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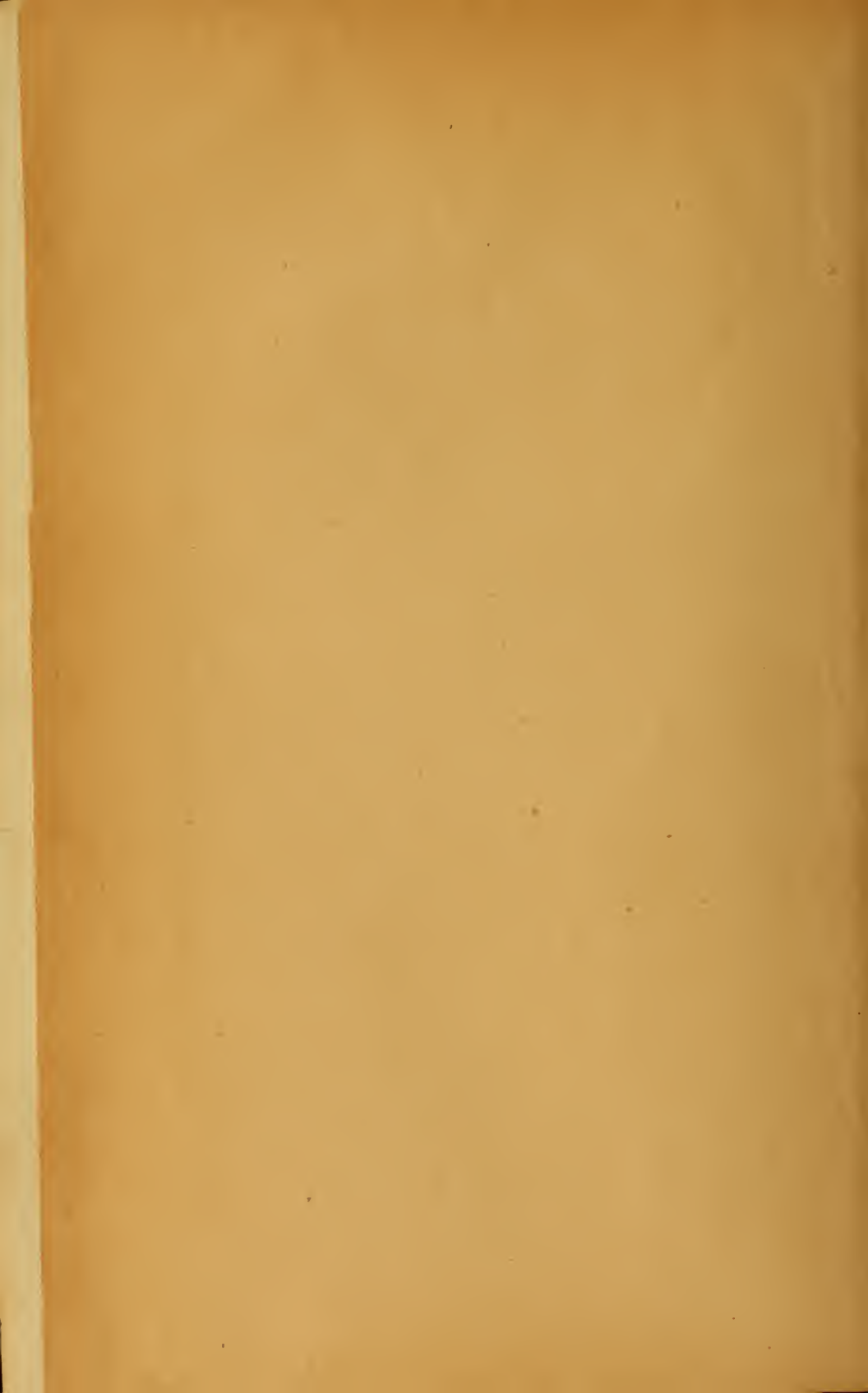
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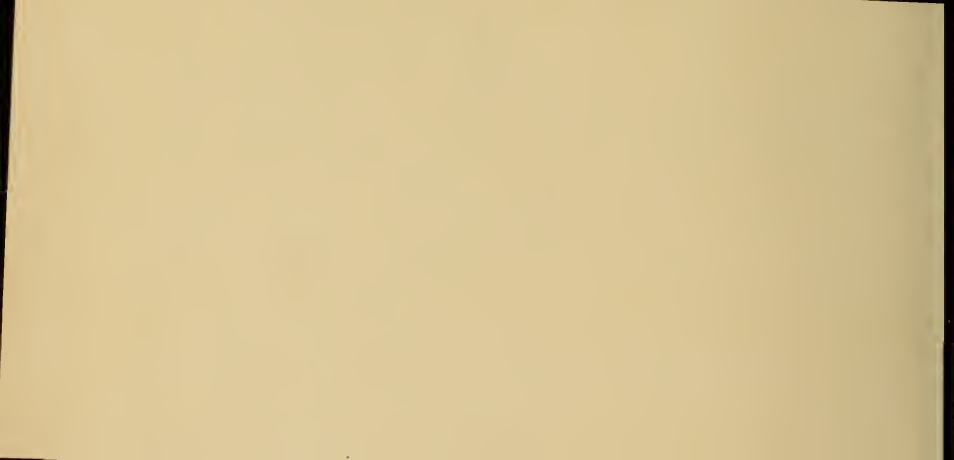
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Nathan B. Coy,

Superintendent of Public Instruction.



EIGHTH BIENNIAL REPORT

OF THE

SUPERINTENDENT

OF

PUBLIC INSTRUCTION

OF THE

STATE OF COLORADO

DECEMBER, 1892.



DENVER, COLORADO:
THE SMITH-BROOKS PRINTING CO., STATE PRINTERS
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Letter of Transmittal.

STATE OF COLORADO,
DEPARTMENT OF PUBLIC INSTRUCTION. }
DENVER, NOV. 15, 1892.

TO HIS EXCELLENCY,
JOHN L. ROUNTT,

Governor of the State of Colorado:

SIR—I have the honor to submit herewith the Eighth Biennial Report of the Department of Public Instruction for the two years ending June 30, 1892.

Very respectfully, your obedient servant,

NATHAN B. COY,
Superintendent of Public Instruction.

1892



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State Board of Education.

1891-1893.

NATHAN B. COY,
SUPERINTENDENT OF PUBLIC INSTRUCTION.

EDWIN J. EATON,
SECRETARY OF STATE.

JOSEPH H. MAUPIN,
ATTORNEY GENERAL.

1893-1895.

JOHN F. MURRAY,
SUPERINTENDENT OF PUBLIC INSTRUCTION.

NELSON O. McCLEES,
SECRETARY OF STATE.

EUGENE ENGLEBY,
ATTORNEY GENERAL.

ERRATA.

PAGE.

- 43, line 30, for "approved" read apportioned.
145, " 29, preface paragraph with, Later the following:
178, " 4, for "Trumbull" read Turnbull.
205, " 15, add Election Day in November.
228, " 20, after "Jackson" insert (elect).
239, " 19, for "J. B." read J. P. Jackson.
294, " 35, for "(music)" read (Minn.)
441, " 5, for "E. T." read C. T. Work.
448, " for "H. W." read N. M. Fenneman.
450, " 21, for "W. S." read J. W. Lawrence.
546, " 29, for "for" read from.
547, " 16, omit "aspem".
547, " 30, for "compressed" read compound.
549, " 22, for "voted" read noted.
549, " 24, for "Dous glassii" read Douglasii.
582, " 15, for "B. T." read B. S. La Grange.
664, " 28, for "J. C." read I. C. Dennett.
793, " 15, for "Berlick" read Burdick.
803, " 18, for "Gillith" read Gillette.



Report of the Superintendent of Public Instruction.

GROWTH OF THE PUBLIC SCHOOL SYSTEM.

The Colorado school system is of recent growth. Less than a generation has passed since the first legislative assembly of the territory, at Denver, in 1861, passed the first school law, which provided, among other things, for the appointment by the Governor of a "Territorial Superintendent of Common Schools." Scarcely is the period of a young man's majority covered, since the first report to which any value attaches was published in 1871; while the period under State Constitution corresponds to the years of a mere strippling. During this short time, however, a system of common schools has been developed, complete in all essential details and ranking well with those of the oldest and best experienced states. The excellence of the system is attested by the average ability of the officers and teachers connected therewith, by the superior rank of the graduates in the leading educational institutions of the east and by the recognition paid the State's foremost educators in national educational councils. The strides by which this growth has been attained are shown in a series of statistical tables, running back to the beginning of systematic, progressive development in 1871. The commemorative period which the nation is celebrating, and in which education is playing so important a part, would seem to justify the introduction of these summaries in this report.

TWENTY-ONE YEARS' GROWTH, 1871-1892.

From 1871 to 1892, the number of persons of school age increased 1,270 per cent.; enrollment, 1,658 per cent.; number of school districts, 748 per cent.; number of school houses, 1,625 per cent.; value of school houses and property, 6,419 per cent.

1877-1892.

Equally interesting will be found the evidences of growth during the period of statehood. Increase in number of persons of school age, 390.9 per cent.; enrollment, 444.1 per cent.; average daily attendance, 488.8 per cent.; number of school districts, 333.5 per cent.; number of school houses, 528.5 per cent.; value of school houses and property, 1,050.5 per cent.

EIGHTH BIENNIAL PERIOD, 1890-1892.

But it is the special intent of this report to set forth the present status of our schools, noting in particular the progress of the past two years.

Unusual activity and expansion mark this short period. Beginning with elementary instruction and extending to higher education, the growth has been symmetrical. The roots of the system have penetrated into deeper soil, while the branches have expanded into higher atmosphere. Public interest, which has been more general, has been for the most part intelligent and helpful. Especially has the support of the press been strong and enlightened. It cannot be charged that material things claim the exclusive attention of the people. Loyalty to the common schools is well nigh universal. All classes unite in ascribing to careful mental and moral training the State's best development and surest guaranty of safety.

THE STATISTICAL TABLES.

The numerical evidence of growth is to be found in the statistical tables following.

These tables are prepared from the annual reports of the county superintendents, fifty-five in number, on

blanks furnished by the Department of Public Instruction. The county superintendents derive their data from the records of the (nearly) fourteen hundred district secretaries who, in turn, are dependent largely on the (approximately) twenty-seven hundred teachers in charge of the schools. Every item of the county superintendents' reports was subjected to the closest scrutiny for correction or verification after reaching the State Superintendent's office. That this was no small undertaking will be appreciated, when it is stated that there are forty-two such items for each school district and thirty-five in the summary of each report. Rarely is a report without error, while some are faulty in every item.

SCHOOL HOUSES.

The increased *value* of school houses and school property, amounting to 24 per cent., as compared with 15.7 per cent. in *number* of school houses, indicates a high average of quality. The improvement of country school houses is marked. The new buildings also which have been erected in and around Denver, Golden, Colorado Springs, Pueblo, La Junta, Durango, Grand Junction, etc., are all superior. The average value of school houses in Colorado (including site, furniture, etc.) is \$3,949.13. According to the Report of the United States Commissioner for 1888-9, the average value of each building, including site, furniture, etc., in the entire United States, is \$1,495. The amount expended for sites, buildings, etc., in this State is 29.94 per cent. of the total expenditure; in the United States, it is 22.5 per cent. About 53 per cent. of Colorado school houses are frame, 16 per cent. brick, 15 per cent. log, 5.8 per cent. adobe, 5.4 per cent. sod, 4.2 per cent. stone, and a few are dugouts.

ENROLLMENT AND ATTENDANCE.

While the total school population has increased 11.5 per cent. during the past two years, the total enrollment has increased 17 per cent., and the average daily attendance 23 per cent. This is verified by comparing the increased expense per capita of school population,

13.6 per cent., with that of enrollment, 9.3 per cent., and of daily attendance, 6.8 per cent. In the same way other items could be cited in verification. It has been found upon investigation that the percentage of enrollment and attendance has improved since the passage of the Compulsory Education Act. Better enrollment is found in graded than in ungraded schools: the increase being 26 per cent. and 3.8 per cent., respectively. The increased enrollment in high schools was 38 per cent. The proportion of high school enrollment to whole number enrolled is 3.12 per cent.; in the United States it is 4.5 per cent.

EXPENDITURES AND RECEIPTS.

The large increase in total expenditures (30.3 per cent.) as compared with the increase in total receipts (18 per cent.) may be accounted for in great part by the large investments in permanent school property.

The decrease in the amount of State fund appropriation (18.1 per cent.) is due to the reduction of the public school income fund, by reason of the unremunerative character of a large part of the investment.

TEACHERS.

The ratio of male to female teachers has been steadily diminishing in this State for many years. This is true of the entire United States, also, and is justly viewed with concern. But the proportion in Colorado (25 per cent. of the whole number) is less than in the entire United States (34.5 per cent. of the whole number). The ratio in Colorado in 1877 was as 233 to 297; in 1882, as 270 to 630; in 1887, as 344 to 1,046; in 1892, as 665 to 2,088. This diminishing ratio has taken place notwithstanding the fact that during the same period the average wages of male teachers have increased 38.2 per cent., while those of female teachers have increased only 7.4 per cent. The quarterly examinations for teachers' certificates show a higher scholarship among the female applicants than among the male.

A preference for women as teachers for ungraded schools is indicated by an increase of average monthly

salary amounting to 6.9 per cent. as contrasted with only 3 per cent. for men. In graded schools the reverse is true although not to the same degree. The average monthly salary of men increased 3.23 per cent., that of women only .6 per cent. It is thus plainly evident that satisfactory male teachers are more difficult to obtain than female teachers. The amount paid for teachers' wages in this State is 44.72 per cent. of the total expenditure; in the United States it is 66 per cent.

GRADED AND UNGRADED SCHOOLS.

Of the whole number of pupils enrolled in the public schools of the State (76,647), 62.9 per cent. are enrolled in graded schools; 37.1 per cent. in ungraded. On the other hand, the number of teachers in graded schools is 36.6 per cent of the entire number; in ungraded schools, 63.4 per cent. In other words, 62.9 per cent. of the pupils enrolled are taught by 36.6 per cent. of the teachers, while 37.1 per cent. of the pupils are taught by 63.4 per cent. of the teachers. That is, the average number of pupils taught by one teacher in graded schools is 47.8, in ungraded 16.3.

The average length of the school year in graded schools is 169 days, in ungraded, 118 days.

The estimated cost per capita of enrollment for teachers per year in graded schools is \$11.10, in ungraded is \$15.81, (the estimated total amount paid teachers in graded schools in 1892, \$535,000, as compared with \$450,000 to those in ungraded schools, is accounted for not so much by the difference in average monthly wages as by the number of days taught).

It will thus be seen that little more than one-third the whole number of teachers in the State have the care of a little less than two-thirds the whole number of pupils, during a period of one-half more time and at an estimated per capita cost of about one-third less than is required for the smaller number of pupils, with the larger number of teachers. The greater economy, to say nothing of efficiency, in graded as compared with ungraded schools, is thus pointedly set forth.

STATE COURSES OF STUDY.

The State Manual and Course of Study, adopted by the State Association of County Superintendents, at the meeting in May, 1890, has stood the test of experience admirably. Almost without exception, trial has resulted in enthusiastic adoption. In the appendix to this report, will be found answers from county superintendents, to a circular letter inquiring about their experience with the course. The replies are preponderatingly approving and encouraging. The course is excellently arranged and the suggestions clear, concise and comprehensive. With the exception of minor changes, which experience may suggest from time to time, it is probable that no radical revision of the course will be required for some time to come.

THE COLLEGE PREPARATORY COURSES OF STUDY.

In the appendix will be found the College Preparatory or High School Courses of Study, as formulated by the committee of the State Teachers' Association, 1889, and adopted by the Association in 1891. Many high schools in the State are reported to be working according to the plan with very satisfactory results. The committee, at the meeting of the State Teachers' Association in 1892, wisely decided to postpone further consideration of the courses, until the national committee of ten, appointed at Saratoga, should make its report.

The enrollment in high schools in this State, amounting to 3.12 per cent. of the total school enrollment, emphasized by an increase of 38 per cent. during the past two years, is proof of a commendable interest in higher education.

THE STATE TEACHERS' ASSOCIATION.

This is the representative educational body of Colorado. Organized in 1875, under the leadership of that educational pioneer, Horace M. Hale, its membership embraces teachers of all grades, not only of public but also of private instruction. It reaches a higher point of interest and attendance with each returning annual session. An unusual feature of the meeting in Decem-

ber, 1892, was a half day's session devoted to the reception of the pioneers of Colorado's school work. Addresses were made by the first (territorial) Governor, the first (territorial) Superintendent of Public Instruction and the first teacher of a Colorado public school. The association was found to have outgrown its early organization, and in the future will be managed under a revised constitution and by-laws.

THE COUNTY SUPERINTENDENTS AND THEIR WORK.

The office of county superintendent is no sinecure. The duties, when properly discharged, call for large patience, intelligence, tact and firmness. The office suffers from too frequent changes, due to political causes. One term is scarcely sufficient to give a working acquaintance with the duties of the position. Nevertheless at the election in 1891, sixty per cent. of the incumbents were retired. About fifty per cent. is the rule. It is true that in some instances better men were substituted, but the choice is not always that way. The good ones may be supplanted by their inferiors at the next election. Hap-hazard methods too often prevail, not only in nominating conventions, but at voting booths. Nominations to elective educational offices ought really to be in the hands of the people whose interests are most directly affected, and not at the disposal of whimsical party caucuses. A gratifying feature of the last election was the return for a third successive term of a few superintendents, whose past services justified their retention.

The present body of superintendents is marked by unusual ability and efficiency. Nearly all the members have been teachers at some time, either in Colorado or elsewhere. Some were formerly superintendents in other states, while a few occupied the office previously in this State. The State association, whose transactions at semi-annual gatherings afford instructive and interesting reading, is a most important and valuable organization. The results of its conferences and recommendations for the short period of its existence, since 1889, are abundant and gratifying.

THE STATE NORMAL INSTITUTES.

Four years have passed since the State Normal Institutes were organized on their present active basis. The attendance has increased in two years 76.1 per cent.; the cost 8.2 per cent. There has been advancement also in the spirit and quality of work. The Institutes of 1892 were conducted with marked ability. Some of them profited by the presence as summer sojourners, of men and women eminent in educational and literary circles elsewhere; as Hamilton W. Mabie, of the *Christian Union*; Elizabeth Harrison, of the Chicago Kindergarten College; Professor W. H. Brewer, of Yale University; President E. H. Cook of the National Educational Association; President John W. Cook, of the Illinois State Normal School; Professor T. H. Kirk, Assistant Superintendent of Public Instruction of Minnesota; Professor L. W. Parish, of the Iowa State Normal School, and others.

The value of the Institutes has been demonstrated by the work accomplished. The principal lack is financial. A State appropriation of \$100.00 instead of \$50.00 for each institute district and an examination fee of one dollar (\$1.00) from each candidate for a county certificate would supply the lack. Such a modification of the statutes as will permit this is heartily recommended.

The sentiment prevails that Colorado is too broadly extended and the requirements of different localities too unlike to make a uniform course of study for the Normal Institutes either feasible or desirable. This sentiment is expressed by the following report of a committee appointed by the State Association of County Superintendents at their annual mid-winter meeting, after a thorough discussion of the question:

1. "It is the sentiment of the committee that the work of the State Normal Institutes should be largely professional, embracing methods of teaching and science, philosophy and history of education; and that in no case should it be used as a preparation for examination for teachers' certificates.

2. "The committee recommends that where practicable, the institutes be divided into grades, according

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to the kinds of teachers' work, primary and grammar, and that instruction be suited to the different grades.

3. "It is recommended that each district mark out such a course of work as will best conform to the existing conditions in the district.

4. "It is recommended that two weeks be the limit of the institutes."

NATHAN B. COY,
Z. X. SNYDER,
J. S. EAGLETON,
J. P. JACKSON,
W. C. THOMAS.

STATE TEACHERS' READING CIRCLE.

The State Teachers' Reading Circle is barely on its feet. Inaugurated in 1890 by City Superintendent Eddingfield of Aspen in a paper before the State Teachers' Association, the movement developed into definite shape by the appointment in 1891 of Mr. Eddingfield as secretary and manager, with Nathan B. Coy, Denver, J. P. Jackson, Colorado Springs and James H. Hays, Greeley, as an advisory board. In the books selected for the first year, Page's Theory and Practice and Hale's Lights of Two Centuries, will be found both instruction and inspiration—the latter quite as essential to the teacher as the former. That the circle is warmly welcomed is shown by the large enrollment already secured. The direct outcome of and aid to the Normal Institutes, its aim is to supply material with which to feed during the year the ambition which the spirit of the Institutes is intended to arouse. Intelligent leadership is all important. This should be secured either by the county superintendent himself or by some one designated by him.

KINDERGARTENS.

A marked feature of educational development in this State during the past two years has been the pronounced movement in favor of kindergartens. The strength of the movement is evidenced by the associations formed for the promotion of kindergarten interests,

the prominence given the subject in private and public gatherings, social and political as well as educational, the frequency and earnestness of press editorials in drawing attention to the subject and the number of schools established for the free instruction of children according to the principles of Froebel.

The movement may be said to have had its immediate origin in two important associations in Denver for the promotion of kindergarten intelligence and instruction; one known as the Colorado Kindergarten Normal School, the other as the Denver Free Kindergarten Association. Both associations were incorporated under the laws of Colorado in the spring of 1890, are maintained by private munificence and have under their care and control free schools for the training of children, and normal departments for the training of teachers. A skilled director supervises the entire work of each association, being aided in the childrens' schools by the students of the normal department. There were graduated from the normal departments in the summer of 1892 fourteen young ladies, who received certificates as qualified kindergartners. The combined enrollment at present in the two departments is between eighty and ninety. An association similar to those in Denver was formed at Colorado Springs in the autumn of 1890 and at Boulder in December, 1892; the one at Colorado Springs having a normal or training class of six students, the one at Boulder, as yet, none. A kindergarten normal department has been established this year in the State Normal School at Greeley, in charge of Miss Laura E. Tefft, a graduate of the Pestalozzi-Froebel Haus, Berlin, Germany, and recently of Brooklyn, New York. Graduates from this department will receive a special degree. Miss Tefft has charge also of a kindergarten model department of the State Normal School. The regular students of the Normal School will henceforth receive instruction in kindergarten methods amounting to a six-months' course of study.

There are, connected with and supported by the two Denver associations, twelve *free* kindergartens, with an enrollment of about eight hundred pupils. There is in Denver also, a *free* kindergarten, under the care of the

Sisters of Mercy, which was opened September, 1892, and has an enrollment of nineteen. Other *free* kindergartens in the State are the Froebel Kindergarten at Fort Collins, with an enrollment of one hundred twenty, opened in 1880 as a public school, and ever since maintained as such; at Montclair, a school of fifteen, opened November, 1891 as a part of the public school system; at La Junta, a school of forty-five, founded September, 1888, and since maintained by T. T. Woodruff, a wealthy capitalist, of Boston; at Colorado Springs, connected with the Free Kindergarten Association, a school of forty members started in 1890; at Rouse, a school of sixty members started February, 1892, and supported by the Colorado Fuel & Iron Co.; at Sopris, a school of thirty-four members opened November, 1892, and likewise supported by the Colorado Fuel & Iron Co.; at Boulder, a school of twenty-five, opened September, 1892, under the auspices of the Boulder Free Kindergarten Association, free only to the children of the poor; a class of twenty-seven deaf, and of nineteen blind, at the State School for the Deaf and the Blind, started September, 1891, and a class of about fifty, connected with the model department of the State Normal School, at Greeley, opened September, 1892. For several years, instruction in the Pueblo industrial public schools (District No. 20) has been exclusively kindergarten during the first six months. About one hundred fifty pupils are to-day receiving such instruction in those schools.

There are in Denver private kindergartens, supported by tuition fees from the pupils, including the school of the Misses Allen and Williams, opened in 1881, and having an enrollment of thirty-three; the school of the Misses Field, opened in the autumn of 1891, and having an enrollment of thirty-five; the school of Miss Fay, opened September 1891, and having an enrollment of twenty-one; the school of Mrs. Carter and Mrs. Miller, opened September, 1892, and having an enrollment of thirty; a class of forty-five, at Wolfe Hall, started in 1888; and a class of twenty at Loretto Academy, started in 1892. Outside of Denver the tuition schools include a school of twenty at Colorado Springs, opened in 1890,

under the auspices of the Colorado Springs Free Kindergarten Association, and the school of Miss Wickard, numbering thirty members, also started in 1890; at Aspen, Miss Collar's school, numbering seventy, and opened September, 1891; at Pueblo, a small school, particulars of which are not known by the writer.

There may be in the State, other kindergartens than those mentioned above, although we have endeavored repeatedly and painstakingly to reach all.

To sum up then, there are in the State four schools for the training of kindergarten teachers; two at Denver one at Colorado Springs and one at Greeley. The total number of students at these four schools is about one hundred.

From the figures given, the total number of pupils receiving so-called kindergarten instruction is about seventeen hundred twenty-five, distributed among thirty-two different schools, nineteen of which are located in Denver. About sixty per cent. of the entire enrollment are also in the Denver schools, and in the same proportion are from the families of the poor. Seventeen per cent. of the entire enrollment are in kindergartens connected with the public schools; eighty-five per cent. are in schools which have been opened since the beginning of 1890.

Mrs. F. A. Collar, associated with her daughter in the kindergarten at Aspen, claims to have opened the first kindergarten in Colorado at Denver, in 1875.

The Fort Collins school board claim to have opened in 1880 the first public school kindergarten west of the Missouri river.

The prominence given the subject for the past few years at the annual meetings of the Colorado State Teachers' Association, the organization of a State Kindergarten Association in the summer of 1891, the prospect of the introduction of a bill in the next legislature permitting the use of public school moneys for the education of children under six years of age, make probable the establishment in the near future of kindergartens as a regular part of the school system of the State. The wisdom of this movement will be tested by

experience. Many warm friends and supporters of kindergartens *per se* view with apprehension their connection with the public school "machine."

The influence of Froebel is by no means limited to the so-called kindergartens established in his name. The spirit of the great teacher pervades all advanced elementary instruction of the present time, whether in public or in private schools.

UNIVERSITY EXTENSION.

University Extension was most successfully inaugurated in Colorado by a course of lectures on the French Revolution, delivered by Chancellor McDowell to a class at Greeley, in the winter of 1891 and 1892. The class numbered over one hundred, about half of whom submitted papers for examination which ranked excellently well. Other courses have since been given by the State University and Colorado College, as well as the University of Denver. That a common plan might be followed, the organization of a Colorado center of University Extension was effected in the spring of 1892 by the co-operation of the universities and colleges in the State. The State Superintendent was elected president of the center; Chancellor McDowell, secretary. The purpose and scope of the organization are set forth in detail in the appendix to this report.

SCHOOL LIBRARIES.

The value of the library as an educational factor is now well-nigh universally recognized. No school can be considered properly equipped which has not a collection of well-selected books. It is observed that responsibility does not cease with the development of the pupil's power to do; direction should be given to power. Accordingly, the teacher's real responsibility only just begins with the pupil's ability to read; the value of the acquisition like that of all acquired power depends upon the use made of it. Education consists largely in learning the right use of books, and this knowledge is to a great extent a matter of early training and familiarity with the best standards.

The item of greatest increase, in the tabular summaries employed to show educational growth in Colorado, is that of school libraries. The increase in the last year was 28.9 per cent.; in the last two years, 67.4 per cent.; and in the last fifteen years 2590 per cent. Interesting are the stories of the beginnings of these libraries. In some instances parents and pupils have contributed money and books, in other instances parlor and lawn entertainments by the pupils, for which a small admission fee was charged; basket picnics, birthday and Christmas offerings, etc., have been ingeniously and effectively resorted to for raising funds.

In country districts, the school library, by becoming at the same time the people's library, may serve most helpfully in drawing together the scattered elements of the community and thus promoting public welfare by establishing mutual acquaintance and good will.

