roof is  $45^{\circ}$ . Determine the length of the rafters and the area of the roof.

6. Having given the three sides of an oblique triangle, state how you proceed to find the three angles and the area of the triangle.

#### GERMAN.

1. Write five German nouns forming plural in *e*, five in *er*.

2. Full declension of the personal pronouns.

3. Uses of Du and Sie. Decline one relative pronoun.

4. Synopsis of *sein*, third person, singular.

5. Define and illustrate reflexive, impersonal and compound verbs.

6. Principal parts of German verbs meaning to go, to command, to think, to draw, to remain.

7. Translate into German: Good evening, doctor. How do you do this evening? Here one finds all that makes life interesting.

8. Here comes the boy with our evening paper. We live in the United States of North America.

9. He will write nothing better. I should like to be at home next week.

10. He stands where his brother stood two years ago. She had received and read the letter.

#### FRENCH.

Translate into English:

Que n'a-t-on pas dit et ne peut-on dire encore sur l'amour de la patrie? La patrie, c'est le lieu qui fut le témoin des pures joies de notre enfance, des premiers sentiments de notre àme. des premières émotions de notre cœur. La patrie, c'est le pays où l'homme a recu les premières lecons de religion et de morale. où il se réjouit de reposer auprès du tombeau de ses pères, après avoir vecu près du berceau de ses enfants. L'amour du sol natal est inné dans le cœur de l'homme et on le regrette d'autant plus qu'on y a été plus malheureux. L'Ecossais sous un ciel brillant, redemande ses brouillards et ses montagnes convertes de niege.

SECOND DAY, P. M.-GEOMETRY.

(Work Nos. 5 and 6 and from the other four choose any three.) 1. An angle formed by two chords intersecting on the circumference of a circle is measured by one-half the intercepted

arc. Prove.

2. Prove that the locus of the vertex of the right angle of all right triangles having a given hypothenuse is the circumference of a circle.

3. Construct a triangle equivalent to a regular hexagon.

4. Prove that as the sides of a regular polygon are indefinitely increased its area approaches the area of the circumscribed circle as a limit.

5. The angles of a spherical polygon  $80^{\circ}$ ;  $100^{\circ}$ ;  $120^{\circ}$ ;  $150^{\circ}$ . Find the area if the radius of the sphere is  $3\frac{1}{2}$  feet. 6. The volume of a sphere is two-thirds the volume of a circumscribed cylinder and its surface is two-thirds the total surface of the cylinder. Prove.

#### CHEMISTRY.

1. What is Chemistry? Distinguish between Chemistry, Physics and Biology.

2. Give the properties of an acid, of a base, and of a salt; give three illustrations of each with formulæ and names; write the reaction of an acid on a base, in a specific case.

3. Describe the production and properties of sulphuric acid; and tell how you could get hydrochloric and nitric acids from their salts by the use of sulphuric acid, writing equations.

4. Describe chlorin, giving occurrence, production, physical properties, chemical properties. What is bleaching powder? How is it made and for what is it used?

5. Give the history, the production, the physical properties and the chemical properties and tests of oxygen.

6. Give the history, production, the physical properties, the chemical properties and tests of hydrogen. In a physical sense is hydrogen a metal? In a chemical sense?

7 Describe the manufacture of sodium carbonate, bi-carbonate and hydroxide from common salt by the Leblanc process. Do you know of any other processes for the manufacture of these compounds from common salt?

8. If the atomic weights of sodium, oxygen and nitrogen are respectively 23, 16 and 14, how much nitric acid could be made theoretically from one pound of sodium nitrate? What is the molecular weight of sodium nitrate?

9. Tell something about the arrangement of the elements of the so-called periodic law. Give the members of the alkali metals and give the members of the halogen group.

10. Tell something about the law of definite proportions and about the law of multiple proportions. What is qualitative analysis and what is quantitative analysis? What is organic chemistry? What is an ion?

#### GENERAL HISTORY.

1. Discuss the effect on the civilization of the Middle Ages of the fall of Constantinople.

2. Give the causes of the comparatively peaceful development of constitutional government in England, contrasting the conditions there with those in France.

3. Sketch briefly the history of the Turanian (Yellow, Mongolian) race as it has affected civilization.

4. What importance for the civilization of Europe do you ascribe to the Persian Wars?

5. What historical conditions made the reign of Elizabeth of great moment to England?

#### THIRD DAY, A. M .- PHYSICAL GEOGRAPHY.

#### (Answer ten questions.)

1. State the bearing of physical geography upon political geography. Illustrate with three nations or states as examples.

2. Describe the Great Plains region—origin, extent, physical characters, economic conditions. In what sense is the term incorrect?

3. Describe the origin and development of a river valley. What are the distinctive characters of the various stages? Give examples of each.

4. What is the relation of lakes, falls, flood-plains and terraces to a river's physiographic history? Illustrate with American rivers as examples.

5. What is the Japan current? What are its causes and effects? Name another similar current.

6. What are the drainage-slopes of the United States? Name the principal rivers of each.

7. What are the main physical features of the Alps Mountains? What stage of mountain development do they represent? Name two examples of other stages.

8. Define the following: Steppe, atoll, delta, plateau, floodplain, barrier reef.

9. What are the principal processes by which all earthforms have been produced? Through what agencies do they work? Give examples.

10. What are the principal physical features of the continent of South America? Compare with Africa and explain any striking differences.

11. What processes of physiographic development are illustrated at (1) the Yellowstone Park; (2) the Canyon of the Colorado river; (3) the Yosemite Valley?

12. What has been the political influence of (1) the Atlantic Ocean; (2) the Alps Mountains; (3) the Nile river?

#### LATIN.

1. Translate:

Ex his omnibus longe sunt humanissimi qui Cantium incolunt,—quæ regio est maritima omnis,—neque multum a Gallica differunt consuetudine. Interiores pleriqui frumenta non serunt, sed lacte et carne vivunt, pellibusque sunt vestiti. Omnes vero se Britanni vitro inficiunt, quod cæruleum efficit colorem, atque hoc horribiliores sunt in pugna aspectu; capilloque sunt promisso atque omni parte corporis rasa præter caput et labrum superius.

2. Give this in Latin:

Meanwhile, a few days afterward, he was informed by the Ubii that all the Suebi were urging their forces to one place, and were ordering those tribes which were in their power to send their infantry and cavalry as reinforcements. Learning these facts, he provides a grain supply, chooses a suitable place for a camp, and directs the Ubii to withdraw their cattle and to convey all their possessions from the country to the towns, in the hope that the barbarous and inexperienced men, led by the lack of food, could be brought to unequal terms of combat. He gives instructions to dispatch numerous scouting parties into the country of the Suebi and to find out what they were doing.

#### GENERAL PEDAGOGY.

#### (Answer any six.)

1. Specify six things which every teacher can and should do to promote hygienic conditions in her school.

2. Give the Herbartian Formal Steps of Instruction, and give your estimate of their value in the preparation of a teacher.

3. What reasons can you give for insisting on sense training in school work?

4. State specific ways which you would use to further the sense training in your school.

5. Give the psychological reasons for teaching drawing in the public schools and state how you would carry out these principles in your teaching.

6. How would you proceed to increase the vocabularies of children in the fourth grade?

7. What should be the aim of punishment in school? Which is the more important, the attitude of the teacher and pupil toward the punishment, or the nature of the punishment? Give your reasons for the ground you take.

8. What do you mean when you speak of disciplining a school?

#### PSYCHOLOGY.

#### (Answer any eight questions.)

1. Describe briefly the distribution of white and gray matter in the nervous system of man. Of what elements is the nervous tissue composed, and what are their functions?

2. What are the common defects of eyesight? To what are they due, and how may they be detected in school children?

3. Compare perception and association of ideas in respect to (1) points in which they are similar and (2) those in which they differ.

4. What is apperception? Illustrate its use in school work.

5. Describe reproductive and constructive imagination. How do they differ from memory?

6. In what respects can memory be cultivated? How can the work of the school contribute to its cultivation?

7. What are concepts and abstract ideas? Give illustrations.

8. What conditions are favorable to attention?

9. How do habits differ from instincts? Give illustrations.

10. In what way is child study related to psychology? What

do you consider the value of the contribution of the former to educational work?

# THIRD DAY, P. M .- PHYSIOLOGY.

1. Make a drawing of a cross-section of compact bone, labeling all structures that could be seen by the aid of a micro-scope.

2. What are bones for? Locate and describe the atlas, the sacrum, the radius, the foramen magnum and the acetabulum.

3. What kinds of muscle tissue in the body, and where does each occur? How do these muscles differ in structure and in their response to stimuli?

4. What are the effects of exercise—slight, moderate and violent—upon the muscles of the body? Upon other organs? What general rules would you lay down for the exercise of a healthy boy of 15 years?

5. What is food? What are man's chief sources of proteid foods; of carbo-hydrate foods? For what are each of these classes of foods specially valuable in the body?

6. If a person should eat a meal of potatoes, bread and butter and milk, where would the different foodstuffs be digested and by what secretions?

8. What is the lymphatic system? Tell what you can of its structure and functions. What are lymph-nodes or lymph glands and where are they most abundant?

9. Locate the following parts of brain and spinal cord: Optic commissure, corpus callosum, pons, arbor vitæ, canalis centralis.

10. What are the more important physiological effects upon a youth from the habitual use of tobacco?

#### GEOLOGY AND MINERALOGY.

1. Name four minerals that occur as iron-ore-masses. Describe the properties of each.

2. Give the nature and origin of the following rocks: Basalt, granite, gneiss, conglomerate, limestone.

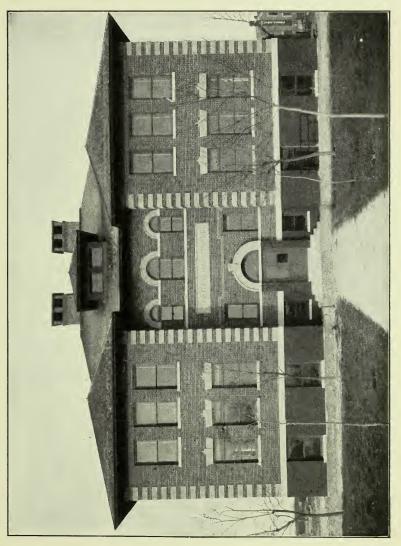
3. In what geological formations does coal occur in Pennsylvania? In Colorado? In Ohio?

4. Give a ten or fifteen line description of the plants of the carboniferous.

5. Give a brief description (100 to 200 words) of the geological formations and of the geological structures of the Front Range of Colorado and of the foothills of the same down to the plains. (By this is meant the range from Pike's Peak to Long's Peak.)

The following question you may substitute, if you wish, for the fifth question:

6. Give a brief essay (say 200 words) on the geology of your home and vicinity.



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# ASTRONOMY.

#### (Select three.)

Write a short, concise essay on each of the following topics, giving explanations and illustrations:

1. The Determination of Latitude and of Local Time.

2. Solar and Lunar Eclipses.

3. The Determination of the Distance from the Earth to the Sun.

4. The Characteristics of the Moon.

5. The Major Planets.

# THE EXAMINATION OF APPLICANTS FOR STATE DIPLO-MAS, DENVER, COLORADO, AUGUST 24, 25 AND 26, 1904.

# FIRST DAY, A. M.-ALGEBRA.

1. Find the highest common factor of  $4x^3$ — $10x^2+4x+2$  and  $3x^4$ — $2x^3$ —3x+2.

2. Given ax+ny=c and bx+my=d. Find the values of x and y by substitution, and by comparison.

3. Find the first power, second power, third power, fourth power and fifth power of  $-2\sqrt{-1}$ .

4. Find the cube root of  $12x^{-4}$ — $8x^{-3}$ — $6x^{-5}+x^{-6}$ .

5. Given two numbers a and b, to find their arithmetic mean, their harmonic mean, and their geometric mean.

6. Find four values of x from  $\sqrt{2x^2-3x+5}-3x=1-2x^2$ .

7. Given  $x^4+y^4=82$ , and x-y=2, to find two pairs of real values for x and y; also two pairs of imaginary values.

## CIVICS.

1. How are United States Senators chosen?

2. How many delegates are admitted to a national or presidential convention from each state? How are these delegates chosen?

3. What is the present number of cabinet officers, and what are their several departments?

4. Give a short account of the United States courts.

5. What is the nature of the first ten amendments to the Constitution?

# POLITICAL ECONOMY.

# (Answer any eight questions.)

1. Define production and consumption. In what relation do they stand to each other?

2. What are the agents of production? What do we call the share of the products that belong to each?

3. What is capital? Distinguish fixed and circulating capital.

4. Define legal tender. What kinds of money are legal tender in the United States?

5. Describe the business of a clearing house.

6. What is an inheritance tax? Is it desirable?

7. Is the introduction of labor-saving machinery a benefit to working people?

8. What are the advantages and disadvantages of the arts and crafts movement as a mode of production?

9. Can the existence of labor unions in this state be justified from an economic point of view?

10. What is socialism? What are its merits and demerits?

#### BOTANY.

#### (Answer eight.)

1. Describe the flowers of the Cottonwood.

2. What is symbiosis? Give example.

3. How can corn meal be distinguished from wheat flour by microscopical examination?

4. What is meant by alternation of generations? Give example.

5. What is the meaning of the word Ecology?

6. What are the characters of the cruciferæ family?

7. Give scientific names of five common Colorado plants.

8. What is the meaning of the word Evolution?

9. How are new fruits and flowers created?

10. What is the importance of carbon to the plant? How is it obtained?

FIRST DAY, P. M.-PHYSICS.

#### (Answer any eight.)

1. Give Newton's three laws of motion, and derive the formula force (F) equals mass (M) times acceleration (a) (F=Ma).

2. Define the following: Inertia, Power, Index of Refraction, Electrical Capacity, Specific Inductive Capacity, Thermal Unit, and Specific Heat.

3. Give Boyle's Law, and the Law of Charles, and give Joule's Mechanical Equivalent of Heat.

4. Tell how to find the relative humidity of the air by means of any well-known Hygrometer, explaining fully.

5, 6. A farmer wishes to pump water at such a rate that he can irrigate a ten-acre field one foot deep in five days of twelve hours each. Find the horse power of the engine required to drive the pump, if the efficiency of the pump and engine is 65%, and a cubic foot of water weighs 62.4 lbs.

7. Explain the action of the siphon, and tell how you would show that its action is dependent upon the pressure of the atmosphere.

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8. A ten horse power electric car requires what current, at electric pressure of 1,200 volts, to run it?

9. Trace a ray of light through a crown glass prism, index of refraction 3/2; explaining the construction. Let the angle of incidence of the incident ray be about  $30^{\circ}$ .

10. A current of electricity was passed through a silver voltameter for 20 minutes, and the cathode increased in weight 2.0056 grams; find the current in Amperes.

#### RHETORIC.

1. Name the divisions or steps used in discussing the structure of the short story, and define each.

2. Show how you would use this structure in preparing mythical and legendary material for presenting to pupils.

3. How does the fact that the English language is constantly changing influence your teaching?

4. When in the school course, do you think the study of rhetoric, as a distinct subject, should be introduced, and what results do you look for from the study?

5. The older text-books on rhetoric gave much attention to figures of speech. How do you rank these, for value in literary study, compared with the structure of the whole piece, and of its minor units?

# ENGLISH LITERATURE.

1. What do you know of the history of the novel? Does the history and the present development of the novel indicate any conclusion on the relation of its function as a form of art to that of the drama and of the lyric?

2. What meaning for literature had the publication of the Lyrical Ballads (Wordsworth and Coleridge)?

3. Compare the theme of Milton's *Paradisc Lost* with that of the *Iliad*.

4. Discuss from any three important view-points any single work of Ruskin or of Carlyle.

5. Discuss the situation, culmination and catastrophe of any one of the following plays of Shakespeare: Julius Cæsar, King Lear, Hamlet, Macbeth.

#### ZOOLOGY.

1. Name three examples of the simplest branch of the animal kingdom. Tell how each travels about, takes food and reproduces.

2. What are the characteristics that distinguish the branch Cœlenterata? Give the life history of a fresh water hydra.

3. Define conjugation, parthenogenesis, and alternation of generations, and tell where each occurs in the animal kingdom.

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4. What organs of special sense in a starfish? Where are they located? How does a starfish travel, and how does it respire?

5. What characteristics distinguish the order Arthropoda? How many legs and wings has a spider, a grasshopper, a house fly?

6. What characteristics separate the Vertebrata from all other animals? What characteristics distinguish the Mammalia? What is a Ruminant, and give examples?

7. What is meant by each of the terms, "mimicry," "warning coloration" and "commensalism," and give examples?

8. How do the following animals breathe: Cricket, crayfish, frog, earthworm and whale?

9. Just what is the "Theory of Development" (Darwinism)? What are some of the facts in nature that seem to you to be strongest in support of this theory?

10. What are the food habits of the robin, the English sparrow and the meadow lark? Of what importance are bees and other flower-visiting insects to the fruit-grower?

# SECOND DAY, A. M.-TRIGONOMETRY.

1. Define radian, and express in radians one of the interior angles of a regular pentagon.

2. Discuss the changes that take place, both in magnitude and sign, in the secant of the angle x as x changes from  $0^{\circ}$  to  $180^{\circ}$ .

3. Express the sin 3 X in terms of sin X.

4. In the oblique triangle ABC, given  $A=30^{\circ}$ ,  $C=105^{\circ}$  and B=7.07 find the remaining parts.

5. Give a method of finding the third side of a triangle when two sides and the included angle are known.

#### GERMAN.

1. Translate:

# Die Sonne und der Wind.

Einst stritten sich die Sonne und der Wind, wer von ihuen am stärksten sei. Sie kamen überein, derjenige solle dafür gelten, der einen Wanderer am ersten nötige, den mantel abzulegen.

Der Wind dachte, er wolle recht stümen, dann werde der mann schon nach seinem Willen tun. Doch als er so stürmte und blies, meinte der Mann nur, dass es doch recht kalt sei und dass en seinen mantel nur immer fester umtun wolle. Er klagte, es friere ihn so sehr, und der tag scheine immer kälter zu werden. Dabei zog er den mantel immer fester an.

2. Give the principal parts of ten irregular (strong) verbs in the above selection.

3. Decline all pronouns in first paragraph.

4. How are adjectives compared in German? Give five examples.

5. Give the usual order of words in principal and subordinate sentences. Give examples.

6 to 9. Translate into German: (a) Now the sun thought he would do quite differently. Mildly he sent down his rays.

(b). The traveler soon found his mantle too warm and took it off.

(c). Fairy tales will always please children. I have lost the money which my brother gave me.

(d). Many strangers visit Germany every year. Some learn the German language well. (40 credits.)

10. Name two German authors and their most famous works.

# FRENCH.

1. Translate into English:

Le lendemain du départ des Républicains, tout le village savait déjà qu'une Française était chez l'oncle Jacob qu'elle avait reçu un coup de pistolet et qu'elle en reviendrait difficilement. Mais comme il fallait réparer les toits des maisons, les portes et les fenêtres, chacun avait bien assez de ses propres affaires sans s'inquieter de celles des autres, et se n'est que le troisiéme jour, quand tout fut à peu prés remis en bon état, que l' idées de la femme revint aux gens.

Alors aussi Joseph Spick répandait le bruit que la Française devenait furieuse, et qu'elle criait: "Vive la République!" d' une facon terrible. Le gueux se tenait sur le seuil de son cabaret, les bras croisés, l'épaule au mur, ayant l' air de fumer sa pipe, et disant aux passants:

"Hé! Nickel . . . . Yokel . . . écoute, écoute, comme elle crie! N'est-ce pas abominable? Est-ce qu'on devrait souffrir cela dans le pays?"

2. (a) Give the principal parts of all irregular verbs in the foregoing.

(b) Inflect "répandit," "le gueux se tenait," "on devrait."

3. Translate into French:

- (a) Have you eaten meat?
- (b) I have bought no bread.
- (c) We have some good books.
- (d) I do not believe that she is sick.
- (e) She fears that we are unhappy.
- (f) It is necessary for you to go. (Two ways.)
- (g) I wish you to come.
- (h) The little girl whom you have seen is very pretty.

4. Discuss the use of the subjunctive in French.

5. Mention any six French authors, with their approximate dates, and some one work of each.

# LOGIC.

1. Define Logic and give relations to other sciences.

2. Define terms, propositions and syllogism.

3. Define *concrete* and *abstract* terms, giving examples of each.

4. Explain the meaning of "begging the question."

5. Discuss some of the fallacies and errors in the process and conclusions in Inductive Reasoning.

#### SECOND DAY, P. M.-GEOMETRY.

#### (Solve any five, not omitting No. 5 or No. 6.)

1. If three or more parallels intercept equal parts on one transversal, they intercept equal parts on every transversal. Prove.

2. An angle included by a tangent and a chord drawn from the point of contact is measured by half the intercepted arc. Prove.

3. Construct a square equivalent to a given parallogram.

4. In a right triangle the square on the hypotenuse is equivalent to the sum of the squares on the other two sides. Prove.

5. The volume of a triangular pyramid is one-third of the volume of the prism—having the same base and altitude. Prove.

6. An iron ball 4 inches in diameter weighs 9 lbs. Find the weight of an iron shell 2 inches thick, whose external diameter is 20 inches.

#### CHEMISTRY.

# (Answer any ten.)

1. Name the following compounds:

HNO <sub>3</sub>	$KNO_3$	$ m \hat{K}_2SO_4$	$FeSO_3$	$K Mn O_4$
$HNO_2$	$\mathrm{KNO}_{2}^{\circ}$	FeCl <sub>2</sub>	$\operatorname{Fe}_2(\operatorname{So}_4)_3$	Mn O <sub>2</sub>
H <sub>2</sub> SO <sub>2</sub>	KCl	FeCl <sub>2</sub>	K. Cr O.	Na H P O <sub>4</sub>

2. Write formulæ of: Acid potassium sulphate. Secondary sodium phosphate. Ferric nitrate. Ferric oxide. Chromium chloride. Lead sulphate. Sodium bicarbonate.

3. What is German silver, brass, bronze?

4. State the law of constant proportions. State the law of multiple proportions.

5. How does the volume of a gas vary with the temperature? With pressure?

6. Give occurrence, preparation and properties of oxygen.7. Define atomic weight.

8. How many volumes each of nitrogen and hydrogen would result from the decomposition of two volumes of ammonia gas?

9. If a salt be dissolved in water, how does it affect the freezing and boiling points of the liquid?

10. What is Avogadro's Law?

11. Define ion, compound, element, atom, molecule.

12. Define specific heat.

13. Describe the manufacture of soda.

14. Describe the manufacture of sulphuric acid.

15. When zinc is dissolved in hydrochloric acid, hydrogen is liberated. How much zinc will be required to liberate one gram of hydrogen?

Atomic weight of zinc = 65.4.

Atomic weight of hydrogen = 1.

#### GENERAL HISTORY.

1. Name three lines of research that have within the preceding century added greatly to our knowledge of prehistoric man, and indicate the nature of each.

2. How have these branches of study, together with the doctrine of evolution, altered our conception of "general history?"

3. What significance to your mind has the present eastern war in regard to the relation to civilization of the Caucasian and Turanian races?

4. Mention four dates that help form the framework of history, and tell what events they signalize.

5. Discuss the influence of Charles X on France.

#### THIRD DAY, A. M .- PHYSICAL GEOGRAPHY.

#### (Answer ten questions.)

1. Discuss the effect of climate and topography upon the settlements and industries of some state with which you are familiar.

2. State the general physical features of the Japanese empire. What bearing have they had upon the present conflict with Russia?

3. Give a brief description of the physical geography of Siberia. What is the importance of Manchuria and Korea to Siberia?

4. Compare Labrador and the British Isles in location, climate and population. Explain any differences.

5. What is meant by (1) drainage-slope; (2) river-system; (3) water-shed? Illustrate with examples in the United States.

6. Describe the Mississippi Flood-Plain, stating its origin, extent, main physical features and relation to the whole valley.

7. What processes of physiographic development are illustrated by each of the following: The Yellowstone National Park, Niagara Falls, the Yosemite Valley, the Florida Peninsula, the Garden of the Gods? 8. Define the following: Water-gap, barrier-reef, hog back, mesa, steppe, fjord. Name or locate examples of each.

9. Define a river-terrace and state how it is formed.

10. Describe the cycle of river-development, illustrating with examples in the United States.

11. Name two constructional and two destructional land forms. Give reasons why they are such.

12. What are the differences between old and young mountains? Illustrate with examples.

#### LATIN.

1. Eorum fines Nervii attingebant; quorum de natura moribusque Cæsar cum quæreret, sic reperiebat; Nullum esse aditum ad eos mercatoribus; nihil pati vini reliquarumque rerum ad luxuriam pertinentium inferri, quod his rebus relanguescere animos (eorum) et remitti virtutem existimarent; esse homines feros magnæque virtutis; increpitare atque incusare reliquos Belgas, qui se populo Romano dedidissent patriamque virtutem proiesissent; confirmare sese neque legatos missuros neque ullam condicionem pacis accepturos. Cæsar. Book 2-15.

2. Give principal parts of the following verbs: Quæreret, pati, remitti, dedidissent, accepturos.

3. Explain the syntax of: Quæreret, reperiebat, esse, pati, dedidissent.

4. Give syntax of following nouns: Vini, rebus, virtutis, populo, pacis.

5. Translate into Latin:

On the next day the Helvetians moved camp three miles. All the cavalry were sent in advance by Cæsar to see where the enemy would march.

After these things they resisted boldly, and attacked our men in the rear.

Cæsar said he thought there was no supply of grain. The Helvetians knew what was being done in our camp.

#### PEDAGOGY.

(Answers should be concise and to the point.)

1. A certain teacher said that all subjects have the same general method, i. e., that the method of teaching singing, drawing and sloyd should not differ essentially from the method of teaching arithmetic or history. (a) Do you agree or disagree with this statement? (b) If you agree, state the points of agreement in teaching singing and arithmetic. (c) If you disagree, state reasons why you could not employ the same general method for both of these subjects.

2. Mention the essential facts of some case of discipline which you have known. Then state how you would have treated the case, and give the principles underlying your line of action.

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3. State (a) the specific results sought in teaching readmethods for reading in the fifth grade.

4. For what principles does the kindergarten stand which may be used to advantage in higher grades?

5. Whom do you consider the three greatest educators America has produced? Tell what each has done in order to justify your opinion.

# PSYCHOLOGY.

# (Answer any seven questions.)

1. Describe briefly the functions of the nervous system of man.

2. How many kinds of sensory spots are found on the skin? How do you account for the existence of these?

3. What is color blindness? How can it be detected?

4. What is meant by visual, auditory and motor memories?

5. What are the laws of association of ideas? What kinds of association should be emphasized in teaching?

6. What is a concept? How does it differ from a percept?

7. How do you classify interests? What interests should be appealed to in school work?

8. Define feeling. How is it related to emotion?

9. What is the educational value of the training of the motor activities of children?

# THIRD DAY, P. M.-PHYSIOLOGY.

.1. Locate the following bones: Radius, femur, ethmoid, occipital, axis and astragalus.

2. Define articulation, joint and suture; give examples; what classes of joints in the body, and give examples of them.

3. Give the gross and microscopic structure of a voluntary muscle as fully as you can. How do voluntary and involuntary muscles differ in structure and in action?

4. What glands occur in the skin? What are their functions? What are the functions of the liver? The function of the pancreas?

5. What classes of foods are digested in the stomach? In the intestines? Would rice alone be a good diet? Why?

6. Why is bathing important? What rules would you lay down regulating the bath for a person of middle age?

7. Locate the vermiform appendix, the spleen, the thoracic duct. What is the function of the last-named structure?

8. Give as fully as you can the course taken by the blood in a complete circulation from the left ventricle back to the same point.

9. What, in a general way, are the functions of the cerebrum, the cerebellum, and the spinal cord? 10. What are the effects of alcohol on the nervous system? On the muscular system? What things are important for the building up of a strong muscular system?

#### MINERALOGY AND GEOLOGY.

1. Name and give the chemical compositions of the essential minerals in the following rocks: Granite, rhyolite, gneiss, amphibolite, basalt.

2. Describe the geological structure and the geological formations of the plains between Denver and the Missouri River.

3. Give a general description of the rocks and life of the Mesozoic.

4. Name the geological formations that contain workable coal in the United States. Give the different coal areas, and state the character of the coal in each case.

5. What is clay? Give its composition, and trace its history.

6. Write an account, not less than 200 words long, of the Glacial Epoch.

# ASTRONOMY.

1. Name the following planets:

- (a) Those that have been known from the earliest times.
- (b) Those that have no satellites.
- (c) Those that are farther than Jupiter from the sun.
- (d) Those that are smaller than the earth.

2. Name five stars of the first magnitude, and also the constellations to which they belong.

3. Describe the phases of the moon.

4. Describe the transits of Venus. How often do they occur? What use is made of them?

5. Define comet, star, meteoroid, planetoid, and planet.

6. Define sidereal time, solar time, mean solar time, equinox, perigee, apogee, solstice.

7. State your view of the sun as to the following points:

(a) Its size and distance from the earth.

- (b) The time of its axial rotation.
- (c) Its spots and their cause.

# ENAMINATION OF APPLICANTS FOR STATE KINDER-GARTEN DIPLOMAS, DENVER, COLORADO, AUGUST 27, 28, 1903.

#### FIRST SESSION-HISTORY OF EDUCATION.

1. Give a brief sketch of the life of Froebel.

2. Contrast Rousseau's attitude toward society with that of Froebel, and show how the educational method of each was modified by it.

#### SUPERINTENDENT OF PUBLIC INSTRUCTION.

3. What have been some of the important influences exerted by the Herbartian philosophy upon educational method?

4. Who is Dr. G. Stanley Hall? What is his special contribution to educational literature?

5. Name five educators of the last half century whose writings have largely moulded the schools of to-day.

#### PSYCHOLOGY.

1. What is a percept? An image? A concept?

2. What is meant by physiological psychology?

3. What are afferent nerves? Efferent nerves? The sensory-motor arc?

4. Give rules for the proper care of the eye during work.

5. What is the educational value of imitation? What its dangers and how avoided?

6. What is meant by apperception?

7. Give the chief laws of association.

#### PEDAGOGY.

1. Name the five Herbartian "steps" of a recitation.

2. Outline a "lesson plan" for a fifth gift play, the purpose and scope of the lesson to be selected by yourself.

3. What is your ideal of control and attention in a kindergarten?

4. How may kindergartens and primary grades modify their practive to bring about a better organization of the two?

#### SECOND SESSION-MOTHER PLAY.

1. What is the general purpose of the book?

2. When was it written? What share had others in its production?

3. Name at least eight problems of child training which are here dealt with.

4. Select four songs, give the central thought of each and apply it to—

- (a) home training.
- (b) kindergarten.
- (c) later school life.

#### GIFTS AND OCCUPATIONS.

1. Make a list of each in logical order.

2. What results do you look for from the use of the gifts? From the use of the occupations?

3. Give the essential characteristics of each of the building gifts.

4. What occupation materials would you chiefly use and why?

5. What occupations are best suited to the primary grades and why?

6. What results would you expect in your children as tests of their fitness for grade work?

# SONG, GAME, STORIES.

1. Would you give systematic tone training in kindergarten, or merely rote songs? Why?

2. What is the value of training in rhythm? Sketch briefly a year of progressive rhythm training.

3. What is the central purpose of kindergarten games? Other purposes?

4. How would you judge an ideal game period?

5. Into how many classes would you divide the stories told in kindergarten.

6. What class of stories requires a large amount of detail in the telling? What class requires illustrative material? Are there any stories best told with little aid of external material (as minute detail, facial gesture, blackboard drawing, etc.)?

# EXAMINATION OF APPLICANTS FOR STATE KINDER-GARTEN DIPLOMAS, DENVER, COLORADO, AUGUST 24 AND 25, 1904.

FIRST SESSION-HISTORY OF EDUCATION.

1. Give a brief historical sketch of the kindergarten movement.

2. What Americans were foremost in introducing kindergartens into this country?

3. What are the culture epochs? Give a reason for their existence.

4. What were the distinctive features of the work of Pestalozzi? Of Froebel?

5. Discuss the influence upon our schools of any one of the following: Dr. W. T. Harris, Dr. Charles McMurry, Mrs. Elizabeth Harrison.

#### PSYCHOLOGY.

1. Give the chief laws of association.

2. What is meant by apperception? By correlation?

3. What is the significance of the first gift?

4. Why should the kindergarten teacher make a study of physiology?

5. Explain fatigue, psychologically.

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#### SECOND SESSION-MOTHER PLAY.

1. Describe the Mutter and Kose Lieder.

2. Tell why Froebel wrote the book and what he said of it.

3. Name eight problems of child training that are dealt with in the book.

4. What is the physiological basis for the book? The psychological?

5. Give central thought of two of the songs, and make practical application.

#### GIFTS AND OCCUPATIONS.

1. Give a table showing gifts and occupations in logical sequence.

2. What occupations are best suited to the primary grades, and why?

3. Give an outline of the first year's work in the gifts for children four years of age.

4. What place should garden work occupy in the daily program.

5. How may the science work be connected with the gifts and occupations, the songs and games?

# THIRD SESSION-SONG, GAME, STORIES.

1. What class of stories requires illustrative material?

2. Name some of the best stories for kindergarten children.

3. Enumerate the benefits of singing in the kindergarten.

4. Name some notable writers of songs for the kindergarten.

5. What is the value of the movement plays in the kindergarten?

#### PEDAGOGY.

1. Outline a "lesson plan" for a fifth gift play, the purpose and scope of the lesson to be selected by yourself.

2. Define play, work, rest.

3. Explain your idea of order and discipline in the kindergarten.

4. What is the philosophy of the games?

5. How may one kindergartner successfully deal with twenty children of two grades in gift and occupation work?

# STATE SUPERINTENDENT'S DEPARTMENT OF COLO-RADO BAR EXAMINATION, DECEMBER 19 AND 20, 1902.

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. Define: (a) Equation. (b) Identical equation. (c) Conditional equation. (d) Literal equation. (e) Rational equation.

2. Solve the following and give reasons for each step in the solution :

6. A hare, 95 of her leaps ahead of a hound, takes 5 leaps to the hound's 4; but 3 of the hound's leaps equal 4 of the hare's. How many leaps must the hound take to catch the hare?

7. Solve and verify:  $\frac{7x-8}{11} + \frac{15x+8}{13} = 3x - \frac{31-x}{2}$ 

8. If a given rectangle had been 3 feet longer and 2 feet wider, it would have contained 64 square feet more. But if it had been 2 feet longer and 3 feet wider, it would have contained 68 square feet more. What are the dimensions of the rectangle?

9. A and B can do a piece of work in 1 hour and 10 minutes, A and C in 1 hour and 24 minutes, B and C in 2 hours and 20 minutes. How long would it take each to do the work alone?

10. Find the 6th root of

 $x^{6}$  - 6 $x^{5}y$  + 15 $x^{4}y^{2}$  - 20 $x^{3}y^{3}$  + 15 $x^{2}y^{4}$  - 6 $xy^{5}$  + 1.

GENERAL HISTORY.

(Answer eight.)

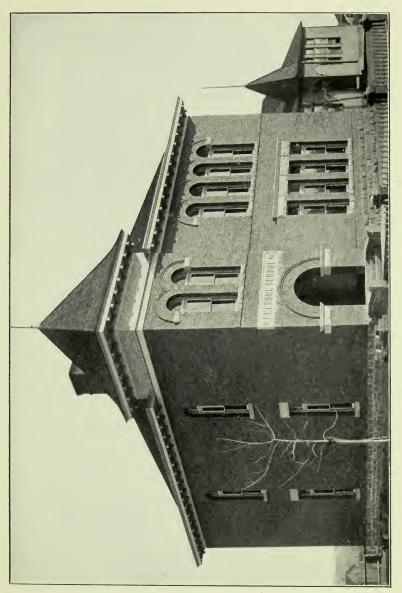
1. What is meant by the "Continuity of History?"

2. What have (1) the Greeks, (2) the Romans and (3) the Teutons contributed to modern civilization?

3. Give the significance of the following dates: 490 B. C., 476 A. D., 732 A. D., and 1453 A. D.

4. What is considered Justinian's greatest work?

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EMERSON SCHOOL, FLORENCE.

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5. "Holy Roman Empire"—what was it? Who called it into existence and who finally brought it to an end?

6. Compare the maps of Europe in the 4th century A. D. and the 16th century.

7. Name the great events that mark the beginning of the modern era.

8. Give the causes of the French Revolution.

9. What caused the delay of the unification of Italy until the 19th century? Of Germany?

10. What is meant by the balance of power?

# SECOND SESSION—UNITED STATES HISTORY.

1. What five European nations attempted to colonize North America? And on what were their claims to the right of colonization based?

2. Give the date, causes, treaty and results of the French and Indian war.

3. Trace the movements of Washington from the evacuation of Boston by the British to his going into winter quarters at Valley Forge.

4. What is meant by the "Critical Period" of United States history, and why so called?

5. Give history of the establishment of the National Bank system of the United States.

6. Give leading events in Monroe's administration.

7. Begin with J. Q. Adams and give the presidents in their order, and date of inauguration of each.

8. Give legislation on slavery from 1775 to 1861. Give number of amendments to the Constitution on this question.

9. Give meaning of the following: "Gerrymandering," "54° 40' or fight," "Rotation in office," "Proclamation line," "Contraband of war."

10. Give brief account of recent trouble with miners in Pennsylvania. How settled? Give names of members of board of arbitration.

#### CIV1L GOVERNMENT.

1. Define a treaty. Name the first, the last, and one other treaty entered into by the United States.

2. What is the number of the new Congress and how many members has it?

3. How are the United States senators chosen?

4. Under what circumstances may a state be wholly or partially unrepresented in the senate?

5. Give three reasons in favor of and three against the election of the United States senators by direct vote.

6. How did President Roosevelt become president? If he is the successful candidate in 1904, how many electoral votes must he necessarily receive?

7. What is meant by "Civil Service," and what are some of its advantages?

8. Who are now the heads of the executive departments?

9. In what cases does the United States supreme court have original jurisdiction?

10. Define extradition, reprieve and treason.

# ENGLISH LITERATURE.

#### (Answer any eight.)

1. What is the end of the study of literature?

2. Speak of the main characteristics of Anglo-Saxon litera ture. Name the greatest poetic work produced in England before the Norman conquest; the most notable writer of prose.

3. Discuss Chaucer's spirit and style, and his position in English literature. Name his chief work.

4. Discuss the motive of one of the following Shakespearian plays: Macbeth, Othello, Julius Cæsar and As You Like It.

5. What peculiar service did each of the following writers render to English letters: Sir Thomas Malory, John Wycliffe. William Tyndale, Sir Thomas Wyatt, the Earl of Surrey, Thomas Percy, Samuel Richardson?

6. Who was the leader of what is known as the Lake School of Poets? Speak of his position in English literature. What names are associated with his?

7. Name an important essayist of the 18th century and two of the 19th century, commenting upon the peculiar excellences of each.

8. Where in literature do you find any one of the following characters: Pompilia, Maggie Tulliver, Tom Pinch, Beatrix Esmond, Arthur Dimmesdale. Write a brief description of the character mentioned.

9. What writers in the early years of the 19th century established our claim to an American literature? Name a production of each.

10. With what lines of literary work do we associate the name of James Russell Lowell? Name and speak of a representative work.

#### THIRD SESSION-GEOMETRY.

# (Answer any five.)

1. Describe three methods of demonstrating the truth of a theorem.

- 2. (a) Can you draw a straight line on the surface of a ball? Explain.
  - (b) Can two polygons, neither of which is equilateral. be mutually equiangular? Illustrate.
  - (c) How many circles can be drawn tangent to a given straight line at a given point of that line?

3. Give at least six conditions under which two lines are equal.

4. Determine the number of sides of a regular polygon, the sum of whose exterior angles is one-sixth of the sum of its interior angles.

5. Find a mean proportional to m and n. If four quantities are in proportion, they are in proportion by division. Demonstrate.

6. In equal circles, central angles are proportional to their intercepted arcs. Demonstrate.

7. Given the three sides of a triangle—construct the triangle.

8. The rectangle of the sum and difference of two lines is equal to the difference of the squares of those lines. Demonstrate.

# ENGLISH HISTORY.

- 1. (a) Sketch the principal steps in the growth of Constitutional Liberty in England.
  - (b) Describe the effects of the Norman Conquest of England.
- 2. (a) Compare the Feudal System introduced into England by William the Conqueror with the Feudal System of France. Discuss its merits.
  - (b) Sketch the general characteristics of the Stuarts, the Tudors.
- 3. (a) Why was Cromwell's rule distasteful to England?
  - (b) Give the significance of the date, 1688.
  - (c) What issues were decided by the battle of Runny-

mede, of Bannockburn, Bosworth and Naseby? 4. Compare Queen Elizabeth and Queen Victoria as rulers and women.

5. Who is the present Prime Minister of England?

# March 20 and 21, 1903.

FIRST SESSION-ALGEBRA.

# (Answer eight.)

1. Define :

(1) A power.

- (2) Like quantities.
- (3) Homogeneous quantities.
- (4) Incommensurable quantities.
- (5) A surd.
- 2. Factor (1)  $6b^2x^2$ —7 $bx^3$ —3 $x^4$ .

(2)  $a^{3}$ — $b^{3}$ —3ab (a—b).

3. Simplify:

 $\{(2a+b)^2+(a-2b)^2\}\times\{(3a-2b)^2-(2a-3b)^2\}$ 

4.	Find	the	cube	root	of:	
	1	3:	x+6x <sup>2</sup>	$-7x^{3}$	$+6x^{4}-$	$-3x^5+x^6$ .

	a—x	$a^2 - x^2$
	1 +	$1 - \frac{1}{a^2 + x^2}$
Simplify:		
	a—x	$a^2 - x^2$ .
	1	1
Write the a	oth power of 2x	$x - \frac{1}{3}y.$
	8x+5	7 <b>x</b> —3 4 <b>x</b> +6

7. Solve and verify: -++-==---

8. A number is expressed by three digits. The sum of the digits is 9; the number is equal to forty-two times the sum of the first and second digits; and the third digit is twice the sum of the other two. Find the number.

9. The length of a rectangle is an inch less than double its breadth; and when a strip three inches wide is cut all around, the area is diminished by 210 inches. Find the size of the rectangle at first.

10. A tank can be filled by two pipes in 24 minutes and 30 minutes respectively, and emptied by a third in 20 minutes. In what time will it be filled if all three are running together?

# GENERAL HISTORY.

1. What causes led to the decline of Greek power?

2. What nations engaged in the Punic Wars and what was the outcome of the conflict?

3. What is the significance of these dates? 476, 622, 1453, 1648, 1870?

4. Give the effects of the Crusades—(1) good, (2) evil.

5. Sketch briefly Napoleon Bonaparte's career.

6. What is The Hague Tribunal?

7. What are some of the leading questions before the great nations to-day demanding solution?

8. Give name, causes, results of three wars in the past decade.

# SECOND SESSION-UNITED STATES HISTORY.

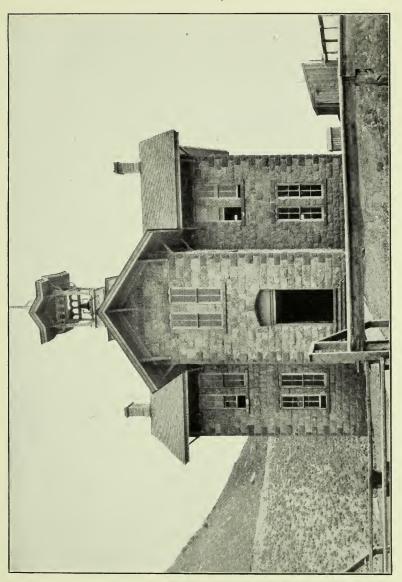
1. When, where and for what purpose was the first settlement made in Virginia, Massachusetts, Maryland, Rhode Island and Pennsylvania?

2. Distinguish between the three kinds of governments represented in the Colonies and give an example of each.

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5.

6.



SCHOOL AT MORRISON, JEFFERSON COUNTY.

LIBRARY OF THE OF THE OF ILLINOIS 3. Of the Revolutionary War name (a) three political leaders, (b) three patriot commanders, (c) three British generals, (d) three leading battles and their results.

4. What three compromises are found in our United States Constitution?

5. Give an account of the Louisiana Purchase.

6. State the leading features of the Missouri Compromise.

7. How and from whom was Colorado acquired by the United States? When?

8. What is the tariff question? What was the question concerning a national bank?

9. What was the Trent Affair? The Ordinance of 1787? The Alabama Claims?

10. Name five events of the past fifteen years that have materially affected this nation politically, socially, or industrially. State reasons for your opinion.

#### CIVIL GOVERNMENT.

1. For what purposes are governments instituted?

2. What are the personal rights of a citizen of the United States?

3. What are the three functions of government? Describe the composition of the judicial department of the United States.

4. Give each step in the process of making a law in this state.

5. What determines the number of members in the legislative department of our state? In Congress.

6. What are the sources of revenue in the federal government?

7. Define these terms: Reprieve, treaty, "eminent domain," civil service, electoral college.

8. What can be accomplished by the present extra session of the United States senate since the house has adjourned?

9. What is the last addition to the executive department of our federal government? Who is its head? What is his salary?

10. Give at least two reasons that justify a state in appropriating money for the support of schools?

# ENGLISH LITERATURE.

# (Answer eight.)

1. Describe the early Anglo-Saxon poetry.

2. Name the great writers of the Elizabethan Age and a work of each.

3. Describe the character of the literature of the Puritan Age.

4. Contrast Classicism and Romanticism and name a disciple of each school.

5. Give the character of Emerson's works and their influence.

6. Name authors of (1) In Memoriam, (2) Modern Painters, (3) Rise of the Dutch Republic, (4) Essay on Man, (5) Lady of the Lake.

7. Describe briefly one character from each of these writers: (1) George Eliot, (2) Shakespeare, (3) Dickens.

8. Name two writers of the Victorian Age, eminent in each of these fields: (1) Poetry, (2) Fiction, (3) Science, (4) Essays.

9. Give a brief account of the rise and development of modern fiction.

10. Give an example of (1) a sonnet, (2) an epic, (3) a lyric, (4) an essay, (5) a satire.

#### THIRD SESSION-GEOMETRY.

#### (Answer eight.)

1. Define and illustrate: Secant, homologous, sides, hypothesis, supplementary arcs, locus of a point.

2. (a) State three special cases when right triangles are equal. (b) State two cases when triangles are similar.

3. In the trapezoid m x y n, mn=2 x y. Prove x t=1/3 xn; yt=1/3 ym, t being at the intersection of xn and ym.

4. Show how a line may be divided into equal parts. Give proof.

5. What is the greatest chord in a circle? Prove it.

6. State and prove the proposition determining the sum of the exterior angles of a regular polygon.

7. Given the diameter of a circle, to construct the circumscribing hexagon.

8. Of all triangles having two given sides, that in which three sides include a right angle is the maximum.

9. The diagonal of a square is three inches, construct the square.

10. Two secants cut each other without a circle; the intercepted arcs are  $12^{\circ}$  and  $48^{\circ}$ ; what is the angle between the secants?

# ENGLISH HISTORY.

# (Answer any eight.)

1. Mention briefly the three conquests of England before the Norman Conquest.

2. Describe the change brought about by the Norman Conquest.

3. Name the chief events in the development of power by the common people or of constitutional growth.

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4. Give the cause, decisive battle and effect of the Wars' of the Roses.

5. Tell briefly the story of the Spanish Armada.

6. For what are these men famous: Bacon, Harvey, Milton, Newton, Wycliffe?

7. Name a great work of Gibbon, Hume, Macaulay, Grote.

8. Discuss the chief of the peaceful reforms that have taken place in the nineteenth century in England.

9. What were the Doomsday Book, Gunpowder Plot, Test, Act, Royal Society, Sepoy Mutiny?

10. Name two great prime ministers of England. Why are they celebrated?

# December 17 and 18, 1903.

# FIRST SESSION—ALGEBRA.

1. Give four axioms commonly used in the solution of an equation.

2. Define factor, polynomial, composite number, exponent.

3. Add—

$$\frac{a}{be} + \frac{b}{ca} + \frac{c}{ab} - 2\left(\frac{1}{a} + \frac{1}{b} - \frac{1}{c}\right)$$

4. Solve:

$$\mathbf{x}^{6}$$
 —  $\mathbf{a}^{6}$   $\mathbf{x}^{2}$  + (b + c)  $\mathbf{x}$  + bc

$$x^{2} + (a + b) x + ab$$
  $x^{4} + x^{2}a^{2} + a^{4}$ 

5. Find the value of—

1

2

- x -

$$\frac{1}{a} + \frac{b}{x} - c \text{ when } x = \frac{ab}{ac-1}$$

Define direct ratio, inverse ratio, compound ratio.
 7.

2x - 3 = 3x - 1

x - 1

 $\mathbf{2}$ 

4

х

3x - 2

 $3 x^2 - 3 + 2$ 

2

$$\frac{a}{b} = \frac{x}{y}; \text{ show } \frac{a^2 + b^2}{x^2 + y^2} = \frac{a^2 - b^2}{x^2 - y^2}$$

3

8.

9. I invested \$5,800 in 5% stock at 105 and 3% stock at 96. How much did I invest in each kind if my annual income is \$250? 10.

# $3 \text{ m}^2\text{n}^2 + 1 - 3 \text{ mn} - \text{m}^3\text{n}^3$ Extract the cube root and verify.

#### GENERAL HISTORY.

#### (Answer Seven.)

 What are the divisions of the Causasian race? To which division did the Hebrews belong? The Romans? The Egyptians?
 Show that the form of government in Egypt was the

natural form in view of the topography of the country.

3. What were the two most famous Phœnician cities? What contribution did the Phœnicians make to civilization?

4. What was the Trojan war and when and where did it occur?

5. Write briefly about the code of Solon or the code of Lycurgus.

6. What sort of people made up the early city of Rome? How did their character affect the early history of the city?

7. Choose one of the following characters for brief discussion: Epaminondas, Alcibiades, Lysander, Leonidas, Miltiades, Pericles, Aristeides.

8. Discuss briefly one of the following characters: Tiberius, Gracchus, Scipio the elder, Cataline, Marius, Fabius Maximus, Appius Claudius.

9. Tell briefly the story of the Franco-Prussian war.

10. What is "the Eastern Question?"

# SECOND SESSION-UNITED STATES HISTORY.

Discuss briefly the part taken in the history of this country by each of the following named persons, giving particular attention to the time, locality and important events during his life: 1. Roger Williams. 2. William Penn. 3. Alexander Hamilton. 4. Henry Clay. 5. James Madison. 6. John Calhoun. 7. Robert E. Lee. 8. William Lloyd Garrison. 9. William McKinley. 10. Thomas Edison.

# CIVIL GOVERNMENT.

1. Define extradition, treason, habeas corpus, reprieve and civil service.

2. How are representatives in Congress apportioned? What is the present ratio?

3. What power prescribes the time, place and manner of holding the election for United States senators and representatives?

4. Who has the full power to prefer charges of impeachment? Who has the full power to try all impeachments? Who presides at impeachment trials?

5. Give three provisions of the Inter-state Commerce Act.

6. Describe the process of naturalization.

7. Give the order of presidential succession.

8. Name the courts comprising the judicial department of the United States.

9. How may the Constitution of the United States be amended?

10. Name five living members of each house of Congress and describe some important measure in which each has taken an active part.

# ENGLISH AND AMERICAN LITERATURE.

# (Answer eight.)

1. What is Beowulf? What Saxon characteristics does it bring out.

2. Who was the greatest English writer? What have you read of his? What is there in what you read which helps to establish the author's title to pre-eminence among English writers?

3. Name two English process writers of the eighteenth century and mention some characteristics of their writings.

4. Name three poets of the Victorian era and mention two poems written, by each.

5. Identify these writers with the English sovereign in whose reign they wrote: Coleridge, Chaucer, George Eliot, Spenser, Darwin, Pope, Thackeray, Goldsmith, Macauley, Burns.

6. What was the nature of the earliest American literature? Name two of the earliest writers and mention something written by each.

7. Name three American humorists, living or dead, and indicate the kind of humor in the writings of each.

8. Who wrote: The Gold Bug? The Marble Faun? Uncle Tom's Cabin? Poor Richard's Almanac? Little Men? The Conquest of Mexico? Old Ironsides? The Man Without a Country? Mrs. Wiggs of the Cabbage Patch?

9. What book have you read recently which you consider worth while? Explain why you consider it worth while.10. What is your opinion of the influence of the daily press

10. What is your opinion of the influence of the daily press on the politics, society and morality of the day? Give reasons for your opinion.

#### THIRD SESSION-GEOMETRY.

# (Answer seven.)

 Give cases in which two triangles are identically equal.
 If through the vertex of an isosceles triangle a straight line is drawn parallel to the base, it will bisect the exterior vertical angle. Demonstrate.

3. An angle whose vertex is on a circle equals half the angle at the centre subtended by the arc. Demonstrate.

4. A circle is described on the radius of another as diameter. Prove that any chord of the greater circle drawn through their point of contact is bisected by the lesser circle.

5. If two sides of a quadrilateral are parallel, the diagonals cut each other in the same ratio. Demonstrate.

6. Define the following expressions, namely: "To measure," "multiple of a given magnitude," "measure of a given magnitude," "incommensurable magnitude," and "harmonic division."

7. What is the measure of the angle at the centre of a circle subtended by the side of a circumscribed square? Illustrate.

8. Describe a circle whose circumference is equal to the sum of the circumferences of two given circles.

# ENGLISH HISTORY.

# (Answer eight.)

1. What races combined to make the English race? What did each contribute to the new race?

2. Who was the greatest of the Saxon kings? In what ways was he great?

3. To what dynasty of rulers did each of the following belong: Victoria, John, Elizabeth, Edward I., Richard III.?

4. What that was of considerable importance in warfare happened at the battle of Crecy? Give the date of the battle approximately and tell in what war it occurred.

5. What is the "Woolsack?" What does it signify?

6. Compare the British Parliament briefly with the American Congress.

7. What events do you identify with the following names: Guy Fawkes, Runnymede, Hastings, Wat Tyler, Naseby, Trafalgar, Cecil Rhodes, Charles Stewart Parnell.

8. What was the attitude of England toward America during the American Civil war?

9. Give a brief statement of the cause, course and result of the recent South African war.

10. What change has been made during the last year in the British cabinet? Why was it made?

March 17 and 18, 1904.

#### FIRST SESSION—ALGEBRA.

1. 
$$x^2+11x+30=0$$
. Solve by factoring.

2.  $144x^4$ —169 $x^2y^2$ +49 $y^4$ . Factor.

. 
$$3y = \frac{5y+2}{27} - \frac{6-3y}{9} - \frac{3}{18} + \frac{y}{\frac{3}{2}} = 0$$
 Find value of y and

verify.

 $x^4+y^4$ —— Reduce to a mixed form. 4. x+v a<sup>°</sup> 1 b<sup>\*</sup>a 5. a 1 1 ------b b a 15x-7 10x+3 418 - - + - - = 1. Solve and verify. 6.  $4+5x \quad 5x-4 \quad 25x^2-16$ 

A hare, 95 of her leaps ahead of a hound, takes five leaps 7. to the hound's four; but three of the hound's leaps equal four of the hare's. How many leaps must the hound take to catch the hare?

8. 
$$\left(\frac{x}{2}\sqrt{2}-\frac{y}{3}\sqrt{3}\right)$$
  $\left(\frac{x}{2}\sqrt{2}+\frac{y}{3}\sqrt{3}\right)=?$ 

What is the value of  $x^{\circ}$ ? Demonstrate. 9.What is the value of y-3? Demonstrate.

Expand (2.5x-3.2v)4. 10.

ENGLISH HISTORY.

(Answer eight.)