Much attention has been given recently to the selection and classification of books for school libraries, with reference to different ages of readers. Several valuable lists have been printed by school boards, librarians and publishing houses. It was hoped that something of the kind would be prepared for Colorado schools under the authority of the Department of Public Instruction. A committee for the purpose, of which the State Superintendent is chairman, was appointed at the Colorado Springs meeting of the State Association of County Superintendents in 1891. The committee has given the subject much serious attention, but has not succeeded in completing a satisfactory list. A compilation of the right sort must necessarily result from wide experience as well as observation, and hence, be of slow growth. Some very suggestive lists, however, have been prepared during the last year, by Mr. J. C. Dana, of the Denver Public Library, whose interest, experience and keen discrimination, qualify him especially for such work. These lists may be obtained by addressing Mr. Dana, at the High School building, District No. 1.

PRIVATE SCHOOLS AND EDUCATIONAL INSTITUTIONS.

A considerable part of the educational work of this State is done by private institutions, statistics of which

are essential to a full report of education. To obtain these a printed form was prepared by the Superintendent of Public Instruction during the past year, a copy of which was sent to each private institution. The information returned was very meagre. For the sake of a fuller representation of educational matters than is possible under the present conditions, I would recommend that the State Superintendent be authorized by law to require all such institutions to furnish on blanks provided for the purpose statistics of a general character relating to endowment, maintenance, receipts, expenditures, enrollment, attendance, length of terms, teachers, courses of study, etc. Provision of this kind has been made in other States.

OFFICIAL BLANKS.

The list of blanks used in the Department of Public Instruction is far from complete, and in form many are far from satisfactory. In the case of two—the teachers' daily register and the district treasurer's order book—new and improved forms have been substituted through the exhaustion of the old supplies. In the register, simple formulæ are given to aid the teacher in keeping record of important items. Sections from the school law of special application to teachers are printed at the beginning of the book.

The treasurer's order book, in form and accompanying instructions, will be found to convey all that is essential to meet the requirements of system and accuracy in the keeping of district financial accounts. Other forms can well be improved when the opportunity is afforded. Only the necessity for economy has prevented further revision without waiting for the exhaustion of the supplies on hand.

TEXT BOOKS.

The law of Colorado respecting text books is contained in the following:

“Every school board, unless otherwise especially provided by law, shall have power, and it shall be their duty * * * to fix the course of study, the exercises and the kind of text books to be used ; *Provided*, That

but one kind of text book of the same grade or branch of study shall be used in the same department of a school, and that after the adoption of any book, it shall not be changed in less than four years, unless the price thereof shall be unwarrantably advanced or the mechanical quality lowered or the supply stopped." * * *

"To provide books for indigent children, on the written statement of the teachers that the parents of such children are not able to purchase them, and to furnish free text books for the use of all pupils, when authorized to do so by a majority vote of the district as expressed at any regular or special meeting."

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

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

It was a long-sighted forethought which secured such protection at the outset. While other States have writhed and groaned under the burdens of obnoxious school book laws, passed during a spasm of popular reform, Colorado has looked calmly on, secure in the constitutional bar provided by the State's First Assembly against such hasty, thoughtless legislation. The educational sentiment of the State is still decidedly in favor of the present local option provision of the act of 1877.

PHYSICAL CULTURE.

It is gratifying to note the growing interest in physical culture as a feature of educational training. The typical student is no longer pale-visaged, stoop-shouldered, thin-voiced and of slovenly gait; but ruddy, erect, full-chested and of elastic step. Encouragement of school and college athletics is justified in spite of certain abuses, by the general discipline of self-command which they impart. Members of college and university athletic teams are eagerly sought as managers of corporations employing large numbers of men, because of their superior power to *control and direct*. Physical training enters the schools through military

drill, calisthenics, gymnastics, exercises incidental to elocutionary training, field athletics, etc. The higher institutions and the schools of the larger cities have regular exercises under trained directors. This practice is becoming more and more common in the lower schools. To be of real benefit, the exercises should occur oftener than once or twice a week.

PHYSIOLOGY AND HYGIENE.

The observance of the law relating to the teaching of physiology and hygiene, with special reference to the effects of alcoholic stimulants, enacted by the Sixth General Assembly, is probably attempted in most of the schools of the State. With what degree of success, it would be difficult to tell; in most cases, doubtless, with poor results. Only careful preparation will enable any teacher to present the subject intelligently or profitably. Extreme tact must be practiced in adapting selected material to prevent the exercise from becoming dull, unpractical, not to say ridiculous. Printed instructions in the form of pamphlets and text books are not always well chosen. Prejudice, begetting exaggeration and falsehood, too often characterizes such specially prepared instructions. It is a pleasure, therefore, to draw attention to two sources of reliable and helpful information, which have recently been brought within the reach of teachers. One is an elementary text book of anatomy, physiology and hygiene, by H. Newell Martin, of New York, entitled, "The Human Body and the Effect of Narcotics," published by Henry Holt & Co. In substance and form it is excellent. The other help is a small circular prepared by Mrs. Mary H. Hunt, Superintendent of the Scientific Department of the Woman's Christian Temperance Union, "For use in the Preparation of Essays, Examinations, Papers, etc., for the Scientific Temperance Department of the World's Columbian Exposition." The circular consists of questions and suggestions for a course of lessons in physiological temperance, arranged to cover all the grades of a city school system, from primary through high school. A number of them were forwarded to the State Superintendent, in December, 1892, by the kindness of Mrs. Hunt, and distributed among the schools of the State.

MANUAL TRAINING.

Manual training has received but little attention in the schools of Colorado. Outside of those schools whose characteristic features are industrial, as the State Agricultural College, the State Industrial School, the State School for the Blind and the Deaf, there is but one school district in which manual training is a part of the course—District No. 20, city of Pueblo. With the difficulty of keeping pace with the rapid growth which has characterized our new State, it is as much as should be expected if new features of educational training are adopted only after they have passed the experimental stage. The establishment of a Sloyd department in the State Normal School, under a most competent instructor, the introduction of Sloyd into certain private schools, and the announcement of a Manual Training High School in Denver, on a broad scale, are indications that this important branch of educational development is not to be slighted in the future.

COMPULSORY EDUCATION AND CHILD LABOR.

Alarming reports come from the State Commissioner of Labor Statistics concerning the employment of children under fourteen years of age, in violation, it is claimed, of the Compulsory Education Act. The rapid increase of the evil within a comparatively short period corresponds with the establishment of large manufacturing plants in the State favorable to the employment of children. Girls are said to constitute by far the larger class exposed. Six months ago the charge was made on official authority that there were then more girls under fifteen years of age at service in the cotton factory at Manchester, near Denver, than was the entire number of the same age at service in the State in 1880, not including those engaged in professional and domestic service.

In view of this, an attempt will probably be made to have the next Legislative Assembly so modify the present law as to hold employers to a sharper accountability. Compulsory laws serve as helpful means to worthy ends by giving timely alarm, and thus fixing public attention upon the threatening evil. But they are sel-

dom satisfactory in their results. This is shown in the history of such laws in the older States, like Massachusetts and Connecticut; where from the beginning, amendment has followed amendment for more than half a century, without making the laws absolutely effective. Agitation educates to a higher standard, but does not eliminate wholly the evil aimed at. It would seem that the law of Colorado might well be amended so as at least to better protect the children of the well-to-do, whose presence in workshops during the years when they should be in school is due to parental greed and not to parental need.

The school census has never called for the listing of the names of those between eight and fourteen years of age, hence there are no exact data by which to determine definitely the extent of the law's violation. Census blanks and school reports should in the future take account of these ages.

CIVIL GOVERNMENT.

The chief end of all school training, it is tritely claimed, is to fit the pupils to act well their parts in after life as free American citizens. The final test of training is conduct. Right conduct in civil life implies, to a degree at least, a correct knowledge of the machinery and methods of government. For such knowledge, text books pertaining to both national and state administration have been written. For an acquaintance with the foundation principles of our national government, there is nothing to compare with "Fiske's Civil Government in the United States." Until recently, there has been no corresponding guide for the study of our State government. The want is now happily supplied by a neat little text book, entitled "Civil Government in Colorado," prepared by Superintendent D. R. Hatch, of the State Industrial School at Golden, and published by The Chain & Hardy Co., Denver.

The appearance of this book should lead to a wider, more thorough study of civil administration within our own State. The school district, as the simplest political unit of representative government, furnishes an admir-

able starting point for study of this kind. From it the transition is easy to the township or county, thence to the State.

ARBOR DAY.

Arbor day was widely observed both in 1891 and 1892. Nearly all of the schools which were in session at the time held commemorative exercises. In some localities there were good reasons for not planting trees; as, lack of water, unseasonableness of the weather, abundance of trees, etc. Some schools held exercises at their buildings in the forenoon and adjourned to the fields and groves for the afternoon. In 1891, the Rocky Mountain columbine was chosen as the State flower, and in 1892, the Colorado blue spruce as the State tree. Both selections were most happy, beautiful in themselves and possessing characteristics peculiar to this region. The spruce has a world-wide reputation as the handsomest specimen of its class. Its home is Colorado. The columbine has been mentioned as the most suitable national flower, its common name suggesting the great discoverer, and at the same time the peace loving character of the people; while the botanical name, *Aquilegia*, suggests the national bird; and its various colorings in different localities correspond to those of our national ensign.

THE WORLD'S COLUMBIAN EXPOSITION.

Education has notoriously fared ill at former world's exhibits, and there is a painful impression of a similar fate awaiting it at Chicago next year. Educational leaders may thank themselves in part if this proves true. Their failure to unite in season upon a suitable head for the department, to say nothing of bitter antagonism towards capable men proposed, may be charged to their account. Meanwhile other departments were ignoring education in the allotment of space. Lack of appreciation on the part of the public generally of such exhibits as education is limited to will also explain the slight that has usually been given. At Chicago, almost all lines of industry and art have been provided for in advance of education; and even after having been tardily given a

fair share of space, education has narrowly escaped virtual exclusion through the gradual encroachment of other departments. The threatened catastrophe was avoided only through the combined efforts of its friends throughout the states. Following is the protest forwarded from Colorado at a critical moment :

COLORADO'S PROTEST.

To the Honorable Board of Directors, Columbian Exposition, Chicago.

GENTLEMEN:—It has authoritatively come to the notice of this board that slight, if any, provision has been made by the directory of the Columbian Exposition for an exhibit of the educational interests of the country, and that an original assignment of space of nearly 200,000 square feet has been transferred to other purposes.

The Board of World's Fair Managers for Colorado begs leave to call the attention of the directory to the fact that the common school-system of America, maintained at an annual expense, directly from the people, of nearly \$200,000,000, is an institution peculiar to our own country, and one which more fully typifies the life of the American home and community than does any other enterprise.

Not only in the immediate voluntary financial outlay, but the cultivation and training of all those elements of character that contribute towards efficient citizenship so earnestly fostered by the people, would seem reasonably to present, to any authority, the importance of making ample provision for the exhibit.

We trust that the magnitude of the institution known as the American Common School, the large share of American life that is devoted to education and its adjuncts, including church schools and universities, will be duly appreciated by the Columbian managers, and that ample and adequate provision will promptly be made therefor.

A national exposition with no exposition of educational methods, processes, means and conduct, would poorly typify the real American life.

On behalf of the Board of World's Fair Managers for Colorado,

O. C. FRENCH,
Secretary.

JOHN L. ROUNT,
President.

On behalf of those engaged in the work of education in Colorado,

NATHAN B. COY,
State Superintendent of Public Instruction.

The preparation of the educational exhibit from this State, like that of the other exhibits, has been seriously retarded by the inability of the Colorado Board of World's Fair Managers to command the funds appropriated for their use by the Eighth General Assembly. The Superintendent of Public Instruction, having been appointed by the Governor to the State Board of Managers, was naturally placed in charge of education in the organization of departments. The position was accepted by him upon the presumption that a competent manager would be placed at his disposal; who would give his entire time to collecting materials for exhibit. The State Teachers' Association, at its meeting in 1891, unanimously recommended for the position Hon. Fred Dick. The recommendation was presented to the State Superintendent and forcibly urged by him upon the Colorado board; but unsuccessfully by reason of straitened financial condition. In consequence, the preparation of an educational exhibit has been dependent upon the limited time at the disposal of the State Superintendent. He has been materially aided by the co-operation of leading school people of the State, especially President Snyder of the State Normal School, who has given helpful talks on the subject at teachers' gatherings in the State throughout the past year. Notwithstanding the disadvantages labored under, there is good prospect of an exhibit which will be at least creditable to the State.

THE NATIONAL COLUMBIAN PUBLIC SCHOOL CELEBRATION.

The public school celebration of October 21, 1892, was probably the most widely observed national event ever celebrated by the schools. Carefully tabulated reports from twenty-nine counties show that out of a total of 1,424 schools embraced in those counties, 1,026 were in session on Columbian Day. Of this number, 842 observed the day, 784 carrying out the national programme. Of 49,781 pupils enrolled, 40,748 were in attendance October 21. Among the visitors were 483 school directors and 24,138 others. Six counties report observing the day and carrying out the national pro-

gramme, but give no further particulars. Ten counties have made no report at all, but there is good reason for believing that the day was appropriately observed in each of them to some extent.

SCHOOL LAW LEGISLATION.

The public school system of this State is fortunate in having been spared thus far the despoiling effects of inconsiderate legislation. The original Act of 1877 "To establish and maintain a system of free schools" was wisely framed. Simple in construction, generally effective in execution, it remains today the same in substance as when first adopted. Amendments have been made from time to time, but they have usually been of minor importance, while the successive separate enactments added to the original body of the laws have been such as were demanded by the enlarged sense of the schools' opportunities and privileges. Well will it be if the wise conservatism which has marked legislation on this subject in the past shall always prevail. Experience will inevitably suggest still further amendments and additions, but they should be made with due deliberation and caution.

Legislation touching school law, passed by the Eighth General Assembly :

House Bill No. 32, relating to fees and salaries, makes the office of county superintendent of schools a salaried office in three counties of the State ; in first class (Arapahoe) counties, at \$3,000; in second class (El Paso and Pueblo) counties, \$2,500; "in counties of all other classes" the sum of five dollars per diem, actually and necessarily employed for the county, and ten cents per mile for each mile actually and necessarily traveled in the performance of duty " To determine whether the county superintendents holding salaried positions should be permitted to employ deputies at the county's expense, as formerly, when the compensation for all was by per diem and mileage allowances, a test case was brought in the district court by the superintendent of Arapahoe county, which resulted in the following decision by Judge G. B. Allen :

STATE OF COLORADO, }
 COUNTY OF ARAPAHOE. } ss.

IN THE DISTRICT COURT,
 DIVISION No. 1.

No. 16273.

A. D. SHEPARD,
Plaintiff,

vs.

THE BOARD OF COUNTY COMMIS-
 SIONERS OF ARAPAHOE
 COUNTY,
Defendants.

(March 1, 1892.)

On appeal from an order of the Board disallowing the claim of \$81 for services of a deputy in the office of the County Superintendent of Schools, for the month of January.

Allen, J. (Orally).

Upon the hearing of this case, it appeared to the Court that the commissioners disallowed this claim under the apprehension that the salary law of 1891 had changed the law as it formerly existed, with reference to their authority to make such payment.

Section 17, of the statute of 1877, provides: "If, for any cause, the superintendent is unable to attend to the duties of his office, he may appoint a deputy, who shall take the usual oath or affirmation of office, and who may exercise all the functions of county superintendent, but such deputy shall draw no salary from the public fund, *Provided*, That the superintendent may receive a per diem for the services of such deputy."

Section 25 of the statute of 1887, *inter alia*, provides: "The Commissioners shall provide him with a suitable office at the county seat, and all necessary blank books, stationery, postage, expressage and other expenses of his office, not otherwise provided for, which last mentioned expenses shall be paid for from the county fund. He shall keep his office open for the transaction of official business, such days each week as the duties of the office may require."

Under the provisions of said section 17, the county superintendent is authorized to appoint a deputy, if for any cause he is unable to attend to the duties of his office, and this means not only in case of a total disability to discharge the duties of the office, but also in any con-

tingency where the superintendent is unable to perform or attend to the duties of his office, by reason of the extent or amount of business that he individually is unable to perform the same.

The object of the salary act of 1891, as expressed in the title, is "To provide for the payment of salaries to certain officers, to provide for the disposition of certain fees, and to repeal all acts inconsistent therewith."

With reference to the office of county superintendent, the only provision contained in said salary act which pertains to such office, is found in section 14, which provides as follows: "County superintendents of schools in the several counties of this state, shall receive the following compensation for their services, to be paid quarterly out of the county treasury, to wit: In counties of the first class, the sum of three thousand dollars per annum; in counties of the second class, the sum of twenty-five hundred dollars per annum." * * * *

SECTION 26. "All acts and parts of acts inconsistent with the provisions of this act are hereby repealed."

It will be observed that this provision of the statute only makes reference to the subject of compensation for services, and provides for the payment of such compensation by an annual salary. Consistent with the title of the act, that is the only regulation that could be made with reference to this office, for the reason that the office of county superintendent never was an office authorized to charge or collect fees. It was entirely dissimilar in that respect to other county offices. The compensation theretofore provided for such services under the statute was to be paid from the county treasury, from the general fund.

The only provision of the general law sought to be changed by the salary bill was that part of section 25, which reads as follows (speaking of the county superintendent): "For the time necessarily spent in the discharge of his duties, he shall receive five dollars per day, and fifteen cents for each mile necessarily traveled one way," which was then a per diem and mileage. That is the only provision of the act of 1887 that, upon the passage of the salary act of 1891, was inconsistent with the provisions thereof as relating to the office of the county superintendent. That is the only provision of the general statute that, either by words or implication, can be said to be repealed by the terms of section 14 of the act of 1891.

All of the provisions and conditions of the general law as it existed prior to the passage of the salary act not inconsistent with that act remain in full force, and we are of the opinion that the law with reference to the *power of the county superintendent to appoint a deputy* has not in anywise been changed, and the fund from which such compensation shall be paid is the general fund, as provided by law.

The action of the board of county commissioners is reversed and an order directing the payment of the claim will be made.

It should be observed that the necessity for the assistance must be clearly shown. Doubt has been entertained as to whether the new salary law repealed that part of the old which restricted in amount the salary of the superintendent to "\$100 for each regularly organized public school in the county." I am inclined to think that this restriction is repealed, and in this opinion I am upheld by eminent legal authority. The old law operated unfavorably in two ways. First, by permitting in some counties an excess of compensation, in others too little; second, by encouraging the establishment of new and weak districts for the sake of the pecuniary consideration.

House Bill No. 295 authorizes school directors to purchase and display United States flags upon school buildings. To what extent this act has been made use of to supply schools with flags is not definitely known. It is certain that many schools have been supplied since the act went into effect. But the movement was not inaugurated by legislation; it was already well under way before the flag bill was drawn up, some schools having purchased, others having been presented with banners by patriotic orders, such as the Sons of America and the Grand Army. The movement was a part of a concerted action begun some five years since with a view to creating in the minds of the school children of the land more definite ideas of their country and its institutions, their significance and claims to loyalty. Its beneficial effect is already attested by substantial testimony: first, in awakening the sentiment of patriotism; second, in stimulating an interest in American history; third, in improved school discipline.

The highest sense of patriotism is not subserved by daily unfurling the flag in weather fair or foul. A more sensible plan is the use of it to emphasize important events in the school and the nation. Such a plan is embraced in the following, prepared by one of the Denver school boards:

ROOMS OF BOARD OF EDUCATION, }
 SCHOOL DISTRICT NO. ONE, }
 ARAPAHOE COUNTY, COLORADO. }

The Board of Education directs that the principals of the several schools cause the national flag to fly from the flag-staffs from sunrise to sunset on the opening and closing days of school in each term, on all national and State holidays, and on the following named days :

February 12—Birthday of Lincoln.

February 22—Birthday of Washington.

April 9—Appomattox.

April 19—Battle of Lexington.

April 30—Inauguration of Washington and contract signed for the purchase of the Louisiana Territory.

May 14—Founding of Jamestown.

May 27—First telegraphic message.

June 14—Adoption of the flag by Congress.

June 17—Battle of Bunker Hill.

September 2—First trip of steamboat.

September 3—Treaty of Paris.

September 22—Emancipation proclamation.

October 19—Cornwallis' surrender.

October 21—Columbus discovered America.

December 22—Forefathers' day.

Also on occasions of national importance, such as may occur from time to time, for which special instructions will be given.

The principals will cause the pupils of the schools to receive appropriate instruction, relative to the historical anniversaries, to the end that patriotism may be inculcated as a part of the education of the children.

This arrangement will cause the flag to be raised the current school year as follows :

September 1—Labor day.

September 2—Opening of school and first trip of steamboat.

September 3—Treaty of Paris.

September 22—Emancipation proclamation.

October 19—Cornwallis' surrender.

October 21—Columbus discovered America.

November 27—Thanksgiving day.

December 19—Closing day of fall term.

- December 22—Forefathers' day.
- December 25—Christmas.
- January 1—New Year's day.
- January 5—Opening day of winter term.
- February 12—Birthday of Lincoln.
- February 22—Birthday of Washington.
- March 27—Closing day of winter term.
- April 6—Opening day of spring term.
- April 9—Appomattox.
- April 17—Arbor day.
- April 19—Battle of Lexington.
- April 30—Inauguration of Washington.
- May 14—Founding of Jamestown.
- May 27—First telegraphic message.
- May 30—Decoration day.
- June 12—Closing day of school.
- June 14—Adoption of the flag by Congress.
- June 17—Battle of Bunker Hill.
- July 4—Independence day.

In addition to the above, each school named for an eminent American citizen, will display the flag on the birthday of the man for whom the school is named.

House Bill No. 379 amends section sixty-four (64) of the school law relating to the levy of county school tax. The bill is unhappily phrased. No little trouble has been experienced in efforts to get at its meaning. Stripped of verbiage it authorizes the county commissioners, at the request of the county superintendent, to levy a per capita tax of $\$10.66\frac{2}{3}$ in order to secure to each district in the county (containing a school population of not less than fifteen persons, according to the school census preceding the time of making the levy) a teachers' salary fund of \$160; that is sufficient in amount to pay four months salary at \$40 per month. The rate of tax levy necessary for this may be obtained by multiplying the per capita sum ($\$10.66\frac{2}{3}$) by the number representing the school census of the county and dividing the result by the number representing the total assessed valuation of the county. The bill further

authorizes the levy by the county commissioners, in case the school districts fail to certify the same, of a special tax for the other expenses of the district necessary to maintain a school four months in the year. The intent of the bill was the relief of the school districts from neglect consequent upon indifferent or incompetent directors. No purpose was entertained of authorizing an *unequal* apportionment of the county school funds. That would have been a violation of sections 72 and 73 of the school law which authorizes that all apportionments of the general school fund by the county superintendent shall be based on the census lists of the several districts for the school year next preceding, and shall be made *according to the number of persons of school age*.

House Bill No. 328 amends sections 44, 45 and 46 of the school law so as to provide for more than one voting place in school districts of the first class. The purpose was to relieve the pressure at the polls in large cities where only one voting place existed.

Senate Bill No. 88 amends section 81 of the school law so as to create thirteen (13) State Teachers' Normal Institute districts in place of six (6). It also authorizes the co-operation of the president of the State Normal School with the Superintendent of Public Instruction in the organization and conduct of the Normal Institutes; and the appropriation to each institute by the county commissioners of *two* dollars instead of *one* for every person certified by the executive committee as attending from their respective counties. These modifications have been of great benefit to the Normal Institutes, increasing the attendance by lessening the distance to them for many teachers, and enhancing their efficiency by valuable executive assistance and additional financial support.

Senate Bill No. 209 provides for the annual assessment and levy of one-sixth (1-6) of a mill in place of one-fifth (1-5) for the support and maintenance of certain state educational institutions.

Senate Bill No. 21, "In relation to the sale of tobacco to children under sixteen (16) years of age," was, by mistake, omitted from the revised issue of the

school law of 1891, but was afterwards, by request, printed in circular form and sent out to school officers and teachers. It draws attention to a common and injurious habit among boys.

CIRCULAR LETTER.

DEPARTMENT OF PUBLIC INSTRUCTION, }
SUPERINTENDENT'S OFFICE. }

The attention of school boards throughout the State is called to the law, as herewith presented, relating to the sale of tobacco to children.

It will be noticed that not only the sale, but the giving of tobacco to children is prohibited, and the penalty for a violation of the law is provided.

Teachers, principals and superintendents will find it possible materially to mitigate the evil of cigarette smoking by reminding the dealers, especially those who have stores in the vicinity of the school houses, of the existence of such a law and of a disposition to enforce its provisions.

Copies of this letter will be furnished for distribution wherever desired.

DENVER, October 7, 1891.

NATHAN B. COY,
State Superintendent.

AN ACT

IN RELATION TO THE SALE OR GIFT OF TOBACCO TO CHILDREN
UNDER SIXTEEN YEARS OF AGE.

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

SECTION 1. Any person who shall sell, give or furnish any tobacco or article made in whole or in part of tobacco, to any child under sixteen years of age, without the written order of the father or guardian of such child, shall be fined in a sum of not less than five dollars, nor more than one hundred dollars, or imprisonment in the county jail not more than three months.

SEC. 2. Justices of the peace in their respective precincts shall have jurisdiction to try cases under this act, subject to the right of appeal, as in the case of assault and battery.

SEC. 3. Whereas, in the opinion of the General Assembly an emergency exists; therefore, this act shall take effect and be in force from and after its passage

Approved April 1, 1891.

(In Session Laws of Colorado, 1891 (Criminal Code), p. 131.)

THE PUBLIC SCHOOL REVENUE.

Comparatively few school officers or teachers, to say nothing of the public generally, have an intelligent acquaintance with the source, the manner of collecting and apportioning of the public school funds. Ignorance on the part of school officers often leads to annoying experiences. Hence the following statement:

SOURCES.

The revenue for the support of the public schools in this State is derived from State, county and district sources. That derived from State and county sources constitutes what is called the general fund, as distinguished from the special fund, derived wholly from district sources.

STATE.

The school revenue derived from State sources and known as the public school income fund, consists of the proceeds from the public school investment fund, the interest on deferred payments of school lands which have been sold and the proceeds arising from school lands under lease.

CUSTODIAN.

The custodian of this fund is the State treasurer.

SUPERINTENDENT.

The fund is approved semi-annually (in January and July) by the Superintendent of Public Instruction among the several counties of the State, in proportion to the school population as shown by the report of each county for the year next preceding such apportionment, previous deduction having been made for supplies, as provided in section nine (9) of the school law.

COUNTY.

The school revenue derived from county sources consists of a tax which the county commissioners are authorized to have levied for the support of the schools within the county, of not less than two (2) nor more than five (5) mills on the dollar, of the assessed valuation of all the taxable property, real and personal, within the county, together with certain moneys derived from fines, penalties and forfeitures.

GENERAL FUND.

As stated at the beginning of this article, the revenue derived from State and county sources constitutes what is called the general fund, the use of which is restricted to teachers' wages and *necessary current expenses* (such as fuel, etc.), at least until a school shall have been conducted for a period of ten months in any one year.

APPORTIONMENT.

This general school fund, the county superintendent is authorized to apportion among the several school districts entitled to the same, according to the number of persons of school age, on the first Monday in January, April, July and October, in each year, and at other times if there be sufficient money in the treasury to require it. (See page 3).

BASIS.

The July apportionment in each year, and all apportionments for a period of one year, except in the case of the apportionment to new districts (section thirty-two (32) School Law), are based on the census lists and reports of the district secretaries for the school year next preceding.

FORFEIT.

A school district may forfeit its apportionment of the general school fund by failure of the district secretary to file his annual report and census list with the county

superintendent; also by the failure of the district to maintain a public school at least three months in any school year.

DISTRICT.

The school revenue, derived from *district sources*, consists of a special tax which the school board of each district is authorized, for school purposes, to certify to the county commissioners as necessary, on or before the day designated by law for levying the other taxes requisite for the year, together with the surplus of bond taxes, if any remains after paying the coupons and the expenses of collecting such special taxes.

FIFTEEN MILLS.

This levy, in a district of the third class, cannot exceed fifteen (15) mills per dollar of the assessed valuation of the taxable property of the district.

IN LIEU OF BOARD.

If any school district shall fail to certify a special tax, sufficient to maintain a public school each year, as required by law, the county commissioners are authorized to see that the same is levied. (Section sixty-four (64) of the school law as amended by the Eighth General Assembly).

CUSTODIAN.

The county treasurer is the custodian of the district tax fund, except the district bond fund, explained below, and holds it separately for each district, subject to the legal warrants of the district board.