1. Show what Alfred the Great did for his country that entitled him to be called "Great."

2. How did the English Reformation differ from the Lutheran Reformation?

3. Discuss the condition of England and its people at the time of the discovery of America by Columbus.

4. What was the influence of Simon de Montfort on English history?

5. Give the principal facts in regard to John Hampden; Oliver Cromwell; John Pym; Prince Rupert.

6. (a) What led to the fitting out of the Spanish Armada?

(b) What effect did it have on England?

(c) What influence on the history of America?

Who was the sovereign of England at the time of each 7. of the following events?

- (a) The granting of Magna Charta.
- (b) The period of England's greatest literary fame.

(c) The American Revolution.

(d) The Battle of Trafalgar.

Explain the nature of the corn laws of England. 8.

Mention ten important events of the reign of Victoria. 9.

What party is in ascendancy in England at present? 10. Name the Prime Minister.

#### GENERAL HISTORY.

# (Answer eight.)

1. Describe the physical features of Greece, and speak of the effect of physical environment upon the character, political organizations, civilization and history of the Hellenes.

2. Describe slavery as it existed under the Roman Empire, and its effects.

3. Give a brief sketch of the second Punic War, as to: (a) Causes; (b) Time; (c) Principal actors and events; (d) Outcome.

4. In what ways have Mohammedan peoples influenced the history of Europe?

5. Describe the period of transition from mediaval to modern history.

6. What do you understand by "The Renaissance," as the term is used in history?

(a) What was the cause of the Thirty Years' War?

(b) What was its effect on the German nation?

(c) Mention one of the important events of the war.

8. Name two republics, two absolute monarchies, and three limited monarchies of Europe; and give the title of the chief official of each.

9. What can you say of the Panama canal?

10. What is the chief cause of the Russo-Japanese War?

SECOND SESSION-UNITED STATES HISTORY.

1. Describe, briefly, the discoveries and explorations of any two of the following: (a) Ponce de Leon. (b) De Soto. (c) Cartier. (d) Champlain.

2. What four nations claimed portions of North America by discovery and exploration, and what did each claim?

3. Give the purpose and terms of existence of the New England Confederacy.

4. What was the first representative assembly for self-government in America? Where and when was it first convened?

5. Tell how the States ratified the national Constitution after its formation and adoption by the Convention of 1787.

- 6. (a) What territory was embraced in the Louisiana Purchase?
  - (b) What were the objects of the expedition of Lewis and Clark?
  - (c) Its results?
- 7. What questions were settled by—
  - (a) The War of 1812;
  - (b) The Mexican War?

8. Describe, briefly, the industrial and commercial progress of the United States since the Civil War.

7.

# SUPERINTENDENT OF PUBLIC INSTRUCTION.

# 9 and 10. What were the results of the Spanish-American War upon—

(a) Cuba;

(b) Porto Rico;

(c) The Philippine Islands?

What did the United States gain by that war?

# CIVIL GOVERNMENT.

1. Name five sources of our laws.

- 2. (a) From what source did the United States government originally derive its authority?
  - (b) What powers under the National Constitution are reserved to the states?

3. Give ten provisions of the Constitution to secure personal liberty.

4. Name the two principal sources from which the national government derives its revenue.

5. What is a treaty? How is a treaty made? What can you say about the Clayton-Bulwer treaty?

- 6. (a) For what special purpose is the United States census taken?
  - (b) How often?
  - (c) When was the last one taken?
  - (d) What was the population in round numbers?

7. Show, by a diagram, the system of the United States Land Survey. Locate, on the map, a quarter-section, and describe it accurately.

8. Explain different processes by which the State may take property from a citizen.

9. Mention two ways in which the President may influence legislation.

10. What is the present session of Congress called? When did the term of the present members of the House begin? When will it end?

#### ENGLISH LITERATURE.

1. What conditions of society are pictured in The Canterbury Tales? When and by whom were they written?

2. What is the meaning of: Troubadours, minnesingers, meistersingers, saga, folk-lore?

3. State the influence of the French on English Literature at the time of the Restoration.

4. What can you say of the place of Lord Bacon in English Literature?

5. Mention three representative writers showing sympathy between man and nature.

6

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6. What is remarkable about the writings of Scott? Name five of his best works. What writer in America most resembled him? Name his principal works.

7. Name two biographers whom you consider good from a literary standpoint. Give your reasons.

S. What place does the novel hold in Literature? Mention three standard American novels, and, in a few words, state the purpose of one of them.

9. Mention some of the best works of the authors connected with the Brook Farm.

10. Who are the most notable writers upon Law in England and in America?

# THIRD SESSION-GEOMETRY.

1. The extremities of the base of an isosceles triangle are equally distant from the opposite sides. Prove.

2. Prove that an angle formed by two chords intersecting within a circle is measured by one-half the sum of the intercepted arcs.

A B C D is a quadrilateral in a circle; P Q R S are the points of bisection of the arcs AB, BC, CD, DA. Show that PR is perpendicular to QS.

3. Find the number of square feet in an equilateral triangle whose side is one metre.

4. A parallelogram is divided by its diagonals into four triangles of equal area. Prove.

5. Given a circle, a point, and two straight lines meeting in the point and terminating in the circumference of the circle. State what four lines or segments form a proportion and in what order they must be taken:

(1) When the point is outside the circle, and —

(a) Both lines are secants.

- (b) One line is a secant and the other a tangent.
- (c) Both lines are tangents.
- (2) When the point is within the circle and the two lines are chords.

Prove in full (1) (a). Show that (1) (c) is a limiting case of (1) (a).

6. Derive an expression for the area of a regular polygon.

7. Define: Altitude of a triangle, medial line, regular polygon, inscribed angle, segment and sector of a circle.

8. What is each angle in a regular pentagon, regular hexagon, regular dodecagon?

# SUPERINTENDENT OF PUBLIC INSTRUCTION.

# DISTRICT NORMAL INSTITUTE REPORTS, 1903.

First District—Logan, Morgan, Phillips, Sedgwick, Washington and Yuma counties. President, Miss L. M. Dyer, Sterling, Logan county. Secretary, Mrs. M. A. Clifford, Ft. Morgan, Morgan county. Treasurer, Miss Minnie Cunningham, Wray, Yuma county. Held at Wray, July 13-24, 1903. Conductor, B. D. Parker. Instructors, S. S. Dow, Miss Lulu B. Barnes. Enrollment, 78.

#### FINANCIAL STATEMENT.

Receipts.

Balance on hand		
From registration fees	\$ 78.00	
From counties in district	31.09	
From State Fund	192.37	

#### Disbursements.

Paid conductor	\$	106.05	
Paid instructors		125,60	
Paid incidentals		12.01	
Total	\$	243.66	
Balance on hand		57.80	
Total	-		\$ 301

Second District—Boulder, Larimer and Weld counties. President, W. C. Thomas, Boulder, Boulder county. Secretary, J. E. Snook, Greeley, Weld county. Treasurer, Miss Mary E. Gill, Ft. Collins, Larimer county. Held at Greeley, August 3-14, 1903. Conductor, Supt. W. C. Thomas. Instructors, Chas. E. Chadsey, J. H. Hays, Miss Mary Carson, Frank Abbott, J. R. Whiteman, J. F. Daniels. Enrollment, 152.

#### FINANCIAL STATEMENT.

#### Receipts.

Balance on hand	\$ 227.52	
From registration fees	152.00	
From counties in district	304.00	
From State Fund	192.37	
Total	 	0

.46

875.59

#### Disbursements.

Paid conductor	\$	150.00		
Paid instructors		375.00		
Paid incidentals		83.10		
Total	\$	608.10		
Balance on hand		267.79		
	-		-	
Total			\$	875.89

Third District—Adams, Arapahoe and Denver counties. President, Mrs. Mary C. C. Bradford, Brighton, Adams county. Secretary, Miss Kathryn Maloney, Littleton, Arapahoe county. Treasurer, Miss E. M. Herey, Denver, Denver county. Held at Denver, August 3-14, 1903. Conductor, Dr. D. E. Phillips. Instructors, W. W. Remington, A. W. Elder, G. W. Wyatt, Herbert Griggs, Miss Emily H. Miles, Miss Adda Lamb, Miss Nora Maloney. Enrollment, 321.

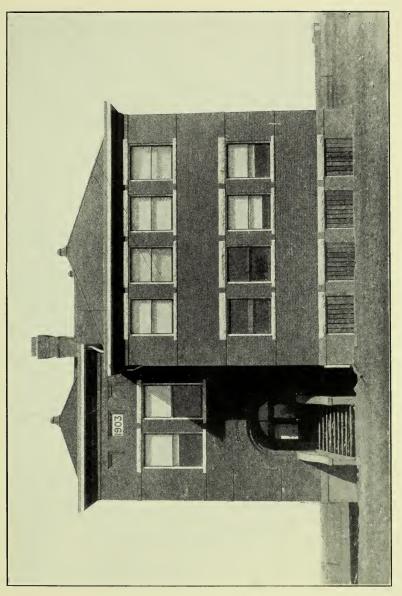
#### FINANCIAL STATEMENT.

Receipts.		
Balance on hand	\$ 1.46	
From registration fees	321.00	
From counties in district	632.00	
From State Fund	192.37	
Total		\$ 1,146.83

#### Disbursements.

Paid conductor	\$ 110.00	
Paid instructors	630.00	
Paid additional <sup>*</sup> expenses	303.70	
Total	\$ 1.043.70	
Balance on hand	103.13	
Total		\$ 1.146.83

Fourth District—Clear Creek, Gilpin and Jefferson counties. President, Mrs. M. A. Bowman, Idaho Springs, Clear Creek county. Secretary, Miss Ida L. Crawford, Golden, Jefferson county. Treasurer, Miss Ida Kruse, Central City, Gilpin county. Held at Golden, June 8-14, 1904. Conductor, Dr. D. E. Phillips. Instructors, J. W. Ellison, A. D. Hoenshal, Miss Myrtle J. Wells. Enrollment, 107.



UNION HIGH SCHOOL, GRANADA, PROWERS CO.

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#### Receipts.

Balance on hand	\$115.04	
From registration fees	107.00	
From counties in district	204.00	
From State Fund	192.37	
Total		\$618.41
Disbursements.		
Paid conductor	\$130.00	
Tald conductor	\$100.00	
Paid instructors	205.00	

Paid instructors	205.00	
Paid incidentals	89.50	
Total	\$424.50	
Balance on hand	193.91	
Total		\$618 41

Fifth District—Douglas, Elbert, El Paso and Teller counties. President, Frank D. Ball, Castle Rock, Douglas county. Secretary, E. M. Collins, Colorado Springs, El Paso county. Treasurer, Mrs. May A. Georgia, Kiowa, Elbert county. Held at Colorado Springs, August 9-22, 1904. Conductor, W. H. Miller. Instructors, Dr. Jacques Redway, J. V. Crone, Miss Eleanor Phillips, Mrs. Mary Tanner Croswell, W. M. Shafer, Dr. R. S. Croswell. Enrollment, 194.

# FINANCIAL STATEMENT.

Receipts.		
Balance on hand	\$179.79	
From registration fees	194.00	
From counties in district	408.00	
From State Fund	192.37	
Total .		\$974.16
Disbursements.		1
Paid conductor	\$150.00	
Paid instructors	482.75	
Paid additional expenses	110.85	
Total	\$743.60	
Balance on hand	230.56	
Total		\$974.16

Sixth District—Cheyenne, Kit Carson and Lincoln counties. President, Mrs. Julia Tinsley, Cheyenne Wells, Cheyenne county. Secretary, E. I. Thompson, Hugo, Lincoln county. Treasurer, John F. Stott, Burlington, Kit Carson county. Held at Cheyenne Wells, August 24-Sept. 5. Conductor, A. J. Fynn. Instructors, Mrs. A. J. Fynn, Miss Kate Hansen. Enrollment, 45.

#### Receipts.

Balance on hand From State Fund			
Total	-		\$ 219.57
, Disbursements.			
Paid conductor	\$	80.00	
Paid instructors		110.00	
Paid incidentals		1.75	
Total	\$	191.75	
Balance on hand		27.82	
Total	-		\$ 219.57

Seventh District—Custer, Fremont and Pueblo counties. President, Asa P. Dickson, Westcliffe, Custer county. Secretary, Miss Lulu J. White, Pueblo, Pueblo county. Treasurer, George E. Colgate, Canon City, Fremont county. Held at Pueblo, August 10-21, 1904. Conductor, M. F. Miller. Instructors, Mrs. E. S. Knapp, A. D. Hoenshel, H. E. Smith. Enrollment, 118.

# FINANCIAL STATEMENT.

Receipts.		
Balance on hand	\$ 25.10	
From registration fees	· 109.00	
From counties in district	236.00	
From State Fund	192.37	
Total		\$ 562.47
Disbursements.		
Paid conductor	\$ 150.00	
Paid instructors	325,00	
Paid incidentals	45.90	

Total	\$ 520.90	
Balance on hand	41.57	
Total		562.47

Eighth District—Baca, Bent, Kiowa, Otero and Prowers counties. President, F. H. Maile, Sheridan Lake, Kiowa county. Secretary, Miss Mary E. Lyon, La Junta, Otero county. Treasurer, J. A. Rosebrough, Lamar, Prowers county. Held at La Junta, August 3-14, 1904. Conductor, George Momyer. Instructors, Miss Myrtle Wells, Miss Charlotte Gauss. Enrollment, 100.

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recoupes.			
Balance on hand	\$	72.70	
From registration fees		100.00	
From counties in district		200.00	
From State Fund		192.80	
Total	-		\$ 565.50
Disbursements.			
Paid conductor	\$	150.00	
Paid instructors		215.00	
Paid additional expenses		114.30	
Total	\$	479.30	
Balance on hand		86.20	
Total			\$ 565.50

Ninth District—Huerfano and Las Animas counties. President, John W. Douthit, Trinidad, Las Animas county. Secretary. Patrick W. Sweeney, Walsenburg, Huerfano county. Treasurer, J. H. Fox, Trinidad. Held at Trinidad, August 10-21, 1904. Conductor, C. V. Parker. Instructors, E. L. Enloe, J. Lawson Alford, Miss M. B. Church. Enrollment, 63.

#### FINANCIAL STATEMENT.

Receipts.			
Balance on hand	\$	19.51	
From registration fees		63.00	
From State fund		192.37	
Total	-		\$ 274.88
Disbursements.			
Paid conductor	\$	105.00	
Paid instructors		155.00	
Paid additional expenses		7.00	
Total	\$	267.00	
Balance on hand		7.88	
Total	_		\$ 274.88

Tenth District—Conejos, Costilla, Mineral, Rio Grande and Saguache counties. President, George W. Irvin, Sanford, Conejos county. Secretary, G. A. Carpenter, Del Norte, Rio Grande county. Treasurer, W. E. Gardner, Saguache, Saguache county. Held at Monte Vista, August 10-21, 1903. Conductor, J. F. Keating. Instructors, W. A. Oliphant, Miss Evelyn Walker, G. A. Carpenter, W. E. Gardner. Enrollment, 79.

# FOURTEENTH BIENNIAL REPORT

#### FINANCIAL STATEMENT.

Balance on hand	\$ 47.01	
From registration fees	79.00	
From counties in district	158.00	
From State fund	192.37	
Total		\$ 476.38

#### Disbursements.

Paid conductor		150.00		
Paid instructors		150.00		
Paid additional expenses		81.62		
Total	\$	381.62		
Balance on hand		94.76		
Total	_		\$ 476.3	8

Eleventh District—Archuleta, Dolores, La Plata, Montezuma and San Juan counties. President, H. E. Black, Cortez, Montezuma county. Secretary, Miss Edith B. M. Young, Durango, La Plata county. Treasurer, L. W. Smith, Pagosa Springs, Archuleta county. Held at Mancos, August 24 to September 4, 1903. Conductor, M. F. Miller. Instructors, Miss Lura D. Patrick, R. Ernesti, Minnie Hand, Maud Agnew, Dr. D. E. Phillips. Enrollment, 56.

# FINANCIAL STATEMENT.

		1	
Receipts.			
Balance on hand	\$	61.88	
From registration fees		56.10	
From counties in district		110.00	
From State Fund		192.37	
Totaľ	-	\$	420.35
Disbursements.			
Paid conductor	\$	150.00	
Paid instructors		187.00	
Paid additional expenses		72.05	
Total	\$	409.05	
Balance on hand		11.30	
Total	-	\$	420.35

Twelfth District—Delta, Gunnison, Hinsdale, Mesa, Montrose, Ouray and San Miguel counties. President, Miss Emma Willis,

# SUPERINTENDENT OF PUBLIC INSTRUCTION.

Montrose, Montrose county. Secretary, Miss Alice A. Royce, Delta, Delta county. Treasurer, Miss Fannie Burnett, Gunnison, Gunnison county. Held at Delta, July 27 to August 8, 1903. Conductor, F. H. Clark. Instructors, U. W. Keplinger, Miss Mary Giffin, Miss Bertha K. Tracey. Enrollment, 111.

# FINANCIAL STATEMENT.

#### Receipts.

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Balance on hand	Ş	170.77	
From registration fees		111.00	
From counties in district		72.00	
From State fund		192.37	
Total	-		\$ 546.14
Disbursements.			
Paid conductor	\$	150.00	
Paid instructors*		210.00	
Paid incidentals		9.15	
Total	\$	369.15	
Balance on hand		176.99	
Total	~		\$ 546.14

Thirteenth District—Chaffee, Eagle, Garfield, Grand, Lake, Pitkin, Park, Rio Blanco, Routt and Summit counties. President, Grant Ruland, Basalt, Eagle county. Secretary, Mrs. Lucy E. DeWitt, Glenwood Springs, Garfield county. Treasurer, Mrs. Edith M. Bailey, Aspen, Pitkin county. Held at Glenwood Springs, August 10-21, 1903. Conductor, F. H. Clark. Instructors, C. A. Hollingshead, Miss Clara Coney, R. Ernesti. Enrollment, 90.

### FINANCIAL STATEMENT.

#### Receipts.

Balance on hand	\$ 50,51	
From registration fees	90.00	
From counties in district	174.00	
From State fund	192.37	
Total		\$ 506.88
Disbursements.		
Paid conductor	150.00	
Paid instructors	225.00	
Paid additional expenses	22.35	
Total	\$ 397.35	
Balance on hand	109.53	
Total		\$ 506.88

## FOURTEENTH BIENNIAL REPORT

## DISTRICT NORMAL INSTITUTE REPORTS, 1904.

First District—Logan, Morgan, Phillips, Sedgwick, Washington and Yuma counties. President, C. F. Parker, Julesburg, Sedgwick county. Secretary, Miss Madge A. Crowner, Holyoke, Phillips county. Treasurer, Miss Minnie Cunningham, Wray, Yuma county. Held at Fort Morgan, June 20-30, 1904. Held at Holyoke, July 11-23, 1904. Conductor, Prof. C. V. Parker. Instructors, S. S. Dow, Miss Evelyn Walker, Miss Ella Jones. Enrollment, Fort Morgan, 43; Holyoke, 54; total, 97.

# FINANCIAL STATEMENT.

Receipts.			
Balance on hand	\$	169.95	
From registration fees		95.00	
From counties in district		190.00	
From State fund		177.31	
Total	-		\$ 632.26
Disbursements.			
Paid conductor		115.00	
Paid each instructor		85.00	
		50.00	
		50.00	
Paid additional expenses	_	42.25	
Total	\$	342.25	
Balance on hand		290.01	
Total	-		\$ 632.26

Second District—Boulder, Larimer and Weld counties. President, Mary E. Gill, Fort Collins, Larimer county. Secretary, W. C. Thomas, Boulder, Boulder county. Treasurer, James E. Snook, Greeley, Weld county. Held at Boulder, August 1-12, 1904. Conductor, Mary E. Gill. Instructors, M. F. Miller, Dr. D. E. Phillips, Miss Eleanor Phillips, E. A. Kenyon, J. E. Snook, W. C. Thomas. Enrollment, 154.

#### FINANCIAL STATEMENT.

#### Receipts.

Balance on hand	Ş	284.79	
From registration fees		153.00	
From counties in district		306.00	
From State fund		177.00	
Total	-		\$

920.79

## Disbursements.

Paid conductor	
Paid each instructor	\$ 150.00
	150.00
	150.00
	75.50
Paid additional expenses	110.40
Total	\$ 635.90
Balance on hand	284.89
Total	\$ 920.7

Third District—Adams, Arapahoe and Denver counties. President, Mrs. Mary C. C. Bradford, Brighton, Adams county. Secretary, Miss Kathryn Maloney, Littleton, Arapahoe county. Held at Denver, June 20-July 1, 1904. Conductor, A. W. Elder. Instructors, Mrs. Scott Saxton, Miss Anna Walsh, Miss Emily Miles, Miss Mary Adeline Lamb, D. R. Hatch, M. E. Eagleton, Herbert Griggs. Enrollment, 280.

#### FINANCIAL STATEMENT.

#### Receipts.

Balance on hand	\$	103.13	
From registration fees		280.00	
From counties in district		550.00	
From State fund		177.31	
	-		
Total			\$1.110.44

#### Disbursements.

Salary paid conductor	\$ 125.00	
Salary paid each instructor (\$90)	630.00	
Additional expenses	340.50	
Total	\$ 1,095.50	
Balance on hand	14.94	
Total		\$ 1.110.44

Fourth District—Clear Creek, Gilpin and Jefferson counties. President, Mrs. M. A. Bowman, Idaho Springs, Clear Creek county. Secretary, Miss Ida L. Crawford, Golden, Jefferson county. Treasurer, Miss Ida Kruse, Central City, Gilpin county. Held at Golden, June 8-17, 1904. Conductor, Dr. D. E. Phillips. Instructors, Dr. A. J. Fynn, Mrs. Bella B. Sibley, R. Ernesti, Miss Ida Kruse. Enrollment, 82.

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Balance on hand	\$	193.91	
From registration fees		82.00	
From counties in district		130.00	
From State fund		177.31	
Total	_		\$ 583.22
Disbursements.			
Paid conductor	\$	130.00	
Paid each instructor		90.00	
•		75.00	
		75.00	
		50.00	
Paid additional expenses		168,15	
Total	\$	588.15	
Overdrawn		4.93	
Total	-		\$ 588.93

Fifth District—Douglas, Elbert, El Paso and Teller counties. President, Mrs. May A. Georgia, Kiowa, Elbert county. Secretary, Mrs. Thera H. Satterlee, Cripple Creek, Teller county. Treasurer, Frank D. Ball, Castle Rock, Douglas county. Held at Colorado Springs, August 1-12, 1904. Conductor, Dr. Henry R. Sanford. Instructors, Fonetta Flansburg, F. D. Ball, Miss Parsons. Enrollment, 141.

#### FINANCIAL STATEMENT.

#### Receipts. Balance on hand...... \$ 246.38 From registration fees..... 141.00 From counties in district..... 182.00 From State fund 177.31Total 746.69 Disbursements. Paid conductor ..... \$ 150.00 Paid instructors 125.00 \$0.00 Paid additional expenses..... 104.10 459.10 Balance on hand..... 287.59Total

746.69

# SUPERINTENDENT OF PUBLIC INSTRUCTION.

Sixth District—Cheyenne, Kit Carson and Lincoln counties. President, Mrs. Julia Tinsley, Cheyenne Wells, Cheyenne county. Secretary, E. I. Thompson, Hugo, Lincoln county. Treasurer, John F. Scott, Burlington, Kit Carson county. Held at Burlington, June 20-July 1, 1904. Conductor, A. D. Hoenshell. Instructors, H. V. Mathews, Nuna Kenton. Enrollment, 31.

# FINANCIAL STATEMENT.

Receipts.			
Balance on hand	\$	27.82	
From registration fees		31.00	
From counties in district		106.00	
From State fund		177.31	
Total	_		\$ 342.13
Disbursements.			
Paid conductor		88.30	
Paid each instructor		72.00	
		50.00	
Paid additional expenses		12.25	
Total	\$	222.55	
Balance on hand		119.58	
Total			\$ 342.13

Seventh District—Custer, Fremont and Pueblo counties. President, Asa P. Dickson, Westcliffe, Custer county. Secretary, George E. Colgate, Canon City, Fremont county. Treasurer, Miss Lulu J. White, Pueblo county. Held at Canon City, June 6-18, 1904. Conductor, M. F. Miller. Instructors, Mark P. Helm, M. E. Shuck, Anna Greist. Enrollment, 74.

# FINANCIAL STATEMENT.

Receipts.		
Balance on hand	\$ 40.57	
From registration fees	66.00	
From counties in district	148.00	
From State fund	177.31	
Total	 	\$ 431.88
Disbursements.		
Paid conductor	\$ 138.00	
Paid each instructor	88.00	
	88.00	
	88.00	
Paid additional expenses	29,25	
Total	\$ 431.25	
Balance on hand	.63	
Total	 	\$ 431.38

# FOURTEENTH BIENNIAL REPORT

Eighth District—Baca, Bent, Kiowa, Otero and Prowers counties. President, J. A. Rosebrough, Lamar, Prowers county. Secretary, Mary E. Lyon, La Junta, Otero county. Treasurer, Florence Sargent, Las Animas, Bent county. Held at Las Animas, June 6-17, 1904. Conductor, E. R. Jones. Instructors, George L. Hess, C. Gauss and Mrs. B. Taylor. Enrollment, 70.

#### FINANCIAL STATEMENT.

#### Receipts.

Balance on hand	\$ 67.69	
From registration fees	68.00	
From counties in district	136.00	
From State fund	177.31	
Total	 	\$ 449.00

#### Disbursements.

Paid conductor	\$ 150.00		
Paid instructors	250.00		
Paid incidentals	49.30		
Total	 	\$ 449.00	
Overdraft	\$ .30		

Ninth District—Huerfano and Las Animas counties. President, John W. Douthit, Trinidad, Las Animas county. Secretary. Patrick W. Sweeney, Walsenburg, Huerfano county. Treasurer. J. H. Fox, Trinidad, Las Animas county. Held at Trinidad, August 8-19, 1904. Conductor, John W. Douthit. Instructors, Mrs. Emma G. Leake, Miss Eugenia H. Deamer, E. L. Enloe, Miss Fannie Kramer. Enrollment, 67.

#### FINANCIAL STATEMENT.

#### Receipts.

Balance on hand	\$ 127.88
From registration fees	67.00
From counties in district	125.00
From State fund	177.31
Total	\$ 497.19

Disbursements.

### Paid conductor Paid each instructor..... \$ 75.0075.00 75.00 60.00 40.00 Paid additional expenses ..... 12.20 Total ...... \$ 337.20 Balance on hand..... \$ 159.99 Total \$ 497.19

Tenth District—Conejos, Costilla, Mineral, Rio Grande and Saguache counties. President, George W. Irvin, Sanford, Conejos county. Secretary, G. A. Carpenter, Del Norte, Rio Grande county. Treasurer, W. E. Gardner, Saguache, Saguache county. Held at Saguache, July 18-30, 1904. Conductor, H. M. Barrett. Instructors, A. T. Hesnard, Miss Nuna Kenton, W. E. Gardner. Held at Alamosa, August 1-12, 1904. Conductor, H. M. Barrett. Instructors, E. M. Cunningham, Miss Nuna Kenton, G. W. Irvin. Total enrollment, 79.

#### FINANCIAL STATEMENT.

#### Receipts.

Balance on hand	\$ 52.83	
From registration fees	79.00	
From counties in district	228.00	
From State fund	177.34	
Total	 	\$ 537.14

#### Disbursements.

Paid conductor	\$ 200.0	10	
Paid each instructor	75.0	0	
	75.0	0	
	125.0	0	
•	6.0	0	
Paid additional expenses	16.9	0	
Total	\$ 497.9	-	
Balance on hand	39.2	4	
Total		\$	537.14

## FOURTEENTH BIENNIAL REPORT

Eleventh District—Archuleta, Dolores, La Plata, Montezuma, and San Juan counties. President, H. E. Black, Cortez, Montezuma county. Secretary, Miss Edith B. M. Young, Durango, La Plata county. Treasurer, Miss Ellen Carlis, Silverton, San Juan county. Held at Durango, June 20 to July 1, 1904. Conductor, M. F. Miller. Instructor, Luella Hall. Enrollment, 76.