The law makes it the duty of the county assessor and county treasurer to so arrange their tax schedules and books as to conform to the provision for a separate and distinct account with each district.

SEPARATE ACCOUNTS.

As it is required of the county treasurer to keep the general and special funds entirely separate and distinct from each other, so should district school officers distinguish between them in the drawing of warrants.

Disregard of this and the complications resulting therefrom led to the preparation of the following instructions during the past year and the pasting of them on the cover (inside) of the new district warrant books. The instructions include also extracts from the school law relating to legal warrants and the method of preventing the payment of those which are illegally drawn.

INSTRUCTIONS TO SCHOOL DIRECTORS.

Directors should use the warrants furnished by the State in payment of all claims against the district. County treasurers should not recognize warrants that are not furnished by the State or that are in excess of the tax levy of the current year.

Of all reports of school officers, those relating to the finances are the least satisfactory.

It will be observed:

1. That the moneys in the custody of the county treasurer to be drawn upon by district school boards may consist of two separate funds, and but two, viz: (a) a general fund, (b) a special fund.

2. That a warrant should state specifically which of the two it is intended to draw from.

To distinguish them:

1. The general fund is made up of a State fund and a county fund. The State fund is derived from the interest on the proceeds from the sale of school lands and from the proceeds of school lands leased; "all estates that may escheat to the State; also all other grants, gifts or devises that may be made to the State for educational purposes." The county fund is derived from the general tax levy of two to five mills by county commissioners (Section 64) and from the penal fund (Section 69).

2. The special fund is a district tax fund, levied either by the district board (Sections 67 and 70) or by the county commissioners (last clause of Section 64), to which may be added the surplus, if any, after paying the interest coupons of a bonded debt and the expenses of collection pertaining thereto (Section 92).

Caution:

1. "No orders shall be drawn upon the county treasurer except in favor of parties to whom the district has become lawfully indebted." (Section 53).

2. "It shall not be lawful for the officers of any district to issue warrants, at any time, in an amount in excess of the tax levy for the current year." (Section 68).

3. "Until the registers, summaries and abstracts described (in Section 61 of the school law) have been filed (as therein required), it shall be unlawful for any district to draw a warrant for the last month's salary of any teacher, principal or superintendent, whose duty it is to make and file such register, summary or abstract." (Section 61.)

4. "If the county superintendent shall notify the county treasurer in writing that there has been a failure on the part of any of the board of directors to comply with the law, and that said money should be withheld from said board of directors, he shall retain the same until further notice from the county superintendent." (Section 26).

5. All blanks, whether of the order or of the stub, should be carefully filled in. This is absolutely necessary to secure accuracy of accounts. (Section 54.)

NATHAN B. COY,

APRIL 27, 1892.

State Superintendent.

The special fund forms the principal portion of the public revenue for the support of the schools. Nominally, it supplements the general fund, but usually by largely exceeding it, as may be seen by examining the financial statement for almost any school year.

STATE TAX.

A special State tax is levied for the support of certain State institutions (the University, School of Mines, Normal School, etc.), but it is paid *directly* to those institutions, and not through general apportionment as a part of the public school fund.

BOND FUND.

Funds that may be needed for school purposes, in excess of those which are obtainable through the

sources already described, are usually raised by creating a bonded indebtedness of the district. Detailed instructions are contained in sections ninety (90) to one hundred two (102) of the school law. The chief thing is to see that the constitutional requirements (section 7, article XI), are complied with; otherwise embarrassment, caused by hindrance and delay, may attend efforts to float the bonds.

CUSTODIAN.

Respecting the custody of the funds derived from the sale of school district bonds, an opinion of Attorney General Maupin, to be found among the official decisions of this report is worthy of perusal. The opinion revokes a former decision of this department.

COMMISSION.

For collecting the school taxes, the county treasurer is entitled to a commission of one (1) per cent., and no more. Flagrant disregard of this restriction occurs in some localities, to the extent of charging three (3) and even four (4) per cent. The dishonesty is sometimes practiced in districts which, on account of their very limited resources, can ill afford to endure it. There should be better security against such imposition and when such extortion has been practiced, restitution should be demanded.

THE PUBLIC SCHOOL INVESTMENT FUND.

The public school investment fund, the interest from which forms the principal factor in the public school income fund, consists of the proceeds from the sale of school lands; "all estates that may escheat to the State; also all other grants, gifts or devises that may be made to the State for educational purposes."

Formerly the proceeds from leased school lands were credited to the investment fund, but the law of 1887 recognized them as properly belonging to the income fund, and authorized the transfer of them, as the securities in which they were held matured, to the credit of the income fund. (Session Laws 1887, page 362.) The amount thus transferred was more than

\$113,000, and accounts largely for the great increase in the apportionments from January, 1888, to January, 1890, inclusive. The regular annual revenue from this source is about \$13,000.

Section 3, Article IX. of the State Constitution provides that the "public school fund of the State shall forever remain inviolate and intact; the interest thereon only shall be expended in the maintenance of the schools of the State, and shall be distributed among the several counties and school districts of the State, in such manner as may be prescribed by law. No part of the fund, principal or interest, shall ever be transferred to any other fund or used or appropriated except as herein provided. The State treasurer shall be the custodian of this fund, and the same shall be securely and profitably invested, as may be by law directed. The State shall supply all losses thereof that may in any manner occur."

It was doubtless supposed at the time of its creation that this constitutional provision would be a sufficient protection against improper management. The present unfortunate condition of the fund, however, scarcely fulfills expectation, as the subjoined statement will show.

According to the records of the State treasury department for the biennial period ending November 30, 1892, the public school investment fund amounted at that time to \$1,016,296.08. Of this amount \$1,001,459.68 were invested as follows: \$300,000 in State capitol bonds at $3\frac{1}{2}$ per cent. interest, \$444,517.46 in State salary warrants of the issues of 1887-88-89 at 6 per cent. interest, and the remainder in State warrants of 1891-92 at 6 per cent.

Nearly one-half of this invested fund is yielding no return because of warrants issued during the years 1887-88-89 in payment of appropriations in excess of the constitutional limit. These illegal warrants were, by an erroneously fixed order of priority, given precedence of payment, so that the funds in the treasury were exhausted before the legal warrants in which the school funds were invested were reached.

The over-due interest on these amounted at the close of the fiscal year (November 30, 1892) to \$124,153.61, and the annual accretion, as long as the fund remains unchanged, will be \$26,656.75. Taking into account the unusual expansion in all lines of educational work during these years, and the extreme sensitiveness of the public to an increase of tax rates even for school purposes, this loss to the public school fund is serious. It will certainly be restored *some day*; that is guaranteed by the constitutional paragraph already quoted: "*The State shall supply all losses thereof that may in any manner occur.*" It is merely a matter of time; but time is an important consideration to the school interests, deprived thus, as they are, of so large a portion (25 per cent., in fact,) of the annual State apportionment fund rightly due them.

Much time has already elapsed without even the first step toward restitution having been as yet successfully taken. If the present time be improved to the very best advantage, the day of relief must necessarily be deferred at least two years, on account of the necessity of an amendment of the State constitution to accomplish it. House bill No. 319, Eighth General Assembly, prepared and introduced by Representative Ammons of Douglas county, was designed to meet the exigency, but was forced to give place to another bill which involved an amendment of another article of the constitution, and was at the time erroneously supposed to be of equal or paramount importance. Fortunately, Mr. Ammons has been returned for the Ninth General Assembly, and it is safe to say that no legislation during the coming session of that body will be by him regarded as of prior claim to the making good the school fund deficit.

A careful study of the problem leads to the conclusion that the proper solution of it is the creation of a bonded indebtedness by the State, for the purpose of raising the money to pay off the warrants.

This is the plan which, it is understood, Mr. Ammons will embody in his bill to be introduced for the consideration of the incoming Legislature. The adoption of it will be a stroke of economy on the part of the State, as the bonds could easily be floated at a much lower rate of

interest than the warrants are now drawing. The longer the delay, the more expensive will be the settlement in the end, to say nothing of crippling meanwhile the school interests. The leakage should be stopped at the earliest possible moment. The plan proposed is really a plan for retrenchment.

THE STATE SCHOOL LANDS.

Related to the State school investment fund, as a basis, are the State school lands. The special interest in school lands taken of late in this State will perhaps justify a brief sketch of the origin and history of the government land grants for education. New England and New York led the way at an early day, by setting apart a certain portion of unoccupied lands for "gospel and school purposes." The proceeds from the sale of such lands in the Boston Back Bay contribute to-day towards the support of certain public educational institutions in the state of Massachusetts. Unquestionably, this early policy of the primitive colonies inspired the subsequent course of the national government in the matter of popular education. The earliest action of this nature was that of the ordinance of the government of the Northwest Territory, passed in 1785. By this the sixteenth section (one square mile) in every township was set apart for the maintenance of common schools; "an ordinance, second only in importance to the Declaration of Independence." The ordinance of 1787 confirmed this provision and increased the grant by two townships of land to the State "for the purpose of a university." In 1789, after the adoption of the Federal constitution, the ordinance of 1787 was confirmed, and accordingly every state organized since the beginning of the present century has received in this proportion for education of all grades. In 1848, on the admission of Oregon, the thirty-sixth section was added to the sixteenth, for the same purpose. In 1862 a further grant of public lands was made to all the states for the establishment of a college of agriculture and mechanics; and in 1890 this grant was increased.

The total land grants made by the United States for educational purposes during the first century of its exist-

ence amounted to more than 80,000,000 acres ; a tract twice as large as the state of Ohio, worth at government prices more than \$100,000,000.

What has been the history of the management of these lands? For the most part unsatisfactory and discreditable. Neither the public nor the actual settler has been the principal beneficiary; but the profit has gone to the speculator and the lot-holder. This is true largely of all lands granted by the government to the states. "Of 20,000 millions of dollars that had at one time been paid by actual settlers for public lands, only about one-twentieth was public income." The rest was private profit. One who has given the subject of school land-grants special study, writes: "No part of the history of the United States is more melancholy than the record of the wreck of these splendid educational endowments in several of the states of the south, or the plunder and waste of them in others of the new territories of the west. A chapter from the history of Chicago is pertinent:

"The sale of the school section bounded by Madison, State, Twelfth and Halstead streets, was the greatest administrative blunder, or crime, in our annals. The tract (640 acres) was divided into 142 blocks—perhaps 5,000 lots—among the most valuable for wharfing and building purposes in the present city. Suppose these to have been leased instead of sold (say upon fifty-year leases, in order that lessees should have proper inducement to build upon them), they would now constitute an education 'foundation' beside which Oxford, Edinburgh and Cambridge, Harvard, Yale, Cornell and Columbia all shrink into insignificance. At a rough guess, the sum may be placed at \$100,000,000. One hundred thirty-eight blocks were sold at \$38,619.47, and four only retained. The four retained are blocks one (Madison, Halstead, Monroe and Union streets), blocks eighty-seven and eighty-eight (Harrison street, Fifth avenue, Polk street and the river), and block 142 (Madison, State, Monroe and Dearborn streets); the last named alone worth two hundred times the entire purchase price of the 138 blocks that were sold."—*Kirkland's "Story of Chicago."*

Colorado, fortunately, was early warned. Her first governor, John L. Routt, in his message to the first legislative assembly, advocated a policy of leasing rather than selling the public lands of the State. Sixteen years later (1892) we find him again as chief executive, advocating the same policy with even greater vigor. His advice has been, for the most part, the policy pursued. It is supported by the present law regulating the management of school lands, as expressed by section 12 of the act approved April 2, 1887: "All lands granted by Congress to the State for the support of the common schools, being sections 16 and 36 and all that may be selected in lieu of such sections are hereby withdrawn from the market, and the sale thereof prohibited; *Provided*, Any parcel of such land may be sold when the State board is of the opinion that the best interest of the school fund will be served by offering such parcel for sale.

The following from the recent report of the State Board of Land Commissioners shows the amount and present status of the lands belonging to the school fund to date of November 30, 1892; also transactions relating thereto during the past two years.

Total amount belonging to the fund, 3,655,686.11 acres. Of this amount about 3,000,000 consist of the school sections 16 and 36 of each township which the state came into possession of by the Enabling Act. They are widely scattered and of different degrees of value. While certain small parts are within reach of water supply for irrigation, and other limited areas have timber and mineral upon them, the greater part is of little value except for grazing purposes. The remaining 655,686.11 acres consist of what is known as indemnity lands, granted to the State in lieu of lands lost by previous settlement, mineral restrictions, private land claims and Indian and military reservations. These are much the more valuable, being located for the most part along or near streams of water, by which they may be brought under cultivation.

Altogether, there have been sold of the school lands 67,573.60 acres; 504,059.14 are under lease and yield an annual rental of \$41,600.85.

There were sold during the two years ending November 30, 1892, 460 lots in the town of South Creede for \$154,951.00; 13,083.10 acres in sections 16 and 36, at prices ranging from \$3.50 to \$17.00 per acre, 15,013.99 acres indemnity lands at \$2.50 per acre.

The sales of indemnity lands were made "under the provisions of the act for the sale and irrigation of State lands, approved April 17, 1889; and for the purpose of obtaining and applying water to the remaining alternate sections retained by the State, as contemplated by the act."

About two per cent. of the State school lands have been sold.

These lands have brought an average price of about \$15 per acre.

About twenty-seven per cent. of these lands have been rented for periods of years.

The length of such periods has been five years.

The two per cent. of school land sold amounts to more than 67,000 acres, largely the choicest sections, located in and near the most thickly populated centers of the State, as Denver, Pueblo, Colorado Springs, etc. Some of this land has increased in value, since the sale a few years ago, 200 to 400 per cent.; for instance, that adjoining the city park of Denver.

I heartily concur in the recommendations of the register of the Board of Land Commissioners of a special commission to attend to the details of inspecting, appraising and classifying the public lands of the State, believing that greater efficiency and economy in the management of them would be thereby secured and a large increase of revenue therefrom. It is not possible for the State officers composing *ex-officio* the board, in connection with their other official duties, to give the department the attention which it demands.

STATE LIBRARY.

On another page will be found a carefully prepared report of the State library by the courteous and efficient assistant librarian in charge, Professor T. N. Haskell. The report represents the classification, character and

general value of the books contained. The number of volumes at present is 11,660, an increase of 1,580 in two years. Attention is called to the neglected condition of the library, in dark and contracted quarters, and without the financial support necessary to give it respectable recognition among other State libraries.

REPORT OF STATE LIBRARY.

HON. NATHAN B. COV,

Superintendent of Public Instruction, and

Ex-Officio State Librarian:

DEAR SIR—It is my duty and pleasure to report to you the condition of the State Library, which you put in my care; and, perhaps, to suggest some things concerning its improvement and removal into the new Capitol.

The last Biennial Report, for the term ending June 30, 1890, said there were then "ten thousand and eighty volumes of books in the State Library," *i. e.*—upon shelves and in storage. Since that time I have received eighteen hundred and twenty volumes—two hundred and forty of them being law books for the Supreme Court—leaving in the library now (shelved as far as possible) eleven thousand six hundred and sixty volumes, and a good many pamphlets, magazines and papers, required by law to be bound, without any legal provision to pay.

These numerous volumes include the early miscellaneous "Territorial Library" and the various "books of reference"—some of them of great value—contributed by foreign countries, the United States Congress and Cabinets, the several States and Territories, and some cities, publishing societies and firms.

Having no appropriation for the purchase of new books to make our repository complete, we are not able to supply the expectations of all our visitors; yet, as a "reference library," it has proven very useful to most persons who have come to its alcoves and tables to consult its diverse authorities, and perhaps a score a day have expressed their grateful appreciation of its advantages and our aid.

As the library has been moved several times, and always crowded into close quarters, its classification and arrangement have been difficult to establish and are still imperfect, and the conveniences now are necessarily incomplete.

Though I have made some evident improvements in the order of the institution, I can, as yet, speak only in a general way of its several parts, as Documentary, Geographical, Historical, Biographical, Miscellaneous, Periodical, etc.

Among the public documents, those most consulted are our complete set of Patent Office Reports, with their careful drawings and specifications. There are here, four hundred and fourteen large, well-bound volumes, many of them twice as large as Webster's Unabridged Dictionary, and filled with the most wonderful inventions of art and utility, in the history of the world. These books and their brainy inquisitors are equally interesting objects of study and thought.

Next, for important reference, stand over three hundred volumes of the American State Papers, the *Official Globe* and *Congressional Record*, giving, for near a century, the chronicles of our national legislature and other departments of government amenable thereto. Then come the Official Registers of the United States Government as a whole, including foreign appointments, Diplomatic and Consular Reports, Our Commercial Relations, the departments of State, Navy, War, Interior, Agriculture, Postal Service and the Judiciary, to which national reports, several states have added their own similar documents, all suited to enhance our people's acquaintance with the government and resources of the country, in all its relations and parts.

The Contributions to Knowledge, sent us in large amounts from the Smithsonian Institute, are also regarded interesting and useful, and are much resorted to. The Miscellaneous Collections, National Museum and regular Smithsonian Reports, add increasing credit and honor to the name of that noble-minded foreigner who founded the now famous institute that bears his name.

THE GEOGRAPHICAL DEPARTMENT,

including government surveys, maps, charts and analagous astronomical and meteorological observations, is very well patronized and increasing in size and importance; while its patient and laborious authors, like Davis, Hayden, Henry, King, Maury, Powell and Wheeler, are ranked as chiefs among the honored savants of America and Europe; and the Reports from the Weather Bureau, Signal and Experimental Stations and Service, are very useful and much valued.

THE HISTORIC AND BIOGRAPHICAL DEPARTMENTS

have the works of Allison, Abbott, both Bancrofts, Gibbon, Hume, Hildreth, Miller, Motley, Napier, Prescott, Smollett, Sismonde, Strickland, Thier, Ticknor and others; Colonial and Rebellion Records, State Archives and Adjutant Generals' Reports, Greeley's American Conflict, The Military History of Grant and Memoirs of Sherman, together with the works of John Adams, Thomas Jefferson, Daniel Webster and Henry Clay. There are also here interesting pre-historic and ethnological works, and a diversity of books and papers relating to the African and Indian tribes, the Chinese, labor troubles

and charities and reforms. The reports upon labor and capital, immigration, cholera, etc., are voluminous and some of them valuable and rare.

THE MISCELLANEOUS DEPARTMENT

has, according to its name, a various assortment of entertaining and useful books, suited to every class and age. The most liked among these are Harper's Libraries for Young People, which have been very popular in the Empire state and elsewhere, and remind us of the wisdom of New York in giving over a hundred thousand dollars a year for the extension and support of her State library system, while our own proud and opulent commonwealth appropriated one thousand, which were scarcely enough to pay a good watchman through the year.

This paucity of appropriations on our part, for so important a State institution as this, is of course, "penny wise and pound foolish," and should be liberally corrected by the incoming legislature. We have only to look at our library as it is and as it should be, to see the need of immediate, just and generous legislation. Here our many thousand books, pamphlets and papers, received mostly "without money and without price," are crowded into a forty by twenty-foot room, with not an inch of space nor a penny to spare for the mineral cabinet required by law; while in the new library hall, a hundred feet square, there will be room not only for shelving, classifying, cataloguing and keeping in order the valuable books we now have, but to receive others that we need, and yet have places for the mining, manufacturing, agricultural and other interests of our people. Is it too much then, to expect our legislators hereafter, to be increasingly liberal toward the State Library, making it the librarian's independent and only care, with as ample pay and aides as the importance of his office and work implies?

THE MAGAZINE AND PERIODICAL DEPARTMENT

even will not be, as all is now, dependent on public spirited gratuity, and consisting of only the daily and weekly papers of the State, a few regular monthlies like the Educational Review, the Journal of the Franklin Institute, etc., and numberless sample copies, such as come to us of their own accord; but we will then be able to fall into line with the library interest of other states, and as a generous rival, may eventually lead the van and hold our torch on high, instead of having, as it were, to hide and hang our heads when the National Library Association comes along.

I have now shown that this library, limited, neglected and inadequate as it is, has found a useful place in our history, and is full of hope just in proportion to its legal constitution and means of supervision, enlargement and support.

In conclusion, let me illustrate the general value of our collected volumes, as they are, by two memorials received not many months since, and which are so full of inspiration that they deserve this special and climactic space. These are "Tributes of all Lands to Abraham Lincoln," being a large quarto containing, as on its 652d page some of the most eloquent eulogies of the age, and the other 'spontaneously acknowledged in the following words: "Received, October 5th, A. D. 1892, from the City of New York, through the courtesy of Messrs. Clarence W. Bowen and Governor John L. Routt, "The History of the Centennial Celebration of the Inauguration of George Washington as the First President of the United States," the same being in folio form, elegant binding, filled with the patriotic spirit and prophetic foresight of our fathers, illustrated with the choicest historic pictures and portraits of that time, and presented to Colorado for use in her library and preservation in her archives."

Very respectfully submitted,

THOMAS NELSON HASKELL,

Librarian in Charge.

STATE EDUCATIONAL INSTITUTIONS.

The State educational institutions are, the University, the School of Mines, the Agricultural College, the Normal School, the Institute for the Mute and the Blind, and the Industrial School. The first four constitute the institutions of higher education.

In the carefully prepared reports found elsewhere, the condition and prospects of each are set forth in detail. Progress marks the record of them all. Within a short period the growth has been wonderful. The increase of attendance, ranging from 50 to 200 per cent., amounts to a general average of nearly 100 per cent. for the biennial period. This may be regarded as the natural outgrowth of steady and substantial development in the elementary schools, which constitute the roots and trunk of the public school system. From this growth have come largely increased needs. The present facilities are severely taxed. It has been necessary in some instances to turn away applicants for admission. This phenomenal development is highly creditable to the State and its educational system, and should be encouraged by the amplest assistance that the public revenues will permit. To approximately meet the exigencies

will require generous legislative appropriations; but it is believed that the State is abundantly repaid for liberal aid to its institutions of learning by the constantly recurring benefits that flow to her from them.

Three of the State institutions have called new men to take administrative charge within two years. After forty years of continuous service in the cause of education, twenty-three of it in Colorado, Horace M. Hale resigned the presidency of the State University for a life of less responsibility and care—still hale and hearty, with honors thick upon him. President C. L. Ingersoll of the Agricultural College, after seven years in that capacity, resigned to take an important position in the University of Nebraska. After but one year at the head of the State Normal School, President Thomas J. Gray, finding his ideas of administration to be at variance with those of the board of trustees, sent in his resignation. The vacancies were filled by men of pronounced character and of wide reputation. The remarkable success of the institutions under the new officers is striking evidence of fitness in the selection.

The death of Professor Isaac C. Dennett of the State University, at his home in Boulder, October 14, 1892, was an irreparable loss, not only to the institution with which he has been connected for thirteen years, but to the State with whose educational interests he had been closely identified since its birth in 1876.

THE STATE UNIVERSITY.

The record of the State University for the biennial period just closed is a remarkable one. The time was favorable for new development when the accession of Mr. James H. Baker to the presidency occurred as a fortunate coincidence. The past year especially marks an epoch in the history of the institution. Prior thereto, a university scarcely more than in name, it has come to assume real proportions and rank. In addition to the usual college of liberal arts courses, professional schools have been established on a broad, comprehensive basis. All are in charge of able and enthusiastic faculties. Associated with the university by privileges rather than by organic connection, is the Colorado School of Divin-

ity, a novel experiment, having a faculty representing eight distinct ecclesiastical denominations. The movement has called forth no little comment from the press of the country, both secular and religious. The experiment is looked upon as the possible forerunner of milder and more rational methods in biblical and theological investigation. The university as the crowning step in the organized system of public instruction, which begins with elementary studies, is deserving of loyal recognition and generous public support.

THE STATE NORMAL SCHOOL.

Although the youngest of the State institutions of learning, the Normal School manifests the vigor and self-reliance of maturer years. The explanation may be found in the pressing need, long felt, of such an institution, and the consequent prompt support given it by those for whose benefit it was established. Notwithstanding the many experiments, beginning with the Massachusetts Normal School Act of 1838, the ideal training school for teachers has never been realized. The conditions in Colorado are supposed to be favorable for a nearer approach to satisfactory attainment than in other states; first, because of the freedom from traditional prejudice; second, because of the high average ability of Colorado's material for good teachers. Keen interest is felt for what is possible and hopeful expectation of what is probable in the Colorado experiment. The management is of a high order; the influences and associations of the school stimulating and inspiring. Through contact of the president and his faculty with teachers in county, district and State associations, the spirit of the school is already sensibly felt throughout the State. The beneficial effect is sure to be shown in the future work of the schools.

THE STATE SCHOOL OF MINES.

The report of the officers of the State School of Mines sets forth clearly and concisely its admirable condition, administrative and educational. It is doubtful if any of its institutions are returning more to the State and its citizens, in proportion to the means

invested. The requirements for admission are more exacting than at any other institution of its class in the United States, and yet the management has been obliged to turn away several applicants since the beginning of the present school year. The practical character and thoroughness of the work done are made manifest by the demand for the services of the students to fill paying positions in mines, smelters and sampling works. The field work of the school is of great value in making known the precious resources of the State and thus inviting capital and residents.

STATE AGRICULTURAL COLLEGE.

If the usefulness of an institution of learning is to be measured by the practical benefits which it directly confers upon a leading industry, the services of the State Agricultural College are deserving of more than ordinary recognition. Judged by the market value of the products of the soil, agriculture stands second to no industry in this State. In quality of products it is unsurpassed in many lines by any other state or country. The biennial report of the president, rendered through Vice-President Lawrence, on account of the protracted serious illness of President Ellis, recounts briefly the relations of the institution to the nation and the State. Beginning in 1887, the College has issued some twenty bulletins on subjects touching the interests of the farmer. These bulletins contain the results of the practical experiments of specialists on topics relating to the field, the garden, the orchard, the dairy, etc., etc. The purpose is to advance the interests of the farmer by leading him to recognize the value of scientific principles applied to his work. The splendid collection of farm and fruit products that will be exhibited from Colorado at the Columbian Exposition is unquestionably attributable in large measure to the influence of this State institution.

STATE SCHOOL FOR THE DEAF AND THE BLIND.

The comprehensive report of the superintendent of the School for the Deaf and the Blind affords a most interesting epitome of this very important department

of the public school system. No more patient, painstaking effort is required from any class of teachers than from the instructors of the unfortunate pupils of this school. That the work is faithfully and efficiently done, no one who has visited the institution can doubt. The courses of study are similar in kind to those in the regular public schools. The methods and devices are necessarily peculiar, but those employed by Superintendent Ray and his associates are the most approved. The purpose of the instruction is to make useful, self-supporting citizens, by cultivating to the fullest degree all the natural capabilities. The instruction is not along a single line, but embraces all the systems in use for the relief and assistance of such pupils. Important departments are, the kindergartens recently introduced, and the department of manual training, both of which are conducted with most gratifying results. It is strange that any parents should hesitate to commit their blind or deaf children to the care of this excellent school. Not even in their own homes is it possible for them to receive such close attention and such careful, intelligent training. The superior sanitary arrangements of the school are shown by the health report: "not a death and but one case of serious illness during the period of two years."

It is the purpose of the instruction to send out each pupil with a knowledge of some practical handicraft by which to earn his own support. Warning is given to parents by an enumeration of the causes of blindness and deafness, showing that in many cases it might have been avoided.

The need of a State school for feeble-minded children is imperatively urged. Superintendent Ray claims to have the names of upwards of fifty such unfortunates who should have the fostering care of a special institution for their benefit. From other sources it is learned that they number seventy or more. It would seem that the State ought at once to provide for this class of now neglected children.

THE STATE INDUSTRIAL SCHOOL.

The superintendent of the State Industrial School presents a condition of things which should certainly

receive the State's early and serious attention. If it is true that the system in vogue there is twenty years behind the times, and that in consequence the influences for right training fall far short of what they should be, the institution is not a credit to the State.

Among those who have given the subject attention, there is a prevalent opinion that the school has never received from the State the support to which it was decently entitled. The suggestions offered by Superintendent Hatch, for improvement, are specific and definite: "We are working here with plastic material; something can be made of it; vice and crime and misery can be prevented. I ask the board of control and legislature to give us the facilities for doing this work; give us comfortable buildings; give us trades to teach the boys; give us a chaplain to watch over their spiritual interests and care for them when paroled; give us a proper and modern law." An institution of this character should either be properly sustained by the State, or else abandoned. The statistical tables furnish some interesting items of information relating to causes of commitment, parentage, nationality, etc., of those committed. An excellent showing is made of industrial products from the farm, brick-yard, tailor-shop, shoe-shop and broom-factory.

THE SUPERINTENDENT OF PUBLIC INSTRUCTION

The office of Superintendent of Public Instruction was created by an act of the first Territorial Assembly, which convened in Denver in the fall of 1861. The appointing power was conferred upon the governor. In 1865, by an amendment of the school law, the territorial treasurer became *ex-officio* Superintendent of Public Instruction. In 1870, the office was again made distinct and appointive at the hands of the Governor, "by and with the consent of the Legislative Assembly;" it so remained until the organization of the State government in 1876, when the office became elective. Following are the names of the superintendents, manner of appointment and tenure:

W. J. Curtice	Territorial	Appointed by governor	1861-1863
W. S. Walker	Territorial	Appointed by governor	1863-
F. W. Atkins	Territorial	Ex-officio (treasurer)	1865-
	Territorial	Ex-officio (treasurer)	1866-
Columbus Nichols	Territorial	Ex-officio (treasurer)	1867-1869
Wilbur C. Lothrop	Territorial	Appointed by governor	1870-1872
Wilbur C. Lothrop	Territorial	Re-ap'nted by governor	July 1872-1873
Horace M. Hale	Territorial	Appointed by governor to fill vacancy	Resigned July, 1873-Jan. 1874
Horace M. Hale	Territorial	Re-ap'nted by governor	1874-1876
Jos. C. Shattuck	State	Elected	1876-1878
Jos. C. Shattuck	State	Re-elected	1878-1880
Leonidas S. Cornell	State	Elected	1880-1882
Jos. C. Shattuck	State	Elected	1882-1884
Leonidas S. Cornell	State	Elected	1884-1886
Leonidas S. Cornell	State	Re-elected	1886-1888
Fred Dick	State	Elected	1888-1890
Nathan B. Coy	State	Elected	1890-1892
John F. Murray	State	Elected	1892-1894

All are still living, and with one exception, are residents of Colorado; but, strange to say, only the present incumbent is directly connected with educational work. All the others are engaged in mercantile pursuits.

The office has changed frequently in recent years through the succession of political parties. Strong as the sentiment may be in favor of non-partisan treatment of educational appointments, practice does not respect the sentiment. Within four years, four persons have in turn held this office. It is generally conceded that one term (two years) barely introduces one to the duties of the position. Four years should be the minimum tenure. This could, without doubt, be accomplished if rightly undertaken. Furthermore, it is worthy of consideration whether it would not be well to have the office filled by the governor, on the recommendation of a representative committee from the State Teachers' Association.

Provision for the maintenance of the office is not what it should be, in view of the character and the

amount imposed. Prior to the special appropriation made by the Eighth General Assembly, the support was for years niggardly and wholly disproportionate to that allotted to the other State departments. It is still unequal and inadequate.

The recommendations offered in the report herewith submitted are :

First. That the State appropriation for Normal Institutes be increased to \$2,600, instead of \$1,300, as now, so as to allow \$100 a season to each district instead of \$50.

Second. That a fee of one dollar be charged each applicant for a teacher's certificate at the quarterly examinations, the money so collected to go to the district institute fund.

Third. That better maintenance be afforded the Department of Public Instruction.

Fourth. That the office of county superintendent of schools be appointive, for four years, at the hands of the county commissioners or county judge, on the recommendation of a committee from the County Teachers' Association.

Fifth. That the office of State Superintendent of Public Instruction be appointive, for four years, at the hands of the governor, on the recommendation of a committee from the State Teachers' Association.

Sixth. A renewal of the recommendation made by my predecessor: That the State Superintendent be *ex-officio*, a member of the governing boards of the State University, the State School of Mines and the Agricultural College, as he is now of the State Normal School.

Seventh. That private schools and educational institutions be required to report to the State Superintendent on blanks furnished by him, general statistics, so as to render more complete the report of the department.

Respectfully submitted,

NATHAN B. COY,
Superintendent of Public Instruction.



Exhibit I.

Tabular Summaries showing Educational Growth
for Different Periods from 1871-1892.

- I. 1871-1892.
- II. 1877-1892.
- III. 1890-1892.
- IV. 1891-1892.

TABULAR SUMMARY OF GROWTH, I.

1871-1892.

ITEMS.	1871.	1892.	PER CENT. INCREASE.
Whole number of persons between 5 and 21 years.....	7,742	106,112	1270
Whole number enrolled in schools.....	4,357	76,647	1658
Number of districts in State.....	160	1,357	748
Number of school houses.....	80	1,378	1625
Value of school houses and property.....	\$ 82,574 05	\$ 5,441,997 62	6419
Expended for teachers' wages.....	\$ 44,148 96	\$ 985,136 68	2131

TABULAR SUMMARY OF GROWTH, II.

1877-1892.

ITEMS.	1877.	1892.	INCREASE.	
			NUMERICAL.	PER CENTUM.
Whole number persons between 6 and 21	21,612	166,112	84,500	390.9
Whole number enrolled in schools	14,085	76,647	62,562	444.1
Average daily attendance	8,141	47,946	39,805	488.8
Per cent. of average attendance to whole number	37	45	8	21.6
Per cent. of average attendance to enrollment	58	62	4	6.8
Per cent. of enrollment to whole number	65	72	7	10.7
Number districts in State	313	1,357	1,044	333.5
Number school houses	219	1,378	1,157	528.5
Value of school houses and property	\$472,983	\$5,441,997 62	\$4,968,924 60	1,050.5
Number of male teachers	233	665	432	95.4
Number of female teachers	297	2,088	1,791	603.
Average wages of male teachers per month	\$86 10	\$77 58	\$-1 48	3.2
Average wages of female teachers per month	\$51 45	\$55 28	\$3 83	7.4

TABULAR SUMMARY OF GROWTH, II.—*Concluded.*

ITEMS.	1877.	1892.	INCREASE.	
			NUMERICAL.	PER CENTUM.
Total receipts of school moneys for year, including amount on hand	\$245,145	\$2,712,924 90	\$2,467,779 90	1,066.6
Expended for teachers' wages	\$140,780	\$985,136 68	\$844,356 68	598.8
Total expenditures	\$215,225	\$2,202,532 94	\$1,987,307 94	923.8
Expenditure per capita of population	\$7 95	\$20 75	\$12 80	161.
Expenditure per capita of enrollment	\$12 20	\$28 73	\$16 53	135.4
Expenditure per capita of average attendance	\$21 10	\$45 93	\$24 83	112.9
Number volumes in libraries	1,583	42,587	41,004	2,590 2

TABULAR SUMMARY OF GROWTH, III.

1890-1892.

ITEMS.	1890.		1892.		INCREASE.	
					NUMERICAL.	PER CENTUM.
Number of school houses.....	1,190		1,378		188	15.7
Value of school houses and property.....	\$4,387,809 40		\$5,441,907 62		\$1,054,098 22	24 0
Number of male teachers in graded schools.....	144		170		26	18.0
Number of female teachers in graded school.....	614		838		224	36.4
Average monthly salary of male teachers in graded schools, for the two years.....	\$96 00		\$ 99 11		\$ 3 11	3.23
Average monthly salary of female teachers in graded schools, for the two years.....	63 14		63 57		43	.6
Number of male teachers in ungraded schools.....	478		495		17	3.5
Number of female teachers in ungraded schools.....	1,139		1,250		111	9.7
Average monthly salary of male teachers in ungraded schools, for the two years.....	\$51 46		\$ 51 66		\$ 20	.3
Average monthly salary of female teachers in ungraded schools, for two years.....	42 99		45 97		2 98	6.9
Received from county tax and State fund, general fund.....	1,284,075 75		1,149,229 84		Dec. 104,845 91	
Received from district tax, special fund.....	1,746,977 81		1,771,594 69		24,616 88	1.4
Received from all sources, not including balance on hand at beginning of term.....	3,797,323 67		4,484,254 42		686,930 75	18 0
Expended for teachers' wages.....	1,532,576 43		1,879,546 32		346,969 89	22.6
Expended for current expenses.....	497,236 22		643,792 70		146,556 48	29.4

TABULAR SUMMARY OF GROWTH, III.—Continued.

ITEMS.	1890.	1892.	INCREASE.	
			NUMERICAL.	PER CENTUM.
Expended for site, building and furniture.....	\$1,157,708 95	\$1,389,109 78	\$231,400 83	19.9
Paid temporary loans, interest on bonds, etc.....	358,376 85	799,597 60	351,220 75	98.0
Total expenditures.....	3,545,898 45	4,622,046 40	1,076,147 95	30.3
Number of districts.....	1,284	1,357	73	5.6
Number of males of school age.....	48,500	53,737	5,237	10.7
Number of females of school age.....	46,637	52,375	5,738	12.3
Total school population.....	97,137	106,112	10,975	11.5
School population between 6 and 16 years.....	72,483	79,284	6,801	9.3
School population between 16 and 21 years.....	22,654	26,828	4,174	18.4
Number between 6 and 16 years enrolled in schools.....	59,385	69,353	9,970	16.7
Number between 16 and 21 years enrolled in schools.....	6,107	7,294	1,187	19.4
Number enrolled in high schools.....	1,733	2,393	660	38.0
Number enrolled in graded schools.....	36,347	45,802	9,455	26.0
Number enrolled in ungraded schools.....	27,410	28,452	1,042	3.8
Total number enrolled in public schools.....	65,490	76,647	11,157	17.0
Average daily attendance.....	38,714	47,946	9,232	23.8
Per cent. of school population enrolled in schools for biennial period.....	68 85	71 50	2 65	3.8

Per cent. of school population under 16 enrolled in schools for biennial period	82 32	87	4 68	5 6
Per cent. of school population over 16 enrolled in schools for biennial period	26 68	26 30	38	1 4
Per cent. of average attendance on enrollment for biennial term	59 20	60 50	1 30	2 1
Expenditure per capita of school population for two years	\$ 38 91	\$ 44 23	\$ 5 32	13 6
Expenditure per capita of school enrolment for two years	56 42	61 69	5 27	9 8
Expenditure per capita of average attendance for two years	94 80	101 28	6 48	6 8
Expenditure per capita of school population 6 to 16 years for two years	51 37	59 19	7 82	15 2
Volumes in school libraries	26,516	42,587	16,071	62 7
Number first grade certificates issued to male teachers	241	253	12	4 9
Number first grade certificates issued to female teachers	495	595	100	24 1
Number second grade certificates issued to male teachers	312	338	26	8 3
Number second grade certificates issued to female teachers	888	958	70	7 8
Number third grade certificates issued to male teachers	297	358	61	20 5
Number third grade certificates issued to female teachers	1,010	1,274	264	20 1
Total number of certificates issued	3,153	3,686	533	18 9
Per capita apportionment of State fund	{ July. \$ 1.73	{ \$ 1.99	{ \$ 1.04	
	{ } \$ 1.32	{ }	{ }	

3,035

TABULAR SUMMARY OF GROWTH, III.—*Concluded.*

ITEMS.	1890.	1892.	INCREASE.	
			NUMERICAL.	PER CENT.
Amount of State fund apportioned to schools.....	\$ 253,839 59	\$ 207,821 92	Dec \$46,017 67	18.1
Attendance at Normal Institute	1,239	2,182	943	76.1
Cost of Normal Institutes.....	\$ 3,851 03	\$ 7,246 65	\$ 3,395 62	8.2



TABULAR SUMMARY OF GROWTH, IV.

1891-1892.

ITEMS.	1891.	1892.	INCREASE.	
			NUMERICAL.	PER CENT.
Number school houses.....	1,285	1,378	93	7.2
Value of school houses and property.....	\$5,079,770 00	\$5,441,997 62	\$362,137 62	7.1
Number of male teachers in graded schools.....	170	170	.....	.....
Number of female teachers in graded schools.....	731	838	107	14.6
Average monthly salary of male teachers in graded schools.....	\$ 94 32	\$ 103 91	\$ 9 59	10.1
Average monthly salary of female teachers in graded schools.....	\$ 62 87	\$ 64 28	\$ 1 41	2.2
Number of male teachers in ungraded schools.....	507	495	D 12	D 2.3
Number of female teachers in ungraded schools.....	1,126	1,250	124	11.0
Average monthly salary of male teachers in ungraded schools.....	\$ 52 07	\$ 51 25	D \$ 0 82	D 1.5
Average monthly salary of female teachers in ungraded schools.....	\$ 45 65	\$ 46 29	\$ 0 64	1.4
Number of districts.....	1,334	1,357	23	1.7
Number of males of school age.....	52,530	53,737	1,207	2.2
Number of females of school age.....	50,490	52,375	1,885	3.7
Total school population.....	103,020	106,112	3,092	3.0
School population between 6 and 16.....	77,021	79,284	2,263	2.9

TABULAR SUMMARY OF GROWTH, IV.—*Concluded.*

ITEMS.	1891.	1892.	INCREASE.	
			NUMERICAL.	PER CENT.
School population between 16 and 21.....	25,999	26,828	829	3.1
Number between 6 and 16 enrolled in schools.....	66,750	69,353	2,603	3.8
Number between 16 and 21 enrolled in schools.....	6,641	7,294	653	9.8
Number enrolled in high schools.....	2,112	2,393	281	13.3
Number enrolled in graded schools.....	44,126	45,802	1,676	3.7
Number enrolled in ungraded schools.....	27,153	28,452	1,299	4.7
Number enrolled in public schools.....	73,391	76,647	3,256	4.4
Average daily attendance.....	43,706	47,946	4,240	9.6
Per cent. of school population enrolled in schools.....	71 †	72 †	-----	1.0
Per cent. of school population under 16 enrolled in schools.....	86.6	87.4	-----	.8
Per cent. of school population over 16 enrolled in schools.....	25.5	27.1	-----	1.6
Per cent of average attendance on enrollment.....	59 †	62 †	-----	3.0
Volunteers in school libraries.....	33,002	42,587	9,585	28.9
Expenditure per capita of school population.....	\$ 23.48	\$ 20.75	D \$ 2.73	D 11.6
Expenditure per capita of enrollment.....	32.96	28.73	D 4.23	D 12.8
Expenditure per capita of average attendance.....	55.35	45.93	D 9.42	D 17.0
Expenditure per capita of population between 6 and 16.....	31.41	27.78	D 3.63	D 11.5

Number of first grade certificates issued to male teachers.....	147	166	D	41	D	27.8
Number of first grade certificates issued to female teachers.....	272	233	D	39	D	14.3
Number of second grade certificates issued to male teachers.....	202	136	D	66	D	34.6
Number of second grade certificates issued to female teachers.....	517	441	D	76	D	14.6
Number of third grade certificates issued to male teachers.....	158	200		42		26.5
Number of third grade certificates issued to female teachers.....	581	693		112		14.2
Total number of certificates issued.....	1,877	1,809	D	68	D	3.6
Per capita apportionment of State fund.....	\$ 0.99+	\$ 1.04+		\$ 0.13		5.0
Amount of State fund apportioned to schools.....	\$98,584.47	\$109,237.45		\$10,652.98		20.4
Attendance at Normal Institutes.....	1,663	1,119		56		3.4
Cost of Normal Institutes.....	\$ 3,335.65	\$ 3,911.00		\$ 475.35		14.2

1850
1851
1852

Exhibit II.

General Statistical Tables, Compiled from the Annual Reports of County Superintendents, for the Years Ending June 30, 1891 and 1892, respectively.

- I. Examinations of teachers. 1891 and 1892.
- II. School population. 1891.
- III. School population. 1892.
- IV. Enrollment and attendance. 1891.
- V. Enrollment and attendance. 1892.
- VI. Teachers and salaries. 1891.
- VII. Teachers and salaries. 1892.
- VIII. Districts—school houses and per capita cost. 1891.
- IX. Districts—school houses and per capita cost. 1892.
- X. Receipts. 1891.
- XI. Expenditures. 1891.
- XII. Receipts. 1892.
- XIII. Expenditures. 1892.
- XIV. Apportionment of State fund. 1891 and 1892.
- XV. Summary of receipts and disbursements. 1891 and 1892.
- XVI. Traveling fund, department public instruction. 1891-1892.
- XVII. Incidental expense fund, department public instruction, January 11, 1891 to January 11, 1893.
- XVIII. Remarks of county superintendents.

TABLE I.

EXAMINATION OF TEACHERS.

COUNTIES.	1891.						1892.							
	FIRST GRADE.		SECOND GRADE.		THIRD GRADE.		FIRST GRADE.		SECOND GRADE.		THIRD GRADE.			
	MALE.	FEMALE.	MALE.	FEMALE.	MALE.	FEMALE.	MALE.	FEMALE.	MALE.	FEMALE.	MALE.	FEMALE.		
	TOTAL.	TOTAL.	TOTAL.	TOTAL.	TOTAL.	TOTAL.	TOTAL.	TOTAL.	TOTAL.	TOTAL.	TOTAL.	TOTAL.		
Arapahoe	14	15	17	58	24	93	221	7	13	12	58	16	124	230
Archuleta	2	2	1	1	1	1	8	1	---	1	---	---	3	5
Baca	3	3	5	5	5	9	30	1	3	1	1	11	8	25
Bent	2	5	---	6	1	---	14	2	2	---	5	1	5	15
Boulder	9	20	4	18	6	25	82	5	8	9	16	14	36	88
Chaffee	1	11	4	6	1	24	47	1	8	2	9	5	17	42
Cheyenne	3	2	2	3	4	4	18	2	6	1	8	2	4	23
Clear Creek	2	7	2	6	---	5	22	2	9	---	10	1	6	28
Conejos	1	1	5	3	5	14	29	3	---	2	2	15	21	43
Costilla	4	5	5	---	3	---	17	1	2	---	---	3	1	7
Custer	1	3	1	1	1	8	15	---	---	---	---	9	7	16
Delta	4	7	4	10	7	5	37	4	3	2	5	5	5	24
Dolores	1	---	---	---	---	---	1	---	3	---	---	1	1	5
Douglas	2	6	1	10	1	3	23	1	3	3	9	1	10	27

TABLE I.—Continued.

COUNTIES.	1891.						1892.						
	FIRST GRADE.		SECOND GRADE.		THIRD GRADE.		FIRST GRADE.		SECOND GRADE.		THIRD GRADE.		
	MALE.	FEMALE.	MALE.	FEMALE.	MALE.	FEMALE.	MALE.	FEMALE.	MALE.	FEMALE.	MALE.	FEMALE.	
	TOTAL.		TOTAL.		TOTAL.		TOTAL.		TOTAL.		TOTAL.		
Eagle	1	4	2	3	8	18	---	4	1	3	---	6	14
Elbert	2	1	3	14	2	5	27	1	12	1	12	8	34
El Paso	2	13	3	37	6	40	101	2	15	6	26	4	78
Fremont	6	7	5	9	6	11	44	5	7	3	8	3	48
Garfield	4	9	4	21	---	2	40	3	9	2	25	---	39
Gilpin	2	3	1	6	---	8	20	2	3	2	3	---	28
Graud	1	1	---	1	---	2	5	1	1	1	1	2	8
Gunnison	1	3	---	5	---	4	13	---	4	3	6	1	16
Hinsdale	---	---	---	4	---	4	4	---	---	1	4	---	7
Huerfano	4	15	4	9	2	3	37	5	5	2	9	4	36
Jefferson	2	2	7	23	1	16	51	1	5	3	24	1	60
Kiowa	1	3	6	7	2	7	26	2	6	5	5	1	23
Kit Carson	4	5	5	13	7	14	48	4	6	6	5	9	53
La Plata	1	9	2	4	2	4	22	---	9	---	5	---	21
Lake	1	20	---	18	---	1	40	3	9	2	8	---	22

Larimer.....	5	9	7	30	10	19	80	1	10	7	20	4	15	57
Las Animas.....	6	3	13	11	4	6	43	3	1	3	10	11	9	37
Lincoln.....	.....	.....	.....	.....	.....	8	8	.....	.....	1	5	.....	8	14
Logan.....	*	*	*	*	*	*	*	4	3	9	3	3	18	40
Montrose.....	4	2	3	4	1	2	16	1	5	2	3	6	2	19
Morgan.....	.....	2	.....	4	1	2	9	.....	.....	1	6	.....	7	14
Montezuma.....	.....	1	5	2	5	2	15	1	3	4	7	3	13	31
Mesa.....	8	5	4	6	.....	5	28	.....	11	4	14	2	3	34
Otero.....	3	2	3	5	.....	6	19	3	4	6	8	5	8	34
Ouray.....	.....	7	3	5	.....	1	16	3	5	2	6	1	1	18
Park.....	1	2	5	8	1	4	21	6	2	.....	5	4	7	24
Phillips.....	1	2	3	6	13	29	54	2	3	3	5	11	26	50
Pitkin.....	1	4	1	1	2	3	12	.....	2	.....	6	5	10	23
Prowers.....	3	4	3	8	7	27	52	3	2	2	8	1	11	27
Pueblo.....	4	14	14	29	2	19	82	1	2	2	6	8	12	31
Rio Blanco.....	.....	2	1	5	.....	2	10	.....	3	.....	1	.....	.....	4
Rio Grande.....	3	3	7	4	1	6	24	5	4	4	2	2	12	29
Routt.....	3	.....	2	9	1	8	23	3	1	.....	9	1	11	25
Saguache.....	3	2	5	4	4	6	24	1	2	4	5	3	5	30
San Juan.....	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	2
San Miguel.....	1	.....	.....	1	.....	.....	2	1	.....	.....	1	1	3	6
Sedgwick.....	5	1	7	20	1	23	57	2	.....	2	2	2	18	36

TABLE I.—*Concluded.*

COUNTIES.	1891.						1892.						
	FIRST GRADE.		SECOND GRADE.		THIRD GRADE.		FIRST GRADE.		SECOND GRADE.		THIRD GRADE.		
	MALE.	FEMALE.	MALE.	FEMALE.	MALE.	FEMALE.	MALE.	FEMALE.	MALE.	FEMALE.	MALE.	FEMALE.	
Summit	2	1	3	5	-----	2	13	-----	-----	6	1	-----	7
Washington ..	3	3	6	11	8	20	51	-----	4	4	5	21	36
Weld	7	15	13	28	4	46	113	5	8	7	3	50	99
Yuma	3	6	1	10	6	19	45	1	2	-----	9	19	37
Totals ...	147	272	202	517	158	581	1,877	106	233	136	200	693	1,809

* Not reported.

TABLE II.

SCHOOL POPULATION, CENSUS 1891.

COUNTIES.	BETWEEN 6 AND 16.			BETWEEN 16 AND 21.			TOTAL BETWEEN 6 AND 21.		
	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.
	Arapahoe	11,008	11,275	22,283	3,877	3,980	7,857	14,885	15,255	30,140
Archuleta	89	68	157	27	22	49	116	90	206
Baca	282	247	529	101	53	154	383	300	683
Bent	149	163	312	45	44	89	194	207	401
Boulder	1,631	1,632	3,263	596	553	1,149	2,227	2,185	4,412
Chaffee	657	623	1,280	224	199	423	881	822	1,703
Cheyenne	52	47	99	18	18	36	70	65	135
Clear Creek	688	724	1,412	260	225	485	948	949	1,897
Conjoes	1,160	1,197	2,357	345	302	647	1,595	1,499	3,094
Costilla	564	501	1,065	192	170	362	756	671	1,427
Custer	352	355	707	131	124	255	483	479	962
Delta	310	290	600	133	113	246	443	403	846
Dolores	68	57	125	22	20	42	90	77	167
Douglas	280	278	558	104	98	202	384	376	760

EIGHTH BIENNIAL REPORT

TABLE II.—Continued.

COUNTIES.	BETWEEN 6 AND 16.			BETWEEN 16 AND 21.			TOTAL BETWEEN 6 AND 21.		
	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.
	Eagle	175	177	352	59	35	94	234	212	446
Elbert	234	207	441	89	98	187	323	305	628
El Paso	1,928	1,886	3,814	583	561	1,144	2,511	2,447	4,958
Fremont	976	946	1,922	346	309	655	1,322	1,255	2,577
Garfield	411	385	796	132	116	248	543	501	1,044
Gilpin	589	601	1,190	189	240	429	778	841	1,619
Grand	65	49	114	12	21	33	77	70	147
Gunnison	356	358	714	141	134	275	497	492	989
Hinsdale	73	69	142	18	23	41	91	92	183
Huerfano	1,006	931	1,937	329	286	615	1,335	1,217	2,552
Jefferson	975	837	1,812	345	264	609	1,320	1,101	2,421
Kiowa	151	108	259	50	30	80	201	138	339
Kit Carson	233	220	453	76	68	144	309	288	597
Lake	1,098	1,006	2,104	321	308	629	1,419	1,314	2,733
La Plata	505	478	983	164	156	320	669	634	1,303

Larimer	1,030	1,026	2,050	460	319	779	1,490	1,339	2,529
Las Animas ..	1,986	1,885	3,865	637	569	1,206	2,617	2,454	5,071
Lincoln	77	41	118	17	33	50	94	74	168
Logan	347	247	594	110	99	209	457	346	863
Mesa	431	415	846	140	145	285	571	560	1,131
Montezuma ..	233	220	453	76	49	125	309	269	578
Montrose	412	354	766	124	104	228	536	458	994
Morgan	147	139	286	63	29	92	210	165	378
Otero	392	457	849	192	189	381	584	646	1,230
Ouray	413	412	825	111	122	233	524	534	1,058
Park	294	302	596	108	117	225	402	419	821
Phillips	315	298	613	90	103	193	405	401	806
Pitkin	515	530	1,045	151	166	317	666	696	1,362
Prowers	216	223	439	66	65	131	282	288	570
Pueblo	2,871	2,567	5,438	1,101	816	1,917	3,972	3,383	7,355
Rio Blanco ..	93	106	199	52	26	78	145	132	277
Rio Grande ..	423	362	785	126	112	238	549	474	1,093
Routt	210	200	410	78	59	137	288	259	547
Sagauche	386	346	732	143	97	240	529	443	972
San Juan	77	71	148	12	30	42	89	101	190
San Miguel ..	105	97	202	32	25	57	137	122	259
Sedgwick	166	153	319	50	42	92	216	195	411

TABLE II.—*Concluded.*

COUNTIES.	BETWEEN 6 AND 16.			BETWEEN 16 AND 21.			TOTAL BETWEEN 6 AND 21.		
	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.
Summit	160	192	352	44	64	108	204	256	460
Washington...	190	188	378	57	51	108	247	239	486
Weld	1,266	1,172	2,438	454	441	895	1,720	1,613	3,333
Yuma	234	261	495	59	75	134	293	336	629
Totals	39,048	37,973	77,021	13,482	12,517	25,999	52,530	50,490	103,020

TABLE III.

SCHOOL, POPULATION, CENSUS 1892.

COUNTIES.	BETWEEN 6 AND 16.			BETWEEN 16 AND 21.			TOTAL BETWEEN 6 AND 21.		
	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.
	Arapahoe	11,357	11,587	22,944	4,016	4,328	8,344	15,373	15,915	31,288
Archuleta	101	73	174	23	21	44	124	94	218
Baca	200	166	366	94	59	153	294	225	519
Bent	176	184	360	56	61	117	232	245	477
Boulder	1,582	1,633	3,215	687	633	1,320	2,269	2,266	4,535
Chaffee	663	708	1,371	175	156	331	838	864	1,702
Cheyenne	52	44	96	16	13	29	68	57	125
Clear Creek	657	708	1,365	231	201	432	888	909	1,797
Conejos	1,152	1,108	2,260	342	323	665	1,494	1,431	2,925
Costilla	630	594	1,224	187	143	330	817	737	1,554
Custer	330	346	676	123	114	237	453	460	913
Delta	327	344	671	129	101	230	456	445	901
Dolores	76	74	150	38	16	54	114	90	204
Douglas	258	264	522	113	107	220	371	371	742

TABLE III. — Continued.