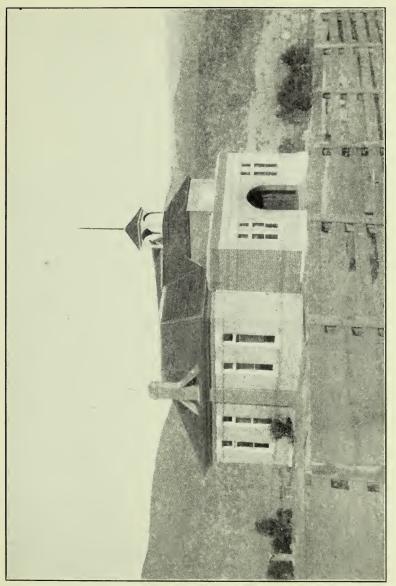
# FINANCIAL STATEMENT.

Receipts.			
Balance on hand	\$	11.30	
From registration fees		75.30	
From counties in district		132.00	
From State fund		177.31	
Total	-	1	\$ 395.91
Disbursements.			
Paid conductor	\$	150.00	
Paid each instructor		80.00	
Paid additional expenses		108.95	
Total	\$	338.95	
Balance on hand		56.96	
Total	-		\$ 395.91

Twelfth District—Delta, Gunnison, Hinsdale, Mesa, Montrose, Ouray and San Miguel counties. President, Miss Emma Willis, Montrose, Montrose county. Secretary, Minnie M. Holaday, Ouray, Ouray county. Treasurer, Miss Alice A. Royce, Delta, Delta county. Held at Grand Junction, June 20 to July 1, 1904. Conductor, F. H. Clark. Instructors, E. E. Cole, Mary G. Carson. Enrollment, 59.

# FINANCIAL STATEMENT.

Receipts.			
Balance on hand	\$	122.00	
From registration fees		59.00	
From counties in district		282.94	
From State fund		177.31	
Total	-		\$ 641.25
Disbursements.			
Paid conductor	\$	150.00	
Paid each instructor		100.00	
		75.00	
Additional expenses		5.65	
Total	\$	330.65	
Balance on hand		310.60	
Total			\$ 641.25



HOWARD SCHOOL, DICTRICT 37, FREMONT COUNTY, COLORADO.

LIBRARY 0F THE URIVERSITY of ILLINOIS Thirteenth District—Chaffee, Eagle, Garfield, Grand, Lake, Pitkin, Park, Rio Blanco, Routt and Summit counties. President, Gilbert A. Walker, Buena Vista, Chaffee county. Secre tary, Mrs. Lucy E. DeWitt, Glenwood Springs, Garfield county. Treasurer, Mrs. Edith M. Bailey, Aspen, Pitkin county. Held at Salida, August 1-12, 1904. Conductor, F. H. Clark. Instructors, C. A. Hollingshead, J. H. Barker, Gertrude Wood. Enrollment, 100.

# FINANCIAL STATEMENT.

Receipts.			
Balance on hand	\$	96.58	
From registration fees		101.00	
From counties in district		200.00	
From State fund		177.31	
Total	-		\$ 574.89
Disbursements.			
Paid conductor	\$	150.00	
Paid each instructor		100.00	
		85.00	
		75.00	
Paid additional expenses		20.00	
Total	\$	430.00	
Balance on hand		144.89	
Total			\$ 574.89

# REPORT OF THE PRESIDENT OF THE STATE AGRICUL-TURAL COLLEGE, NOV. 30, 1904.

To the State Superintendent of Public Instruction:

I beg leave to submit the following portions of the Twelfth Biennial Report to the State Board of Agriculture.

This report reviews the general situation, having the entire institution as its scope. The heads of the various departments have prepared reports, giving in detail the work of the past year, to be submitted for your aproval.

For five years we have been working together in good faith and good will to make this an institution for the more rapid and permanent development of Colorado and the Rocky Mountain region. Without removing the emphasis from other departments, we have sought to give animal husbandry, plant husbandry, horticulture and veterinary science the emphasis worthy of so great an agricultural state. It has been our purpose also to make this less a preparatory school and more and more a technical school of high order. This may not appeal so much to numbers, but it has greatly improved the quality of the work done and added to the efficiency of those completing the various courses, Not only are our graduates holding high rank among those of other institutions, both eastern and western; but the demand for our men is four times greater than the supply. This certainly proves the character of the work we have done under your direction.

You will be pleased to learn that the number of students in the agricultural department has quadrupled as compared with last year. The indications are strong that this number will be doubled next year. Even then, we shall not be able to meet the demand for trained workers. At the present time we have calls for ranch foremen, farm superintendents, for heads of experimental plants and government work which would take nearly every student in the department were they prepared. The same is true of the civil engineering and irrigation department.

By imposing severer entrance requirements, lengthening the courses, and holding every student to a strict account of his work, we have not thought so much of the enrollment as we have of the character of our output. It can no longer be said that the Agricultural College is a Fort Collins institution of little more than high school grade. We require four years' work after graduation from an accredited high school or from our preparatory school. No complaint has come from the student body because of the severer discipline and stiffer requirements; but, rather, they often express conviction that you have rendered the students a lasting benefaction by so ordering their work as to have brought it to profesional value and dignity.

In my last biennial report I said: "We are searching for an able man for the chair of Agriculture." The search continued until we found what we wanted. The result is Professor W. L. Carlyle, of the University of Wisconsin, who has rendered the school and the State invaluable service for more than a year. You have ably seconded his successful work by the purchase of more thoroughbred stock, the securing of the Andrews farm, one of the best in northern Colorado, and providing for him more assistance in the department. He himself has added to our herds by the solicitation of valuable gifts from leading stock men. and has started the whole State on a new road to success in stock breeding and meat products which will mean great wealth to the arid West. The beet pulp feeding of last winter and the horse breeding experiment, being inaugurated by special appropriations secured from the national government, of themselves rank your Agricultural College with the foremost of America. The commendation of Secretary Wilson is worth alone all these efforts have cost. We have justly received recognition as the leading agricultural college of the Rocky Mountain region. A

great work has been given us to do. Steadfastly, we are rising to its heroic measure.

In this connection I must mention the acquisition of Professor W. H. Olin, of the Iowa Agricultural College. His co-operative work as an agronomist has put new life into the rain belt and compelled new methods throughout the entire State. His record for doing things is so well known that he has been able to secure for the college in donations farm machinery more than double his annual salary, with probably as much more to follow.

The short course, to be inaugurated this winter, is in readiness, and I herewith submit the preliminary announcement as a part of this report. The response from ranchmen and farmers at the present writing insures its success.

# Short Course in Agriculture for Farmers and Stockmen, January 16 to 27, 1905.

Agricultural Faculty—B. O. Aylesworth, A. M., I.L. D., President; William L. Carlyle, B. S. A., Professor of Agriculture; Clarence P. Gillette, M. S., Professor of Entomology and Zoology; George H. Glover, M. S., D. V. M., Professor of Veterinary Science; William P. Headden, Ph. D., Professor of Chemistry; Wendell Paddock, M. S., Professor of Horticulture and Botany; Clarence J. Griffith, B. S. A., Associate Professor of Animal Hus bandry; Walter H. Olin, M. S., Associate Professor of Agronomy.

Lecturers-Hon. John Gosling, of Kansas City, will conduct the block tests and lecture on prime carcasses of beef, mutton and pork; Prof. C. F. Curtiss, of Iowa Agricultural College, will lecture on feeding and breeding of live stock and conduct judging demonstrations with beef cattle; Hon. N. H. Gentry, of Sedalia, Missouri, will conduct judging demonstrations of hogs and discuss breeding and feeding of swine; Hon. George McKerrow, superintendent of Farmers' Institutes of Wisconsin, will conduct judging demonstrations with mutton sheep and discuss sheep and lamb feeding; Prof. W. J. Spillman, United States agrostologist, will discuss forage crops and grasses for the arid and semi-arid West; Prof. C. J. Zintheo, professor of farm mechanics in the Iowa Agricultural College, will lecture upon the use and abuse of farm machinery, and. with a stereopticon, will present farm methods and the farm machinery used in many parts of Asia, Europe and South America, as well as in our own nation; Prof. M. A. Carleton, United States cerealist, will lecture on methods of extending our cereal, or grain acreage, and improving grain production; Mr. E. C. Bliss of Greeley, Colorado, will tell how the Greeley potatoes are produced and give helpful suggestions on potato culture; Prof. C. O. Townsend, of the United States Bureau of Agriculture, will lecture on seed selection for sugar beets, effect of beet culture on soil fertility and sugar beet fertilizers; Prof. B. C. Buffum, director of Wyoming Experiment Station, will discuss range grasses and irrigation problems; Mr.

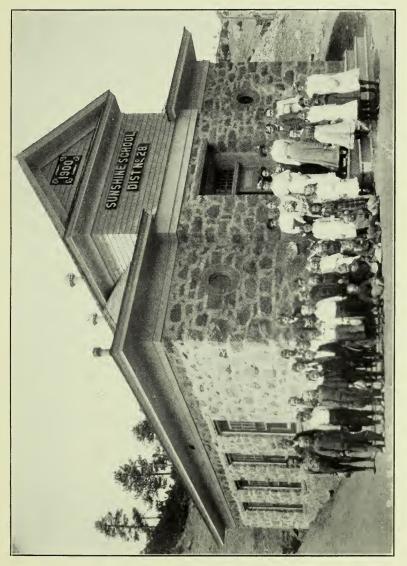
Mark Austin, of Lehi, Utah, who has done more than any other man for the establishment of the beet sugar factories in Colorado, will lecture on sugar beet farming in the United States; President Victor Alderson, of the State School of Mines, Golden, Colorado, will deliver a popular lecture on industrial education; Hon. I. N. Stevens, of Colorado Springs, will deliver an evening lecture on Colorado's exhibits of agricultural products at the World's Fair; evening lectures will also be given by Prof. L. G. Carpenter, of Denver, Dr. W. R. Thomas, of Fort Collins, the surveyor general of Wyoming, and others.

Announcement—The college authorities have recently been urged by stockmen and farmers from all parts of the State to offer a course of practical instruction in stock judging, feeding, breeding and other allied subjects for those actually engaged in stock raising and farming in Colorado. With the object of satisfying this demand and in the hope of aiding in the improvement and development of the live stock and farming interests of Colorado, the State Board of Agriculture has authorized the establishment of a two weeks' course of practical demonstrations and lectures dealing with the various phases of the live stock business from the growing of crops and grasses most suitable for feeding purposes to the rearing, feeding and marketing of the various classes of live stock grown in Colorado. The course as outlined is designed primarily for ranchmen and farmers actively engaged in the business of raising live stock and producing those crops that have proven best adapted to our conditions. While these will doubtless derive the most benefit from the course, yet all those interested, in any way, in live stock or agricultural pursuits, will find much to interest them in the demonstrations and lec-Through this short course the college desires to bring tures. ranchmen in touch with some of the most successful stockmen and farmers in the nation; to present the latest researches in agriculture and modern methods of farming, given by men of national reputation; to give daily work in the study of live stock. forage, grain, sugar beets and potatoes—our leading farm products.

Terms of Admission—The course will be open to all persons over 21 years of age. A tuition fee of 2 will be charged, to aid in paying for lectures and incidental expenses connected with the course. Payment of this fee admits to all classes and lectures of the course.

*Time*—The course will open January 16th and close on Friday, January 27, 1905.

*Character of Instruction*—The live stock of Colorado is one of its greatest agricultural resources. Its constant improvement is not only desirable but profitable as well, and gives us a rank with other live stock states in our own nation. For these reasons daily instruction will be given on essential points to be observed in selecting breeding stock, in obtaining good market types and



SUNSHINE SCHOOL, DISTRICT 28, BOULDER.

the principles that should govern the feeding of stock. Daily practice will be given in judging the different classes of horses, cattle, sheep and hogs. Excellent representatives of all the leading breeds in the different classes of live stock will be secured for demonstrative work in judging, and to illustrate the principles of selection. Market types of the different classes of meat producing animals will be judged on foot, and, later, slaughtered, and the carcasses cut for demonstration. Lectures will be given on the feeding, care and management of the different classes of live stock.

A series of lectures and demonstrations will also be given on the cause and prevention of some of the more common diseases of live stock. Particular attention will be given to discussion of poisonous weeds on the range, and the life history of animal parasites, such as scabies, lice, bots, etc., and the best means of eradicating them.

The growing of forage crops, such as alfalfa, sorghum, kaffir corn, field peas and the grasses, as well as the various cereals, will be discussed by some of the leading experts in America in these lines. Instruction will be given in seed selection and grain judging during the course, with lectures and discussions giving much valuable information in this line.

Owing to the importance of the potato and sugar beet crops in the agriculture of Colorado, special days will be set apart for their discussion. The subjects discussed on these days will include seed selection, methods of planting and cultivating, fertilizers and harvesting. Each evening during the course lectures by some of the leading scientific agriculturists and stockmen of the country on some phase of agriculture will be given in the college chapel. These lectures will be illustrated largely by stereopticon views and will prove one of the most valuable features of the course.

An auditorium seating over one thousand persons has been built since our last report. After the construction was begun it was thought best to add a third story for class rooms. With the gymnasium in the basement, this magnificent addition stands completed at a cost of \$25,000. Many improvements on the farm and in the stock yards have been made during the last two years.

The department of electrical engineering has been put into full operation. Nearly one-seventh of the students this year are either in this course or preparing for it.

We have reached a point in our development where the demand for increased revenues is imperative. While the federal government has given us an additional \$20,000 this year for a special experiment, that experiment itself will draw somewhat from our regular funds. We should ask for still greater government aid. In this connection, let me urge you to give all possible support to the bill to be introduced again before the national congress this winter granting an additional annual sum to all experiment stations. It would mean an increase of 200 per cent. in the work of this station. We must do our part towards its passage. It may be wisdom to send a representative to Washington to assist the executive committee of the agricultural colleges and experiment stations.

Unquestionably, we must have more assistance from the State itself. The agriculture of Colorado is the wonder of the whole country. Through the excellent efforts of the Bureau of Publicity, a greatly increased population is assured the State. The proper direction of these forces will make Colorado the third stock, fruit and general farming state in the Union. With the national administration and department of agriculture friendly to us and willing to aid us in every way, with opportunity looming large just before us, it would be a shame indeed if for lack of funds we were to fail of our national destiny. In what way we shall ask the State for more generous aid, I leave to your wisdom. I am sure the proper procedure will bring us the help we so sorely need.

The Cattle and Horse Growers' Association of Colorado is with us to the full limit of their influence and personal work. If we open the way, they will go in and conquer for us.

I close by inserting the new courses in animal husbandry, agronomy, horticulture, veterinary science, and electrical engineering. The other courses—civil and mechanical engineering, domestic science, architecture, chemistry, zoology, modern languages, and commercial—are practically the same as before.

Resfectfully submitted,

# BARTON O. AYLESWORTH, President.

# COURSES OF STUDY.

The instruction offered in agriculture has been divided in the catalogue for the first time into five departments, as follows:

1. Department of Animal Husbandry (page 42); 2. Department of Agronomy (page 41); 3. Department of Horticulture (page 46); 4. Department of Veterinary Science (page 50); 5. Department of Agricultural Chemistry (page 82). (For details of courses, see catalogue.)

	Male.	Female.	Total.
Post Graduate	9	2	11
Senior	. 18	7	25
Irregular Junior	. 3		3
Sophomore	. 20	2	22
Freshman	63	2	65
Senior Commercial	. 4	, 7	11
Junior Commercial (Freshman rank.)	15	14	29
Senior, Domestic Science Normal		1	1
Junior, Domestic Science Normal		8	8
Second Sub-Freshman	. 70	13	83
First Sub-Freshman	. 103	29	132
Unclassified	. 14	21	35
Special	. 2	6	8
Total	. 321	112	433

# SUMMARY OF STUDENTS FOR 1903-04.

# THE STATE BOARD OF AGRICULTURE.

Hon. P. F. Sharp, Denver, term expires 1905; Hon. Jesse Harris, Fort Collins, term expires 1905; Hon. Harlan Thomas, Denver, term expires 1907; Mrs. Eliza Routt, Denver, term expires 1907; Hon. James L. Chatfield, Gypsum, term expires 1909; Hon. B. U. Dye, Rocky Ford, term expires 1909; Hon. B. F. Rockafellow, Canon City, term expires 1911; Hon. Eugene H. Grubb, Carbondale, term expires 1911; Governor James H. Peabody; President Barton O. Aylesworth, ex-officio.

# OFFICERS.

P. F. Sharp, President; A. M. Hawley, Secretary; Whitney Newton (State Treasurer, Denver, Colorado), Treasurer; George A. Webb, Local Treasurer.

The following comprise the members of the Board of Instruction:

B. O. Aylesworth, A. M., LL.D., Litt. D., President and Professor of Logic and Political Economy; W. R. Thomas, A. B., Litt. D., Constitutional History and Irrigation Law; J. W. Lawrence, M. E., Mechanical Engineering; C. P. Gillette, M. S., Zoology and Entomology; W. P. Headden, A. M., Ph. D., Chemistry and Geology; T. G. Ammons, Domestic Science; E. B. House, B. S., E. E., Mathematics; E. M. Traber, A. B., Rhetoric and Philosophy; Virginia Corbett, B. L., History and Literature; Wendell Paddock, M. S., Botany and Horticulture; George H. Glover, M. S., D. V. M., Veterinary Science; L. D. Crain, M. M. E., Electrical Engineering; W. L. Carlyle, B. S. A., Agriculture; Joseph F. Daniels, Librarian.

In addition to these instructors there are 2 associate professors, 3 assistant professors, 4 head instructors, 5 first assistants, 10 second assistants, 1 secretary to president and manager text-book department, 1 physical director, 1 musical instructor, 1 secretary, 3 stenographers, 1 florist, 2 horticultural laborers, 1 farm superintendent, 5 farm laborers, 3 janitors, 1 irrigation engineer, 1 assistant irrigation engineer, 1 assistant agriculturist. 1 chief clerk and stenographer, 1 field agent.

# REPORT OF THE PRESIDENT OF THE COLORADO STATE NORMAL SCHOOL.

# Greeley, Colorado, Nov. 30, 1904.

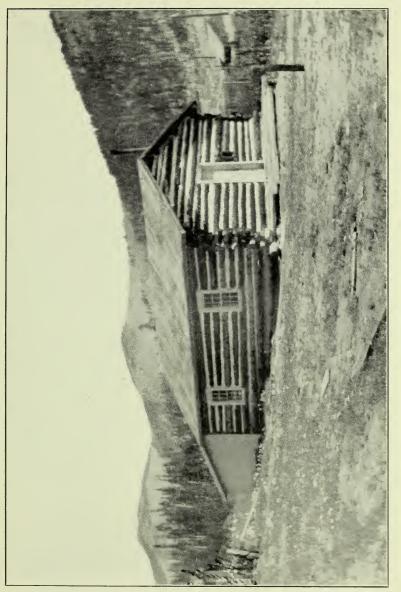
To the Hon. Helen L. Grenfell, State Superintendent of Public Instruction, Denver, Colorado:

Dear Madam—I have the honor to submit the seventh biennial report of the State Normal School of Colorado, for the period ending November 30, 1904.

*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 attainments 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.

The school has been in operation fourteen years. In that time 3,000 different Normal students have been in attendance. Many of these are teaching in the public schools of Colorado. The school has graduated 703. These are engaged in the public school service of the state. There are at present 325 in the Normal department, and 500 in the training department. Most of the counties of the state are represented in the school.

Normal Courses of Study—I. (a) Courses leading to degrees in the Colorado State Normal School are of two kinds: 1, Nor-



# **ΠΝΙΛΕΒ**ΣΙΙΧ ΟΕ ΙΓΓΙΝΟΙΣ ΟΕ ΤΗΕ ΓΙΒΒΑΒΥ

mal; 2. Normal College. (b) The Normal course leading to the degree Pd. B., is intended to qualify teachers for work in elementary schools, and the Normal College course, leading to the degree Pd. M., is intended to qualify teachers for work in high schools. (c) A Normal course is usually completed by a high school graduate or a student with equivalent preparation in two years; and a Normal College course in three years. (d) A preparatory course of one year is provided for those who are not high school graduates, but are of sufficient maturity to prepare for a regular course in one year.

II. (a) The regular school year consists of three terms, aggregating thirty-eight weeks. In addition to this, there is a summer term in which work on the regular courses may be taken. As far as possible the work of each term in any subject is complete in itself. (b) Students are permitted to enter at the beginning of any term, but are advised that it is much to their advantage to enter at the beginning of the fall term. (c) During the summer term the amount of work given in any subject and the credit allowed for it is the same as in any other term. The necessary amount of work in the subject is accomplished by a proper increase in the number of recitals per week. The number of subjects taken by a student is proportionately decreased.

III. (a) One recitation per week for a term shall count as a term hour. (b) Sixty term hours for the junior year and sixty-three for the senior year, in addition to physical culture work, which is required of all students, constitute a regular year's work in a Normal course. Ordinarily this consists of four subjects, with five recitations per week in each for three terms, with one additional recitation per week in pedagogy throughout the senior year. (c) Forty-eight term hours in addition to physical Culture work constitute a regular year's work in a Normal College course. Ordinarily this consists of four subjects with four recitations per week in each of three terms. Five recitations per week in work planned primarily for a Normal course counts as four recitations per week in a Normal College course. In a Normal College course, also, three periods of laboratory work, or other work in which outside preparation is not necessary, counts as one recitation. (d) By special permission, a student in either a Normal or a Normal College course is allowed to elect one additional subject.

IV. A graduate of a Normal course, whose academic qualifications are satisfactory, is allowed to complete a Normal College course in one year.

(For detailed account of the above courses, see catalogue.)

*Examining Board, 1903*—Helen L. Grenfell, State Superintendent; C. F. Parker, County Superintendent, Sedgwick county; Z. X. Snyder, President School.

Examining Board, 1904—Helen L. Grenfell, State Superintendent; W. C. Thomas, County Superintendent, Boulder county; 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 liber ality, and the legislature for the prompt recognition of the needs of the school in the way of appropriation, I am, yours very truly,

Z. X. SNYDER, President.

1009 1004

The statistics in regard to enrollment and the financial statements as submitted by the president of the board of trustees are as follows:

Whole number of students enrolled:	1903		1904 ·
Males 22		46	
Females	272	349	395
Number in Training School	287		316
Number in Kindergarten	66		66
Number in Summer School			141
Total enrollment	725		918
Less number registered both terms			52
Balance	725		866

#### ATTENDANCE.

	1905	1904
The average daily attendance first term (estimated), per cent	. 96	96
The average daily attendance second term (estimated), per cent	. 95	95
The average daily attendance third term (estimated), per cent	. 95	95
The average daily attendance for entire year (estimated), per cent	. 95	95
Number of days in session during year		190

NUMBER OF STUDENTS IN EACH DEPARTMENT CLASS	1903	1904
Post Graduates	4	6
Seniors	93	86
Juniors	131	161
Sophomores	14	17
Special	30	15

# SUPERINTENDENT OF PUBLIC INSTRUCTION. 187

### NUMBER OF STUDENTS IN EACH DEPARTMENT CLASS.-Concluded.

	1903	1904
Summer Term		
Training School	387	316
Kindergarten	66	66
Less number registered both terms		52
Total	725	866
Number of diplomas issued	82	86

# FINANCIAL STATEMENT, 1903.

# BUILDING FUND-RECEIPTS.

Appropriation	\$ 21,704.11	
Paid out account west wing	21,722.08	
To balance		\$ 17.97

#### MAINTENANCE FUND-RECEIPTS.

Total		\$
Refund from building account	13,646.46	
Apprortionment	410.34	
Fees	2,176.76	
Taxes	69,590.95	

\$ 85,824.51

#### DISBURSEMENTS.

By overdraft, July 31, 1902	
Expense	
Library	
Laboratory	
Art	
Sloyd	
Museum	
Kindergarten	
Model school	
Domestic science	
Grounds	
Furniture	
Apparatus	
Salaries	
To balance	
	8

2,062.92

87,888.43

# FOURTEENTH BIENNIAL REPORT

# FINANCIAL STATEMENT, 1904.

#### RECEIPTS.

Taxes	65,400.00	
Public school fund	519.02	
Rent	125.00	
Fees	4,705.80	
To balance		19,725.58
Total		90,475.40

#### DISBURSEMENTS.

By balance July 31, 1903	2,063.92	
Salaries	47,341.66	
Laboratories	964.85	
Library	2,146.15	
Art	1,445.17	
Furniture	1,919.30	
Model school and kindergarten	202.07	
Museum	566.57	
Athletics	24.00	
Improvements of grounds	443.73	
Building	21,700.43	
Total		76,753.98
Expense account	11,657.55	
Total		90,475.40

# REPORT OF THE PRESIDENT OF THE STATE SCHOOL OF MINES.

# Golden, Colorado, November 23, 1904.

Mrs. Helen L. Grenfell, State Superintendent of Public Instruction, Denver, Colorado.

Dear Madam—I have the honor to submit the following report of the Colorado School of Mines for the biennial period ending November 30, 1904.

The faculty and administrative officers, with their salaries, are as follows:

# SUPERINTENDENT OF PUBLIC INSTRUCTION.

Victor Clifton Alderson, Sc. D., President, \$5,000.00; Paul Heyer, Ph. D., Professor Emeritus of Mathematics, \$-Horace Bushnell Patton, Ph. D., Geology and Mineralogy. \$2,500.00; Arthur Ransley Curtis, B. S., Machine Design, \$2,250.00; Claude W. L. Filkins, Mechanics, \$2,250.00; Herman Fleck, Ph. D., Chemistry, \$2,250.00; Frank W. Traphagen, Ph. D., F. C. S., Metallurgy, \$3,000.00; Lewis Emanuel Young, E. M., Mining, \$2,250.00; Charles Roland Burger, A. B., Mathematics, \$1,600.00; William Jonathan Hazard, E. E., Assistant Professor of Electrical Engineering, \$1,800.00; Edson Ray Wolcott, B. S., Assistant Professor of Physics, \$1,500.00; Charles Darwin Test. B. M. E., A. C., Instructor in Analytical Chemistry, \$1,200.00 (on leave of absence); William George Haldane, B. S., Instructor in Metallurgy, \$1,600.00; Julius Worster Eggleston, A. M., Instructor in Geology and Mineralogy, \$1,350.00; John Christian Bailar, B. S., Instructor in Qualitative Analysis, \$1,350.00; Gurdon Mon tague Butler, E. M., Instructor in Geology and Mineralogy, \$1,000.00; John Joseph Brown, A. B., Instructor in Mathematics, \$1,200.00; William F. Allison, C. E., Instructor in Surveying, \$1,200.00; Steve H. Worrell, B. S., Instructor in Quantitative Analysis, \$900.00; Gynla Bennett Mauson, Instructor in Descriptive Geometry and Drawing, \$900.00; T. C. Doolittle, Registrar. \$1,800.00; Mabel Claire Shrumm, Librarian, \$900.00; Estelle Presnell, Secretary to the President, \$600.00.

Courses of Study—The school offers two four-year courses mining engineering and metallurgical engineering—on the successful completion of which the degree of E. M. or E. Met. is conferred.

(For courses in detail see catalogue.)

*Entrance Requirements*—The entrance requirements have been revised and now are as follows:

Unit Course—A unit course of study is defined as a course covering a school year of not less than thirty-five weeks, with four or five (preferably five) periods of at least forty-five minutes each per week.

Sixteen units are demanded for entrance, of which twelve are required and four may be chosen from a list of electives.

Required Units—Algebra,  $1\frac{1}{2}$  units; plane geometry, 1 unit; solid geometry,  $\frac{1}{2}$  unit; languages, other than English, 2 units; English, 3 units; history, 2 units; physics, 1 unit; chemistry, 1 unit.

Required units, 12; elective units, 4. Total units for entrance, 16.

The four elective units may be selected from the following list: Drawing, 1; shop work, 1; mathematics,  $\frac{1}{2}$  or 1; Greek, 1, 2 or 3; French, 1, 2 or 3; German, 1, 2 or 3; Spanish, 1 or 2; history, 1 or 2; English, 1; science, 1 or 2; psychology,  $\frac{1}{2}$  or 1;

political economy,  $\frac{1}{2}$  or 1. In allowing credit for drawing and shop work two forty-five minute periods will be regarded as equivalent to one forty-minute period of class room work. Half units are accepted in all studies, except in physics and chemistry, provided that not less than one full unit shall be accepted in language.

Attendance—For the school year 1903-4 the attendance was 250. For the year 1904-5 it was 291, distributed as follows:

Enrollment by Classes—Senior, 50; Junior, 58; Sophomore, 86; Freshman, 97. Total, 291.

Geographical Distribution—Colorado 215, Illinois 16, Pennsylvania 6, Missouri 6, Indiana 5, Texas 4, New Jersey 3, Nebraska 3, Virginia 3, New York 3, California 3, Wyoming 3, Wisconsin 2, Connecticut 2, Minnesota 2, Ohio 2, Iowa 1, Oregon 1, Idaho 1, Mississippi 1, Arizona 1, Utah 1, North Carolina 1, England 2, Mexico 2, India 1, Ireland 1. Total, 291.

Louisiana Purchase Exposition—The school maintained at the St. Louis Exposition a working assay and metallurgical laboratory. The general supervision was under a committee composed of the President and Professors Fleck and Traphagen. The laboratory work was entrusted to students who were sent in groups of four, each group remaining three or four weeks. The exhibit was unique, in that it showed the actual process of extracting values from the ores and attracted wide attention. It received an award of a gold medal.

New Buildings—The corner stone of Stratton Hall was laid November 20, 1902, by the A. F. and A. M. of Colorado and was completed in February, 1904. The building is in the Mission style of architecture and is conceded to be one of the most attractive school buildings in the state. The basement and first story are of Lyons sandstone; above that is gray Golden brick. The basement is used as a metallurgical laboratory; the first floor and one-half the second floor are used as recitation rooms for mining, metallurgy, surveying, and mechanics. The remainder of the building is devoted to drafting rooms. Stratton Hall is named after the late W. S. Stratton, who gave \$25,000 towards its cost.

I append the reports of the secretary and treasurer.

Respectfully submitted,

VICTOR C. ALDERSON, President.

# REPORT OF SECRETARY.

*Receipts and Expenditures*—As ascertained by the auditing board, and checked up by Expert Accountant A. F. Dieter, the institution is chargeable with the following receipts since November 30, 1902, date of last report to the General Assembly:

#### RECEIPTS.

Warrants drawn on State Auditor prior to November 30, 1902, and since cashed by State Treasurer\$ 30,376.41
Warrants drawn on State Auditor since November 30, 1902, and cashed by State Treasurer
Receipts from students
From A. B. Frenzel and others, prizes to students
Total receipts in two years\$190,902.96

#### CREDIT.

By transfer to Treasurer Rubey\$1	90,502.96
In hands of President Alderson	150.00
In hands of Colorado Scientific Society	250.00
Total transferred\$1	90,902.96

Disbursements from All Funds—Following were disbursements for the two years beginning December, 1902, and ending November 30, 1904, including special legislative fund and expenditures at World's Fair, St. Louis:

Furniture and fixtures\$	2,591.13	
Permanent apparatus	7,433.57	
Miscellaneos equipment	3,619.92	
Building and grounds	47,922.85	
Supplies	9,669.78	
Operating expenses	107,391.15	
Repairs and renewals	1,346.38	
World's Fair, St. Louis	3,139.05	
Athletic Association, C. S. M	4,579.00	
Refunds to students	5,320.39	
A. R. Curtis	950.00	
		\$193,963.5
Add special legislative fund on hand, November 30, 1902		22,300.0
Grand total for two years	-	\$216,263.5

00 \_\_\_\_\_ The above sum equals the checks returned by Treasurer Rubey and cancelled by auditing board, minus \$430.16, which equals the value of checks outstanding. In other words, the credit of the treasurer for checks returned stands at \$215,833.06.

In the expenditure table the first four divisions foot up \$61,567.47. Exclusive of gifts this represents the additions made to permanent property in the last two years. It is close to 28 per cent. of the total expenditures, compared with 15 per cent. on the last biennial report, and 12.5 per cent. on the report previous thereto.

JAMES T. SMITH, Secretary.

# REPORT OF TREASURER.

Statement of the Treasurer of the Colorado School of Mines for the two years beginning December 1, 1902, and ending November 30, 1904.

#### RECEIPTS FROM ALL SOURCES.

Cash on hand December 1, 1902	5,114.03	
Warrants on State Auditor	138,188.04	
From James T. Smith, secretary	50,948.10	
From legislative building fund	22,300.00	
Due to Woods-Rubey National Bank, warrants not yet paid	29,009.59	
Total to account for		\$245,559.76

#### PAYMENTS.

Checks paid in two years	215.833.06	
Warrants on hand, not cashed	29,009.59	
Cash on hand December 1, 1904	717.11	
Total credits		\$245

In the above credits the special legislative fund, \$22,300, is accounted for in the sum of checks paid.

The amount of warrants on hand not paid by State Treasurer, less cash on hand in regular fund, \$717.11, reads \$28,292.48, which is the net debt due by the institution to the Woods-Rubey National Bank, Golden. The net debt due November 30, 1902, was \$25,262.38, and November 30, 1904, it was \$33,835.88. Hence the increase in two years reads \$3,030.10.

J. W. RUBEY, Treasurer.

559.76

# FOURTEENTH BIENNIAL REPORT OF THE REGENTS OF THE UNIVERSITY OF COLORADO-1902-1904.

To the State Superintendent of Public Instruction and the Fif teenth General Assembly:

The Fourteenth Biennial Report, from October 1, 1902, to October 1, 1904, is herewith presented by the Regents.

### DEPARTMENTS OF THE UNIVERSITY.

The departments of instruction in the University of Colorado are comprehended under the following divisions:

1, College of Liberal Arts, courses leading to the degree B. A.; 2, Graduate School, courses leading to the degrees M. A. and Ph. D.; 3, 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.); Mechanical Engineering, lead-ing to the degree B. S. (M. E.); Chemical Engineering, leading to the degree B. S. (Ch. E.); 4, Colorado School of Medicine, a fouryear course leading to the degree M. D.; 5, Colorado School of Law, a three-year course leading to the degree LL. B.; 6. Summer School; 7, Colorado State Preparatory School. (Separate organization, grounds and building. Conducted by the University.) The following comprise the faculty of the State University:

College of Liberal Arts-Dr. James H. Baker, President; Fred B. R. Hellems, Dean, Professor of Latin; Mary Rippon, Professor of German and Literature; J. Raymond Brackett, Professor of Comparative and English Literature; Ira M. DeLong, Professor of Mathematics; Charles C. Ayer, Professor of Romance Languages; William Duane, Professor of Physics; Charles A. Lory, Acting Professor of Physics; George Norlin, Professor of Greek; Francis Ramaley, Professor of Biology; Melanchthon F. Libby, Professor of Philosophy; John B. Phillips, Professor of Economics and Sociology; John B. Ekeley, Professor of Chemistry; Arnold Emch, Professor of Graphics and Mathematics; Russell D. George, Professor of Geology; Sanford Bell, Professor of Education; Joseph H. Bair, Professor of Psychology and Education; Frederic L. Paxson, Professor of History; Milo G. Derham, Assistant Professor of Latin; Henrietta J. Meeteer, Dean of Women; Fordyce P. Cleaves, Instructor in Oratory; George C. Taylor, Instructor in English; James F. Royster, Acting Instructor in English; Robert W. Stevens, Instructor in Music, and eighteen assistants.

School of Applied Science-Henry B. Dates, Professor of Electrical Engineering; Milo S. Ketchum, Professor of Civil Engineering; John A. Hunter, Assistant Professor of Mechanical Engineering; George R. Moore, Superintendent of Shops and

three assistants; School of Medicine, Luman M. Giffin. Dean, Professor of the Principles of Surgery, Eugene H. Robertson, Professor of Pathology and Bacteriology, James R. Arneill, Professor of Medicine and twenty-one assistants; School of Law, John D. Fleming, Secretary, Professor of Law and Judge of the Practice Court, Albert A. Reed; Professor of Law, William H. Pease, Professor of Law and twenty-four assistant lecturers; Library, Alfred E. Whitaker, Librarian and three assistants; Physical Training, David B. Cropp, Director, and one assistant; Preparatory School, Henry White Callahan, Headmaster, and eleven instructors; in connection with the University Hospital, the buildings and grounds, there are thirty-two employes.

One hundred and sixty-nine students were in attendance at the University during the academic year 1891-2, of which number one hundred and three were enrolled in the Preparatory School. During the academic year 1903-4, five hundred and eighty-one students were enrolled in the University proper, and three hundred and eighty-five in the Preparatory School, a total of nine hundred and sixty-six. The total attendance for the present year will reach one thousand and eighty.

During the biennial period one hundred and seventy-three degrees were conferred, as follows: College of Liberal Arts, 75; Graduate School, 16; School of Applied Science, 29; School of Medicine, 22; School of Law, 31. The Preparatory School graduated eighty-three students during the period.

The register of the graduates now shows the following figures: College of Liberal Arts, 324; Graduate School, 59; School of Applied Science, 63; School of Medicine, 128; School of Law, 113; Honorary degrees, 12; a total of 699. In addition the graduates of the Preparatory School number 462.

The requirements of the Graduate School, always high, have been greatly strengthened within the past two years. Higher degrees are not granted for work done in absentia. All candidates for degrees Master of Arts and Doctor of Philosophy must be in residence at the University. The degree Master of Science is not offered. There were nineteen graduate students in the year 1902-3, and twenty-three in the year 1903-4. Higher degrees have been conferred upon sixteen candidates within the biennial period.

Important changes have been made in the College curriculum, as first appeared in the catalogue published in March, 1903. First effective in June, 1904, the three degrees previously awarded were merged in the degree Bachelor of Arts. The requirements for graduation under the revised curriculum are as follows:

To attain the degree Bachelor of Arts, a student must complete one hundred and thirty hours, including ten hours in English and twenty hours in a major subject to be chosen not later than the end of the Sophomore year. All students in the Freshman year must take three hours of English each semester, and five hours each semester from the following group:

2. Classical Languages.

3. Natural Sciences.

All students of the Sophomore year are required to take two hours of English each semester. All hours not implied in the above requirements are elective.

Naturally, the requirements for admission were modified to fit the above plan, and made to conform with the requirements of the North Central Association of Colleges and Secondary Schools. The new requirements are given in detail in the catalogue published in 1904.

A Summer School was organized in the spring of 1904, and the first session held June 20 to July 30, 1904. Courses were offered in the following subjects: Mathematics, Classical Languages, Chemistry, Botany and Biology, Geology, Physics, English Literature, Modern Languages, History and Sociology and Psychology and Education. A credit of two hours toward the one hundred and thirty required for the Bachelor's degree was given for each five-hour course successfully pursued in the Summer School by a regularly matriculated student.

The curriculum of the Colorado School of Applied Science has been extended by the introduction of a four-course in Chemical Engineering. Four engineering courses are now offered, leading to the degree Bachelor of Science in Civil, Electrical, Mechanical and Chemical Engineering.

The University campus has undergone extensive improvements during the biennial period. The central portion of the Library Building has been completed and is now in use. The building is of gray brick with white sandstone trimmings, and is a thoroughly modern and serviceable structure. The cost of the central portion as it now stands, including heating and stacks, was about \$80,000,00. A wing has been added to the north end of the Engineering Building at a cost of over \$27,000.00.

The Thirteenth General Assembly made a special appropriation for the University of \$120,000, with the proviso that the entire income from the one-fifth mill and the appropriation should not exceed \$220,000 for the biennial period, December, 1900, to December, 1902.

The Fourteenth General Assembly increased the mill rate to two-fifths, but the increase affected only the second year of the biennial period, December, 1902, to December, 1904, hence \$40,000 special appropriation was voted for the support of the University during the period. This special appropriation of \$40,000 has not been paid, and in consequence the University is suffering from a large deficit at the close of the biennial period. This amount should be made good early in the session of the Fifteenth General Assembly. Aside from all improvements the average running expenses of the University for the last two years have been about \$120,000 per year. During the period the increase in attendance has been large, with a corresponding increase in necessary expenses. The running expenses are now not far from \$140,000 per year, with a hundred legitimate demands in various directions that cannot be met.

It will be impossible to meet the regular expenses and make all the needed improvements from the proceeds of the two-fifths mill. The immediate needs are completion of the Chemistry Building, a Law Building, an Auditorium, a new Heating Plant, a Woman's Dormitory, completion of the Library Building.

The last General Assembly made provision for payment of emergency loans to the University and other State institutions. A large part of the University loan has now been paid by the State and the remainder is being paid as fast as funds for the purpose accumulate.

#### ACCREDITED SCHOOLS.

The following schools are accredited: Denver High School, East Side. Denver High School, West Side. Colorado Springs High School. Greeley High School. Pueblo High School, District No. 1. Central High School (Pueblo). Denver High School, North Side. Georgetown High School. Canon City High School. Durango High School. Aspen High School. Fort Collins High School. Golden High School. Grand Junction High School. Trinidad Public High School. Cheyenne (Wyo.) High School. Denver Manual Training High School. Union High School No. One, Otero County (La Junta). Central City High School. Idaho Springs High School. Longmont High School. Fort Morgan High School. Cripple Creek High School. Leadville High School. Victor High School. Monte Vista High School. Salida High School. Las Animas High School. Lamar High School. Florence High School.

South Canon City High School. Saguache County High School (Saguache). Logan County High School (Sterling). Loveland High School. Douglas County High School (Castle Rock). Wheat Ridge High School (Alcott).

Respectfully submitted,

DAVID M. RICHARDS, HAROLD D. THOMPSON, WILLIAM H. BRYANT, FRANK E. KENDRICK, OSCAR J. PFEIFFER, WILLIAM J. KING,

Board of Regents.

JAMES H. BAKER,

President.

#### EDWIN J. INGRAM,

Secretary.

## REPORT OF THE SUPERINTENDENT OF THE SCHOOL FOR THE DEAF AND BLIND.

To the State Superintendent of Public Instruction:

As my report for the two years ending November 30, 1904, I submit the following taken from our Circular of Information and from the report of our Board of Trustees covering the same period.

Very Respectfully,

W. K. ARGO, Superintendent.

Character of the School—The Colorado School for the Deaf and the Blind is, as the name implies, a school pure and simple. It was established in 1874, in accordance with the purpose of the state to give to every child within her boundary capable of taking it a common school education. It is not in any sense an "asylum" or "home" for the afflicted; it is not a hospital for the care and treatment of eyes and ears, and it is not a place for the detention and care of the imbecile. A child so unsound physically as to be unable to care for itself, in a measure, or so backward mentally as to make no progress in the literary department, can not be retained in the school.

*Course of Study*—The course of study for the deaf covers • about the same ground as that of the public schools of the state, while the blind, to whom language presents no difficulty, are given a high school course. To secure the best results in both instances it is necessary that the child be entered as soon as it becomes of school age, and that the attendance be regular and continuous through the entire course.

Methods of Instruction—In the blind department, the methods are those approved by the best schools of the country. New York Point is used in the greater part of the literary work and music, but all are taught to real Braille and Line, and to write script and operate typewriters. In the deaf department, all new pupils are placed in oral classes where the attempt is made to teach them to speak and read the lips. Those who have learned to talk before losing their hearing and some of those born deaf do well under this method, and such are kept in the oral department during their entire stay here. All school work with these pupils is done orally so there is no danger of their forgetting how to talk as some parents fear. There are, however, some deaf children who can never learn to speak well enough to make it of practical value and these are taught by the use of the manual alphabet and writing, with recourse to the sign language only when necessary.

Trades—In addition to the work in the literary department, the school undertakes to give to each pupil such a knowledge of some trade as may be of help in gaining a livelihood after graduation. To this end from one to three hours per day through the entire course is spent in the shops under competent instructors. While the training given is necessarily incomplete, it goes far toward preparation for life work. The trades taught at present are, for the blind boys, piano tuning, broom and mattress making, chair caning, carpet and hammock weaving; for the deaf boys, carpentry, printing, shoemaking, broom and mattress making. All the girls have regular instruction in sewing, knitting, crocheting and such general housework as is involved in the care of their own rooms. The older deaf girls and those of the blind who see some have also lessons in cooking.

Terms of Admission—All deaf and blind persons, of sound mind and body, between the ages of six and twenty-one years, 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 counties 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 sick have the very best care and attention. 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. All pupils must be promptly removed at the close of the session.

From the report of the Board of Trustees to the Governor.

At the last meeting of the legislature the Board asked for a special appropriation of \$59,500 for various purposes enumerated in our last report, the most urgent and important of which was the purchase of certain lands lying immediately east of the school, and fast getting beyond our reach by reason of the improvements constantly being made thereon. In addition to this purchase of land we have made certain repairs to buildings, such as plumbing, painting, etc., in the interests of economy and health, and have done some necessary grading upon the newly acquired territory, besides making much needed additions to the equipment of the musical, literary and industrial departments. The overdraft at this date is \$14,638.44. It is not our policy, under ordinary circumstances, to go before the legislature with an overdraft, nor would it have been necessary under normal conditions.

The number of pupils reported November 30, 1898, was 116; November 30, 1900, 137; at the date of our last report, 151, while there are present to-day 168, a growth of more than 44 per cent. in six years. During this period there has been no corresponding increase in buildings, and the school is overcrowded at this time. We, therefore, again call to your attention our needs, most of them the same as presented in our last report, and all of them real, if we are to do what the state expects of us in the education and training of the unfortunate children committed to our care. These needs are as follows:

(1) The payment of the overdraft incurred in securing land. (2) The erection of an administration building with additional room for libraries, dormitories, toilet, baths, etc. (3) A firstclass gymnasium thoroughly equipped. (4) The completion of the basement and attic of the school building. (5) A pipe organ for the blind. (6) A bakery and additional room for laundry purposes. (7) Additional space for pupils' dining-room. (8) A barn and storage shed. (9) The completion of the grounds.

A conservative estimate of the value of the buildings and grounds at this time is \$275,000.

In behalf of the Board of Trustees.

Respectfully submitted,

J. F. HUMPHREY, President.

From the Superintendent's report to the Board of Trustees: *Attendance*—The number of pupils present at the time of this report is the largest in the history of the school—16S, or

#### FOURTEENTH BIENNIAL REPORT

fifty-two more than were reported November 30, 1898. There are other children in the State who should be here, but it is hoped that as the aims and purposes of the school become more widely known, and parents learn more of its equipment and methods, the percentage kept at home may become smaller and smaller. When the people of the State generally understand that this is purely an educational institution, partaking in no sense of the asylum or hospital idea, there will be no longer any question in the minds of those having deaf or blind children as to sending them to us. A compulsory attendance law has been passed in some states, but from the reports upon results we are not prepared to recommend such a law to our legislature.

#### PUPILS PRESENT DURING THE BIENNIAL PERIOD.

	Deaf.	Blind.	Total.	
Present November 30, 1902	. 99	52	151	
New pupils admitted since	. 41	13	54	
Former pupils returned	. 4	4	8	
	144	69	213	

*Health*—Though the general health has been good, our long record of freedom from serious illness has been broken by the loss of two pupils in the last two years.

The Literary Department—There have been practically no changes in method with either the deaf or the blind. As before, we are earnestly striving to do what is best for the deaf as a whole, using oral methods where there seems hope of success, and the manual method where there is little or no talent for speech or speech reading. The chief hindrance to good work in a small school is the problem of classification, where the number of teachers is limited by a limited income. It is impossible to have even a class of ten perfectly graded, and often there are, or ought to be, at least two divisions in the class, sometimes three. No teacher can secure the best results under such circumstances, and we look forward to the time when the school may double in size or when six pupils will not be considered too few for one teacher. The same problem confronts us in the blind department, though less seriously, since the blind have language and the communication of ideas to them is as natural and almost as rapid as with normal children.

*Graduates*—The only pupils to complete the course of study within the two years were Misses Clara Brose of Fort Collins, Pauline Cheatley of Russell Gulch, Eliska Coe of Stonewall, Rose Fegan of Boulder, and Anna Herpich of Denver, constituting the class of 1903. These five blind young ladies had worked long and faithfully for their diplomas, and went out from the school with the respect and esteem of all who knew them.

Library and Library Fund—During the famine years, from 1892 to 1902, the school library, which was very small indeed. re-



COLORADO EDUCATIONAL EXHIBIT, LOUISIANA PURCHASE EXPO-SITION. THE FACADE OF PAVILION.

## LIBRARY OF THE UNIVERSITY of ILLINOIS

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#### SUPERINTENDENT OF PUBLIC INSTRUCTION.

ceived no new material whatever. In 1902 some \$500 was spent for sighted books, greatly to the delight and profit of the whole school; but nothing has been done as yet in the way of books for the blind. In donating certain houses and lots comprising a part of the land recently acquired, the donor, General W. J. Palmer, desired that \$10,000 of the purchase price be set apart as a library fund, the income to be used for supplying reading matter for the pupils. This the Board has done by designating the three cottages fronting on Pike's Peak avenue as constituting a permanent fund for library purposes to be called the "Palmer Library Fund." Should the State wish to use these or the land upon which they are situated for other purposes, it would be necessary to first invest the sum named in some other securities for the benefit of the library. We have great hope from this fund when the properties are put in order for renting. Only those who have struggled with "the powers that be" to get reading matter can fully appreciate the wisdom of the restriction upon the General's gift.

Industrial Department—This department appeals to the public more than any other because it is here, people say, they can see the practical solution of the bread and meat problem. This is true in a sense, and you have put forth every effort to make the department worthy of the name. Your printing office, which had fallen far behind the times in equipment, has just been fitted up with new presses, a new cutter, and numerous minor articles for convenience and service. The carpenter shop, with its new benches for wood working and new machinery added from time to time is fast becoming a model of its kind. The shoe shop, broom and mattress shop, sewing rooms, etc., are all gradually increasing in efficiency as their furnishings become more complete. And as a preparation for all this, your manual training and domestic science classes are at work daily, under competent instructors in both deaf and blind departments.

Improvements—Though much energy, time and money has been expended in securing the land, of which mention has been made, a great deal has been done here and there in a small way to increase the efficiency and hence to enhance the value of the plant. Buildings have been put in repair and painted, dozens of presses and tables have been made in the shop to take the place of the rickety affairs in use, the grounds have been leveled up and sodded, cement walks laid and a thousand and one little additions made for the convenience and comfort of our household. Your policy to keep the place in perfect repair at all times will prove, without doubt, the most economical in the end, but with buildings so run down as these were six years ago, it has taken a long time to reach the starting point.

The Deaf-Blind—We have in school now three of these doubly-unfortunate children, or about one-tenth the whole number of the deaf-blind in the schools of the United States. Of these Lottie Sullivan and Ralph Wooden have been mentioned before, both of them bright pupils. The latest comer of the three is Minnonia Abbott, age fifteen, who came to us September, 1903, from La Junta. She had been sent to the school when six years of age, at which time she had some sight, but was returned home, after a year's trial, as being too delicate and frail to accomplish anything. Her health gradually grew worse, culminating in an illness which kept her in bed a year or longer, and left her more feeble than ever. But some two years ago there was a turn for the better and her parents asked the privilege of sending her to us. While her progress has been slow compared with that of Lottie or Ralph, she shows considerable improvement and there are many evidences of an awakening of the intellect that has so long lain almost dormant.

Exhibit at St. Louis—The idea of a living exhibit, consisting of classes from schools for the deaf and blind at actual work, originated with Mr. Alvin E. Pope, director of group seven. and proved one of the most interesting features of all the wonderful collection in the Palace of Education. Through the interest and kindness of our State Commission, we were enabled to participate in this exhibit by having Lottie Sullivan and her teacher present for more than two months, to illustrate methods and results in the instruction of the deaf-blind. During her stay, Lottie was afforded every opportunity to see the exposition and had the great pleasure of meeting Helen Keller and her dear friend, Mr. Wade of Oakmont, Pa., who has done so much to brighten the pathway of the deaf-blind. She has returned to us with a broadened mind and quickened impulses that will affect all her future life. We had also, in the Colorado Educational Booth, a small objective exhibit consisting of bound volumes of examination papers, photographs of buildings, grounds, etc., and samples of handiwork of both the deaf and the blind.

Acknowledgements—To attempt to enumerate here all the kindnesses we have received at the hands of our friends would be a difficult task. The people of the city vie with each other in their efforts in our behalf, and some one is always thinking of our comfort and pleasure. Our visitors, too, do not hestitate to express their approval and say pleasant things about the school. Indeed we have had much for which we are sincerely grateful.

We have endeavored in the foregoing to give a general idea of the work that has been done the past two years. You have watched it closely and know exactly the large amount of detail involved. You are personally acquainted with your people, in and out of the school room, and I do not need to tell you that it would be hard to get together a more earnest, capable and efficient corps. Having seen us morning, noon and night, week days and Sundays, from attic to basement, you need no proof that we try to be at our best at all times and I think I need not assure you that we are earnestly striving to live up to our motto: "To be, rather than to seem."

#### SUMMARY OF REPORT OF TREASURER FOR BIENNIAL TERM ENDING NOV. 30, 1904.

#### RECEIPTS.

Balance November 30, 1902	\$ 25.93	
Auditor of State	136,716.84	
Superintendent office receipts, board and tuition	12,272.35	
Superintendent office receipts, miscellaneous	8,702.65	
Overdraft	14,638.44	
Total		\$172.356.21

#### DISBURSEMENTS.

To paid warrants Nos. 5616 to 7428 inclusive......\$172,356.21

A List of Officers, Teachers and Other Employes and Their Salaries-W. K. Argo, superintendent, \$2,000.00; Della J. Felton, Office Assistant, \$480.00; G. W. Veditz, Teacher of Deaf, \$1,300.00; E. C. Campbell, Teacher of Deaf, \$1,100.00; L. E. Milligan, Teacher of Deaf, \$1,200.00; Mary E. Griffin, Teacher of Deaf, \$850.00; Alma Chapin, Teacher of Deaf, \$850.00; Olga Gebhart, Teacher of Deaf, \$850.00; Jessie Dudley, Teacher of Deaf, \$850.00; Grace Beattie, Teacher of Deaf, \$850.00; Lillian Curd, Teacher of Deaf, \$650.00; Bessie Veditz, Teacher of Deaf-Blind, \$550.00; Louise Sloan, Teacher of Deaf-Blind, \$400.00; H. R. Chapman, Teacher of Blind, \$1,350.00; Jessie Baker, Teacher of Blind, \$850.00; Mrs. A. L. Bohrer, Teacher of Blind, \$850.00; Myrna Woodruff, Teacher of Blind, \$650.00; A. L. Bohrer, Teacher of Music and Tuning, \$1,100.00; M. E. Churchman, Teacher of Music, \$650.00; Edwin Dietrich, Teacher of Violin, per month, \$40.00; C. C. Owen, Teacher of Carpentry, \$1,000.00; H. M. Harbert, Teacher of Printing, \$800.00; J. W. Ayres, Shoemaking, per month, \$40.00; John Potter, Broom and Mattress making, per month, \$50.00; Mrs. E. C. Allen, Sewing (deaf), \$350.00; Eliza Todd, Sewing (deaf), \$250.00; Mary Etta Thedinga, Slovd and Domestic Science. \$540.00. Twenty-seven other employes are engaged in the different lines of work required by the institution.

# REPORT OF THE COLORADO STATE INDUSTRIAL SCHOOL.

To the Hon. Helen L. Grenfell, Superintendent of Instruction:

Madam—In compliance with the law creating the Board of Control of the State Industrial School for Boys, we respectfully submit this, the twelfth biennial report of the Board. This report is for the two years beginning December 1, 1902, and ending November 30, 1904.

Board of Control—Hon. John R. Schermerhorn, President, Denver; Hon. Thomas J. Downen, Secretary, Pueblo; Hon. Joseph Dennis, Jr., Member, Golden.