COUNTIES.	BETWEEN 6 AND 16.			BETWEEN 16 AND 21.			TOTAL BETWEEN 6 AND 21.		
	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.
	Eagle	196	191	387	91	59	150	287	250	537
Elbert	225	212	437	76	84	160	301	296	597
El Paso	1,886	1,942	3,828	612	597	1,209	2,498	2,539	5,037
Fremont	989	929	1,918	356	334	690	1,345	1,263	2,608
Garfield	401	365	766	141	116	257	542	481	1,023
Gilpin	597	610	1,207	187	194	381	784	804	1,588
Grand	61	40	101	14	20	34	75	60	135
Gunnison	366	387	753	141	140	281	507	527	1,034
Hinsdale	180	180	360	50	40	90	230	220	450
Huerfano	1,048	1,001	2,049	322	281	603	1,370	1,282	2,652
Jefferson	992	833	1,825	360	270	630	1,352	1,103	2,455
Kiowa	129	117	246	47	33	80	176	150	326
Kit Carson	225	228	453	71	66	137	296	294	590
Lake	1,121	1,107	2,228	350	313	663	1,471	1,420	2,891
La Plata	554	496	1,050	132	126	258	686	622	1,308

Larimer	1,047	996	2,043	423	336	759	1,470	1,332	2,802
Las Animas ..	2,001	1,878	3,879	639	510	1,149	2,640	2,388	5,028
Lincoln	71	53	124	18	18	36	89	71	169
Logan	325	344	669	130	120	250	455	464	919
Mesa	595	472	977	172	161	333	677	633	1,310
Montezuma ..	214	239	453	86	60	146	300	299	599
Montrose	471	392	863	127	128	255	598	520	1,118
Morgan	161	145	306	62	36	98	223	181	404
Otero	573	529	1,102	208	182	390	781	711	1,492
Ouray	494	357	761	140	143	283	544	590	1,044
Park	295	307	602	110	94	204	405	401	806
Phillips	310	285	595	93	85	178	403	370	773
Pitkin	605	638	1,243	170	236	466	775	874	1,649
Prowers	199	231	430	65	53	118	264	284	548
Pueblo	3,001	2,759	5,760	954	976	1,930	3,955	3,735	7,690
Rio Blanco ..	75	101	176	37	21	58	112	122	234
Rio Grande ..	282	221	593	90	68	158	372	289	661
Routt	235	232	467	105	82	187	340	314	654
Saguache	379	352	731	147	118	265	526	470	996
San Juan	84	79	163	17	22	39	101	101	202
San Miguel ..	153	146	299	38	42	80	191	188	379
Sedgwick	154	143	297	47	41	88	201	184	385

TABLE III.—*Concluded.*

COUNTIES.	BETWEEN 6 AND 16.			BETWEEN 16 AND 21.			TOTAL BETWEEN 6 AND 21.		
	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.
Summit	178	187	365	64	71	135	242	258	500
Washington...	201	185	386	51	50	101	252	235	487
Weld	1,303	1,264	2,567	487	400	887	1,790	1,664	3,454
Yuma	247	274	521	73	93	166	320	367	687
Totals.....	40,004	39,280	79,284	13,733	13,095	26,828	53,737	52,375	106,112

TABLE IV.

ENROLLMENT AND ATTENDANCE.

1891.

COUNTIES.	ENROLLED IN HIGH SCHOOLS.	ENROLLED IN GRADED SCHOOLS.	ENROLLED IN GRADED SCHOOLS IN PER CENT.	UNDER 16 ENROLLED IN PUBLIC SCHOOLS.	OVER 16 ENROLLED IN PUBLIC SCHOOLS.	WHOLE NUMBER ENROLLED IN PUBLIC SCHOOLS.			AVERAGE DAILY ATTENDANCE.	PER CENTAGE.			NO. MILLS COUNTY TAX LEVY.
						MALE.	FEMALE.	TOTAL.		OF ENROLLMENT ON WHOLE NUMBER.	OF DAILY ATTENDANCE ON ENROLLMENT.	OF DAILY ATTENDANCE ON WHOLE NUMBER.	
Arapahoe	859	18,440	1,923	20,266	956	10,467	10,755	21,222	12,810	70	60	60	•
Archuleta	---	---	130	116	14	81	49	130	79	63	61	61	2.0
Baca	---	58	377	372	63	237	198	435	314	64	72	72	3.0
Bent	---	250	54	257	47	153	151	304	175	76	57	57	2.0
Boulder	111	1,749	1,594	3,109	345	1,728	1,726	3,454	2,088	78	60	60	•
Chaffee	22	689	400	1,014	97	545	566	1,111	764	65	68	68	2.0
Cheyenne	---	58	50	88	20	59	49	108	75	80	69	69	2.0
Clear Creek	58	885	375	1,247	71	602	716	1,318	916	69	69	69	2.5
Conjoes	---	455	1,373	1,636	192	984	844	1,828	1,007	60	55	55	2.0
Costilla	---	80	542	486	136	391	231	622	467	44	75	75	2.0
Custer	---	273	421	595	99	351	343	694	505	72	73	73	3.0

TABLE IV.—Continued.

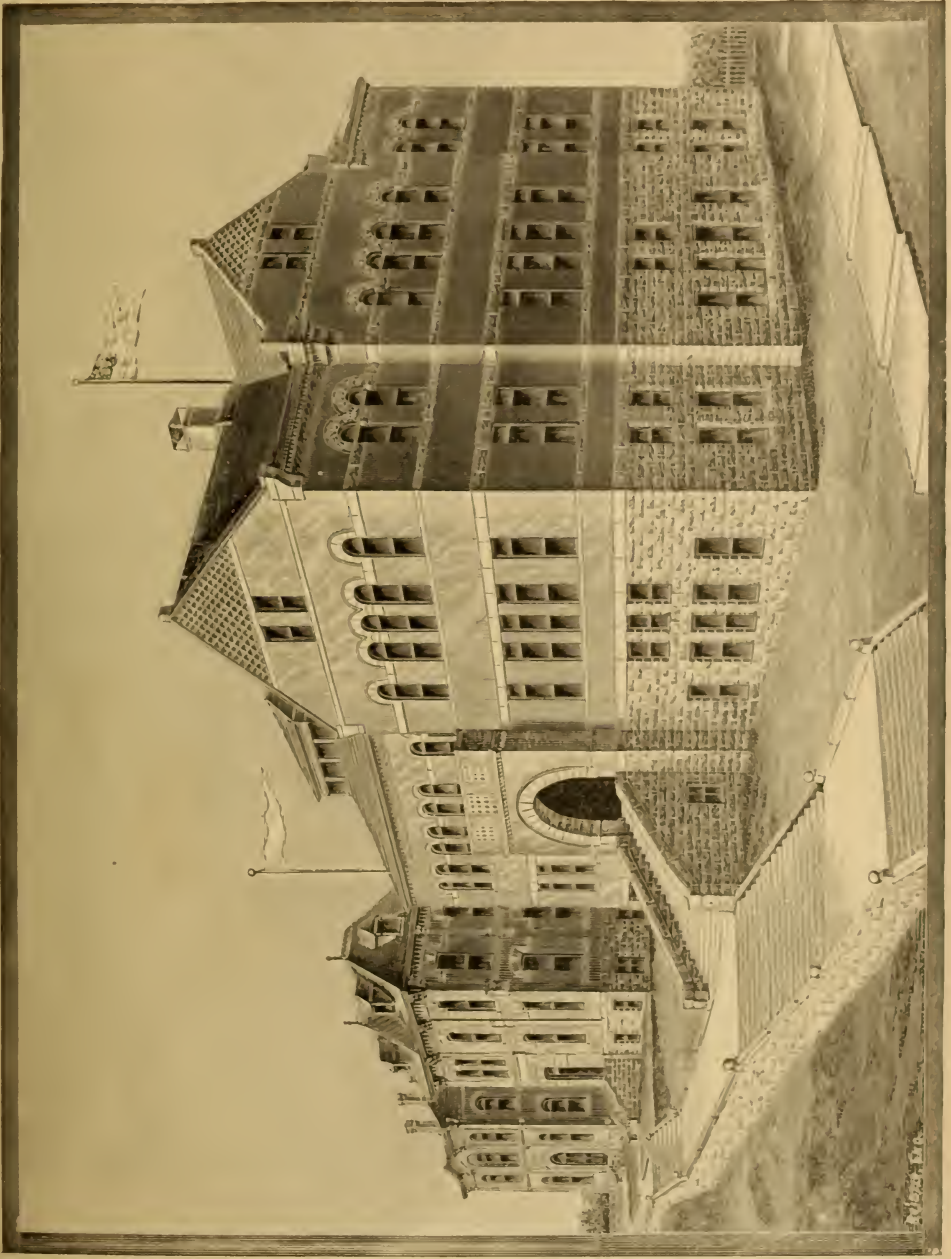
COUNTIES.	ENROLLED IN HIGH SCHOOLS.	ENROLLED IN GRADED SCHOOLS.	ENROLLED IN UNGRADED SCHOOLS.	UNDER 16 ENROLLED IN PUBLIC SCHOOLS.	OVER 16 ENROLLED IN PUBLIC SCHOOLS.	WHOLE NUMBER ENROLLED IN PUBLIC SCHOOLS.			AVERAGE DAILY ATTENDANCE.	PERCENTAGE.			NO. MILLS COUNTY TAX LEVY.
						MALE.	FEMALE.	TOTAL.		OF ENROLLMENT ON WHOLE NUMBER.	OF DAILY ATTENDANCE ON ENROLLMENT.	OF ENROLLMENT ON ENROLLMENT.	
Delta.....	30	212	448	556	134	325	365	690	383	81	55	5.0	
Dolores.....	---	---	102	89	13	62	40	102	61	61	60	3.0	
Douglas.....	---	118	460	519	59	292.	286	578	355	76	61	3.0	
Eagle.....	---	---	318	268	50	149	169	318	196	71	61	3.0	
Elbert.....	---	53	306	301	58	198	161	359	249	57	69	3.0	
El Paso.....	123	2,857	1,167	3,842	305	2,069	2,078	4,147	2,465	84	59	2.0	
Fremont.....	64	1,200	742	1,812	194	967	1,039	2,006	1,229	78	61	3.0	
Garfield.....	---	189	508	610	87	367	330	697	473	67	68	2.0	
Gilpin.....	24	962	114	1,042	58	539	561	1,100	697	68	63	3.0	
Grand.....	---	---	88	72	16	44	44	88	43	60	49	3.0	
Gunnison.....	35	474	270	715	64	358	421	779	451	79	58	2.0	
Hinsdale.....	---	105	15	113	7	55	65	120	105	66	87	4.0	
Huerfano.....	---	381	1,147	1,336	192	805	723	1,528	908	60	59	*	

Jefferson	48	526	1,122	1,519	177	873	823	1,696	1,178	70	69	3.0
Kiowa	---	---	326	262	64	170	156	326	192	96	59	2.0
Kit Carson	---	---	530	466	64	279	251	530	297	89	56	5.0
La Plata	75	445	323	658	185	443	400	843	487	64	58	5.0
Lake	26	1,122	263	1,342	69	759	652	1,411	904	52	64	7.5
Laramie	41	895	1,194	1,917	213	1,699	1,031	2,130	1,298	75	60	4.0
Las Animas	24	1,649	1,480	2,918	235	1,715	1,438	3,153	1,745	62	55	1.5
Lincoln	---	---	133	120	13	76	57	133	73	80	55	2.0
Logan	37	162	693	773	119	459	433	892	461	*	52	5.0
Mesa	50	494	351	797	98	464	431	895	514	79	57	*
Montezuma	51	---	468	426	93	271	248	519	260	90	59	*
Montrose	21	353	423	710	87	405	392	797	468	80	59	2.0
Morgan	---	128	187	275	40	168	147	315	212	83	67	3.0
Otero	---	594	260	667	97	384	380	764	461	62	60	*
Ouray	10	280	434	685	39	366	358	724	411	68	57	2.0
Park	---	249	397	452	104	269	287	556	336	66	60	*
Phillips	47	156	596	712	87	437	362	799	400	99	50	5.0
Pitkin	30	971	113	1,015	99	530	584	1,114	666	81	59	2.0
Prowers	---	268	232	434	66	232	268	500	257	88	51	3.0
Pueblo	190	3,522	847	4,171	388	2,341	2,218	4,559	2,366	62	52	*
Rio Blanco	---	83	101	153	31	86	98	184	113	66	61	2.0
Rio Grande	11	485	404	781	119	474	426	900	530	88	59	2.0

TABLE IV.—Concluded.

COUNTIES.	ENROLLED IN HIGH SCHOOLS.	ENROLLED IN GRAD-ED SCHOOLS.	ENROLLED IN UN-GRADED SCHOOLS.	UNDER 16 ENROLLED IN PUBLIC SCHOOLS.	OVER 16 ENROLLED IN PUBLIC SCHOOLS.	WHOLE NUMBER ENROLLED IN PUBLIC SCHOOLS.			AVERAGE DAILY AT-TENDANCE.	PERCENTAGE.		NO. MILLS COUNTY TAX LEVY.
						MALE.	FEMALE.	TOTAL.		OF ENROLL-MENT ON WHOLE NUMBER.	OF DAILY AT-TENDANCE ON ENROLL-MENT.	
Routt.....	-----	-----	436	275	161	261	175	436	214	80	49	**
Sagauche	-----	174	510	600	84	362	322	684	416	70	61	2.0
San Juan.....	-----	133	-----	110	23	55	78	133	79	70	59	*
San Miguel	-----	74	51	123	2	69	56	125	70	48	56	2.0
Sedgwick	40	57	252	314	35	188	161	349	224	85	64	4.0
Summit	-----	203	154	333	24	188	169	357	183	78	51	3.0
Washington	14	180	239	495	28	221	212	433	264	90	61	2.0
Weld	71	1,458	1,227	2,316	440	1,397	1,359	2,756	1,456	82	53	3.0
Yuma	-----	67	573	560	80	297	343	640	356	*	**	2.5
Totals.....	2,112	44,126	27,153	66,750	6,641	37,166	36,225	73,391	43,706	71+	59+	38

* Not reported.



SCHOOL OF MINES, GOLDEN.

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TABLE V.

ENROLLMENT AND ATTENDANCE.
1892.

COUNTIES.	ENROLLED IN HIGH SCHOOLS.	ENROLLED IN GRAD- ED SCHOOLS.	ENROLLED IN UN- GRADED SCHOOLS.	UNDER 16 ENROLLED IN PUBLIC SCHOOLS.	OVER 16 ENROLLED IN PUBLIC SCHOOLS.	WHOLE NUMBER ENROLLED IN PUBLIC SCHOOLS.			AVERAGE DAILY AT- TENDANCE.	PERCENTAGE.		
						MALE.	FEMALE.	TOTAL.		OF ENROL- LMENT ON WHOLE NUMBER.	OF DAILY AT- TENDANCE ON ENROLL- MENT.	NO. MILLS TAX LEVY.
Arapahoe	979	18,885	2,015	20,793	1,176	11,012	10,867	21,879	13,977	69	64	3.0
Archuleta	.....	.....	131	112	19	81	50	131	77	60	59	4.0
Baca	.....	.....	422	341	81	241	181	422	279	81	66	3.0
Bent	.....	216	132	320	28	171	177	348	185	73	53	3.4
Boulder	125	2,158	1,415	3,337	361	1,811	1,887	3,698	2,440	81	66	2.0
Clayenne	.....	80	36	93	23	61	55	116	106	93	91	5.0
Clear Creek	58	1,029	290	1,292	85	664	713	1,377	922	76	67	2.0
Chaffee	66	869	375	1,182	128	626	684	1,310	860	76	66	2.0
Concejos	.....	716	1,168	1,493	391	1,041	843	1,884	1,014	64	54	2.0
Costilla	.....	699	699	573	126	447	252	699	395	45	56	2.0
Custer	.....	.....	711	588	123	351	360	711	477	76	67	5.0

TABLE V.—Continued.

COUNTIES.	ENROLLED IN HIGH SCHOOLS.	ENROLLED IN GRAD-ED SCHOOLS.	ENROLLED IN UN-GRADED SCHOOLS.	UNDER 16 ENROLLED IN PUBLIC SCHOOLS.	OVER 16 ENROLLED IN PUBLIC SCHOOLS.	WHOLE NUMBER ENROLLED IN PUBLIC SCHOOLS.			AVERAGE DAILY ATTENDANCE.	PERCENTAGE.			
						MALE.	FEMALE.	TOTAL.		OF ENROLLMENT ON WHOLE NUMBER.	OF DAILY ATTENDANCE ON ENROLLMENT.	NO MILLS COUNTY TAX LEVY.	
Delta	46	228	420	547	147	360	334	694	347	77	50	*	
Dolores.....	----	----	127	121	6	67	60	127	107	62	84	8.0	
Douglas.....	----	120	482	513	89	397	295	602	393	81	65	3.0	
Ragle	----	----	301	277	24	154	147	301	214	56	71	3.0	
Filbert	----	----	410	353	57	211	199	410	239	69	58	3.0	
El Paso.....	130	3,187	1,147	3,960	444	2,173	2,231	4,404	2,626	87	60	2.0	
Premont	96	835	1,135	1,892	174	1,015	1,051	2,066	1,324	79	64	7.0	
Garfield	42	114	700	748	108	415	441	856	626	84	73	2.5	
Gilpin	39	1,005	94	1,084	54	564	574	1,138	767	72	67	3.0	
Grand	----	----	89	76	13	48	41	89	56	66	63	3.5	
Gunnison	22	472	258	680	72	355	397	752	481	73	64	2.0	
Hinsdale	----	272	21	281	12	140	153	293	181	65	62	7.0	
Huerfano	----	586	1,071	1,459	198	748	909	1,657	1,064	62	64	*	
Jefferson	46	519	1,203	1,591	177	937	831	1,768	1,204	72	68	5.0	
Kiowa.....	----	----	285	229	56	152	133	285	177	87	62	2.0	

Kit Carson				63	241	240	481	293	82	61	2.0
Lake	45	1,145	481	418	751	757	1,508	1,172	52	77	6.3
La Plata	79	543	313	869	518	447	965	576	73	60	5.0
Larimer	57	886	1,218	1,953	1,118	1,043	2,161	1,327	77	61	5.0
Las Animas	38	1,892	1,756	3,399	1,984	1,682	3,666	2,164	73	59	3.0
Lincoln			155	138	89	66	155	64	97	41	2.0
Logan	57	211	491	664	376	383	759	407	82	54	3.0
Mesa	34	563	429	892	515	511	1,026	610	78	59	•
Montezuma			468	379	221	247	468	244	80	52	4.0
Montrose	22	361	480	750	456	407	863	446	77	52	2.0
Morgan		152	210	318	193	169	362	206	90	57	3.0
Otero	75	523	369	843	493	474	967	668	65	63	2.0
Ouray	7	401	300	654	380	328	708	379	68	53	2.0
Park		274	348	547	292	330	622	276	77	44	•
Phillips			705	629	382	323	705	420	91	60	4.5
Pitkin	23	1,105	151	1,198	645	694	1,339	878	81	66	2.0
Prowers		231	259	401	237	253	490	200	90	59	4.5
Pueblo	171	3,585	793	4,252	2,283	2,269	4,552	2,920	59	64	•
Rio Blanco		67	93	429	80	80	160	99	68	62	•
Rio Grande	25	231	322	486	337	241	578	322	87	50	2.5
Routt		70	324	320	195	199	394	261	60	66	3.0
Saguache		163	531	614	362	332	694	405	70	55	•

TABLE V.—*Concluded.*

COUNTIES.	ENROLLED IN HIGH SCHOOLS.	ENROLLED IN GRAD-ED SCHOOLS.	ENROLLED IN UN-GRADED SCHOOLS.	UNDER 16 ENROLLED IN PUBLIC SCHOOLS.	OVER 16 ENROLLED IN PUBLIC SCHOOLS.	WHOLE NUMBER ENROLLED IN PUBLIC SCHOOLS.			AVERAGE DAILY AT-TENDANCE.	PERCENTAGE.			
						MALE.	FEMALE.	TOTAL.		OF ENROLL-MENT ON W H O L E N U M B E R.	OF DAILY AT-TENDANCE ON ENROLL-MENT.	NO. MILLS GOVNT TAX LEVY.	OF ENROLL-MENT ON W H O L E N U M B E R.	OF DAILY AT-TENDANCE ON ENROLL-MENT.	NO. MILLS GOVNT TAX LEVY.
San Juan.....	---	116	---	110	6	56	60	116	103	57	89	5.0	
San Miguel.....	---	156	113	214	55	133	136	269	157	71	58	2.0	
Sedgwick.....	33	60	264	285	72	194	163	357	213	93	60	4.0	
Summit.....	---	292	208	365	135	242	258	500	232	100	46	3.5	
Washington.....	---	167	226	352	41	209	184	393	247	81	63	3.0	
Weld.....	75	1,317	1,451	2,508	335	1,431	1,412	2,843	1,758	82	62	3.0	
Yuma.....	---	---	529	461	68	249	286	529	332	77	63	2.5	
Totals.....	2,393	45,802	28,452	69,353	7,294	38,814	37,833	76,647	47,946	72+	62+	3.2	

*Not reported.

57610

TABLE VI.
 NUMBER OF TEACHERS IN GRADED AND UNGRADED SCHOOLS. AVERAGE MONTHLY SALARIES.
 1891.

COUNTRIES.	GRADED SCHOOLS.				UNGRADED SCHOOLS.					
	TEACHERS.		SALARIES.		TEACHERS.		SALARIES.			
	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.
Arapahoe	43	254	297	\$ 101 64	\$ 63 90	41	88	129	\$ 42 35	\$ 41 15
Archuleta	1	1	2	50 00	30 00	2	5	7	50 00	51 00
Baca	2	6	8	75 00	56 66	1	17	32	31 21	30 00
Bent	8	31	39	79 02	57 87	16	6	7	30 00	42 00
Boulder	2	13	15	77 50	68 41	5	29	34	51 23	42 72
Chaffee	2	3	5	60 00	50 00	5	9	14	43 33	48 50
Cheyenne	3	15	18	122 00	69 00	5	13	18	73 00	47 00
Clear Creek	5	2	7	78 12	70 00	13	21	34	55 02	43 50
Conejos	1	1	2	50 00	50 00	10	6	16	40 00	40 00
Costilla	3	5	8	65 00	36 66	7	16	23	52 08	42 85
Custer	2	4	6	82 50	50 00	11	15	26	54 00	57 50

TABLE VI.—Continued.

COUNTIES.	GRADED SCHOOLS.					UNGRADED SCHOOLS.					
	TEACHERS.			SALARIES.		TEACHERS.			SALARIES.		
	MALE.	FEMALE.	TOTAL.	MALE	FEMALE.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	
Dolores	---	---	---	---	---	1	---	---	\$	90 00	60 00
Douglas	1	2	3	\$ 95 00	\$ 67 50	7	26	33	51 00	44 00	44 00
Eagle	---	---	---	---	---	3	15	18	87 50	60 00	60 00
Elbert	1	1	2	75 00	55 00	4	24	28	58 75	43 20	43 20
El Paso	10	55	65	122 00	72 00	8	61	69	47 00	46 00	46 00
Fremont	11	22	33	76 00	60 00	14	19	33	57 00	42 00	42 00
Garfield	1	4	5	160 00	90 00	4	35	39	68 33	49 96	49 96
Gilpin	5	13	18	104 00	62 50	1	12	13	50 00	36 00	36 00
Grand	---	---	---	---	---	---	7	7	---	47 14	47 14
Gunnison	3	6	9	88 66	60 83	---	23	23	---	52 00	52 00
Hinsdale	1	1	2	100 00	65 00	---	2	2	---	47 50	47 50
Huerfano	1	7	8	100 00	62 50	13	22	35	57 50	47 40	47 40
Jefferson	3	8	11	87 66	60 71	9	41	50	54 47	43 16	43 16
Kiowa	---	---	---	---	---	12	14	26	42 20	36 42	36 42

TABLE VI.—*Concluded.*

COUNTIES.	GRADED SCHOOLS.						UNGRADED SCHOOLS.					
	TEACHERS.			SALARIES.			TEACHERS.			SALARIES.		
	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.
San Juan.....	.....	2	2	.....	\$100 00	.....	.....	.....	.....	.....	.....	.....
San Miguel.....	1	1	2	\$80 00	80 00	3	3	6	\$61 67	.....	.....	\$47 83
Sedgwick.....	1	1	2	75 00	50 00	10	25	35	32 00	.....	.....	29 00
Summit.....	1	2	3	100 00	75 00	2	5	7	60 00	.....	.....	60 00
Washington.....	1	7	8	55 00	40 00	14	22	36	28 12	.....	.....	28 89
Weld.....	7	33	40	84 55	54 29	22	51	73	53 35	.....	.....	43 40
Yuma.....	1	1	2	55 00	40 00	9	26	35	32 48	.....	.....	27 94
Totals.....	170	731	901	\$94 32	\$62 87	507	1,126	1,633	\$52 07	.....	.....	\$45 65

*Not reported.

TABLE VII.
NUMBER OF TEACHERS IN GRADED AND UNGRADED SCHOOLS. AVERAGE MONTHLY SALARIES.
1892.

COUNTIES.	GRADED SCHOOLS.						UNGRADED SCHOOLS.					
	TEACHERS.			SALARIES.			TEACHERS.			SALARIES.		
	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.
Arapahoe.....	47	321	368	\$ 106 32	\$ 65 93	\$	28	110	138	\$ 40 75	\$	40 00
Archuleta.....							2	4	6	60 00		44 37
Baca.....							14	22	36	31 71		33 55
Bent.....	2	3	5	80 00	60 00		2	10	12	45 00		45 00
Boulder.....	7	34	41	83 61	57 00		16	41	57	51 53		43 64
Chaffee.....	1	18	19	133 33	71 75		3	20	23	65 00		51 27
Cheyenne.....	1	1	2	77 70	52 00		1	4	5	46 89		44 44
Clear Creek.....	4	18	22	115 83	70 18		5	12	17	70 00		68 00
Conejos.....	5	4	9	89 50	55 00		14	18	32	50 10		36 85
Costilla.....							14	12	26	49 88		43 94
Custer.....							16	13	29	52 11		30 00
Delta.....	1	5	6	100 00	63 00		12	5	17	58 00		50 00

TABLE VII.—Continued.

COUNTIES.	GRADED SCHOOLS.				UNGRADED SCHOOLS.			
	TEACHERS.		SALARIES.		TEACHERS.		SALARIES.	
	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.
Dolores.....	.....	.....	.....	.....	.....	.....	.....	.....
Douglas.....	1	2	3	\$ 90 00	\$ 57 50	7	8	\$ 57 18
Eagle.....	.....	2	2	.....	67 50	2	32	44 15
Elbert.....	.....	.....	.....	.....	.....	.....	24	63 70
El Paso.....	14	68	82	104 75	71 37	8	34	41 67
Fremont.....	8	16	24	83 92	61 21	14	79	47 00
Garfield.....	1	5	6	150 00	75 00	9	47	47 68
Gilpin.....	5	14	19	107 50	62 50	1	44	50 44
Grand.....	.....	.....	.....	.....	.....	4	15	35 14
Gunnison.....	2	7	9	110 00	62 50	3	12	45 00
Hinsdale.....	2	5	7	95 00	66 12	.....	33	50 21
Huerfano.....	3	8	11	82 50	55 33	13	5	52 50
Jefferson.....	4	8	12	93 33	57 00	11	38	48 33
Kiowa.....	.....	.....	.....	.....	.....	10	61	44 15
							27	38 46

Kit Carson							29	43	72	35 00	34 75
Lake	17	17					1	10	11	71 00	71 00
La Plata	12	13	185 00				3	15	18	76 00	48 00
Larimer	27	30	110 58				24	54	78	47 76	45 15
Las Animas	30	37	87 96				27	29	56	48 98	42 73
Lincoln							4	10	14	60 83	44 67
Logan	4	8	62 25				29	39	68	32 69	32 09
Mesa	2	12	119 00				5	11	16	60 62	58 00
Montezuma	1	1	75 00				8	10	18	57 00	55 20
Montrose	1	7	125 00				13	11	24	58 84	53 64
Morgan	1	2	85 00				1	18	19	60 00	46 00
Otero	3	11	97 00				7	12	19	52 00	43 50
Ouray	1	9	111 11				6	9	15	57 00	70 05
Park	3	6	88 66				6	18	24	46 81	41 53
Phillips	2	4	60 00				20	35	55	33 33	29 80
Pitkin	1	23	200 00				3	11	14	82 50	63 43
Powers	2	4	80 00				4	20	24	39 50	37 90
Pueblo	11	94	142 17				18	39	57	49 26	47 76
Rio Blanco	1	1	100 00					6	6		56 66
Rio Grande	2	3	105 00				10	10	20	47 00	40 00
Routt	1	1	75 00				4	16	20	49 00	50 00
Saguache	1	3	112 50				12	24	36	52 27	44 00

TABLE VII.—*Concluded.*

COUNTIES.	GRADED SCHOOLS.					UNGRADED SCHOOLS.				
	TEACHERS.			SALARIES.		TEACHERS.			SALARIES.	
	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.	MALE.	FEMALE.	TOTAL.	MALE.	FEMALE.
San Juan.....	1	3	4	\$120 00	\$83 13	-----	-----	-----	-----	-----
San Miguel.....	1	2	3	100 00	80 00	3	9	12	\$65 00	\$48 47
Sedgwick.....	-----	2	2	-----	67 50	7	22	29	32 20	33 34
Summit.....	2	3	5	92 50	70 00	1	7	8	65 00	60 00
Washington....	1	6	7	50 00	48 00	8	26	34	29 00	31 00
Weld.....	9	25	34	69 74	54 54	18	56	74	51 30	45 22
Yuma.....	-----	-----	-----	-----	-----	10	37	47	36 87	28 76
Totals.....	170	838	1,008	\$103 91	\$64 28	495	1,250	1,745	\$51 25	\$46 29

*Not reported.