Officers—Fred L. Paddelford, Superintendent; R. C. Hukill, Chief Clerk; Mrs. M. A. Slingerland, Matron; Elmer E. Weller, Chaplain; Walter Joel King, Physician; Loren S. Minckley, Principal of Schools.

#### MOVEMENT OF POPULATION.

Number of inma	tes November 30	), 1902	198
Received during	term		287

#### LEAVING DURING TERM.

485

Expiration of sentence	21
Paroled	211
Escaped	0
Pardoned	15
Discharged	17
Returned to court	3
Died	2
	269
Total number remaining November 30, 1904	216

#### SUMMARY.

There were in school November 30, 1902	198
There are in school November 30, 1904	216
The greatest number was in February, 1904	225
The smallest number was on December 1, 1902	198
The average number per day during the term	211

The Fourteenth General Assembly appropriated for the support and maintenance of the institution, and for what improvements the board could make, \$107,000.00 and the cash receipts of the school. An appropriation of \$5,000.00 for the purchase of land adjoining the school grounds was also made.

Sixty-four acres of land have been purchased and that portion which may be irrigated has been brought under cultivation. The increased amount of alfalfa that this land has afforded has enabled us to keep a larger herd of cows and horses with little added expense, thus proving a rich boon to the school. It has also given work to a great many boys who have filled washouts, grubbed trees and stumps, and leveled the ground preparatory to seeding and irrigating it properly, and by affording work for them in harvesting the crops produced thereon. By handling the appropriations and cash in the best manner that we could devise, we have been able to erect and finish the outside of a handsome building of buff pressed brick with tile roof. The two-story part of this building is 40x70 feet, the one-story part aggregating 30x128 feet. The upper story and the hall and stairways leading to it have been finished, and the room will be furnished for a chapel or assembly room. The lower part is to be used for boys' dining room, kitchen, bakery and serving room, and the basement utilized in connection therewith when we shall have received an appropriation to be used in finishing the building. We deemed it wise to erect a building of the style and size that is needed, and finish as much of it as possible, and then ask the legislature for sufficient funds for its completion, rather than to build a cheap structure that would never answer the purpose for which it was intended.

A large well is being excavated, which, when completed, gives promise of furnishing all the water we can possibly use on lawns and for domestic purposes. This will do more than any other one thing to beautify the grounds, besides providing an ample supply of water to be used in case of fire. We have purchased eight head of registered thoroughbred Shorthorn cows and heifers from the State Agricultural College, and have secured a registered double-standard polled Durham bull to head the herd. Four fine young Percheron mares have also been added to our livestock department. A splendid flagpole has been erected. Gymnasium apparatus has been purchased. Night men have been put in all the dormitories. Some machinery has been installed in the woodworking department. A small barn has been built for the thoroughbred cattle. Much new fence has been built and painted. The campus has been enlarged. Trees have been set out about the grounds and swimming pool. All of these improvements and new departures, together with many others, are more fully described in the Superintendent's report. The exhibit of work from the Industrial School captured first prize and a diploma at the State Fair at Pueblo in 1903, and our exhibit at the World's Fair has been awarded a gold medal, besides eliciting letters containing words of praise from educators on both sides of the Atlantic.

The receipts and disbursements for the two years ending November 30, 1904, have been as follows:

#### RECEIPTS.

Appropriation,	maintenance	\$107,000.00	
Appropriation,	land	5,000.00	
Cash receipts.		10,397.40	
			\$122,397.40

#### EXPENDITURES.

Support, maintenance and current expenses\$9	6,758.53
Land	5,000.00
Buildings and other improvements 2	0,638.87

\$122,397.40

Needs-We need an appropriation of \$10,000.00 for finishing and furnishing the chapel and dining room building recently erected. For two cottages we ask an appropriation of \$12,500.00 for each. These cottages are badly needed to relieve the crowded condition of the school and to give the larger boys separate quarters and more homelike surroundings. Constant building, making more lights necessary, increased amount of water to be pumped, and addition of new machinery, has overloaded our dynamo and engine to such an extent that duplicating the present plant is a matter of economy as well as necessity. For a direct connected generator and engine we desire an appropriation of \$1,500.00. For finishing and extending the steel standpipe to a height of seventy-five feet we desire an appropriation of \$2,200.00 This improvement will give increased fire protection to the buildings, and, now that we have an ample supply of water in sight, it ought to be made. For a conservatory large enough to permit the propagation of plants in profusion, and to give employment to several boys, we ought to have \$1,000.00. For ten typewriters to be used by a class of our boys who desire to fit themselves for office men, we ask \$1,000.00. An appropriation of \$500.00 is needed for a milling machine to complete the equipment of our little machine shop. Five hundred dollars appropriated for the purchase of machinery for the woodworking class of the manual training department would be wisely expended.

For a barn planned after modern ideas we ask an appropriation of \$3,000.00.

An appropriation of \$110,000.00 is needed for general maintenance for the next two years.

#### RECAPITULATION.

General maintenance	110,000.00
To finish and furnish building recently erected	10,000.00
Two cottages, furnished completely	25,000.00
Dynamo and engine	1,500.00
Addition to standpipe	2,200.00
Conservatory	1,000.00
Typewriters	1,000.00
Machinery for manual training	1,000.00
Barn	3,000.00

More Land—For many years the school has had the use of about eight acres of ground, where the pig pens and part of the barn corral are situated. This ground can not be irrigated, but its location is such that makes it valuable property for the school, inasmuch as no other suitable ground is available for the purposes for which it is used. An appropriation should be made for the purchase of this land.

*Health*—We have been blessed with uniformly good health among the boys, though one boy died from inherited tuberculosis, and another from acute bowel complaint, this year.

For many days at a time there is not a boy from among the 220 inmates of the school confined to the hospital, and the hospital ward has been used for a sleeping room for the overflow from the dormitories as often as to furnish accommodation for such boys.

Discipline—It has been our constant endeavor to secure officers who can maintain discipline with the minimum amount of punishment. Whenever it has been thought necessary to resort to corporal punishment to subserve the best interests, not only of the school, but of the individual himself, the punishment has been administered with that calm and dispassionate temper that impresses upon the recipient the grave nature of the offense that calls for extreme measures. However, not many punishments have been given, considering the number of boys at the institution. Only one punishment was given one month during the term. One punishment for 220 boys would be one punishment in 220 months, or 18 years, for one boy. How many families can present such a record? Other months average about eight.

Corporal punishment has now been abolished except in cases of absolute necessity. The discipline of the school is good, the boys are happy and contented, not an escape being charged against the whole biennial term for which this report is made.

Conclusion—In conclusion, we wish to acknowledge the splendid management and careful attention to matters in detail, large and small alike, of the Superintendent, ably seconded by a corps of earnest workers in all departments. The best of good will has existed during the entire term between the Board and Executive of the School, and this accounts for much that we have accomplished in bettering the condition and improving the standing of the institution.

The Board cordially invites all citizens of the State to visit the State Industrial School, and become acquainted with the work we are doing. The Governor, the members of the General Assembly, judges of the courts, and all other public officers who are interested in the institution are also urged to visit us frequently. Respectfully submitted,

> JOHN R. SCHERMERHORN, President. THOMAS J. DOWNEN, Secretary. JOSEPH DENNIS, Jr., Member.

## COLORADO ARBOR AND BIRD DAY NOTES, APRIL 17, 1903. CONTENTS.

Governor's Proclamation. Law Governing Observance of Arbor Day. Superintendent's Letter to Teachers. Superintendent's Letter to School Children. Letter Concerning the Offering of Prizes by The Colorado State Forestry Association, "The Necessity of Arbor and Bird Day Work in Colorado."

Subjects for Essays—History of Arbor Day. Uses of Trees. The World's Great Forests. What We Owe to Bird Life. Birds of Colorado. Nature in the Rocky Mountains. The Outdoor Life. Trees I Have Known. Plant Fruit Trees. The Most Unselfish of Our Holidays. What We Can Do to Bring Back Our Birds. Historic Trees.

Program Suggested—Song, Anthem for Arbor Day (tune, America). Reading of State Superintendent's Letter to the Children. Recitation, The Bloodless Sportsman. Essay, Description of Colorado Trees. Reading, The Bluebird's Plea. Song, The Voice of Spring. Recitation for Group, The State Flowers in Convention. Essay, The Relation of Trees and Birds. Recitation, Leonardo's Bird Cages. Song, Woodman, Spare That Tree. Quotations by children, each giving a favorite of his own, appropriate to the day. Short addresses by School Directors or other guests. Song, Father, We Thank Thee.

Selections-The Bluebird's Plea, Frances Margaret Fox; How Birds Dress, from American Journal of Education; A Tropical Fruit Tree, Bertha F. Herrick; Mr. and Mrs. Brown, from Crane Third Reader; Johnny Appleseed, Anon., from New York Arbor Day Annual, 1902; Anthem for Arbor Day, Rev. S. F. Smith, D. D.; The Child's World, W. B. Rands; What Do We Plant? Henry Abbey; The Help of Birds, Norman C. Schlichter; Nests, May Riley Smith; O Ye of Little Faith, Christian Burke; The Noble Nature, Ben Jonson; Spring, Bessie Chandler; April, Anna J. Grannis; I Can But Sing, Eudora Bumstead; Telltales, Youth's Companion; The Bloodless Sportsman, Sam Walter Foss; Four-Leaf Clover, Ella Higginson; In Church, Anon., from Humane Education Leaflet; When the Green Gits Back in the Trees, James Whitcomb Riley; A Bird's Nest, Florence Percy; 'Tis Arbor Day, Ida May Dennison, Denver; The Sower, Adelaide A. Proctor; In the Swing, Eudora S. Bumstead; Cherries, Frank Dempster Sherman; Mother Earth, Anon., from New York Arbor Day Annual; Leonardo's Bird Cages, Anon., from Washington's First Bird Day Book, 1898; We Thank Thee, Crane Third Reader; Three Trees, Anon., from New York Arbor Day Annual; A Tree Song, Truth; Little Bird Blue, Anon., from New York Annual, 1902; Mrs. Wasp and Mrs. Bee, American Bee Journal; The State Flowers in Convention, Anon.; Which Tree Is Best? Youth's Companion; How Do Robins Build Their Nests? American Primary



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#### SUPERINTENDENT OF PUBLIC INSTRUCTION.

Teacher; The Gossip of the Nuts, Western School Journal; Two Trains to Poppy-Land, Christian Union; Johnny's Choice, Crane Third Reader; Closing Quotation, Rev. Arthur Sewell.

#### COLORADO ARBOR AND BIRD DAY NOTES, APRIL 15, 1904. CONTENTS.

Law governing observance of Arbor Day; Governor's Proclation; Superintendent's Letter to Teachers; Superintendent's Letter to School Children; Sketch of J. Sterling Morton and extracts from his speeches; Forestry, Henry Michelsen; Old Trees, Texas Arbor Day Manual, 1902; List of Trees in Denver, W. G. M. Stone; Humane Education; Nature Study, Lida B. McMurry.

Selections-Bird Homes, Pennsylvania School Journal; A Pelican Paradise, C. William Beebe; Shared, Lucy Larcom; One Thing that Money Cannot Command, Texas Arbor Day Manual, 1902; Work, Alice Cary; Spring, Anon.; Summer, Mary Howitt; Autumn, A. S. C.; Winter, Frank L. Stanton; The Forest Greeting, Paul Laurence Dunbar; The Oak Tree, Anon.; The School-House Yard, Elizabeth Howland Thomas; The Flowers of the Nations, Cora C. Day; A Child to a Rose, Jones Third Reader; Arbor Day, Will C. Myers, Gilman, Colo.; Three Colorado Flowers, Anon.; A Belated Violet, Oliver Herford; A Pioneer, Anon.; Army of the Corn, Sidney Lanier; King Wheat, Ninette M. Lowater; That's the Way, Anon.; To the Man-of-War Bird, Walt Whitman; The Wounded Curlew, Celia Thaxter; The General and the Bird's Nest, The Morse Readers; A Lesson From the Sparrows, Selected; Sir Robin, Lucy Larcom; The Singing Lesson, Jean Ingelow; The Robin and the Flower, Charles A. Myall; The Halo, William C. Gannett; Bird Nests at Washington, John James Piatt; The Plow Boy, Maurice Thompson; Some Good Requests to be memorized and Acted Upon by Our Boys and Girls, From the Mercy Drama; The Butterfly's Easter Morning, Emma C. Dowd; The First Anemone, C. O. P.; The Thrush's Lesson, Anon.; There Are Some Wrong Things We Can Never Undo, Juliana Horatia Ewing; Lost-Three Little Robins, Lincoln Literary Collection; Mother Earth's Party, Anon.; The Tree's Dream, Elizabeth H. Thomas; Anticipation, Youth's Companion; My Neighbor, Persis Gardiner; Tree-Top Trouble, American Primary Teacher; Three Little Trees, Journal of Western Canada; I'm So Happy, Mattie M. Renwick; Kris Kringle, Thomas Bailey Aldrich.

Suggested Program for Higher Grades: Song—Spring Song; Reading of State Superintendent's Letter to Children; Recitation—One Thing that Money Cannot Command; Recitation by Four Pupils—Spring, Summer, Autumn, Winter; Essay—Our National Forest Reserves; Song—Work,

For the Night is Coming; Recitation—The Wounded Curlew; Recitation for Group—The Flowers of the Nations; Essay—Our Bird Club; Reading—A Pelican Paradise; Short Addresses by School Directors or other guests; Song—Arbor Day Anthem.

Suggested Program for Primary Schools: Song—Little Deeds of Kindness; Reading of State Superintendent's Letter to the Chidren; Recitation — The Tree's Dream; Recitation—Lost: Three Little Robins; Recitation for Group— Mother Earth's Party; Song—Chick-a-dee; Recitation—My Neighbor; Recitation—Three Little Trees; Class of fourteen give some good requests to be memorized and acted upon; Song— America. Closing quotation.

#### THE BIRTHDAYS OF WASHINGTON AND LINCOLN, 1903.

Souvenir Program—Superintendent's Letter to Colorado Teachers; Leading Events—Louisiana Territory; Illustration— First School House Erected in Colorado, 1861; Illustration—A School House of To-day, 1903.

Program Suggested—Song, America; Recitation, Washington's Birthday, Margaret Sangster; Recitation, • Lincoln, Maurice Thompson; Essay, What We Owe to Washington and Lincoln, by Pupil; Recitation, Historical Exercise for Several Pupils (one arrangement may be found in Washington and Lincoln Birthday Circular, 1902. Others can be easily prepared by teacher); Song, Columbia, the Gem of the Ocean; Essay, The Discoverer of the Mississippi, by Pupil; Recitation, Ponce de Leon, or the Fountain of Youth, Hezekiah Butterworth; Song, The Starry Flower of Liberty; Reading, La Salle's Expedition, Parkman; Essay, Historical Account of the Louisiana Purchase, by Pupil; Song, The Star-Spangled Banner.

#### THE BIRTHDAYS OF WASHINGTON AND LINCOLN, 1904. CONTENTS.

Superintendent's Letter to Teachers; Superintendent's Letter to School Children; History of the Louisiana Purchase and the Subsequent Development of Its Territory; What a Century Has Brought Forth, selected from The History of The Louisiana Purchase, James K. Hosmer; Columbus, Joaquin Miller; The Hero of Puerto Rico, Hezekiah Butterworth; De Soto, Hezekiah Butterworth; The American Indian, Charles Sprague; The Seminole's Defiance, George W. Patten; Indian Names, Lydia Huntley Sigourney; The Pilgrim Fathers. John Pierpont; Pike's Peak, J. Ernest Whitney; Long's Peak, Sarah Elizabeth Howard;

Sierra Blanca, Patience Stapleton; The Angelus, Bret Harte; Hymn of the Alamo, R. M. Potter; The Kansas Emigrants, J. G. Whittier; The Man with the Pick and the Drill, Capt. Jack Crawford; Custer's Last Charge, Frederick Whittaker; A Dakota Wheat Field, Hamlin Garland; The Race of the Oregon, John James Meehan; The Dawn of Peace, John Ruskin; The Greater Land, Capt. Jack Crawford; Suggestions for the Observance of Washington's Birthday, American Primary Teacher; Washington's Character, Edward Everett; Our Chieftain, Washington, A. E. Thomas; Abraham Lincoln, Crane Fourth Reader; Abraham Lincoln, Edmund Clarence Stedman; The Maul, Mary E. Nealy; Wanted-A Man, Edmund Clarence Stedman; Our Presidents, Frances M. Auchenbach; The Flag Goes By, Henry Holcomb Bennett; Dear Country Mine, Richard Watson Gilder; Boundaries of the United States, John Fiske; Yankee Ships, James T. Fields; To the Eagle, James G. Percival; A Flag on Every School House, T. J. Crowe: Columbia, Charles Groenendyke, San Luis, Colo.; Our Flag, Charles Groenendyke, San Luis, Colo.; Washington and Lincoln, Anon.; Flag Drill, The Teachers' World; The Color Guard, Charles W. Harwood; Which General, Kate W. Hamilton; For Little Boys, Adapted from Lizzie Hadley.

Suggestive Topics for Essays—Legends of the Indians; The Men Who First Explored the New World; Spain in America; Napoleon's Bargain; Home Life and Customs of Pioneers; The Romantic Journey of Lewis and Clarke; Life on the Old Mississippi; Territorial Government and Officers; State Government and Officers; Transportation in Colorado—from the Prairie Schooner and the Burro to Electric Cars and Automobiles; Some Great Americans of To-day; Duty of the Boys of To-day to Their Country.

*Program Suggested*—Part I—Song, Columbia; Reading of State Superintendent's Letter to Pupils of the Public Schools; Recitation, Columbus; Recitation, Ponce de Leon; Recitation, Indian Names; Essay, The Men Who First Explored the New World; Recitation, The Pilgrim Fathers; Song, Our Flag; Read ing, What a Century Has Brought Forth; Recitation, Race of the Oregon; Recitation, Dawn of Peace, or, Dear Country Mine.

Part II—Song, Columbia, the Gem of the Ocean; Reading, . Washington's Character; Recitation, Our Chieftain, Washington; Recitation, Our Presidents; Essay, Some Great Americans of To-day; Song, Marching Through Georgia; Recitation, Washington and Lincoln; Recitation, Abraham Lincoln; Recitation, The Maul, or, Wanted—A Man; Essay. The Duty of the Boys of To-day; Song, America.

## OPINIONS OF ATTORNEY GENERAL.

## Attorney Ceneral's Office, Denver, Colo., June 9, 1903.

Hon. Helen L. Grenfell, State Superintendent Public Instruction, Capitol:

Dear Madam—Replying to yours of the 1st inst., enclosing copy of your letter of April 24, I would say that, under the new public printing act, establishing the office of Commissioner of Public Printing, approved April 11, 1903, no public printing or binding of any sort shall be furnished to any department of the State government, or to any officer or employe of the State, except on the requisition of the head of such department, addressed to the Commissioner of Public Printing. In effect, the Commissioner of Public Printing now performs the duties previously devolving upon the Secretary of State and Printing Clerk.

I am of the opinion that the blank forms of registers, books, etc., required to be furnished by you under section 3973, M. A. S., the cost of which is to be deducted from the amount apportioned to each county at the semi-annual apportionment of school funds, and paid by the counties, respectively, for whom the printing is ordered, out of that fund, is not under the control of the State Auditing Board, provided for by the general appropriation act, and the amount apportioned to your department by the State Auditing Board is not applicable to that expense. The expense of such printing and binding is not an expense of the State, but an expense charged to, and paid for, by the particular county to which it is furnished, and the money is simply advanced by the State Treasurer out of the State school fund upon your certificate, as provided for in said section of the statutes.

All other printing of your department, however, such as your State diplomas, school laws, etc., must be taken from the contingent fund allowed your department under the general appropriation act. It is probably needless for me to say that until the Supreme Court, however, has passed upon the suit involving the validity of the last general appropriation act, there is nomoney available under that act.

Trusting that this will be a satisfactory reply to your inquiry,. I am,

Respectfully,

N. C. MILLER, Attorney General. Denver, Colo., September 21, 1903.

Hon. Helen L. Grenfell, State Superintendent Public Instruction, Capitol:

Dear Madam—I have considered the following letter, submitted to you by C. E. Hagar, Secretary of the State Board of Charities and Correction:

"At the postponed regular meeting of the State Board of Charities and Correction, held Wednesday afternoon, September 9, 1903, I was instructed to request from you information in relation to the question whether children of school age, in custody of the State of Colorado in its several State institutions, are entitled to a share of the school fund of this State, and if so, what steps should be taken to obtain the same. The board desires, further, if it shall be found that these children are entitled to such portion of the State school fund, to know whether the teachers employed to instruct these children must possess a teacher's certificate from the proper State or county authorities."

I beg leave to report in reference to said inquiry, as follows:

The school fund of the State, apportioned to the several counties by you, is derived from the following source:

"The sections numbered 16 and 36, in every township, and where such sections have been sold or otherwise disposed of by any act of Congress, other than land equivalent thereto in legal subdivisions of not more than one-quarter section, and as contiguous as may be, are hereby granted to said State for the support of the common schools."

Section 7, Enabling Act, page 92, Mills.

This provision alone probably settles your question without further discussion. This section has been construed, invariably, by our courts, and by this office, as creating a trust fund in the hands of the State.

The beneficiary is the common school, and our Legislature has passed some statutes in furtherance of the trust. These are to be found in the School Laws of 1901, under sections 72, 73, 74 and 75. Also, reference is made to section 10 of said laws.

The fund, therefore, belongs exclusively to the school districts of the State of Colorado, which are a legal subdivision of the government. The funds, therefore, belong to the school districts of the State, as being a legal organization of the common schools. The apportionment of the funds to the counties, to be thereafter distributed among the school districts per capita, is only a wise and salutary one, measuring the equitable portion of the fund which should be paid to each school district. What Congress and the State had in mind is an institution to educate children. Houses of correction and other places of confinement for incorrigible children are State institutions, and must be cared for by the State. They do not belong to the common school system of our State.

The residence of the parents controls the residence of the children. If the State passes a law authorizing the confinement of incorrigible children, such place is an institution of involuntary confinement. The inmates of such place should be enumerated where their parents reside. Orphans confined in such an institution do not gain a residence at its situs. It is a rule that inmates of institutions of involuntary confinement do not gain a residence by being domiciled at such place. This is a familiar rule of law in relation to houses of involuntary confinement. Inmates of such institutions, therefore, are not to be enumerated as a part of the school district where such house is located.

In reference to the Home for Dependent and Neglected Children, I am convinced that the solution of their enumeration is to be solved on elementary principles of law. Among these is the right of a person, whether rich or poor, to establish a home in any school district. In case the parents are dead the common law right of the State to step in and exercise the relation of parent to these children carries with it the same right of this legal parent to place the home of such children where it deems most advisable. Such children are not inmates of an institution of involuntary confinement. They are in a home provided by the State, which then stands in the relation of a parent. They are as much entitled to the privileges and advantages of our common school system as are any other children whose natural parents are in existence. They are, therefore, to be enumerated in the district in which said home for neglected and dependent children is situated.

I believe this covers the questions raised in the inquiry of the Secretary of the Board of Charities and Correction, and I beg leave to submit the same as my conclusion as to the law covering it.

Respectfully,

N. C. MILLER, Attorney General.

## REPORTS OF COUNTY SUPERINTENDENTS.

#### Adams County-Mary C. C. Bradford-1903-1904.

The general educational tone is excellent. The average of salaries has been raised during the past year, and the tendency is strongly toward graded schools, more teachers to a school, and the introduction of high school studies whenever practicable. The interest in the teachers' association is growing, and enthusiasm in manual work and the explicit and constant teaching of ethics (practical) and patriotism has been aroused. The examinations are proving applicants for certificates to have at tained a higher grade of scholarship, more pupils are graduated from the eighth grade, emphasis has been laid upon nature study, and better methods of teaching civil government have been adopted. On the whole, Adams county has made satisfactory progress during 1903-1904.

#### Arapahoe County-Kathryn M. Maloney-1904.

The schools are in very good condition, and improvements are being made all the time. Four districts will have new school houses this year. Teachers' wages are being raised.

Archuleta County-L. W. Smith-1903-1904.

In District No. 1 a fine eight-room two-story brick school house has been built, and the district, I am proud to say, is fast getting up to the standard. The board is composed of our best business men, who invite the superintendent to all the meetings, no matter what business, and act in every detail for the good of the work. Each year they get the best possible material and have put in ninth grade work. The work in all districts is progressing, and was better for the year 1904 than ever before.

#### Baca County-Margaret M. Marsh-1903-1904.

The educational work in Baca county is improving. The school directors are careful in selecting first-class teachers, and the tendency is to have longer terms and pay higher wages. Two roomy and attractive school houses have been built during 1904, and another will be completed in time for the fall term. The districts, with but few exceptions, are in excellent condition financially. The State course of study is employed in some of the districts, and an endeavor will be made to have it adopted by all, and followed so far as is practicable in rural schools. Owing to the small school population the county has no high school, but great interest is manifested by the pupils in attaining the common school diploma, which admits them to any high school in the state.

#### Bent County-Florence Sargent-1903-1904.

The Las Animas public schools have experienced great changes for the better during the past two years. A new tenroom high school building was erected. A chemical laboratory was fully equipped, also a physical laboratory, with \$600 worth of apparatus, added. The reading room was supplied with all the best periodicals. The grounds were planted with trees and an irrigating system instituted. Systematic work in physical culture was done in all the grades. A fine new piano was purchased, which has greatly stimulated the work done in music. A 6x12 flag was purchased. Manual training will be introduced the coming year, for which rooms have been equipped and a special instructor employed.

The work in the rural schools is steadily advancing. Attendance has been more regular, and greater interest in educational work manifested throughout the county. Special attention has been paid to the study of language during the past year. Permanent improvements are being made from time to time, as dis tricts can afford them.

#### Boulder County-W. C. Thomas-1903-1904.

The educational affairs of Boulder county are in a creditable condition. The increase of school population in 1904 over that of 1903 is seven and one-half per cent. Our county association meetings have been left to a vote of the teachers. By almost a unanimous vote they decided to have but one session of the association in the year, and hold that session for two days.

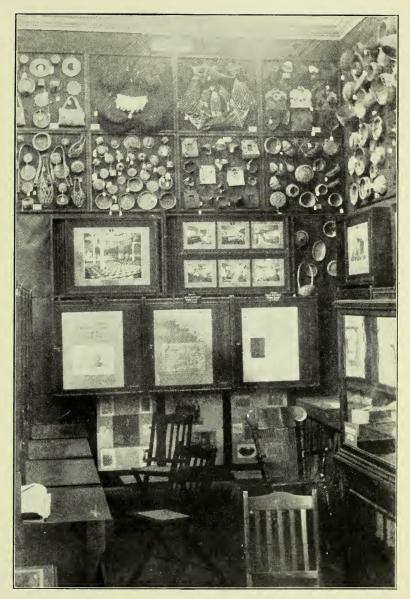
#### Chaffee County.

No special report made.

Cheyenne County-Julia Tinsley-1903-1904.

The rural schools are in a good condition. The teachers are following the State course of study more closely. This enables

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COLORADO EDUCATIONAL EXHIBIT, LOUISIANA PURCHASE EXPO-SITION. COLORADO SPRINGS, MANUAL WORK AND PHOTOGRAPHS.

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the teachers for the coming year to take up the work and get better results. We are planning to organize a county association. In the past year everything has been done to place the Cheyenne Wells high school on a level with the other accredited high schools of our State.

#### Clear Creek County-Martha A. Bowman-1903-1904.

No serious interruption having occurred during the past two school years, a great deal of regular work was accomplished. Especially in the rural schools is increased interest shown, and an effort is made for graded work, which shall place the pupils on a basis comparable with that in town schools. Three rural districts graduated eighth grade classes, and the average scholarship was commendable. For this work there is a demand for better prepared teachers, at increased salaries. Additions have been made to several school libraries, three being in rural districts. There was an increased attendance in the high schools, although in the grades it was less, owing to a decrease in school population incident to disturbed business conditions. District No. 5. Idaho Springs, has recently organized as a first-class district, with a school census of 1,015 persons. It has a well-equipped gymna-sium in the high school building, completed in 1903; sewing and other hand work were introduced in the grades, and a complete course of music added, under a competent instructor. At Georgetown and Silver Plume the schools have held successful terms. The pupils at Georgetown, under the leadership and instruction of their high school principal, have maintained two bands an an orchestra for three years past.

A small district, No. 8, was consolidated with No. 10, Lawson, and the new district divided and graded the pupils, adopted free text-books, and is now building an addition to its school house for the accommodation of the primary department.

#### Conejos County-George W. Irvin-1903-1904.

There are in this county hopeful indications pointing to educational progress. About one-half of the school population is Mexican or Spanish people. There is a much greater desire with them for education in the public schools than formerly. Several Mexican students (fifteen or twenty) were during the past year in attendance in State institutions. Each year, however, the number of Mexican teachers becomes less. The great need of the county is a high school, so that those completing the eighth grade might continue in the higher courses without being compelled to go so far from home. The county normal for county teachers has been a great aid to the educational work of the county.

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#### Costilla County-Charles Groenendyke-1903-1904.

The school districts of this county are, as a rule, in a very favorable position financially. Only two have any bonded indebtedness, and only one has unpaid warrants outstanding. I am pleased to report favorable progress in educational matters. The corps of teachers we have had during the past school year will compare favorably with those of any other county of like class in the State. The county superintendent, in visiting the schools, has taken the occasion, and he trusts not without effect, to impress upon the minds of both teachers and pupils the necessity of inculcating and acquiring not simply facts, but principles. not simply knowledge, but an ambition to be useful. Teachers' meetings were held in the southern half of the county, and were attended by teachers who were teaching in the "Mexican" schools. They were of decided benefit in stirring up professional ambition, and affording an opportunity for the interchange of helpful ideas and suggestions. In the schools of this county efficiency in the fundamental branches is the chief point sought after.

#### Custer County-Asa P. Dickson-1903-1904.

Titles to school grounds in some of the districts in Custer county have been cleared up during the last year. Two of the four bonded districts have paid the last of their bonded indebtedness. One school building, No. 5, has been moved to a new and better site and the building thoroughly remodeled. Some material improvements have been made in conveniences and appliances. Four new school libraries are now being placed in rural schools. The next effort to be made is to lengthen the terms and advance the teachers' wages. A copy of the State course of study is placed in every teacher's hands, with an earnest request that it be consulted frequently and that pupils be held back to the point of thoroughness.

#### Delta County-Alice A. Royce-1903-1904.

During the year District 1 has built a \$14,000 addition to its school, and has added a special teacher in English. The coming year a supervisor in music and drawing will be employed. Paonia, in the eastern part of the county, has opened a fine new eight-room brick building, costing, with furnishings. \$14,000, and arranged for a four years' high school course. All of the districts have made an advance in their special school levy, and nearly every district has advanced the salary of its teachers, and all are demanding better teachers. Several are specifying in contracts that music, drawing and physical culture shall be taught.

#### Denver County.

No special report made.

#### Dolores County—Elizabeth Kelly—1903-1904.

I am sorry to say education in Dolores county is not progressing as it should; not enough interest is taken by parents. Pupils are doing as well as could be expected under these circumstances.

#### Douglas County.

No special report made.

#### Eagle County—Grant Ruland—1903-1904.

The standard of teaching has been gradually raised by rigid grading and personal efforts. The number of pupils completing the eighth grade has greatly increased in the past five years. As each year passes, more students leave for higher institutions of learning. Six new school houses have been constructed since July, 1902. In five instances the old buildings have been disposed of and new up-to-date school houses have taken their places. Two others have been more centrally located. The number of teachers has increased over the increase in school population. Many boards see the necessity of increasing the salary of teachers, so that the best teachers may be induced to apply. Nearly every school district has a flag. Many let it float most of the time, even though it does call for a new flag often. The teachers' reading course is not so effective as it could be under more favorable circumstances. Our schools are too far apart for unity of action. This year a reading club will be established, however.

#### Elbert County-May Atcheson Georgia-1903-1904.

Both teachers and pupils manifested great interest in the school work for the year, the attendance in the rural schools being unusually goood. More psycho-manual work was done than here tofore, the pupils enjoying this work greatly. In District No. 13 excellent work was done in composition, paper folding and drawing, in addition to the regular work. The pupils in District No. 19 took up modeling in clay, and in District No. 22 excellent maps in relief from paste were made. The pupils in District No. 3 made unusual progress in composition and literature. The school boards have displayed deep interest in keeping the buildings and grounds in repair. Thirty-two pupils completed the eighth grade in 1904, and three interesting teachers' meetings were held, in which much interest was displayed by patrons and teachers. A new district was organized from a portion of District No. 5, and numbered 40.

#### El Paso County.

No special report made.

#### Fremont County—George E. Colgate—1903-1904.

It is a pleasure to report that the educational work in Fremont county is going on with renewed energy. We have a splendid corps of teachers. A very enthusiastic educational spirit is manifest in both city and rural schools. In most all of the districts improvements have been made to the school houses, and in many of the districts new buildings have been erected. In the rural districts larger special levies are made, better wages paid, longer terms demanded. The outlook has never been better in our county.

### Garfield County-Lucy E. DeWitt-1903-1904.

The outlook in the main is encouraging. The marked improvements in the Glenwood Springs school justifies the assertion. Most boards are demanding higher qualifications in teachers and raising salaries accordingly. Improved conditions prevail in many districts where additional rooms have been built to accommodate the rapidly increasing population. Eighth grade examinations have all been under my supervision, with the exception of those in Glenwood Springs. I find that these examinations, prepared and conducted by the county superintendent, are looked forward to with much interest by pupils. The Roaring Fork Teachers' Association held two meetings last year. At the meeting held in Glenwood Springs, sixty per cent. of Garfield county teachers were present. The normal institute held here last summer enrolled sixty-five per cent. of the county teachers.

## Gilpin County-Ida Kruse-1903-1904.

There has been steady progress in our schools during the past two years. The graded schools are now without exception on a

satisfactory basis for good work, while the rural schools have gained more in equipment than in any preceding year. The State course of study has been followed with particularly good results in rural districts, where effort has been made to grade the pupils evenly. A general interest in having suitable buildings for school work is growing throughout the county, and points toward the better housing of our pupils in several of the districts. The boards of directors and the teachers have all worked loyally for the advancement of school interests.

#### Grand County-Elmer R. Bacchus-1903-1904.

There is quite an interest being manifested by the patrons of Grand county for the education of their children. We realize some difficulty in procuring teachers of experience and ability owing to the many inconveniences in reaching the county. Although the pupils throughout the entire county are advancing nicely in their studies, we look forward with pleasant anticipation when Grand county will be in touch with the outside world, as it will broaden the educational ideas of her citizens and give more character and pride to her schools.

Gunnison County—Fannie Burnett--1903-1904.

The work of the schools of this county, generally, has been very good. The county high school is an incentive to the pupils of the county. They seem more anxious now to finish the eighth grade and enter high school. One new school building of two rooms has just been completed at Somerset, and improvements made on several others. Teachers' and parents' meetings were continued through the year in one district, and were instructive and helpful.

#### Hinsdale County.

No special report made.

#### Huerfano County.

No special report made.

Jefferson County—Ida L. Crawford—1903-1904.

The districts are, with few exceptions, out of debt, and four have added new school buildings, which are well equipped. Many

#### FOURTEENTH BIENNIAL REPORT

of the old ones have been renovated and supplied with new material for school purposes. Arvada has entered the second-class list and now has a flourishing high school of its own. The traveling library which was started for the benefit of the children of the county, and is therefore composed of juvenile books only, is doing much good among the schools and appreciated by them. On the whole, the schools are in a very prosperous condition.

#### Kiowa County-F. H. Maile-1903-1904.

The teachers employed during the past year were, on the average, of higher qualifications, and the work done was of a correspondingly higher grade. All school districts are now out of debt and bountiful provision in a financial way is made by the people for the support of schools.

#### Kit Carson County-John F. Stott-1903-1904.

There is a very noticeable improvement in the financial condition of the districts of the county. Only five districts had outstanding warrants June 30, 1904. October 1st will see the last school bond in the county paid off. Two districts were consolidated. One has been annulled. Four districts have joined the Library Association, making twenty-eight shares in all. Teachers' wages have a slight upward tendency. The fourth room was fitted up in 1903 in the Burlington school house. The ninth grade will be added to the course. Nearly all our schools were closed a portion of the winter of 1903 on account of contagious diseases.

#### Lake County-Lizzie W. Jones-1903-1904.

Our schools are progressing. During the year just completed School Districts Nos. 1 and 6 have been united, very much to the advantage of the latter. We have one new school which is a perfect model; it is roomy, well lighted, has good furniture and a business-like board. We have a uniform course of study in our county. We have one district which holds school during the summer in a tent.

#### La Plata County.

No special report made.

#### Larimer County.

No special report made.

Las Animas County-John W. Douthit-1903-1904.

Within the past year several new mining camps have been opened up by the C. F. & I. Company, in which four large and commodious buildings (school houses) were erected, at an expenses not less than \$4,000 each. Much more interest was manifested by teachers the past year in professional reading than ever before. Meetings of our county association were held each month and attendance very good. Our normal institute was well attended by Las Animas county teachers, and the work of the instructors was highly appreciated by teachers and visitors alike.

#### Lincoln County-E. I. Thompson-1903-1904.

We have only third-class districts in this county, which main tain an excellent corps of teachers throughout the grades. Teachers have more interest in advancing themselves than heretofore, attending normal institutes and summer schools. The greatest improvement has been along the line of work done by the teachers.

Logan County-Louise M. Dyer-1903-1904.

Nearly all the districts are, financially, quite prosperous, except a few which, having no railroad property and lying on the highlands, have but little means for school purposes. Such districts endeavor to do the best they can for the pupils, but unfortunately that means but from three to five months of school. The teachers have been earnest in their efforts to interest and advance their pupils. The per cent. of attendance has been fairly good. The attendance at the county high school has been very satisfactory, and it is a pleasure to note that one-third the attendance has been from the rural districts. Five new buildings or additions to former ones have been built. But few of the districts have any indebtedness, and only for small amounts. There is an evident desire on the part of the people to furnish the pupils with libraries and all necessary school books and apparatus.

#### Mesa County-Z. B. McClure-1903-1904.

Schools in Mesa county are moving forward. Wages are advancing and better teachers are being secured. New houses are

being built with special reference to sanitation, conveniences and beauty. The increase in population and the county superintendent's policy, "No new districts," are rapidly supplanting the single-room schools with two, three and four-roomed schools. During the past summer six districts which heretofore have had but one teacher have built additions to their school houses and employed the second teacher. This permits closer grading and better work, and, in many instances, especially where they have three or more teachers, some high school work is being done, thus keeping pupils in school who would otherwise drop out. The most important improvement in Mesa county is the financial condition of the districts. Less than one thousand dollars of registered warrants were on the treasurer's books at the close of the year 1903, and a balance of over twenty-eight thosuand on hand, there being only one district but which could have paid its entire indebtedness, except bonds, and that district is less than two hundred dollars behind.

#### Mineral County.

No special report made.

#### Montezuma County-H. E. Black-1903-1904.

Interest in school work in Montezuma county is increasing somewhat rapidly. Parents and pupils are getting to see more and more the needs of a thorough education along their chosen lines. A number of school buildings and school grounds were improved in 1903. Two new buildings were erected. An advance of twelve per cent. in teachers' salaries over those of 1902 proves that the school people are bidding for better talent. The poorer class of teachers is being left out entirely and every district is asking for trained teachers of the younger type. The attendance in the schools of the county stood in 1903 seventeen per cent. above that of the year before, the cost of schools ten per cent. less, and the average cost per pupil, based on attendance, fourteen per cent. less than that of the previous year, showing that the modern professional teacher secures the best attendance. We are putting in more advanced grades in several schools. With an exception of two districts the text books were in 1903 made uniform throughout the entire county by district adoption of a series of modern school texts on all the common branches. The school boards showed an interest in school work by securing the best teachers obtainable, thereby paying better salaries. A limited amount of manual training work was introduced into the lower grades of two districts in 1904. A county teachers' association organized was well attended on several occasions by both teachers and patrons.

#### SUPERINTENDENT OF PUBLIC INSTRUCTION.

#### Montrose County-Emma Willis-1903-1904.

All the districts in Montrose county have libraries but five --- the number of volumes being 3,355. Two districts finished paying off their bonded indebtedness in 1903, and the majority of the districts are in good condition financially. Many of the rural schools pay \$60 per month for a term of eight months. District 5 had almost enough money in the building fund to erect a nice brick building at a cost of \$1,500. The patrons of the schools throughout the county seem to be in close touch with the school work and give much valuable assistance to our county associations, not only by their presence, but by taking part in the discussions. Music was a special factor added to the course in the Montrose schools in 1903. The greatest stimulus was added to our educational work at the election in November, 1903, when the question of establishing a county high school was submitted to the voters of the county of Montrose and carried by a large majority. This centralizes all of the high school work in the county in one school. This county high school gives an added incentive to the pupils of the rural schools who have not reached the eighth grade.

#### Morgan County-Mattie A. Clifford-1903-1904.

The educational work of Morgan county shows a marked improvement over previous years. School houses are built wherever needed. Better and experienced teachers are in greater demand. School libraries are gaining favor and the school boards are buying books for their schools.

#### Otero County-Mary E. Lyon-1903-1904.

The schools of Otero county are improving. School houses are in good condition, better teachers are employed, school boards are taking greater interest in their schools. Manzanola, Sugar City, Fowler and Olney have adopted a four years' course for high school. Rocky Ford, La Junta and Manzanola have added eight-room additions to their ward schools. Much interest is taken in decorating school rooms and beautifying school grounds. Otero Union High School, at La Junta, enrolled 195 pupils this year. Forty-three pupils of the rural districts completed the eighth grade and received county diplomas; four of the rural districts had eighth grade graduating exercises. Otero county is divided into three districts for holding teachers' associations, in which four meetings were held at Fowler, four meetings at various places in eastern part of the county, and one in the northern part of county.

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#### Ouray County.

No special report made.

#### Park County-Mayme V. Remington-1903-1904.

The educational and financial conditions of Park county were never better. The annual statement of the county treasurer shows a fair balance in the treasury of every district. During the past two years several school buildings have been remodeled and refitted with new furniture and apparatus. Rural schools, having heretofore but three or four months of school during the year, have lengthened the terms to seven and eight months. The salaries of teachers have been increased in our town schools and in many of the rural schools. The teachers' reading circle work was carried on in a systematic manner, the teachers took a lively interest in the course of reading and reaped much benefit from the books. The press of the county has been very kind and generous in its notices and encouraging words, helping materially the educational interests. All through the county there is general cooperation among school boards, teachers, parents and county superintendent, and we all look forward to a bright, successful school year.

#### Phillips County-Madge A. Crowner-1903-1904.

The school year 1903 had some things to encourage and inspire one with hope. Thirteen pupils received diplomas of gradua tion from the eighth grade of our schools, and now many of them have entered our high school. Twelve copies of reading circle books were sold the teachers of our county in 1903, and twenty in 1904, and meetings were held monthly for the circle in the superintendent's office. We have attempted a better system of grading, and our school boards are anxious to secure good teachers and willing to pay the best salaries they possibly can to secure such teachers. A sod school house, although having done good service as such in the past, is now replaced by a neat, substantial and commodious frame one.

#### Pitkin County-Edith M. Bailey-1903-1904.

The schools of Pitkin county did most excellent work duringthe past two years. We are handicapped in our rural schools with a great variety of poor text-books. I am working, slowly but surely, for a uniform system of text-books.

#### Prowers County.

No special report made.

#### Pueblo County—Lulu J. White—1903-1904.

Our schools are enjoying an era of the greatest prosperity they have ever known. In 1903 the school population increased 1,152, yet the pupils were taken care of in a manner that did credit to the boards. Ten new buildings were erected at a cost of more than eighty thousand dollars, four districts established libraries, and about half the districts own their text-books. The organizing of a directors' association brought the boards of third-class districts into closer relations, and awakened a greater interest in education, so a greater effort was made to raise the standard of teachers in the rural schools. Only two teachers holding third grade certificates were employed in the county last year. The county superintendent has held parents' meetings in many of the rural districts, and she feels that the effort has been appreciated and much good resulted therefrom. In 1904 the average salary throughout the county increased and longer terms have been held in many of our rural schools. Twenty districts, through the efforts of their teachers, added libraries, and special attention has been given to reading throughout the county, with very flattering results. Two rural schools brought some of the ablest school men of the State to lecture to their patrons, thus awakening a different interest in the work. More work along these lines will be followed the coming year.

#### Rio Blanco County-Charles F. Brown-1903.

The schools of this county are fair when we take into consideration the inconvenience of attending the same. We will have longer terms in rural districts this fall and winter than we have had heretofore. We expect to have our county high school placed on the accredited list this fall.

#### Rio Grande County-George A. Carpenter-1903-1904.

The educational work in this county progresses with increasing interest. There is a decided upward tendency in teachers' wages, and an unsupplied demand for well equipped, experienced teachers. The districts this year show a marked improvement in financial condition, and with this comes a corresponding increase in the length of school terms in our rural schools. We have the largest number of normal school graduates on our teaching force in the history of the county. The general interest in higher education is manifested by the largest number of high school graduates attending college or normal school ever known. To provide means for doing advanced work, many of our young people seek positions as teachers in the rural schools. This necessarily places such schools as they secure in hands having scant professional training.

#### Routt County-Verna M. Bartz-1903-1904.

During the year 1903 the schools of Routt county showed much improvement. There was an increase in the amount of special tax levied, and the majority of the districts invested in up-todate school apparatus, and many bought new school furniture. The new school house at Yampa was well built and the interior nicely finished. The school terms increased in length, and in many of the districts a four months' summer and three or four months' fall and winter term were held. Three of the districts adopted free text-books. We made progress toward having a uniform system of text-books throughout the county. In the rural schools the terms are being lengthened and higher wages are paid the teachers, the majority of whom hold first grade certificates. During the year 1904 two school houses were erected, one of sawed logs, the other a nice one of stone. Because of the long distances teachers are obliged to travel, there was but one meeting of the County Teachers' Association held during the year. This was well attended and aroused much enthusiasm.

#### Saguache County-W. E. Gardner-1903-1904.

Educational feeling in the county is good. There is a marked tendency on the part of school boards to pay better salaries and require professionally trained teachers. Out of a total of thirtyfive teachers now teaching in the county, seventeen are either normal or university trained. The normal at Saguache was a wonderful inspiration to our teachers. All in the county but two attended either at Saguache or Alamosa. The school term is becoming longer. The new compulsory education law is causing an increase in attendance. In 1903 our total enrollment was eight hundred and twenty-six. In 1904 it was eight hundred and seventysix. The average daily attendance in 1903 was only four hundred and ninety-three, while in 1904 it was six hundred and sixty-five.

#### SUPERINTENDENT OF PUBLIC INSTRUCTION.

#### San Juan County-Ellen Carbis-1903-1904.

During the school year of 1903 schools were opened at Gladstone and Chattanooga, and a new school house erected at Eureka. With a decrease in the school population of the county, as shown by the census, the school attendance was greater in 1903 1904 than during any previous year. Three teachers from the rural schools have been promoted to positions in the Silverton schools.

#### San Miguel County-Charles S. Watson-1903-1904.

Schools districts throughout the county are paying higher salaries to teachers, and are getting better service in return.

#### Sedgwick County—C. F. Parker—1903-1904.

The schools of this county are in excellent condition. They are using the State course of study as a basis, and so the work of the county is quite uniform. The teachers are energetic and upto-date. They take educational papers and attend associations and institutes. On a whole the schools of this county are in a very healthy condition.

#### Summit County-Lulu B. Hogan-1903-1904.

Not many changes have come about in our county during the past two years. In District No. 1 for some time the board has followed a plan whereby a full high school course could eventually be established by adding one higher grade to the school each year. In 1904 the above plan was more nearly accomplished than ever before—an extra school room being rented and a fifth teacher being employed; but, owing to a decrease in the census, this plan for the present has been abandoned. New blackboards, paper and paint are noticeable in several of the districts, and changes for the better are evident. Our school houses are all well built, and in good repair, and nearly all well equipped. Our plan to have a joint teachers' association with Park county has been very successful.

#### Teller County-Thera H. Satterlee-1903-1904.

This county has an exceptionally good corps of teachers. The State course of study is closely followed, and the schools well graded. All districts, with the exception of three, are on a cash basis. One addition and one log house have been built during the year, 1904. Our first attempt to convey children to school was inaugurated in September. The schools of the Cripple Creek district have made great improvements during the last year. The enforcement of the compulsory law throughout the county increased the attendance during the first half of 1904. Epidemics among the children during the second term reduced the average attendance, and prevented the year's work being as satisfactory as the first term promised.

#### Washington County-Alta M. Tuttle-1903-1904.

We have a class of energetic, progressive teachers who are alive to the interests of school work. We now have 39 organized school districts, each maintaining school from four to nine months, One new district was organized in 1903, one new school building erected, several school rooms repaired, buildings painted, and a number of trees planted. Four pupils completed the eighth grade, and ten were enrolled in the high school. There is but one high school in the county, at Akron, the county seat. There were fifteen enrolled in this school last year.

#### Weld County-James E. Snook-1903.

Schools show a healthy growth during the past year. Though only one new district was formed, the total enrollment increased from 4,591 to 5,176, requiring 18 more teachers than the previous year. Five new school buildings were completed and used, while four others, including a four-room pressed brick at Eaton, and a fine eight-room grade building at Greeley, will be ready for occupancy this autumn. The length of term in graded schools (two or more teachers) has reached  $178\frac{1}{4}$  days, while the average term in rural schools (of which we have 71) lacks but a fraction of a day of eight and one-half months.

Yuma County-Minnie Cunningham-1903-1904.

Owing to the annexation, in 1902, of a part of Adams county to Yuma county, the number of school districts in Yuma have been increased to 51. A tendency towards uniformity of textbooks in the county is growing steadily. School officers, teachers and patrons have given most hearty co-operation in every effort to improve the schools of the county. The number of schools and the length of terms have increased. A great interest was

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manifested in the four meetings of the Teachers' Association, held in 1904, not only by the teachers, but also by the patrons. Thirteen districts have libraries, and an effort is being made to place libraries in more of the schools.

#### TWENTY-EIGHTH ANNUAL SESSION, DECEMBER 22, 23, 24, 1902, COLORADO TEACHERS' ASSOCIATION, HIGH SCHOOL, COLORADO SPRINGS, COLORADO.

Officers of General Association—John Dietrich, president, Colorado Springs; James B. Ragan, secretary, Denver; Homer W. Zirkle, treasurer, Denver.

Directors—F. H. Clark, 1902, Central City; John Dietrich, 1903, Colorado Springs; C. E. Chadsey, 1904, Denver; L. C. Greenlee, clerk of rates, Denver.

Auditors—J. B. Garvin, 1902, Denver; E. C. Elliott, 1903, Leadville; F. J. Brownscombe, 1904, Aspen.

Officers of Reading Circle—Mrs. Helen L. Grenfell, chairman; J. H. Hays, 1902, Greeley; B. O. Aylesworth, 1903, Fort Collins; J. E. Snook, business manager, Greeley.

Monday, December 22.

#### General Association, 2 P. M.

1. Invocation—W. F. Slocum. 2. Music—Chorus of pupils from the grades, Madelene Kennedy, director. 3. Reading minutes of previous meeting. 4. President's address. 5. Announcements. 6. Appointment of committees. 7. Election of fourteen nominators.

#### Program.

8. Piano Solo—Kamennoi Ostrow—Rubenstein—A. C. Pearson, director of chorus work, High school, Colorado springs. 9. The Spirit of Modern Education, Grace E. Shoe, North Side High school, Denver. 10. The School and Juvenile Deliquency—Hon. Ben B. Lindsey, judge of Arapahoe County Court. General discussion. 11. Report on Educational Progress—D. R. Hatch, E. C. Elliott and A. H. Dunn, committee.

#### FOURTEENTH BIENNIAL REPORT

#### Monday, December 22.

#### Institute for the Deaf and Blind.

General Association, 8 P. M.

1. Report on Constant and Variable Factors in High School Course—W. H. Smiley, E. L. Mason and H. H. Hart, committee. General discussion. 2. Program by students of the Institute for the Deaf and Blind. 3. Reception to members of the association by the trustees and faculty of the Institute for the Deaf and Blind.

#### TUESDAY, DECEMBER 23.

#### Child Study Section, 9:30 A. M.

F. H. Clark, president; Mary Darley, secretary.1. Announcements. 2. Selection of committees.

#### Program.

3. The Attitude of Children Towards the Truth—T. R. Croswell, principal training department State Normal School. 4. Discussion—Opened by Emma Black. 5. The Present Status of Child Study and Its Practical Value in the Schools—D. E. Phillips. Discussion.

#### TUESDAY, DECEMBER 23.

#### Science Section, 9:30 A. M.

Charles W. Comstock, president; Edward L. Brown, secretary, principal North Side High School, Denver.

Program.

1. Announcements. 2. Selection of committees.

3. President's Address—C. W. Comstock, civil and mining engineer. 4. Non-Euclidean Geometry—Arnold Emsch, assist ant professor of mathematics, University of Colorado. 5. Observations on the Forms of Snow Crystals—John C. Shedd, professor of physics, Colorado College. 6. The Approach of Comet Perrine (1902b) to Mercury—Charles J. Ling, instructor in physics, Manual Training High School, Denver. 7. Suggestions in Presenting Nature Study—H. L. Shantz, instructor in biology, Colorado College. 8. Physics in High Schools—A plea for simpler and better work—F. L. Abbott, professor physical science. State Normal School, Greeley, Colorado. 9. Subject for Dis cussion—Present Relations of English and Science Courses in High Schools.

#### TUESDAY, DECEMBER 23.

#### Psycho-Manual Section, 9:30 A. M.

S. M. Hadden, president, State Normal School, Greeley; Theodosia G. Ammons, secretary, State Agricultural College, Fort Collins.

1. Announcements. 2. Selection of committees.

#### Program.

3. Paper—Essentials in Public School Drawing—Emily H. Miles, supervisor drawing, District No. 1, Denver, Colo. 4. Paper—Why I Wish to Have Manual Training Introduced in the Schools Under My Charge—Edward C. Elliott, superintendent of schools, Leadville, Colorado. 5. Paper—Science, Not Fads, in Household Economics—Theodosia G. Ammons, department of domestic science, Colorado Agricultural College, Fort Collins, Colorado. 6. Paper—The Evolution of Weaving—Mrs. Bella B. Sibley, training teacher, primary grades; instructor in textiles, Colorado State Normal School, Greeley, Colorado.

#### TUESDAY, DECEMBER 23.

#### 9:30 A. M.

Superintendents' and Principals' Round Table.

Charles E. Chadsey, president, superintendent North Side Schools, Denver; J. W. Hamer, secretary.

1. Announcements. 2. Selection of committees.

#### Program.

Should vacation schools be established in all districts of 3. the first class as a permanent part of the school system? 4. What is the function and importance of the night school? 5. Effect of a shorter college course upon the high school course. 6. Would more effective teaching be secured if high school and grammar school teachers exchanged work occasionally? 7. Should secondary school work begin at the end of the sixth year of school? Advantages and disadvantages of the free text book system. 8. 9. In many schools "none but experienced teachers need apply." Is this a wise provision from the standpoint of the school's efficiency?

#### FOURTEENTH BIENNIAL REPORT

#### TUESDAY, DECEMBER 23.

#### College and High School Section, 2 P. M.

Henry B. Smith, president, High School, District No. 2, Denver; Frances C. McClure, secretary, North Side High School, Denver.