TABLE VIII.

DISTRICTS, SCHOOL HOUSES AND PER CAPITA EXPENSE.
1891.

COUNTIES.	NO. DAYS OF SCHOOL.		SCHOOL HOUSES.						AVERAGE COST PER MONTH, EACH PUPIL.	
	DISTRICTS.	GRADED SCHOOLS	UNGRADED SCHOOLS	NUMBER	NUMBER OF ROOMS	SITTINGS.	VALUATION.	VOLUMES IN LIBRARY	BY ENROLLMENT	BY AVERAGE DAILY ATTENDANCE
Arapahoe	97	186	131	136	357	17,641	\$ 2,670,625	20,771	\$ 3.67	\$ 0.17
Archuleta	5	141	141	4	5	92	7,460	.....	2.10	3.45
Baca	32	160	90	16	18	*	6,820	.....	3.19	4.49
Bent	8	186	113	9	16	394	19,099	.....	3.24	5.07
Boulder	53	179	119	55	82	3,734	104,645	375	2.43	4.53
Chaffee	26	185	111	28	41	1,416	59,525	600	4.88	7.40
Cheyenne	7	200	129	6	8	879	16,384	.....	5.59	7.94
Clear Creek	15	186	138	14	*	1,343	49,992	678	2.57	4.12
Conejos	25	115	94	20	37	2,271	28,119	200	2.28	4.04
Costilla	21	120	99	16	24	710	16,805	18	3.85	4.10
Custer	24	114	89	24	31	1,127	17,005	34	3.00	5.75

TABLE VIII.—Continued.

COUNTIES.	DISTRICTS.		NO. DAYS OF SCHOOL.						SCHOOL HOUSES.					AVERAGE COST PER MONTH, EACH PUPIL.	
	GRADED SCHOOLS.	UNGRADED SCHOOLS.	NUMBER.	NUMBER OF ROOMS.	SITTINGS.	VALUATION.	VOLUMES IN LIBRARY.	BY ENROLLMENT.	BY AVERAGE DAILY ATTENDANCE.						
Delta	180	102	21	24	770	\$ 15,800	466	\$ 2 42	\$ 3 87						
Dolores	-----	159	1	1	55	1,200	200	1 97	3 30						
Douglas	180	125	26	29	830	17,150	60	3 58	6 00						
Eagle	-----	113	11	11	392	10,450	75	4 63	7 52						
Elbert	180	130+	21	*	583	12,900	-----	3 76	5 22						
El Paso	180	117	61	120	4,056	268,488	960	2 80	5 35						
Fremont	100	142	32	55	2,537	74,220	98	2 14	3 63						
Garfield	180	105+	23	31	860	31,050	35	2 76	4 80						
Gilpin	188	86	12	23	1,191	44,461	1,343	3 31	5 23						
Grand	-----	120	7	*	139	1,825	-----	3 94	4 81						
Gunnison	171	80+	21	28	1,323	41,200	362	4 76	6 50						
Hinsdale	175	60	4	4	175	30,200	-----	3 58	4 00						
Huerfano	157	106	25	*	2,298	29,207	-----	1 56	2 06						
Jefferson	178	128	46	58	1,937	80,500	626	2 37	3 25						

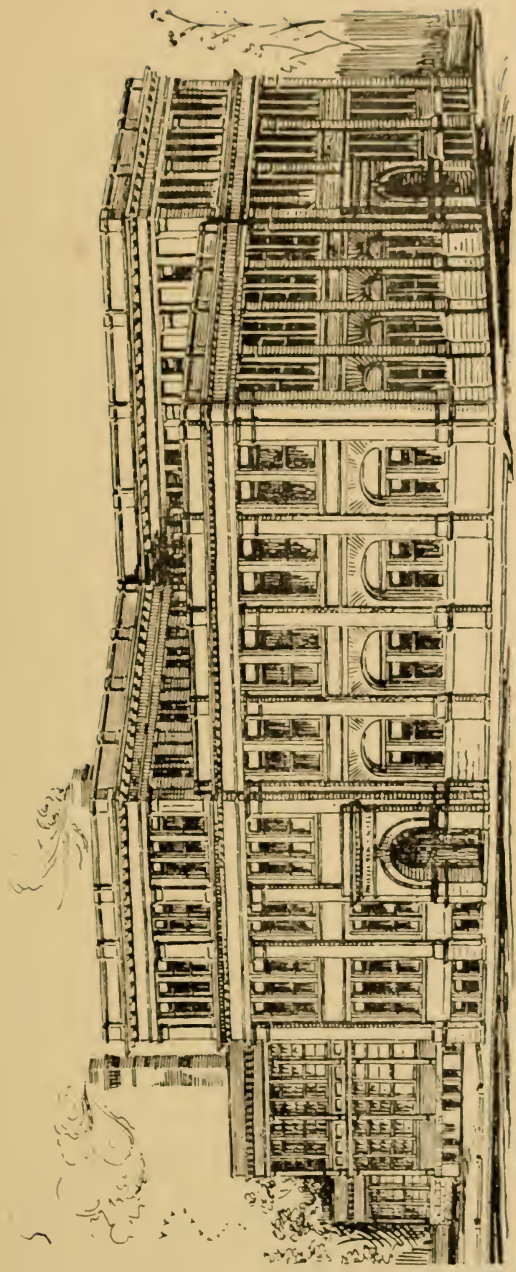
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Kiowa	23	130	18	20	447	16,488	---	4 00	6 81
Kit Carson	45	119	35	39	964	21,231	266	5 13	8 05
Lake	9	160	11	22	1,865	161,650	1,200	2 24	4 91
La Plata	16	179	17	24	831	32,832	200	1 71	3 37
Larimer	54	170	55	72	2,648	89,520	1,276	2 91	4 78
Las Animas	53	167	39	*	2,896	97,705	75	1 75	2 91
Lincoln	6	205	7	7	232	11,110	---	6 93	8 56
Logan	41	180	32	38	956	23,410	---	3 81	6 75
Mesa	14	170	13	20	966	54,975	377	3 00	5 28
Montezuma	12	100	12	15	309	13,665	---	3 17	6 52
Montrose	18	180	19	26	1,033	36,600	125	2 19	5 24
Morgan	10	180	10	*	386	17,875	---	3 98	7 13
Otero	16	179	16	20	986	29,725	---	4 85	7 55
Ouray	11	180	12	17	780	25,075	169	2 38	3 96
Park	21	177	24	27	783	18,508	---	4 16	6 39
Phillips	42	180	35	38	3,127	19,930	60	3 17	5 08
Pitkin	7	182	7	23	919	54,950	302	3 69	8 77
Prowers	22	180	16	22	712	16,713	---	4 12	5 59
Pueblo	49	183	56	164	4,287	423,550	400	3 40	6 33
Rio Blanco	8	173	7	9	215	13,850	---	4 34	6 14
Rio Grande	22	162+	17	23	1,079	21,575	169	2 75	4 67
Routt	22	104	15	18	382	5,800	---	4 18	6 10

TABLE VIII.—*Concluded.*

COUNTIES.	NO. DAYS OF SCHOOL.		SCHOOL HOUSES.					AVERAGE COST PER MONTH, EACH PUPIL.	
	GRADED SCHOOLS.	UNGRADED SCHOOLS.	NUMBER.	NUMBER OF ROOMS.	SITTINGS.	VALUATION.	VOLUMES IN LIBRARY.	BY ENROLLMENT.	BY AVERAGE DAILY ATTENDANCE.
Saguache.....	159	103+	25	29	953	\$ 18,706	204	\$ 3 75	\$ 6 26
San Juan.....	200	.....	1	2	300	10,000	.....	2 49	4 19
San Miguel...	180	103+	3	4	134	3,850	.....	2 68	4 67
Sedgwick.....	175	114	22	24	593	10,430	.....	3 15	4 66
Summit.....	160	150	8	12	343	11,550	355	3 01	5 02
Washington...	180	105	20	24	564	28,022	36	4 85	7 47
Weld.....	177	138	71	93	3,551	148,593	887	2 94	6 32
Yuma.....	180	114	23	27	*	14,865	.....	2 64	4 66
Totals.....	.....	.....	1,285	1,862	79,874	\$ 5,079,770	33,002	.....	.....
Averages.....	169+	117+	.....	.....	.....	.....	.....	.....	.....

* Not reported.



ROBERT S. ROESCHLAUB
ARCHITECT - DENVER.



MANUAL TRAINING SCHOOL, DISTRICT NO. 1, DENVER.

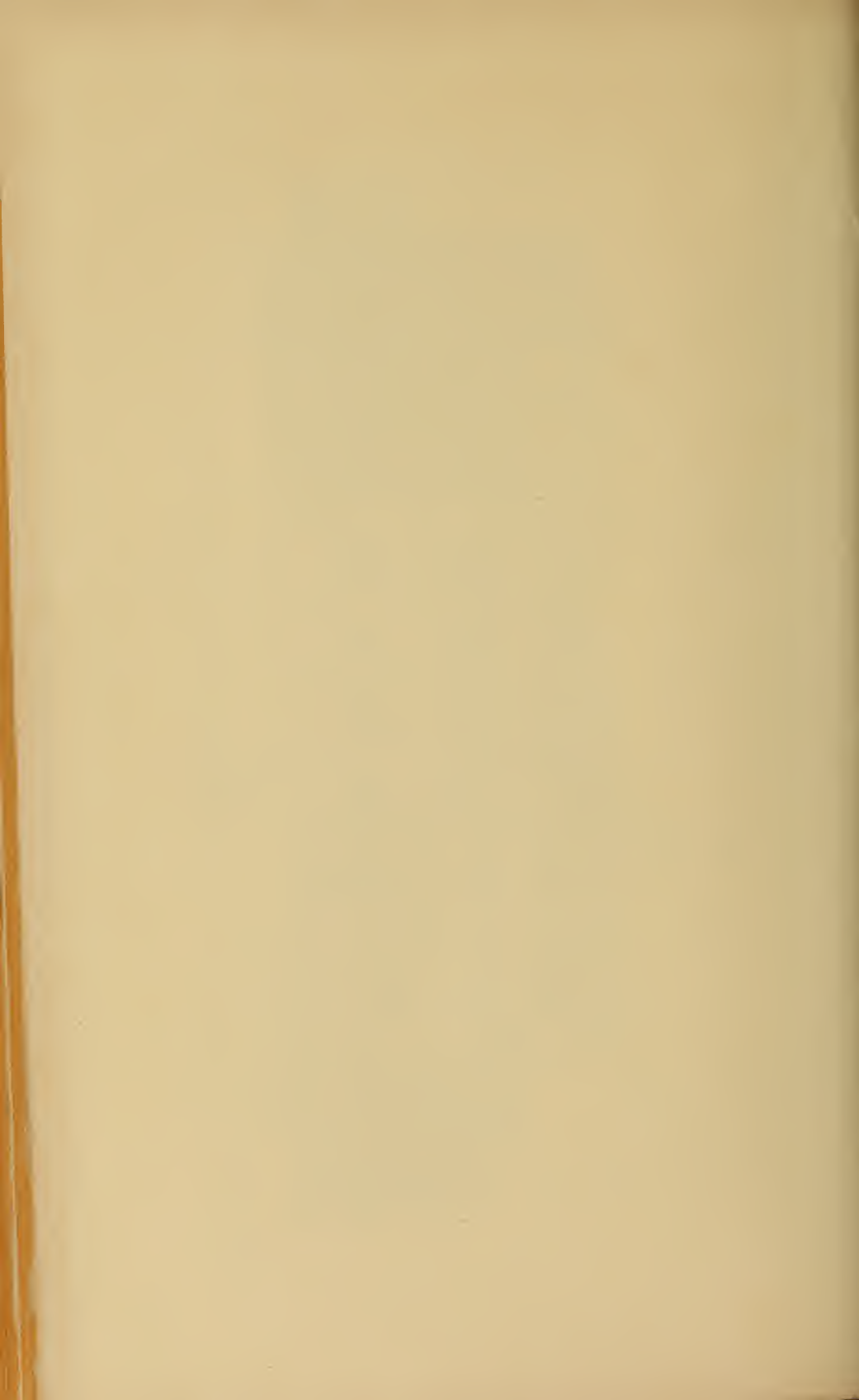


TABLE IX.

DISTRICTS, SCHOOL HOUSES AND PER CAPITA TAX.

1892.

COUNTIES.	DISTRICTS.		NO. DAYS OF SCHOOL.				SCHOOL HOUSES.						AVERAGE COST PER MONTH, EACH PUPIL.	
	GRADED SCHOOLS.	UNGRADED SCHOOLS.	NUMBER.	NUMBER OF ROOMS.	SITTINGS.	VALUATION.	VOLUMES IN LIBRARY.	BY ENROLLMENT.	BY AVERAGE DAILY ATTENDANCE.					
Arapahoe	189	130	141	426	18,769	\$2,879,955 00	25,936	\$ 3 32	\$ 5 68					
Archuleta	.....	111	5	6	194	6,943 50	278	4 04	6 62				
Baca	.....	87	21	23	527	8,046 00	.....	3 62	5 02			
Bent	.....	110	10	17	414	19,985 00	.....	3 94	6 96			
Boulder	178	125	57	89	4,025	132,685 00	450	2 59	4 04					
Chaffee	184	112	29	44	1,712	50,129 00	422	4 90	6 54					
Cheyenne	200	136	6	8	387	11,987 00	.....	6 34	9 09				
Clear Creek	183	149	13	28	1,361	42,290 00	1,090	2 18	3 49					
Conejos	133	92	27	43	1,900	39,079 00	125	94	1 85					
Costilla	.....	112	16	20	661	15,313 00	.....	2 10	4 50			
Custer	.....	91	20	26	1,104	16,264 36	34	2 41	3 54				

TABLE IX.—Continued.

COUNTIES.	NO. DAYS OF SCHOOL.		SCHOOL HOUSES.						AVERAGE COST PER MONTH, EACH PUPIL.	
	DISTRICTS.	GRADDED SCHOOLS.	UNGRADDED SCHOOLS.	NUMBER.	NUMBER OF ROOMS.	SEATINGS.	VALUATION.	VOLUMES IN LIBRARY.	BY ENROLLMENT.	BY AVERAGE DAILY ATTENDANCE.
Delta	16	175	114	19	24	926	\$ 15,361 00	23	\$ 2 71	\$ 4 44
Dolores	2	.....	179	2	3	81	1,000 00	120	6 02	6 46
Doñas	28	140	113	26	29	840	19,000 00	100	3 14	4 90
Eagle	16	60	124	12	13	470	12,125 00	110	2 96	4 22
Elbert	22	.....	149	18	23	610	12,340 00	43	4 14	6 32
El Paso	56	169	120	64	115	4,286	297,005 00	1,303	3 22	6 16
Fremont	26	189	130	31	57	2,553	75,010 00	504	2 65	4 44
Garfield	30	180	111	32	38	1,175	40,340 00	250	3 18	4 39
Gilpin	11	189	91	12	23	1,249	47,169 00	1,301	3 27	4 54
Grand	7	.....	80	4	4	82	1,781 00	.....	3 38	5 37
Gunnison	22	200	107	21	30	1,205	40,800 00	.....	2 93	4 57
Hinsdale	5	120	60	4	5	170	28,110 00	.....	3 19	5 96
Huerfano	31	176	134	28	35	1,913	34,123 00	.....	2 49	4 23

Jefferson	43	173	132	47	64	2,446	99,475 00	700	2 92	4 16
Kiowa	21	.....	139	21	21	420	15,691 00	547	4 51	7 30
Kit Carson	43	.....	127	43	47	839	18,580 00	394	5 28	7 30
Lake	11	170	155	15	25	2,080	149,390 00	1,490	78	8 17
La Plata	16	199	124	16	25	898	36,660 00	299	4 60	7 40
Larimer	54	170	138	61	77	2,856	88,845 00	1,395	3 49	5 54
Las Animas	56	190	99	46	71	3,329	96,670 00	.....	1 77	3 12
Lincoln	6	.....	154	8	11	198	13,010 00	.....	5 63	29 51
Logan	43	167	118	39	44	1,247	35,410 00	.....	4 27	6 60
Mesa	14	170	121	20	35	1,135	60,000 00	370	2 80	4 74
Montezuma	12	80	141	15	18	*	14,390 00	.....	3 50	5 60
Montrose	18	180	130	21	28	843	28,135 00	30	3 16	5 56
Morgan	11	180	149	13	16	502	22,000 00	.....	3 36	4 84
Otero	19	180	120	17	34	1,200	57,730 00	50	2 70	4 37
Ourray	11	153	111	13	18	521	23,385 10	75	2 54	3 41
Park	22	170	131	25	28	750	17,625 00	52	1 19	2 60
Phillips	39	180	101	33	36	3,578	17,085 00	.....	2 88	4 80
Pitkin	13	200	95	11	31	1,187	66,450 00	1,095	5 85	7 30
Prowers	21	180	166	18	24	770	20,228 55	.....	5 05	6 00
Pueblo	45	187	119	55	139	4,456	441,692 00	1,498	4 19	7 31
Rio Blanco	7	175	113	7	8	212	14,411 00	.....	4 91	7 30
Rio Grande	22	158	101	16	20	670	17,835 00	112	3 00	5 48

TABLE IX.—*Concluded.*

COUNTIES.	NO. DAYS OF SCHOOL.		SCHOOL HOUSES.					AVERAGE COST PER MONTH, EACH PUPIL.	
	GRADED SCHOOLS.	UNGRADED SCHOOLS.	NUMBER.	NUMBER OF ROOMS.	SITTINGS.	VALUATION.	VOLUMES IN LIBRARY.	BY ENROLLMENT.	BY AVERAGE DAILY ATTENDANCE.
Koutt	27	120	82	23	27	595	\$ 8,159 00	\$ 3 50	6 00
Saguache.....	26	159	112	25	28	937	17,860 00	3 48	6 26
San Juan.....	1	192	.....	1	4	*	10,000 00	4 27	4 80
San Miguel ...	6	182	113	3	9	248	3,870 00	2 07	3 50
Sedgwick	25	180	109	21	22	526	9,904 00	3 08	5 22
Summit	8	176	132	8	11	383	12,575 00	3 00	7 51
Washington...	27	180	116	21	27	637	23,532 00	4 47	7 60
Weld	68	174	138	74	103	3,544	159,894 11	3 06	5 52
Yuma	33	.....	120	24	26	752	13,875 00	2 92	5 23
Totals.....	1,357	.....	.....	1,378	2,206	83,331	\$5,441,907 62	.....	.....
Averages...	.....	169 †	118 †	.....	.....	.....	.....	.....	.....

* Not reported.

TABLE X.

FINANCIAL STATEMENT. 1891.
RECEIPTS.

COUNTIES	AMOUNT ON HAND JULY 1, 1890.	FROM GENERAL FUND.	FROM SPECIAL FUND.	FROM ALL OTHER SOURCES.	TOTAL RECEIPTS.
Arapahoe	\$ 223,171 11	\$ 222,328 46	\$ 244,856 58	\$ 130,914 58	\$ 821,271 13
Archuleta	1,279 51	712 24	858 66		2,849 81
Baca	1,055 78	3,726 54	5,016 38	10 86	9,809 56
Bent	3,923 64	3,994 61	2,872 33	541 26	11,241 84
Boulder	10,716 38	13,096 30	30,775 98	3,859 89	58,448 55
Chaffee	15,065 74	4,528 40	14,498 88	3,874 11	37,967 13
Cheyenne	1,985 50	2,256 86	5,502 73	366 97	10,052 66
Clear Creek	9,662 86	5,713 11	16,795 14	230 12	31,801 23
Conchos	3,011 14	5,102 81	7,212 31	6,113 11	21,439 37
Costilla	1,987 81	5,182 25	360 84		7,530 90
Custer	3,228 86	3,171 53	4,245 88	582 58	11,228 85
Delta	4,545 20	5,146 98	4,577 98	639 79	14,899 95
Dolores	212 87	124 82		1,866 00	1,993 69
Douglas	7,684 93	4,845 12	2,407 92	1,089 59	16,027 58
Engle	5,857 72	3,222 05	2,818 81	725 22	12,623 80

TABLE X.—Continued.

COUNTIES.	AMOUNT ON HAND JULY 1, 1896.	FROM GENERAL FUND.	FROM SPECIAL FUND.	FROM ALL OTHER SOURCES.	TOTAL RECEIPTS.
Elbert.....	\$ 7,996 24	\$ 7,344 97	\$ 3,366 22	\$ 666 66	\$ 19,344 09
El Paso.....	13,774 24	23,879 55	64,865 53	51,185 52	153,104 84
Premont.....	13,966 41	9,335 60	15,168 11	4,663 22	43,073 34
Garfield.....	4,720 49	5,526 61	12,376 32	7,243 46	29,866 88
Gilpin.....	6,436 64	4,993 91	15,471 51	89 77	26,901 83
Grand.....	779 11	756 11	468 11	-----	2,003 33
Gunnison.....	7,382 61	4,304 46	7,722 31	1,431 89	20,841 27
Hinsdale.....	113 21	2,044 99	229 57	137 06	2,524 83
Huerfano.....	6,856 71	5,785 01	4,793 73	4,008 01	21,143 46
Jefferson.....	10,621 43	13,170 00	11,683 33	3,289 31	38,764 07
Kiowa.....	7,963 64	2,198 72	8,680 74	47 75	18,890 85
Kit Carson.....	6,665 41	8,093 57	11,337 89	3,051 15	29,148 02
Lake.....	4,012 77	9,969 69	26,351 39	14,972 77	55,306 62
La Plata.....	5,669 58	8,618 57	5,144 84	436 98	19,269 97
Larimer.....	14,374 54	18,204 30	14,533 62	5,786 86	52,899 32
Las Animas.....	21,634 94	17,371 72	16,415 10	12,354 13	67,775 89
Lincoln.....	3,258 08	3,672 03	5,563 34	-----	12,493 45

Logan	10,066 40	9,083 68	12,530 93	839 47	34,526 48
Mesa	6,018 37	3,484 09	8,705 34	9 30	18,217 16
Montezuma	1,945 74	2,248 71	1,951 12	1,336 64	7,482 21
Montrose	3,603 09	2,967 39	6,685 97	10 00	13,286 45
Morgan	7,094 89	4,155 53	6,410 46	3,798 29	21,399 17
Otero	4,420 86	4,381 83	9,679 07	2,602 65	21,893 41
Ouray	2,384 77	2,174 49	8,116 48	19 58	12,695 29
Park	6,738 15	5,594 83	6,274 28	5,157 07	23,764 33
Phillips	6,163 98	4,389 20	5,474 48	1,277 25	17,394 91
Pitkin	34,665 33	7,439 29	24,952 89	7,127 94	74,195 45
Prowers	7,237 13	3,075 47	3,002 26	2,260 85	15,575 71
Pueblo	66,020 66	36,233 78	52,847 51	594,252 00	689,353 08
Rio Blanco	2,502 65	1,592 70	2,073 12	1,009 03	7,177 89
Rio Grande	4,999 06	3,673 16	8,223 43	3,320 89	29,126 54
Routt	4,663 88	3,235 78	1,312 58	197 13	8,899 37
Saguache	7,994 50	3,430 08	4,548 36	6,177 75	22,060 69
San Juan	1,124 60	2,244 25	1,323 51	263 28	3,632 13
San Miguel	1,736 23	2,070 60	4,857 10	1,082 88	6,213 22
Sedgwick	5,271 00	3,100 52	2,468 55	41 10	13,229 72
Summit	4,031 54	3,194 15	9,239 17	1,040 36	10,714 00
Washington	2,869 64	2,660 49	2,165 90		16,915 28

TABLE X.—*Concluded.*

COUNTIES,	AMOUNT ON HAND JULY 1, 1890.	FROM GENERAL FUND.	FROM SPECIAL FUND.	FROM ALL OTHER SOURCES.	TOTAL RECEIPTS.
Weld	\$ 21,180 50	\$ 24,385 91	\$ 30,402 69	\$ 6,043 02	\$ 82,012 12
Yuma	2,978 04	2,638 83	7,153 34	425 26	13,192 47
Totals.....	\$ 642,965 11	\$ 565,393 65	\$ 784,860 12	\$ 810,246 63	\$ 2,803,465 51

TABLE XI.

FINANCIAL STATEMENT, 1891.
EXPENDITURES.

COUNTIES.	FOR TEACHERS' WAGES.	FOR CURRENT EXPENSES.	FOR SITES, BUILDINGS AND FURNITURE.	FOR TEMPORARY LOANS PAID.	TOTAL EXPENDITURES	BALANCE IN HANDS OF COUNTY TREASURER JUNE 30, 1891.
Ataphoe	\$ 277,324 93	\$ 89,432 87	\$ 326,144 14	\$ 60,776 95	\$ 753,678 89	\$ 67,592 24
Archuleta	1,341 88	579 94	319 34	-----	2,234 16	617 65
Baca	4,567 67	595 14	2,094 78	173 94	7,831 53	1,978 03
Bent	5,374 68	1,330 85	1,116 25	703 51	8,525 29	2,716 55
Boulder	31,868 25	10,983 92	3,831 82	2,517 12	49,201 11	9,247 44
Chaffee	16,972 20	4,283 51	5,995 45	1,703 25	28,864 41	9,102 72
Cheyenne	3,485 81	1,387 58	3,346 31	-----	8,219 70	1,832 36
Clear Creek	17,090 65	4,179 55	2,243 24	798 05	24,311 49	7,489 74
Conejos	6,550 32	2,476 92	6,837 47	1,465 16	17,329 87	4,109 50
Costilla	3,395 97	1,099 93	994 65	50	5,401 05	2,120 85
Custer	5,866 68	1,146 71	497 96	-----	7,510 75	3,718 10
Delta	7,320 71	1,342 94	1,983 91	1,380 16	12,027 72	2,882 23
Dolores	1,155 00	382 71	-----	-----	1,537 71	365 98
Douglas	9,061 85	572 63	1,296 56	35 04	10,966 08	5,061 48
Eagle	5,921 90	1,687 95	848 67	718 41	9,176 93	3,446 87

TABLE XI.—Continued.

COUNTIES.	FOR TEACHERS' WAGES,	FOR CURRENT EXPENSES,	FOR SITES, BUILDINGS AND FURNITURE,	FOR TEMPORARY LOANS PAID,	TOTAL EXPENDITURES,	BALANCE IN HANDS OF COUNTY TREASURER JUNE 30, 1901.
Elbert.....	\$ 7,012 50	\$ 1,442 42	\$ 1,534 73	\$ 266 90	\$ 10,256 55	\$ 9,087 54
El Paso.....	57,400 00	26,643 39	49,074 91	9,075 85	142,203 15	10,901 69
Fremont.....	21,842 35	3,540 72	7,118 45	4,865 43	37,366 95	5,706 39
Garfield.....	12,944 53	3,429 09	9,374 35	501 93	26,249 90	3,616 98
Gilpin.....	15,593 20	4,327 24	1,406 76	235 74	21,472 94	5,428 89
Grand.....	863 30	89 95	297 02	35 87	1,286 14	717 19
Gunnison.....	8,659 61	2,694 11	1,358 09	1,304 00	14,015 81	6,825 46
Hinsdale.....	1,395 00	839 83	-----	222 29	2,457 12	67 71
Huerfano.....	12,287 98	2,886 11	932 18	455 34	16,561 61	4,581 85
Jefferson.....	19,815 50	5,244 47	1,639 90	4,668 47	31,368 34	* 7,395 73
Kiowa.....	5,623 94	1,590 35	5,898 25	28 31	13,140 85	5,750 00
Kit Carson.....	8,259 68	2,069 92	8,560 88	392 22	19,282 70	9,805 32
Lake.....	15,089 00	10,873 77	9,267 15	6,749 77	49,419 69	5,886 93
La Plata.....	11,395 61	3,166 64	588 43	50 79	15,201 47	4,068 50
Larimer.....	27,362 46	7,790 32	3,592 48	4,775 45	43,430 71	9,468 61
Las Animas.....	25,802 51	18,510 83	3,865 62	4,724 44	52,903 40	14,872 49
Lincoln.....	2,730 00	1,355 48	3,755 44	-----	7,840 92	4,652 53

Logan	11,735 30	5,303 08	4,002 46	2,124 10	23,164 94	9,361 84
Mesa	8,371 09	2,225 15	5,159 65	112 61	15,868 50	2,348 60
Montezuma	3,824 87	1,641 44	891 96	280 00	6,638 27	843 94
Montrose	7,127 02	1,992 45	1,936 12	80 89	11,136 48	2,129 97
Morgan	7,036 55	1,652 40	3,463 92	3,152 97	15,305 84	6,063 33
Otero	7,969 08	3,356 68	4,961 50	111 51	16,398 77	4,694 64
Ourray	7,723 86	2,341 03	199 52	217 78	10,482 19	2,213 10
Park	9,025 56	779 93	766 66	5,487 45	16,059 60	7,704 73
Phillips	6,992 04	2,073 46	2,731 38	743 02	12,449 90	4,855 01
Pitkin	20,300 80	6,659 55	9,973 09	6,017 52	42,950 96	31,244 40
Prowers	6,054 29	1,635 35	1,251 78	884 45	9,795 87	5,779 84
Pueblo	58,120 69	33,116 48	291,314 86	331,777 90	624,329 93	35,024 02
Rio Blanco	3,051 04	652 38	1,454 43	1,346 70	6,534 55	642 95
Rio Grande	9,218 27	2,884 52	3,997 36	234 32	16,334 42	3,792 07
Routt	4,895 91	742 30	445 04	-----	5,993 25	2,816 12
Saguache	8,017 15	1,550 73	2,036 78	5,134 77	16,739 43	5,331 20
San Juan	1,985 00	1,327 35	-----	-----	3,312 35	319 78
San Miguel	2,185 80	452 41	350 82	1,883 92	4,872 95	1,540 27
Sedgwick	4,652 95	1,381 94	2,774 85	81 42	8,891 16	4,375 50
Summit	5,327 97	1,132 33	147 10	1,266 63	7,814 03	2,030 57
Washington	6,395 92	2,790 23	3,504 68	1,953 28	14,644 11	2,291 19

TABLE XI.—*Concluded.*

COUNTIES.	FOR TEACHERS' WAGES	FOR CURRENT EXPENSES.	FOR SITES, BUILDINGS AND FURNITURE.	FOR TEMPORARY LOANS PAID.	TOTAL EXPENDITURES.	BALANCE IN HANDS OF COUNTY TREASURER JUNE 30, 1891.
Weid	\$ 36,760 07	\$ 11,373 28	\$ 11,416 81	\$ 8,865 80	\$ 68,415 96	\$ 13,596 16
Yuma	6,124 34	1,913 13	1,101 83	967 71	10,107 01	3,085 46
Totals	\$ 894,409 64	\$ 306,856 39	\$ 739,547 79	\$ 488,699 64	\$ 2,419,513 46	\$ 383,952 05

TABLE XII.

FINANCIAL STATEMENT, 1892.
RECEIPTS.

COUNTIES.	AMOUNT ON HAND JULY 1, 1891.	FROM GENERAL FUND.	FROM SPECIAL FUND.	FROM ALL OTHER SOURCES.	TOTAL RECEIPTS
Arapahoe	\$ 67,592 24	\$ 226,546 00	\$ 374,237 48	\$ 284,109 92	\$ 952,489 64
Archuleta	713 85	1,658 65	2,310 45		4,682 95
Baca	2,327 51	2,853 02	5,291 15	519 06	10,990 74
Benet	2,716 55	3,156 88	2,662 66	1,581 06	10,116 85
Boulder	9,695 81	11,932 54	32,646 11	12,560 33	66,234 79
Chaffee	9,173 86	6,691 12	12,432 02	686 04	25,983 04
Cheyenne	1,376 70	2,614 34	1,294 37		5,285 41
Clear Creek	6,872 62	5,433 34	14,561 53	1,537 98	28,405 47
Conejos	2,927 75	6,977 00	8,686 10	4,680 00	23,270 91
Costilla	1,739 13	3,819 00	4,665 34	2,403 99	12,627 46
Custer	3,653 52	2,711 11	2,781 36	461 67	9,607 66
Delta	2,593 62	3,992 07	4,289 60	574 04	11,359 33
Dolores	365 98	1,171 35	11,365 56	1,020 65	13,923 54
Douglas	3 445 89	6,336 99	4,174 33	495 55	14,452 76
Eagle	3 335 97	3,702 68	4,399 35	1,317 32	12,755 32

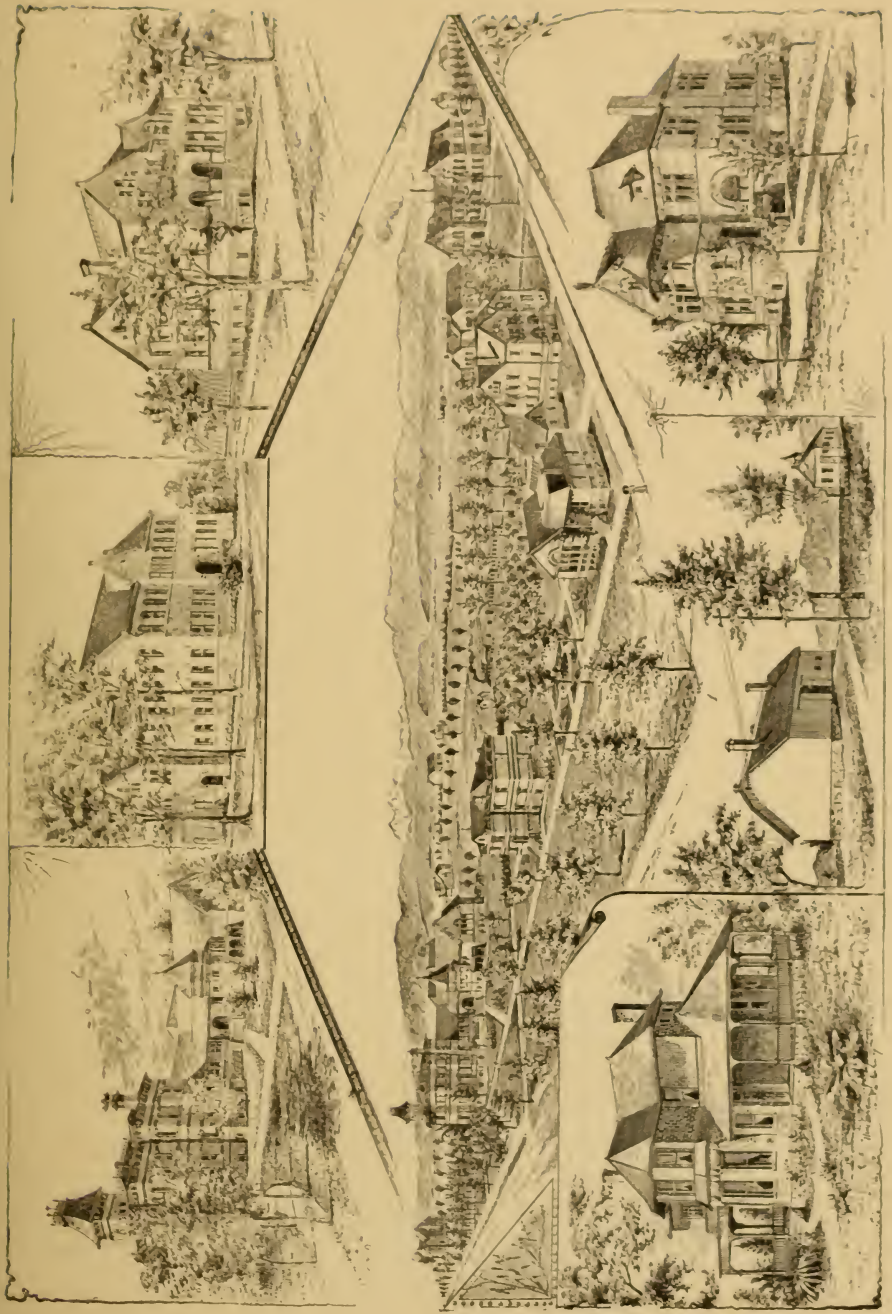
TABLE XII.—Continued.

COUNTIES.	AMOUNT ON HAND JULY 1, 1891.	FROM GENERAL FUND.	FROM SPECIAL FUND.	FROM ALL OTHER SOURCES.	TOTAL RECEIPTS.
Elbert.....	\$ 9,572 37	\$ 5,674 81	\$ 1,865 74	\$ 987 78	\$ 18,100 70
El Paso.....	10,792 36	21,329 42	56,589 94	119,060 25	207,771 97
Fremont.....	12,363 11	14,170 50	25,665 06	23,941 08	76,139 75
Garfield.....	5,713 76	6,127 07	19,636 16	6,467 32	37,944 31
Gilpin.....	5,459 69	4,994 54	13,898 70	2,549 70	26,662 63
Grand.....	1,011 68	1,196 95	392 12	-----	2,600 75
Gunnison.....	7,323 10	4,862 40	11,959 68	2,509 90	26,655 08
Hinsdale.....	14 26	2,076 08	-----	1,986 23	4,076 57
Huerfano.....	4,483 09	7,878 24	9,871 02	7,068 08	29,300 43
Jefferson.....	7,827 76	16,947 00	14,699 15	18,099 12	57,673 03
Kiowa.....	5,639 50	3,127 81	5,145 10	536 59	14,449 00
Kit Carson.....	9,627 08	3,868 22	8,883 38	45 10	22,363 78
Lake.....	6,988 38	12,847 19	27,107 21	8,564 05	55,566 83
La Plata.....	3,187 93	12,089 38	7,868 90	3,313 50	26,399 71
Larimer.....	9,311 52	17,706 60	15,118 65	12,894 87	55,031 64
Las Animas.....	14,779 33	19,525 98	26,912 30	3,625 89	64,843 50
Lincoln.....	4,689 36	2,201 63	3,090 04	66 04	10,047 07

Logan	11,031 71	5,400 40	9,947 09	2,550 57	85,089 77
Mesa	2,366 90	6,563 66	18,517 68	12,152 96	39,001 30
Montezuma	990 35	2,901 61	3,712 68	810 97	8,415 61
Montrose	2,525 86	5,491 24	20,168 44	255 59	28,441 13
Morgan	6,088 59	2,519 61	5,695 87	-----	14,314 07
Otero	6,417 82	3,003 90	10,195 17	18,023 47	35,640 12
Ouray	2,225 02	5,102 97	15,602 49	1,375 00	24,765 48
Park	6,179 63	3,719 60	4,452 79	763 49	15,115 51
Phillips	4,675 86	3,720 80	4,780 32	868 48	14,045 40
Pitkin	30,648 62	4,411 68	21,778 58	5,663 05	62,501 93
Prowers	5,883 40	4,946 23	6,157 97	2,572 47	10,860 97
Pueblo	34,310 79	42,978 14	59,985 65	159,438 56	276,713 14
Rio Blanco	643 50	1,942 06	2,684 20	3,640 88	8,910 61
Rio Grande	2,342 05	2,389 05	5,070 07	2,819 92	12,641 09
Routt	3,185 66	3,496 37	1,973 54	2,098 52	10,784 09
Saguache	5,368 50	4,192 63	5,132 38	3,708 92	18,401 81
San Juan	319 78	182 44	3,902 67	113 00	4,517 80
San Miguel	1,331 52	3,171 28	3,635 67	10 28	8,148 75
Sedgwick	3,909 40	2,554 51	5,455 00	134 94	12,663 81
Summit	3,585 54	3,578 41	3,683 16	333 96	10,281 07
Washington	2,166 43	2,946 48	10,166 13	1,679 07	16,948 11

TABLE XII.—*Concluded.*

COUNTIES.	AMOUNT ON HAND JULY 1, 1891.	FROM GENERAL FUND.	FROM SPECIAL FUND.	FROM ALL OTHER SOURCES.	TOTAL RECEIPTS.
Weld	\$ 13,869 91	\$ 20,424 30	\$ 26,619 21	\$ 9,391 28	\$ 70,304 70
Yuma	2,718 76	1,730 46	4,117 37	213 98	8 780 57
Totals.....	\$ 389,170 88	\$ 583,836 84	\$ 986,734 69	\$ 753,182 49	\$ 2,712,924 90



AGRICULTURAL COLLEGE BUILDINGS, FORT COLLINS.

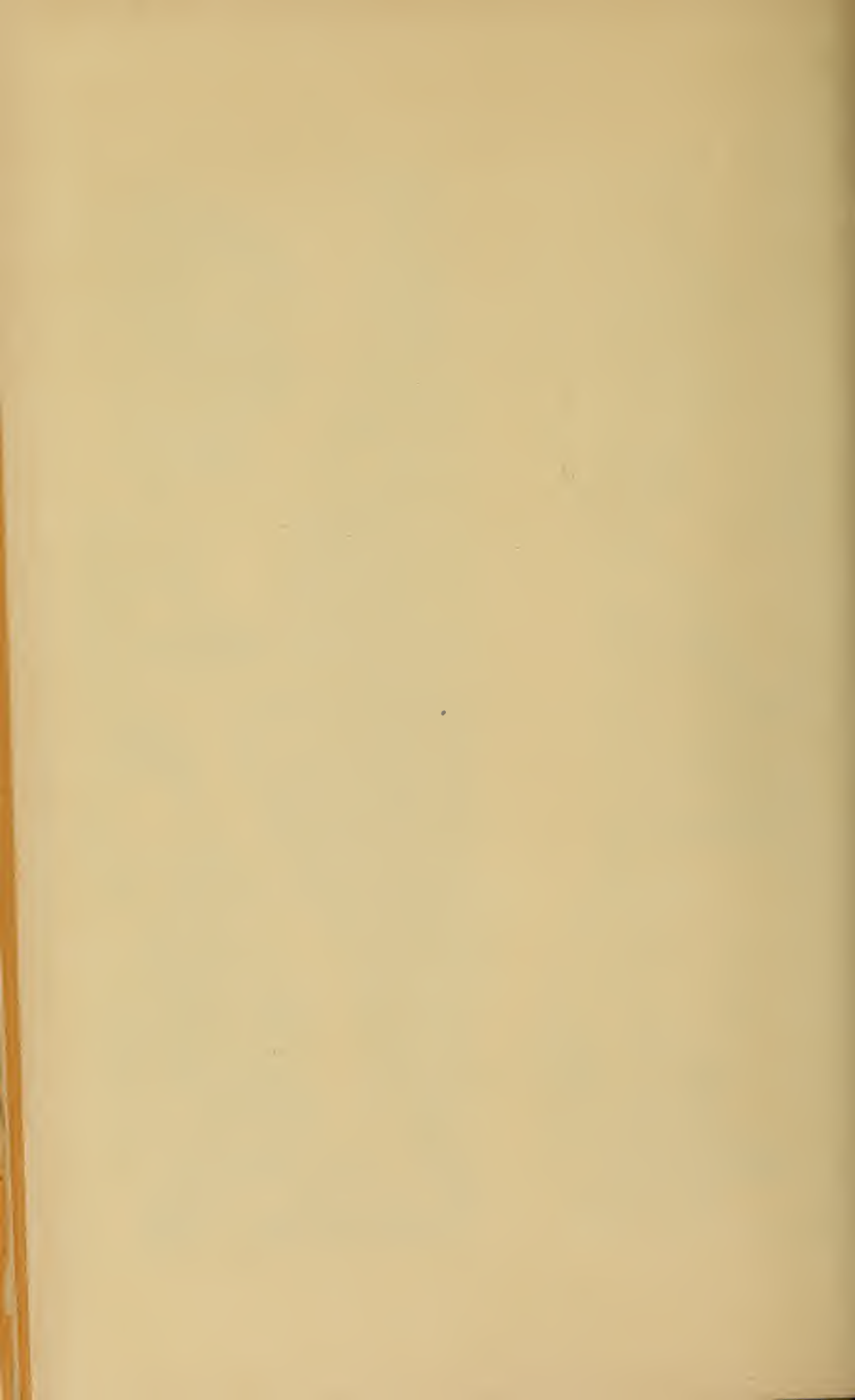


TABLE XIII.

FINANCIAL STATEMENT, 1892.

EXPENDITURES

COUNTIES.	FOR TEACHERS' WAGES.	FOR CURRENT EXPENSES.	FOR SITES, BUILDINGS AND FURNITURE.	FOR TEMPORARY LOANS PAID.	TOTAL EXPENDITURES.	BALANCE IN HANDS OF COUNTY TREASURER JUNE 30, 1892.
Arapahoe	\$ 315,519 54	\$ 106,643 83	\$ 326,448 92	\$ 65,829 40	\$ 814,441 69	\$ 135,043 95
Archuleta	1,747 48	284 27	238 08	1,165 15	3,434 98	1,247 97
Baca	4,601 58	930 11	1,113 18	572 76	7,217 63	3,773 11
Bent	6,000 34	1,381 81	569 32	793 50	8,654 97	1,461 88
Boulder	33,942 73	7,060 54	15,940 69	3,363 96	60,307 92	5,899 57
Chaffee	16,843 83	5,198 53	1,437 67	1,273 28	24,753 31	4,229 73
Cheyenne	2,308 19	781 26	1,088 65	-----	4,178 10	1,107 31
Clear Creek	18,134 00	4,316 95	3,111 70	149 42	25,712 07	2,693 40
Conchos	9,668 99	2,924 70	2,839 81	2,115 30	17,548 80	6,022 11
Costilla	4,265 79	1,646 88	2,479 44	1,446 65	9,838 76	2,188 70
Custer	4,827 93	1,044 14	1,254 38	616 24	7,742 69	1,864 67
Delta	4,642 15	2,346 42	469 83	823 93	8,282 33	3,077 00
Dolores	-----	1,877 96	5,027 88	400 00	7,305 84	6,617 70
Douglas	7,995 03	850 49	628 91	976 47	10,360 90	4,091 88
Eagle	5,548 84	1,432 86	1,601 77	809 02	9,392 49	3,362 83

TABLE XIII.—Continued.

COUNTIES.	FOR TEACHERS' WAGES.	FOR CURRENT EXPENSES	FOR SITES, BUILDINGS AND FURNITURE.	FOR TEMPORARY LOANS PAID.	TOTAL EXPENDITURES.	BALANCE IN HANDS OF COUNTY TREASURER JUNE 30, 1892.
Filbert	\$ 7,322 37	\$ 1,148 75	\$ 468 92	\$ 393 01	\$ 9,273 05	\$ 8,827 05
El Paso	6,696 86	24,559 03	85,407 04	2,029 18	178,692 11	29,079 86
Fremont	25,964 00	5,390 00	10,267 22	14,651 49	56,272 71	19,867 04
Garfield	12,696 77	2,997 22	7,691 84	4,397 90	27,603 73	10,340 58
Gilpin	15,541 50	4,228 46	1,027 48	2,025 86	22,823 30	3,779 33
Grand	1,214 35	182 76	457 28	.....	1,854 39	746 36
Gunnison	11,457 19	3,010 37	1,035 93	2,333 22	17,836 71	8,818 37
Hinsdale	1,440 50	402 63	100 00	1,604 24	3,547 37	529 20
Huerfano	12,268 58	2,622 27	6,241 21	538 50	21,610 56	7,689 87
Jefferson	22,259 45	7,146 31	13,022 36	357 01	42,785 13	14,487 90
Kiowa	5,726 78	1,361 83	3,963 47	369 07	11,421 15	3,027 85
Kit Carson	9,516 50	2,159 96	3,099 18	591 49	15,277 13	7,686 65
Lake	20,140 00	14,453 73	2,375 00	5,391 82	42,279 55	13,236 25
La Plata	14,273 33	3,125 62	1,224 37	3,794 48	22,417 80	3,981 91
Larimer	28,116 62	7,169 18	11,612 53	400 58	47,298 91	7,732 73
Las Animas	31,896 78	8,748 69	8,902 47	2,086 64	51,634 58	13,208 92
Lincoln	4,055 06	2,480 28	1,679 48	.....	8,205 82	1,841 25

Logan.....	12,897 11	3,674 99	2,286 57	2,269 98	26,577 65	8,332 12
Mesa.....	13,695 40	5,340 97	11,720 62	4,993 14	35,600 13	5,941 07
Montezuma	3,479 09	1,148 04	1,745 07	354 95	6,727 15	1,688 46
Montrose.....	11,919 25	7,033 53	3,145 66	375 01	22,473 45	5,967 08
Morgan.....	6,161 47	813 64	2,610 76	290 23	9,882 10	4,421 87
Otero.....	5,535 47	3,682 15	20,574 47	2,723 27	31,915 36	7,024 74
Ouray.....	10,275 31	8,953 81	1,265 36	.....	20,494 48	3,871 00
Park.....	8,698 65	966 64	599 34	194 30	10,728 33	4,857 15
Phillips.....	5,472 22	1,303 91	2,210 02	504 08	9,286 23	4,790 23
Pitkin.....	22,232 59	7,105 89	10,731 78	4,510 09	44,579 23	17,922 78
Prowers.....	5,442 46	4,038 47	991 38	1,289 30	11,471 61	8,388 48
Pueblo.....	65,972 38	37,536 37	55,730 99	70,467 07	259,766 81	67,666 33
Rio Blanco	2,638 24	1,110 99	3,022 48	1,082 21	7,853 91	1,056 75
Rio Grande	6,942 75	1,886 35	2,604 12	154 78	11,588 00	1,033 99
Routt.....	4,363 98	827 93	2,702 23	.....	7,794 14	2,029 95
Sagauche	7,539 79	1,307 99	3,323 93	1,851 24	14,315 86	4,080 97
San Juan	2,857 88	651 55	938 56	.....	4,417 99	89 69
San Miguel	3,667 00	608 98	1,591 65	124 88	5,692 51	1,416 24
Sedgwick.....	4,201 02	784 66	2,198 83	343 75	7,511 20	4,540 50
Summit.....	5,449 09	1,349 25	246 41	1,667 91	8,733 57	2,347 39
Washington	6,703 94	2,699 80	1,025 54	3,270 37	14,200 65	4,658 46

TABLE XIII.—*Concluded.*

COUNTIES.	FOR TEACHERS' WAGES.	FOR CURRENT EXPENSES.	FOR SITES, BUILDINGS AND FURNITURE.	FOR TEMPORARY LOANS PAID.	TOTAL EXPENDITURES.	BALANCE IN HANDS OF COUNTY TREASURER JUNE 30, 1892.
Weld	\$ 38,782 91	\$ 13,164 85	\$ 4,221 61	\$ 3,320 87	\$ 59,490 24	\$ 10,814 46
Yuma.....	4,998 21	1,339 03	888 60	205 96	7,331 80	1,438 77
Totals	\$ 985,136 68	\$ 336,936 31	\$ 659,561 99	\$ 220,897 96	\$ 2,202,532 94	\$ 510,391 96

TABLE XIV.

APPORTIONMENT OF STATE FUND.

COUNTIES.	1891. \$0.968 PER CAPITA.			1892. \$1.064 PER CAPITA.		
	AMOUNT APPORTIONED.	DEDUCTED FOR BLANKS.	BALANCE CERTIFIED TO AUDITOR.	AMOUNT APPORTIONED.	DEDUCTED FOR BLANKS.	BALANCE CERTIFIED TO AUDITOR.
Arapahoe	\$ 28,994 99	78 63	\$ 28,916 36	\$ 31,978 37	72 83	\$ 31,905 54
Archuleta	189 40	9 87	179 53	220 80	12 17	268 63
Baca	753 48	17 28	736 20	585 93	70	585 23
Bent	417 22	3 69	413 53	457 79	3 54	454 25
Boulder	4,125 46	46 12	4,079 34	4,656 74	24 93	4,631 81
Chaffee	1,634 63	16 23	1,618 40	1,800 32	18 36	1,781 96
Cheyenne	135 59	56	135 03	132 87	84	132 03
Clear Creek	1,810 23	8 11	1,802 12	1,941 19	45 59	1,895 60
Conchos	2,970 23	43 44	2,926 79	3,054 52	3 38	3,051 22
Costilla	1,445 04	28 85	1,416 19	1,545 09	11 03	1,534 17
Custer	961 01	4 22	956 79	977 05	3 56	973 09
Delta	805 80	30 00	775 80	924 55	2 75	921 80
Dolores	123 60	5 64	118 56	172 20	6 18	166 10
Douglas	796 62	12 93	783 69	780 96	6 77	774 19

TABLE XIV.—Continued.

COUNTIES.	1891. \$0.9968 PER CAPITA.			1892. \$1.0404 PER CAPITA.		
	AMOUNT APPORTIONED.	DEDUCTED FOR BLANKS.	BALANCE CERTIFIED TO AUDITOR.	AMOUNT APPORTIONED.	DEDUCTED FOR BLANKS.	BALANCE CERTIFIED TO AUDITOR.
Hagle	\$ 439 97	\$ 12 54	\$ 427 43	\$ 512 71	\$ 4 43	\$ 508 28
Elbert.....	609 43	20 83	588 60	629 02	88	628 14
El Paso.....	4,540 34	40 43	4,499 91	5,190 13	59 62	5,130 51
Fremont.....	2,491 40	20 59	2,470 81	2,704 02	44 92	2,659 10
Garfield.....	1,033 94	23 98	1,009 96	1,125 06	11 14	1,113 92
Gilpin.....	1,621 01	11 02	1,609 99	1,667 10	3 68	1,663 42
Grand.....	134 08	75	133 33	141 02	98	140 04
Gunnison.....	962 70	48 35	914 35	1,053 28	16 47	1,036 81
Hinsdale.....	161 36	2 58	158 78	332 09	3 29	328 80
Huerfano.....	2,422 52	115 84	2,306 68	2,790 27	15 57	2,774 70
Jefferson.....	2,297 08	43 66	2,253 42	2,537 18	31 42	2,505 76
Kiowa.....	385 71	13 61	372 10	345 65	1 97	343 68
Kit Carson.....	667 14	2 49	664 65	615 83	3 21	612 62
Lake.....	2,607 38	9 93	2,597 45	2,893 44	17 65	2,875 79
La Plata.....	1,171 86	9 99	1,161 87	1,358 33	10 19	1,348 14

Larimer.....	2,757 94	25 91	2,757 03	2,928 69	26 74	4,977 65
Las Animas.....	4,996 73	99 11	4,867 62	5,259 44	15 33	5,235 11
L.icoln.....	149 99	4 65	145 34	169 37	13 19	176 18
Logan.....	993 47	25 77	967 70	959 04	24 33	928 71
Mesa.....	992 19	18 52	973 67	1,277 26	5 37	1,271 89
Montezuma.....	589 31	3 05	556 26	612 86	60 85	334 01
Montrose.....	953 29	8 19	945 10	1,100 66	53 40	1,047 26
Morgan.....	364 96	25 89	339 07	497 32	76	446 56
Otero.....	682 94	24 94	958 00	1,420 27	18 67	1,402 20
Ouray.....	887 56	19 01	868 55	1,087 22	1 79	1,085 43
Park.....	801 40	9 59	791 81	846 05	6 57	839 48
Phillips.....	862 17	16 62	845 55	816 58	3 00	813 58
Pitkin.....	1,221 06	10 87	1,210 19	1,571 86	7 28	1,564 58
Prowers.....	589 24	15 39	573 85	582 74	8 33	574 41
Pueblo.....	6,333 28	37 33	6,295 95	7,858 02	20 47	7,837 55
Rio Blanco.....	259 15	1 14	258 01	275 74	74	275 00
Rio Grande.....	956 29	117 32	838 97	1,123 40	2 83	1,120 57
Routt.....	512 01	8 92	503 09	604 33	15 11	589 24
Saguache.....	999 66	24 01	945 65	1,029 73	3 99	1,025 74
San Juan.....	170 37	4 12	166 25	204 16	68	203 48
San Miguel.....	226 26	7 94	218 32	332 68	9 95	322 73
Sedgwick.....	404 76	3 04	401 72	422 47	47	424 00

TABLE XIV.—*Concluded.*

COUNTIES.	1891. \$0.9968 PER CAPITA.			1892. \$1.0604 PER CAPITA.		
	AMOUNT APPORTIONED.	DEDUCTED FOR BLANKS.	BALANCE CERTIFIED TO AUDITOR.	AMOUNT APPORTIONED.	DEDUCTED FOR BLANKS.	BALANCE CERTIFIED TO AUDITOR.
Summit	\$ 446 79	\$ 2 44	\$ 444 26	\$ 500 21	\$ 15 00	\$ 485 21
Washington ..	516 34	6 48	509 86	595 67	3 36	592 31
Weld	3,342 22	30 44	3,311 78	3,564 76	23 24	3,541 52
Yuma	691 56	13 70	677 86	670 64	2 00	668 64
Totals	\$ 981,584 47	\$ 1,245 95	\$ 980,338 52	\$ 109,237 45	\$ 774 50	\$ 108,462 95

TABLE XV.