1. Announcements. 2. Selection of committees.

#### Program.

3. The High School and the College—Walter H. Nichols, professor of history, University of Colorado, Boulder. 4. The High School and a Business Career—E. L. Mason, principal High School, Colorado Springs. 5. The High School and Citizenship —C. W. Bigelow, instructor in civics, High School, District No. 2, Denver. 6. The High School and the Home—Mrs. J. H. Baker, Boulder. General discussion. 7. Is a Less Number of Years Advisable in High School or College Courses, Under Any Circumstances?—Dr. W. F. Slocum, president Colorado College, Colorado Springs. 8. Discussion, led by Dr. Z. X. Snyder, president of State Normal School, Greeley, Colorado.

#### TUESDAY, DECEMBER 23.

County Superintendents' Section, 2 P. M.

Grant Ruland, president, superintendent Eagle county; J. E. Snook, secretary, superintendent Weld county. Executive committee—Helen L. Grenfell, Lulu J. White, G. A. Carpenter.

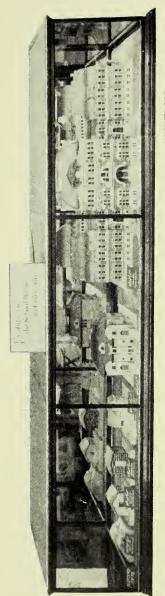
#### Program.

1. How Shall Our School Election Laws Be Improved?—G. E. Colgate, Fremont county. 2. Discussion. 3. The Comparative Value to Our Schools of Teachers of Different Training— Lulu J. White, Pueblo county. General discussion.

TUESDAY, DECEMBER 23.

#### Kindergarten Section, 2 P. M.

Cecilia Adams, president, supervisor kindergartens, District No. 1, Denver; Louise Hodge, secretary, District No. 20, Pueblo. 1. Announcements. 2. Selection of committees.



COLORADO EDUCATIONAL EXHIBIT, LOUISIANA PURCHASE EXPOSITION. EVOLUTION OF THE SCHOOL HOUSE IN COLORADO.

LIBRARY OF THE LIBRARY LIBRARY

#### Program.

3. Music. 4. General Subject—Power of Environment. (a) The Racial Environment of the Child—Z. X. Snyder, president State Normal School, Greeley. (b) The Education of the Subconsciousness—E. G. Lancaster, Colorado College, Colorado Springs. Discussion.

#### TUESDAY, DECEMBER 23.

5:00 p. m. to 6:00 p. m.—Reception to visiting teachers by faculty of Colorado College. 8:00 p. m.—Perkins Hall, Colorado College. 1. Organ Solo—Clarence W. Bowers, piano instructor, Colorado College. 2. Lecture—Subject, Grades of Thinking and Thinking in the Grades—Dr. N. C. Shaeffer, state superintendent of public instruction, Pennsylvania. 3. Songs by College Glee Club.

#### WEDNESDAY, DECEMBER 24.

#### General Association, 9:30 A. M.

#### Program.

1. Vocal Solo-Who'll Buy My Lavender?-German-Mrs. C. G. Garrison. 2. The Bible in the Public Schools of Colorado (Religion and Instruction)-W. W. Remington, superintendent Montclair schools. Outline-I. Historical Resume. 1. The Bible and the church as factors in the founding and development of educational systems. 2. Increased freedom. The church a conservative element. II. Present Tendencies. 1. Decadence of Biblical instruction. Opposition to the same. 2. Recent decisions in Nebraska and Wisconsin. 3. The Constitution and the Patton-Cowles decision in Colorado. 4. What may a Colorado teacher do? III. The Public School Can Not Dispense With Religion in Instruction, Whatever May Be Done With a Formal or Perfunctory Reading of the Bible at Set Times. 3. Discussion-Led by Frank O. Meeker, superintendent Fort Morgan schools, and Mary A. Wilson, Cripple Creek. 4. "The love of things ancient doth argue stayedness, but want of experience maketh apt unto innovations."-Hooker. Paper, by Aaron Gove. superintendent District No. 1, Denver. 5. Questions by members of the association. 6. Report and recommendations of the council. By the president, Arthur Allin. 7. Two Songs-Neidlinger -Mrs. C. G. Garrison. Business session, 11 a.m.

#### WEDNESDAY, DECEMBER 24.

#### General Association, 2 P. M.

#### Program.

1. Piano Solo-Mrs. F. A. Faust. 2. Scientific Temperance Instruction in the Schools-Mrs. A. A. Hawley, state president W. C. T. U., Denver, Colorado. Outline-The security of the nation depends on the intelligence and virtue of its citizens. The study of temperance physiology is closely related to the development of character. Why such teaching is mandatory in the United States. Necessity of such instruction in all grades. When oral instruction is desirable, and why. When use of text books is desirable, and why. Preparation of the teacher. Results from a business standpoint. 3. Discussion-Led by Dr. R. W. Corwin, chief surgeon Colorado Fuel and Iron Company's hospital, Pueblo, Colorado. 4. Symposium on libraries. Definite Plans for Working With Teachers. (a) The Present Conditions and a Plan-Joseph F. Daniels, librarian, State Agricultural College. (b) The State Library as a Department of the Office of Superintendent of Public Instruction-Mrs. Mary F. Miller, state library. (c) What the Teacher Wants from the Library-Cora L. Danielson, Edison School, North Denver. (d) Pictures as Well as Books-Frances Smith, Cripple Creek schools. (e) Technical or Professional Phase of Co-operation-Mabel C. Shrum, librarian, State School of Mines. 5. Piano Solo-Mrs. F. A. Faust. 6. The Things That Hinder and the Things That Help-L. B. Grafton, superintendent Colorado City schools. Discussion-Led by Edgar Kesner, superintendent Salida schools.

#### Meetings of Committees.

Nominating Committee—Tuesday, 5 p. m. To nominate president, director, auditor, and director of state reading circle. Committee on Resolutions—Wednesday, 9 a. m. Committee on Necrology—Wednesday, 9 a. m. Auditing Committee—Wednesday, 9 a. m.

#### COLORADO TEACHERS' ASSOCIATION, DECEMBER 28, 29, 30, 31, 1903, EAST SIDE HIGH SCHOOL, DENVER, COLORADO.

Officers of General Association—F. H. Clark, president, Central City; W. W. Remington, secretary, Denver; Homer W. Zirkle, treasurer, Denver.

Directors—John Dietrich, 1903, Colorado Springs; C. E. Chadsey, 1904, Denver; G. A. Carpenter, 1905, Del Norte; L. C. Greenlee, clerk of rates, Denver.

#### SUPERINTENDENT OF PUBLIC INSTRUCTION.

Auditors—J. S. McClung, 1903, Pueblo; J. B. Garvin, 1905, Denver.

Officers of Reading Circle—Mrs. Helen L. Grenfell, chairman; B. O. Aylesworth, 1903, Fort Collins; J. H. Hays, 1904, Greeley; J. E. Snook, business manager, Greeley.

#### Monday, December 28.

#### General Association, S.P. M.

1. Invocation—H. A. Buchtel. 2. Music—By the College of Music, University of Denver. 3. Reading Minutes of previous meeting. 4. President's Address—The Influence of the Teacher in the Making of History, F. H. Clark, Superintendent of Schools, Central City. 5. Announcements. 6. Appointment of Committees—(a) Committee on Necrology, 3; (b) Committee on Resolutions, 3. 7. Election of fourteen nominators.

#### TUESDAY, DECEMBER 29.

#### Child Study Section, 9:30 A. M.

D. R. Hatch, principal Hyde Park school, Denver, president; Elizabeth Patton, Colorado Springs, secretary.

1. Announcements. 2. Selection of Committees. (a) Two Nominators. (b) Special committees.

#### Program.

3. How Child Study Aids the Teachers, Mrs. M. L. Ashton, Colorado Springs. 4. The Child, E. Maud Cannell, State Normal School; Discussion, J. F. Daniels, Fort Collins. 5. Physical Abnormalities and Mental Defects, M. F. Miller, Fort Collins. 6. Discussion, Miss Zella Kindall, Denver.

TUESDAY, DECEMBER 29.

#### Science Section, 9:30 A. M.

E. Waite Elder, East Side High School, Denver, president; John Cutler Shedd, Colorado College, Colorado Springs, secretary.

1. Announcements. 2. Selection of Committees (a) Two Nominators; (b) Special Committees.

#### Program.

3. President's Address—E. Waite Elder, East Side High School, Denver. 4. Paper—The Making of a Scientist, D. T. A. Cockeral, Colorado College. 5. Paper—Radium, H. V. Kepner, Manual Training High School, Denver. 6. Paper—Plant and Animal Ferments and Their Relation to Life, C. E. Schneider, Colorado College. 7. Paper, with practical demnostration— Wireless Telegraphy, W. P. Carstarphen, Jr., Denver.

#### TUESDAY, DECEMBER 29.

Superintendents' and Teachers' Round Table, 9:30 A. M. L. B. Grafton, superintendent schools, Colorado City, president; O. J. Blakesley, superintendent schools, La Junta, secretary. 1. Announcements. 2. Selection of Committees.

#### Program.

3. Manual and Industrial Education, and the Introduction of Gardening in the Rural Schools. 4. School Room Decoration. 5. The Teaching in Emphasis of Ethics Through Literature, opened by Principal Scott, Colorado Springs. 6. What Are the Essentials of an Orthodox Pedagogical Creed? 7. Special Pro-motions and Demotions—When? By Whom? On What Basis? 8. How Much Freedom Should Be Given the Individual Teacher? 9. President Elliott is alleged to have said that the public schools of this country are not accomplishing one-sixth of what they should. Is this true? If so, what are the causes and remedies? Opened by Dr. Snyder, Greeley. 10. What Can be Done to Give Pupils a Better Use of English? 11. With Supplementary Reading in Literature, Geography and History, How Far Should the Class be Confined to the Basic Work and How Much Freedom in the Use of the Supplementary Materials? 12. Are We Educating for the Sake of the Industries and the Professions? Opened by Nellie Love Baldwin, La Junta. 13. In High Schools Giving Four-year Courses, Should the School Authorities Permit a Commercial Course Requiring Any Less Time to Complete? 14. Does Physical Drill Given During School Hours Secure the Desired Mental Relaxation? Opened by Superintendent Shafer, Cripple Creek.

#### TUESDAY, DECEMBER 29.

#### Kindergarten Section, 9:30 A. M.

Margaret G. Grabill, president; Carrie L. Richards, District 20, Pueblo, secretary.

1. Announcements. 2. Selection of committees.

#### Program.

3. Violin Solo—"Romance" (Wieneoski), Miss Edith Sindlinger, Denver. 4. Paper—The City Kindergarten, Miss Margaret Giddings, Denver. 5. Paper—The Settlement Kindergarten, Miss Mary Masen, Chicago. 6. Paper—The Camp Kindergarten, Miss Mabel Milligan, Sopris. 7. Vocal Solo—"In Dreamland" (Julian Jordan), Miss Katharine Nichols, Chicago.

TUESDAY, DECEMBER 29.

#### General Association, 2 P. M.

Program prepared by Fred L. Paddelford, Golden.

A. Industrial Schools.

1. Cornet Duet—"Nearer, My God, to Thee," Byron Linton and Franklin Jones. 2. Address—The Neglected and Perverted Girl, Miss Emma Page, superintnedent Industrial School for Girls. 3. Song—"The Ninety and Nine," George Billings. 4. Address—The American Boy, "Handle With Care," Fred L. Paddelford, superintendent Industrial School for Boys. 5. Cornet Solo—"My Old Kentucky Home," Franklin Jones. 6. Display of work. B. The Arts-Crafts, State Normal School.

#### 8:00 P.M.

Lecture, Assembly Room—W. W. Stetson, superintendent of public instruction, Augusta, Maine. Music in charge of Mr. W. J. Whiteman, supervisor of music, Denver.

#### WEDNESDAY, DECEMBER 30.

#### College and High School Section, 9:30 A. M.

Barton O. Aylesworth, president Agricultural College, Fort Collins, president; Grace E. Shoe, North Side High School, Denver, secretary.

1. Announcements. 2. Selection of committees.

#### Program.

3. The Perry Movement. (a) As to the Secondary School, Orville Price, West Side High School, Denver. (b) As to the College, Florian Cajori, Colorado College, Colorado Springs. 4. Discussion. 5. Some Aspects of the Present Educational Situation, Dr. Sanford Bell, University of Colorado, Boulder. 6. Discussion. 7. Practical and Definite Aims in High School Instruction, H. M. Barrett, Central High School, Pueblo. Discussion.

#### WEDNESDAY, DECEMBER 30.

#### County Superintendents' Section, 9:30 A. M.

W. C. Thomas, Boulder, president; Thera H. Satterlee, Cripple Creek, secretary.

Executive Committee—Helen L. Grenfell, James E. Snook, Mary Lyon.

1. Reading of minutes of previous meeting. 2. Appointment of committees by president. 3. Announcements.

#### Program.

4. The Relation of the County Superintendent to Higher Educational Work, Dr. D. E. Phillips, University of Denver. 5. Discussion. Superintendent Mary E. Gill, Larimer county. 6. Round table discussions; five minutes presentation of topics by leaders; ten minutes for discussion of each topic. (a) Our Compulsory Education Law, as Recently Amended, Superintendent Z. B. McClure, Mesa county. (b) The Work of Traveling Libraries, Superintendent Mary C. C. Bradford, Adams county. (c) Recipe for Managing School Boards, Superintendent May A. Georgia. Elbert county. (d) Some Suggestions Concerning County Examinations, Superintendent Ida Kruse, Gilpin county. (e) How I Visit Rural Schools, Superintendent Minnie Cunningham. Yuma county.

#### WEDNESDAY, DECEMBER 30.

#### Arts and Crafts Section, 9:30 A. M.

C. Valentine Kirby, Manual Training High School, Denver, president; M. W. Hull, manual training, Pueblo, secretary.

1. Announcements. 2. Selection of committees.

#### Program.

3. Manual Work in Rural Schools, Miss Mary Richards, Pueblo. 4. General discussion. 5. Imitation Stained Glass Windows, illustrated, Charles M. Carter, supervisor of art instruction, Denver. 6. General discussion. 7. Manual Training as a Preventative of Delinquency, Judge B. B. Lindsey, Denver. General discussion.

#### WEDNESDAY, DECEMBER 30.

#### General Association, 2 P. M.

1. Sociology Through History and Literature, J. Bruce Mather, North Side High School, Denver. 2. The Weakest Point in the American School System, Helen L. Grenfell, Superintendent of Public Instruction, Colorado. 3. The Marking System and Pupils' Reports, J. F. Keating, superintendent, Pueblo.4. Discussion, led by Katherine Wright, principal, Colorado Springs.

#### WEDNESDAY, DECEMBER 30.

8:00 P. M.—Assembly room.

Entertainment and reception by the Denver Teachers' Club. Music by Mr. Herbert Griggs, with Teachers' Chorus Club.

THURSDAY, DECEMBER 31.

#### General Association, 9:30 A. M.

1. High School Rhetoricals and Contests, Loring D. Beckwith, principal High school, Monte Vista. 2. Discussion, led by Fred A. Howe, University of Colorado, Boulder. 3. Discussion, topics selected and announced by the speakers. Principal Charles Edwin Carter, Greeley; Mrs. C. E. Dickinson, Denver; Professor A. B. Hyde, University of Denver; Mrs. A. J. Fynn, Denver; Superintendent J. P. Treat, Trinidad; County Superintendent J. E. Snook, Greeley.

#### 11:00 A. M.—Business Session.

4. Announcements. 5. Report of nominators. 6. Election of officers. 7. Consideration of recommendations of the educational council. 8. Report of committee on necrology. 9. Report of committee on resolutions. 10. Report of treasurer. 11. Report of auditing committee. 12. Unfinished business. 13. New business.

#### 2 P. M.

1. Games for the Play Ground and Their Influence, Geo. L. Hess, superintendent of schools, Las Animas. 2. Discussion, led by A. D. Hoenshel, principal of High School, Georgetown. 3. Standards of Honor Among Pupils, John B. Garvin, East Side High School, Denver. 4. Discussion. (a) From the standpoint of the grades, Mary Stewart, principal of High school, Longmont. (b) From the standpoint of the high schools, Wm. J. Truesdale, superintendent of schools, Manitou. (c) From the standpoint of the college.

#### ANNUAL MEETING OF THE SUPERINTENDENTS' AND PRINCIPALS' ROUND TABLE, COLORADO TEACHERS' ASSOCIATION, DENVER, APRIL 3 AND 4, 1903.

L. B. Grafton, president, Colorado City; O. J. Blakesley, secretary, La Junta.

DISCUSSION.

1. Parents' Meetings—Dr. Lancaster.

2. Home Work for Pupils in Grammar Grades—Principal Stott.

3. Social Life of Pupils as Conflicting With School Duties —Superintendent Dietrich.

4. Spelling—How Much Written, How Much Oral?

5. Do Our Methods of Teaching Lay Sufficient Stress On the Emotional Side of the Child's Life?—Dr. Snyder.

6. Grammar Grade and High School Rhetoricals.

7. How Estimate a Teacher's Capability or Efficiency?— Superintendent Copeland.

8. Under What Circumstances Is It Wise to Suspend a Pupil?

9. How Can a Superintendent, in Towns of 10,000 People and Under, Best Help His Teachers?—Superintendent Chadsey.

10. The Value and Importance of Good Memory Selections.

11. On What Basis Should Promotions Be Made?

12. What Is the Average Grade Teacher Doing to Obtain a Better Mastery of English?

13. Self-Government of Pupils—Is It Practical?—Dr. Callahan.

14. In Teaching Do We Lay Sufficient Stress on Repetition, Imitation and Habit?

15. To What Extent Can Civics and History be Taught in the Grades?

16. The Bible in the Public Schools.

17. Do Teachers Help Their Pupils Too Much?

18 What Kind of Language Work Will Yield the Best Results in the Second, Third and Fourth Grades?

19. How Use Library to Get Most Out of It for Pupils?— Mr. Barrett.

20. Freedom of the Teacher.

21. Shall Commercial Work Be Part of a High School Course?—Principal Brown, Principal Hart.

22. Some First-Year High School Problems.

23. To What Extent Shall We Discuss Social and Political Questions in General Exercises or in Classes?—Superintendent Keating.

24. Does the High School Play Too Much in the Hands of Colleges?

25. Should Not High Schools Do More General Chorus Work—More Singing for Pleasure?

26. Advantages and Disadvantages of Vertical Writing-Can It Be Written Rapidly?

#### EDUCATIONAL COUNCIL OF THE COLORADO THE TEACHERS' ASSOCIATION, MEETINGS, 1903.

#### DENVER, APRIL 3, 4, 1903.

Topics-The Function of the Educational Council in Iniating Legislation; The Bible in the Public School; The Parental or the Juvenile Court, Which Will Be Better? Student Rowdyism; Pensions for Teachers.

DENVER. OCTOBER. 23, 1903.

Topics-Student Rowdvism-Report of committee; By-Laws and Amendments to the Constitution of the Association.

#### DENVER, DECEMBER, 28, 1904.

Topics-School Fraternities; School Legislation; How Far Is Religious and Ethical Instruction Incident to Class Room Work? Report of Committee on Student Rowdvism; Should the Civil Law Be Appealed to in Cases of School Misdemeanor and Crime?

PUEBLO, MARCH 31 AND APRIL 1, 1904.

W. M. Shafer, Cripple Creek, president; A. N. Thompson, Colorado Springs, secretary.

#### DISCUSSION.

1. Of What Value Is the Formal Side of English, and How Shall We Teach It?—E. S. Parsons.

2. Should Good-written English Be Made An Indispensable **Requisite to High School Graduation?** 

3. Can the Public Schools Do More to Secure the Use of Good English by the People?

4. Are High School Pupils Overworked ?-G. E. Meyers.

5. How Can We Hold Our Boys and Girls in the High Schools?-Charles Lorv.

6. What Are the Teacher's Civic Duties?

7. How Can We Bring the Public to a More Conservative and Appreciative View of Public School Work?

8. Teachers' Meetings; Parents' Meetings; Relation of Home and School.

9. What Is the Best Remedy for the Lawless Tendency in School Life?

10. Where Is the Responsibility for the Prevailing Spirit of Lawlessness?

11. What Is the Value of Trade Schools for Grade Pupils? 12. Eighth Grade Work With Reference to High School Preparation—P. L. Clark.

13. Do Modern Social Conditions Require that the Child Be Under the Care of Specialists for a Longer Time of the Year?

14. The Mentally and Physically "Short" Children—What Shall We Require of Them?

15. What Is Religion? What Is Morality? Are They Identical? Can One Exist Without the Other?

16. Are We Teaching Morals as Thoroughly as We Should?

17. What Can Be Done to Increase Teachers' Salaries?—L. B. Grafton.

18. The Merit System as Applied to Our Branch of Public Service.

19. What Is the Best Way to Select Teachers?

20. Examinations Below the High School.

21. The Relation of Discipline to Teaching.

22. Feminization of the Schools.

23. University of Colorado's Entrance Requirements—E. F. Dyer.

24. Do Our Methods of Teaching Lay Sufficient Stress Upon the Emotional Side of the Child's Life?

25. How Can We Best Extend the Privileges of the Public Schools? (a) Evening Schools. (b) Free Lectures. (c) Play Grounds.

### COUNTY SUPERINTENDENT'S ASSOCIATION. ANNUAL MEETINGS.

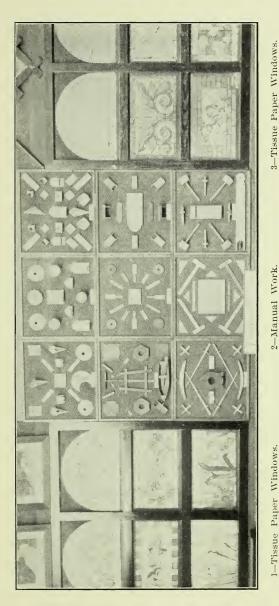
#### PUEBLO, MAY 12, 13, 14, 1903.

Officers—President, Superintendent Grant Ruland, Eagle: Vice-President, Superintendent Minnie Holaday-Rathmel, Ouray; Secretary, Superintendent J. E. Snook, Weld; Treasurer, Superintendent Mary E. Gill, Larimer.

Executive Committee—State Superintendent Helen L. Grenfell, Denver; Superintendent Lulu J. White, Pueblo; Superintendent G. A. Carpenter, Rio Grande.

#### TUESDAY, 2:30 P. M.

Music. Roll call. Reading of minutes. Address of welcome. Superintendent Lulu White, of Pueblo. President's address. Superintendent Grant Ruland, of Eagle. Appointment of commit-



COLORADO EDUCATIONAL EXHIBIT, LOUISIANA PURCHASE EXPOSITION. DENVER, FOURTH, FIFTH AND SIXTH GRADES.

#### LIBRARY OF THE OF THE VIVVERSITY OF ILLINOIS

tees. Report upon recent school legislation, Legislative committee.

#### TUESDAY, 8 P. M.

Illustrated Lecture—Industrial Training in the Public Schools, Dr. R. W. Corwin, of Pueblo.

#### WEDNESDAY, 9:30 A. M.

Round Table—Leader, Hon. Fred Dick.

1. The Use and Abuse of School Houses. 2. Should the School Curriculum Be Pruned or Allowed to Expand? 3. How May We Enforce the Use of the State Course of Study? 4. The Duty and Powers of the County Superintendent in Enforcing School Laws. 5. Topic to be selected by members present at meeting.

#### WEDNESDAY, 2 P. M.

Town and Rural Schools. Paper—How Shall Each Meet the Wants and Comply With the Demands of the Other? Superintendent Edith B. M. Young, La Plata. Discussion, Superintendent Mary E. Lyon, Otero. Paper—How May We Better Fulfill the Law Requiring Instruction Concerning Humane Treatment of (Animals? Superintendent G. W. Irvin, Conejos. Discussion, Superintendent Edith M. Bailey, Pitkin. Question Box.

#### WEDNESDAY, 6:30 P. M.

Dinner served by pupils of Domestic Science Department of School District No. 20. Address, Superintendent J. S. McClung, District No. 1, Pueblo. Address, Superintendent J. F. Keating, District No. 20, Pueblo.

#### THURSDAY, 9:30 A. M.

Paper—Consolidation of Rural School Districts, Superintendent J. A. Rosebrough, Prowers. Discussion, Superintendent W. E. Gardner, Saguache. Paper—Colorado's School Exhibit at the World's Fair, Superintendent Mayme Remington, Park. Discussion, Superintendent E. I. Thompson, Lincoln. Business meeting.

#### GLENWOOD SPRINGS, MAY 10, 11, 12, 1904.

Officers—President, Superintendent W. C. Thomas, Boulder; Vice-President, Lulu J. White, Pueblo; Secretary, Thera H. Satterlee, Teller; Treasurer, W. E. Gardner, Saguache.

Executive Committee—State Superintendent Helen L. Gren fell; Superintendent Mary E. Lyon, Otero; Superintendent James E. Snook, Weld.

#### TUESDAY, 2:30 P. M.

Music. Address of welcome, Dr. M. H. Dean, Glenwood Springs. President's address, W. C. Thomas, superintendent Boulder county. Roll call. Appointment of committees. Music.

#### TUESDAY, 8 P. M.

Music. Lecture—Environment, Frank H. H. Roberts, Ph. D., University of Denver. Music.

#### WEDNESDAY, 9:30 A. M.

Music. Round Table—Leader, Lucy E. DeWitt, superintendent Garfield county. Part 1.—The "Appeal" Sent Out By the Educational Council. Part 2.—1. Our Present Compulsory Law. 2. Consolidation of Schools. 3. Suggestions for the Improvement of Our Normal Institutes. (All are expected to freely take part in these discussions.)

#### WEDNESDAY, 2:30 P. M.

Music. Paper—The Social Obligations of the County Superintendent, Florence N. Sargent, superintendent Bent county. General discussion. Paper—The Work of Rural School Room Decoration, Lulu J. White, superintendent Pueblo county. General discussion. Paper—The Village School. Superintendent F. J. Dollinger, Glenwood Springs. Music.

#### WEDNESDAY, S P. M.

Reception at Hotel Colorado, given by the ladies of the Glenwood Reading Club.



COLORADO EDUCATIONAL EXHIBIT, LOUISIANA PURCHASE EXPO-SITION. MANUAL WORK-STATE NORMAL SCHOOL, GREELEY.

#### LIBRARY OF THE UNIVERSITY OF ILLINOIS

#### THURSDAY, 9:30 A. M.

Business Meeting—Reading minutes. Election of officers. Reports of committees. Discussion of work of committee on re-codification of the School Law.

#### THURSDAY, 2:30 P. M.

Music. Paper—Silent Influences in Character Building, Grant Ruland, superintendent Eagle county. General discussion. Paper—Minnie Holaday-Rathmel, superintendent Ouray county. General discussion. Address—Senator Edward T. Taylor, Glenwood Springs. Music.

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# LIST OF ILLUSTRATIONS



#### LIST OF ILLUSTRATIONS.

Agricultural College, Ft. Collins, Auditorium. Agricultural College, Electrical Engineering and Central Heating Plant. Alice School House, District No. 19, Clear Creek county. Colorado Educational Exhibit, Louisiana Purchase Exposition: Colorado Springs, Manual Work and Photographs. Denver, 4th, 5th and 6th grades, Manual Work. Denver, 4th, 5th and 6th grades, Tissue Paper Windows. Denver, 8th grade, Carved Boxes. Evolution of the School House in Colorado. Facade of Pavilion. Pueblo District No. 20, Manual Work, Cabinets of Drawings, Reading Corner Colorado Dailies. State Normal School, Manual Work. Denver: Clayton School. Elmwood School. Manual Training High School. Eaton Grade School. Eaton High School. Florence, Emerson School. Fountain, El Paso county, School. Ft. Collins High School. Howard School, District No. 37, Fremont county. Idaho Springs High School. Morrison, Jefferson county, School. Normal School Building, Greeley. Normal School, Greeley, President's Residence. State School of Mines, Golden, Stratton Hall. Sunshine School, District No. 28, Boulder county. Trinidad, Columbian School. Trinidad, Park School. Union High School, Granada, Prowers county. University of Colorado, Engineering Building. University of Colorado, Library.

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