RECEIPTS AND DISBURSEMENTS OF SCHOOL MONEYS
YEAR ENDING JUNE 30, 1891.

ITEMS.	RECEIPTS.	EXPENDITURES.
Amount in hands of District and County Treasurers, July 1, 1890.....	\$ 642,965 11	
From General Fund.....	565,333 65	
From Special Fund.....	784,860 12	
From all other sources.....	810,246 63	
For Teachers' wages.....		\$ 894,409 64
For current expenses.....		306,858 29
For sites, buildings and furniture.....		729,547 79
For temporary loans, including interest on bonds.....		488,699 64
Balance, same being amount in hands of District and County Treasurers, June 30, 1891....		383,952 05
	\$ 2,803,465 51	\$ 2,803,465 51

YEAR ENDING JUNE 30, 1892.

Amount in hands of District and County Treasurers, July 1, 1891.....	\$ 389,170 88	
From General Fund.....	583,836 84	
From Special Fund.....	956,784 69	
From all other sources.....	753,182 49	
For Teachers' wages.....		\$ 985,136 68
For current expenses.....		336,936 31
For sites, buildings and furniture.....		659,561 99
For temporary loans.....		220,897 96
Balance, same being amount in hands of District and County Treasurers, June 30, 1892....		510,391 96
	\$ 2,712,924 90	\$ 2,712,924 00

It will be noticed that the amount reported on hand July 1, 1891, does not correspond with amount on hand at close of the school year, June 30, 1891. This may be accounted for by the fact that some District Secretaries allow a day to elapse between reports, that is, they do not tie the one to the other of the separate two years' reports by taking the balance on hand from the former for the latter.

TABLE XVI.

TRAVELING FUND.

DATE.	ITEMS.	DR.	CR.
	To appropriation 1891.....	\$ 500 00	
	To appropriation 1892.....	500 00	
1891.	Same Cr.		
July 8.....	By voucher on file in auditor's office		\$ 23 25
July 31.....	" " " "		125 00
August.....	" " " "		71 90
November 30..	" " " "		4 25
1892.			
March 31.....	" " " "		14 70
May 31.....	" " " "		26 60
June 30.....	" " " "		54 55
July 30.....	" " " "		25 80
August 30....	" " " "		61 62
September 30.	" " " "		27 50
November 1..	" " " "		4 00
November 30..	" " " "		12 37
	By unexpended balance in hands of treasurer.....		548 46
		\$1,000 00	\$1,000 00

TABLE XVII.

INCIDENTAL EXPENSE FUND. JAN. 11, 1891 TO JAN. 11, 1893.

ITEMS.	DR.	CR.
To appropriation, 1891	\$ 1,833 35	
To appropriation, 1892	2,000 00	
Same Cr.		
1891.		
By paid clerical assistance.....		\$ 1,631 67
By paid trip to Chicago and return.....		114 15
By paid sundry expenses of office, telegrams, typewriter supplies and express.....		29 29
1892.		
By paid clerical assistance.....		1,943 59
By paid trip to Brooklyn and return.....		146 30
By paid sundry expenses of office, telegrams, typewriter supplies and express.....		19 39
To balance	51 04	
	\$ 3,884 39	\$ 3,884 39

Vouchers on file in Treasurer's office.

Remarks of County Superintendents, 1892.

ARAPAHOE COUNTY.

A. D. SHEPARD.

Arapahoe county has one hundred school districts, divided as follows: three districts of the first class, four of the second and ninety-three of the third. There are one hundred forty-one school houses, containing four hundred twenty-six school rooms, necessitating the employment of three district superintendents, forty principals, four hundred thirty teachers and three hundred seven school directors.

A marked improvement has been made in the past two years in the character of the school houses that have been erected. Tasty brick buildings have taken the place of the old stereotyped frame, and in the east end of the county (known as the rain belt) the sod houses are being replaced by neat, comfortable frame buildings.

Directors, as a rule, have given more time to the schools, have been more liberal in furnishing apparatus, have been more careful in the selection of teachers, and, to a considerable extent, refused to employ teachers who did not hold first or second grade certificates. The result is apparent in the increased attendance at the Arapahoe County Teachers' Association, which is composed of as fine a body of teachers as can be assembled in this State or any other.

Nearly five hundred teachers have attended the normal institutes of this county during the past two years, which has made this branch of the school system a decided success, and the schools are reaping the benefits.

The public school property is estimated at \$2,800,000, which, with \$1,200,000 invested in private educational institutions, makes \$4,000,000 invested for educational purposes.

The public school libraries, which are well patronized by teachers and pupils, contain 26,000 volumes.

In conclusion, permit me to say that the public schools rest on a sure foundation, and, while we do not claim perfection, we are well satisfied with the progress.

ARCHULETA COUNTY.

C. W. PRICE.

We have six school districts in this county, and district No. 1 has two departments, also the directors in district No. 2 were asked to build another school house to accommodate scholars too far distant to attend the old school house. School district No. 3 is composed of Mexicans and they take quite an interest in their school and are anxious to secure American teachers.

Some of our schools are in log houses yet, but are making preparations to build better ones. The school officers desire, as far as possible, to keep up a good attendance and furnish books and clothing where necessary, and also, they are anxious to get good teachers and often are compelled to send away for them.

The school population is 218, but they are not all in school, as they are scattered too much, but there is no locality in the county, where there are ten or more scholars, but what they have a school.

On account of the deep snows, but two districts have a winter school.

BACA COUNTY.

DR. R. D. HOMSHER.

Number of districts June 30, 1891, thirty-four.

Number of districts June 30, 1892, thirty-one.

Our county is new, having been organized in 1889. County officers were appointed at the solicitation of county seat boomers. A number of these were elected afterward through the same influence to a great extent. Such a condition of affairs could not be conducive to the best interests of schools.

In 1890, in order to negotiate or sell delinquent taxes, our county commissioners reduced the rate of taxation as low as possible and cut the special levies of a number of districts. The districts not being informed of this state of affairs went ahead, had their schools and issued their warrants. The consequence was they were plunged into debt and have been in debt ever since, to the great injury of the schools. Then again, there has been a want of knowledge of the

school laws of this State, many or nearly all of our people being recently from other states. The laws have never been fully carried out. The reports to districts have not been made as required by law. Consequently the directors, in many instances, have not had sufficient information to conduct the affairs of their districts in an intelligent manner. Machinery must work freely to work well.

Recognizing this simple law of nature, the superintendent has made it a point to see that the directors are informed as to their duties and resources; to see that the districts keep track of their affairs by keeping their accounts in a proper way; and to see that the county officers make their proper reports to the districts. The result of the superintendent's work has been very gratifying.

Officers of the districts are performing their work intelligently and promptly. Expenses are being kept within the districts' resources, and nearly all the districts will be out of debt with the close of this year. Teachers do not have to blindly discount their orders. They are very much encouraged and feel more like work and fitting themselves for the work. This year they are getting better wages, as a rule, than heretofore.

A Co-operative Teachers' Institute was held during the past summer that resulted in awakening interest in our common studies or the subject of the quarterly examinations. The teachers voted the institute as the best ever held in the county.

Our teachers are giving us the brightest schools ever had. Heretofore little has been done with phonetic methods; now they are being pushed vigorously, as far as known, in every district in the county. Language work, instead of being little known as heretofore, is being fairly taught in every school so far as visited this year.

Our county has proved itself to be a good county. Farmers raise good crops of small grain, and the people are here to stay. The county is prosperous. Delinquent land tax is at a premium, and our county is paying cash on demand for its warrants.

While everything looks brighter for our schools as far as the prosperity of our county and the preparation of our teachers are concerned, it seems that our schools must receive another backset by the action of our commissioners in reducing the valuation of our county twenty per cent. This will have the same effect as reducing the special levy twenty per cent. It will also lessen the general county school fund twenty per cent., and be a great loss to our school interests.

The writer has taught under the Ohio and Indiana school systems, but for practical and economical management he thinks the Colorado system leads them all.

The State Superintendent, Nathan B. Coy, has done everything asked in relation to school work in our county. He has been prompt to answer inquiries from the county superintendent, and insists strongly, *very strongly*, on getting the reports due himself. It is to be hoped his successor will make as good a State officer.

BOULDER COUNTY.

WILLIAM V. CASEY.

I have the honor to submit report of school work in this county for the year ending June 30, 1892.

It gives me pleasure to be able to report an advance all along the line of education. A prosperous year has closed, and we have a bright outlook for the future. The work in the school room has been of a higher order and the attendance more regular than heretofore. The course of study for rural schools has been more closely followed and already good results begin to appear. More than twenty pupils passed the final examination and have been admitted to the preparatory course of the University.

The census of the city schools has increased and already the Boards of Education are looking to the erection of a new school building. Last year both Boulder and Longmont erected a building at the cost of \$20,000. Other districts have found it necessary to increase their facilities for accommodating the children. The work in our city schools is of an excellent character, and there seems to be a tendency among outside districts to send pupils into the towns in order to take advantage of the longer term and the better graded work.

Districts 23, 47 and 49 have erected new school houses during the past year in order to accommodate the pupils of these districts. One of these buildings is of brick, one frame (addition) and one log. Lafayette has employed one additional teacher, it being necessary to divide the grades in that thriving little town.

Our semi-annual teachers' association is in a flourishing condition. The meetings of this association alternate between Boulder and Longmont, and are productive of great good. Two days are devoted to each meeting. Inspiration has been given our teachers by the able lectures from men connected with our State institutions. The fee of twenty-five cents which each member pays is applied to the purchase of books for our county teachers' library. We have now over 100 volumes of professional works, besides many reports and pamphlets. The record shows that 152 books have been read by members of the association during the past year. We are adding to the number in the library each year. Steps have also been taken to establish school libraries in each school district.

Quite a number of schools have purchased an American flag and have erected in the school yards a suitable pole. Fifty of our teachers have joined the reading circle.

CHAFFEE COUNTY.

JAMES CONDIT.

Our schools are in quite a prosperous condition. The larger per cent. of our teachers are holding first grade licenses and rank high as teachers. I am sorry to report quite a large per cent. of third grade licensed teachers. Some of this class are doing perfectly satisfactory work; a few have been notified to bring up their grade if they expect to be licensed again.

I have made it a rule not to renew any first grades unless the teacher attends our county and district institutes; as a consequence, all Chaffee county teachers are found in attendance; a large per cent. of our teachers have always attended—this brings them all out.

Our schools are well supplied with apparatus; in some of the districts, too well supplied with certain useless kinds. The school boards are too prone to buy indiscriminately of agents; too few books of reference are bought, and too many of certain questionable kinds of charts are purchased.

We are suffering from want of uniformity of text books. We are no nearer uniformity to-day than three years ago, and not as near a solution of the problem as then. The need of uniformity in Chaffee county is very great, we hope to do something along this line during the coming year.

The compulsory education law is helping our school attendance. Circulars have been issued to the secretaries giving a fac-simile of the law—the secretaries have been urged to see that this provision of our school law is completely carried out.

We expect good results to come from this law during the coming school year.

As a rule our teachers are energetic, progressive and alive to the interests of school work. This is due to a great extent to the county associations and Normal Institutes; also, to the practical tendency of our examinations, and the efficient co-operation of our State Superintendent.

CHEYENNE COUNTY.

S. C. PERRY.

The growth and condition of schools in this county are just about the same as last year. The number of school children is less than we

had last year. Two districts have been discontinued, cutting the number down from seven organized districts to five. No new districts have been organized in this county during the past year. No buildings of any kind for school purposes have been erected. District No. 6 has just completed the sinking of a well and erection of wind-mill and pump for the same, which give an abundance of water for the trees planted about the school grounds.

The condition of the schools, considering the advantages and disadvantages, is all that we can expect. The attendance is fully up to what it was the past year. We have had a good list of teachers on hand and they are doing good work.

Let me call attention to the fact that but very little of the population in this county is permanent.

CLEAR CREEK COUNTY.

DR. WM. R. COLLINS.

In connection with my annual report for the school year ending June 30, I take pleasure in announcing the excellent condition of Clear Creek county schools, taken as a whole.

The progressiveness of most of the teachers now employed is very gratifying. In one respect our system is lacking. We have had no county teachers' association for the interchange of ways and means in the school room, for the introduction of new methods, and for the discussion of educational subjects. We hope to see one organized in September.

At present time the kindergarten methods are used in our primary department with excellent results. We have one district furnishing free text books to its pupils. District nine is reorganized and opened July 1. Districts six and fourteen will probably unite soon.

We have a flourishing Teachers' Association, the first on record in the history of the county, and a Reading Circle consisting of twelve wide awake teachers

COSTILLA COUNTY.

RICHARD S. ASAY.

Some encouraging features of the condition of the public schools in Costilla county may be observed when we compare the past year with the present. Each successive year proves a step forward in enlarging and refining the work accomplished.

During the year just passed, we have obtained some teachers who are both able and willing to perform the arduous labor of instructors.

While in the years 1889-90 much furniture and apparatus was purchased, in the year 1891-92 fully as worthy a duty was done by paying for the material purchased.

Financially, the past year was a merited success. The several districts were badly in debt, some of which had overdrawn warrants outstanding to the amount of \$1,000 to \$1,800. At this writing the twenty districts of the county are practically out of debt, except in the case of bonds given for school houses, etc. The southern half of the county is occupied exclusively by Mexicans. In the north, each district has built a good frame building, except district 21, which at the present time is contracting to have a \$1,500 house erected. It has been considered the best policy in the less populated country to make the districts large, even so much so as to have two or three school houses in one district, thereby being enabled to have a more efficient board of directors.

Some errors may be presented in the financial statement, but, if there be such, they arise not from any intended deception, but from a want of knowledge that has heretofore existed regarding the general fund and the special fund. We have the resources and will develop what we have.

CUSTER COUNTY.

DR. W. E. BRUCE.

The number of pupils in county has not increased. Length of term has increased in schools of county about five per cent. Wages for teaching are the same. School warrants are also worth about five per cent. more than two years ago (they have not been worth their face). Degree of scholarship is materially better on part of pupils. Number of district, same.

Only one new school building (in place of a rented one).

DELTA COUNTY.

F. W. ROBISON.

The schools of Delta county are not wanting in educational facilities, in the way of school furniture, maps, globes, charts, books of reference, etc. Many districts have purchased new apparatus this year.

Two districts furnish the text books for use of pupils.

Four districts have a good library in connection with the school and six others are making efforts toward starting one. It will not be long till there is a good library in every school. This is mostly if not entirely the work of teachers and pupils.

Teachers are wide-awake and energetic and the patrons manifest great interest in school work.

We have a County Teachers' Association which meets twice a year and is always well attended. At the first session of the Association this year, nineteen out of twenty-two teachers in the county were present, one of the absentees being prevented from attending by sickness.

Pollard's synthetic method is used in the primary department of the Delta schools and is giving universal satisfaction.

The character of the work done in the schools throughout the county is such as to warrant me in pronouncing her a peer among her sister counties, and it is hoped that the present standard of excellence will be maintained.

DOUGLAS COUNTY

P. H. HAMMOND.

The most successful school year in many respects, that Douglas county has had for many years, ended June 30, last; the largest number of good teachers and the smallest number of poor ones being employed. Boards of directors and patrons have learned that good teachers are absolutely essential to successful and progressive school work.

The highest number of first grade and the lowest number of third grade teachers being employed that the county has had in any one year of its history, the successfulness of the work is easily accounted for, and it is sincerely urged that all concerned in this work will endeavor to maintain the present high standard of our schools. The only way to do this is to secure the best teachers that can possibly be had.

The chances are at least two to one that a first grade teacher is better than a second grade, and not less than ten to one that she is better than a third grade.

School directors are cautioned against engaging teachers upon the certificates they are going to get, as several mistakes have been made by so doing. There are plenty of good teachers who hold certificates, either from this or other counties, for all the schools, and have several to spare.

Sixteen schools were taught the past year by first grade teachers, only one of which was a partial failure. Twelve were taught by teachers holding a second grade, resulting in one failure and one partial failure. Four held third grades, two of which were failures.

EAGLE COUNTY.

JAMES DILTS

The history of schools, for the past two years in Eagle county, is a record of healthful growth, not only in the increasing number of districts organized, but in the quality of teaching and the consequent interest taken in schools by both pupils and parents. The school has become one of the enterprises talked about in almost every neighborhood. A widening general culture is apparent.

There are five reed organs owned by the districts and some one able to play the organ in each school owning one.

The people are becoming more careful in selecting teachers, and teachers are meeting by more careful preparation.

Eagle claims to be the banner county of her class in Colorado.

ELBERT COUNTY.

C. F. LINDSLEY.

Schools and school interests are on the increase in the county. District boards are in general ready and willing to help both teacher and pupil in any way within their power and means; there are now twenty-two districts. During the last year we have run, at different times, twenty-five schools. This is exceedingly well, when we take into consideration the great extent of territory in the county not yet settled. There will be two graded schools next year, Elbert and Elizabeth, the latter place having under construction at the present time a four-room stone building, put up by district No. 2. Besides this, there will be four other buildings erected this fall by as many different districts. There have been two teachers' meetings held during the year. At each of them great interest was shown by all teachers present, especially in the line of rural school work, of which this county school work is mostly made up. There is a strong feeling existing among the taxpayers and patrons of our schools that we must do more to build up the school interests and school work of our county, that we may appear as well as our sister counties in this respect.

EL PASO COUNTY.

J. P. JACKSON.

The county now has fifty-six districts and a school population of over 5,000. Marked progress has been noted during the past year. This is especially true of the rural schools.

The city schools of Colorado Springs, Colorado City and Manitou have long since established a high reputation for thoroughness and

efficiency and have able educators at their heads. Thoroughly graded, with fine courses of study, efficient teachers and magnificent buildings, they have reached an eminence of which our citizens are justly proud.

The rural schools, from shorter terms, change of teachers, sparse settlements and lack of supervision, have had much to contend with. Special effort has been made during the past year to grade and classify them and to organize them in one uniform system under the management of the county superintendent as are the various schools of a city under the supervision of a city superintendent. Owing to their number, now sixty, and to distances, one can only hope to approximate this end, but the progress thus far has been gratifying indeed. Teachers, school officers and patrons heartily co-operate.

The schools of the whole county have been graded and a record is left for guidance of the next teacher. Welch's classification register is provided for this purpose. Monthly examinations are held, report cards are sent to the parents, and a brief summary of the condition of the school is sent monthly to the superintendent. A copy of the classification register is also sent during the first and the last month of the session. Blanks for the above reports are furnished by the county.

The State Manual and Course of Study is in all the schools, and with it a supplement prepared by the superintendent, adapting it more specifically to the needs of this county.

An examination was given last spring to pupils finishing the common school course. Twenty-eight passed with credit and were presented with neatly engraved diplomas which admit them to the high schools of the county.

It is gratifying to know that these boys and girls have not rested on their laurels but are now pursuing advanced studies in neighboring village schools or have entered our city high schools.

A committee of leading educators, appointed by the superintendent last spring, reported a list of text books recommended for uniform use in the county. Most of the school boards have already adopted this list, and it will aid materially in unifying the work of the various schools.

At the last annual meeting in May, twenty-nine districts, all the more populous ones, including four-fifths of the school population of the county, instructed their boards to provide free text books for their schools. Already good results are noted. Never before have the country boys and girls been so well provided with reading matter. Most boards purchased two series of readers, besides Masterpieces of

American Literature, King's Geographical Reader and other matter for supplementary reading, of which the rural schools have heretofore been sadly in need.

The State Normal Institutes are proving of much value in raising the standard of teachers. Many improvements noticed can be traced to the work of the institute.

The compulsory law is enforced only in part, but its moral effect is good, even where not enforced to the letter.

Meetings of the school officers of the county have been inaugurated during the past year. While difficult to secure a general attendance, as yet, the results have been good in working up a more intelligent interest in educational work.

The primitive log school house has given place to the neat and comfortable frame or brick, which is well furnished and equipped with apparatus. In some cases, however, the commendable zeal and liberality of our school officers have led them to be imposed upon by agents of high-priced apparatus of little value.

The financial standing of our districts is excellent and their warrants can be cashed without discount at any time.

With the beginning of 1892, Colorado Springs opened school in the Lowell, a beautiful, well ventilated, eight-room brick structure, which relieved the previous overcrowded condition of her schools. With the beginning of 1893, she will move her high school into a handsome new building, costing \$100,000. It is of beautiful architecture and will do honor to this city of beautiful buildings.

The teaching of vocal music, under special supervision, introduced in our three cities two years ago, has proven a decided success. The musical spirit has pervaded the country schools and now most of them are provided with organs, and in some the teachers give efficient instruction in the science of vocal music.

Physical culture is given considerable attention. In the cities it is now systematically taught under the direction of specialists.

The study of literature is assuming an important place in our schools.

The American flag floating from our buildings and the introduction of civil government in our course of study to be pursued with the aid of a text book in all our schools puts them abreast of the times on the important subject of patriotism.

School boards are retaining for a longer time, often at advanced salaries, teachers who have proved satisfactory and are lengthening the sessions to nine months per year.



A serious problem in a State so sparsely populated is that of maintaining schools sufficiently convenient to every man's door, without dividing up the territory into districts too weak to maintain efficient schools. It is possible that the omnibus plan of collecting pupils from larger areas in vogue in some places in New England may assist us in the solution of the difficulty.

FREMONT COUNTY.

J. H. FREEMAN.

School work in Fremont county may be said to be making commendable progress. High taxes for school purposes are cheerfully paid. Good houses and well supplied are generally furnished. Attendance is very good. It will be noted that during the year just closed 98.6 per cent. of the school population under sixteen years of age has been enrolled in the schools.

Our greatest present need is a school of higher grade that shall attract into it the brightest boys and girls from the country and village schools as they finish the work these schools are prepared to do. Though Fremont county has three so-called high schools, none of them has been prepared to meet the needs. They have not the room, nor sufficient faculty, nor proper libraries nor apparatus. An effort is now making to advance the high school of district one until it shall be prepared to give at least two of the courses recommended by the State Teachers' Association, and so, while furnishing a good academic training, it will prepare for the State University.

GARFIELD COUNTY.

S. M. WHITE.

The educational interests are steadily advancing in Garfield county, and each annual election brings out a full vote of both sexes, who see that the interests of their children are not neglected. Political contention never enters into a contest for school directors. Garfield is the banner county for fine school houses. Every district can boast of their school building as being the best equipped and the best building in the neighborhood. The idea seems to prevail that in order to encourage the youth, we must make the school building and apparatus attractive. I wish to say a word for the teachers. Perhaps the profession of teaching is the only one that is not protected, and in view of that fact, when a teacher receives a license to teach she is expected to perform the school work, or step down and out. The majority of my teachers have been steadily employed for the past five years, and it ought to be a sufficient guarantee of a teacher's ability to obtain a school any where in the county upon reference as to her past record

as an instructor. Most of our teachers have been faithful workers in the school room, and to all teachers contemplating an engagement in our public schools we say that there is something to do besides drawing the monthly salary. There is something besides the scholastic attainments necessary to the success of a teacher. She must be a model of social excellence, and should remember that the ragged, barefoot boy, or the orphan girl, demand the same attention as the child of the rich. Make everything pleasant and attractive for everybody. Look after the educational interests of pupils under your care so as to prepare them for future citizenship.

GILPIN COUNTY.

DR. E. F. LAKE.

The schools of this county are in a satisfactory condition; taking into consideration that many districts, from lack of funds, have to have short terms. Each district has a comfortable school house, and many are supplied with maps, globes, etc., to facilitate work.

Our teachers are taking an active interest in the meetings of the County Association, and about ninety per cent were in attendance at our Normal Institute at Golden, in August. School directors are mainly interested in the schools, and are demanding a higher grade of scholarship in their teachers. I hope to soon see the third grade certificate abolished. I look forward to an era of greater progress the coming year.

GRAND COUNTY.

HILRY HARRIS.

The number of schools has not increased any in the last two years. The school population has increased about two per cent. The condition of schools and school work is not what it should be. The school tax levies are too small, the terms of school too short, (hardly filling the requirements of the law), and too many third grade teachers have been employed, consequently the educational advancement of the school population is very slow and of low grade.

GUNNISON COUNTY.

CHARLES FUELLER.

In regard to the growth and condition of the schools in this county (Gunnison), I beg leave to report that the schools have more than kept pace with the growth and development of the county. The school population of 1892 is five per cent. larger than in 1891 and over ten per cent. larger than in 1890.

Two new districts have been organized.

Number of days in which school was held has increased.

The most marked growth in efficiency is observable in the towns, especially Gunnison, Crested Butte and Pitkin. Several new school houses have been built.

The teachers have been faithful and earnest, and the number holding first grade certificates has increased.

HUERFANO COUNTY.

NELSON RHOADES, JR.

The State course of study has been adopted into each school of the county. In Mexican schools it has been changed to meet the requirements of those having to battle with the idioms of a strange language as well as pursue the regular course of work. Monthly reports are required from teachers to county superintendent, of examination, a duplicate of which is also sent to the district board; individual reports of the work of each pupil being also sent monthly to parents.

At the commencement of each term, teachers are required to report classification of school to this office with statement of page of each branch at which pupil is started; this is recorded, and pupils are absolutely required to make certain advancement in a given time of actual school attendance. Semi-annual examinations are given by myself of all schools in the county for promotion of those properly prepared. Pupils not prepared for examinations for promotion are required to take examination for standing in their own grade.

I have instituted a system of gold and silver medals for rank and scholarship, to be determined from class records kept by the teachers in a class book furnished by myself. I expect this to be productive of a great amount of interest.

General condition of educational interest is good. One school building was erected last year at an expense of \$6,000.

The Rouse district has a kindergarten department, which is under the very competent management of Miss Fannie E. Johnston, of Ottawa, Canada, and Denver, Colorado. Kindergarten schools are a decided success in every particular. It has satisfactorily demonstrated the fact that the kindergarten for the mining town is the long looked for redeemer of its children from ignorance they are so apt to follow.

The teachers' library of this county now contains about 400 volumes.

Several districts will incur bonded indebtedness for purpose of erecting school houses this year.

We anticipate good results from the graded system now inaugurated.

HINSDALE COUNTY.

J. C. LOGAN.

Our county contains five school districts and eight schools. The limited supply of means and the floating population of some of the districts, located in mining regions, are the most serious difficulties under which our schools are struggling.

A new district, including Creede, was organized this year. This district contains four schools, three graded and one ungraded. District No. 1, which includes Lake City, has a commodious brick building and well graded schools. Free text books would aid greatly the progress in the schools.

JEFFERSON COUNTY.

J. S. EAGLETON.

The progress of educational work in Jefferson county has been very encouraging for the past two years. Since the last biennial report there has been \$35,000 expended in new buildings. The buildings which have been erected are models of comfort, having the most improved methods of heating and ventilation.

The sentiment in favor of higher education is growing rapidly. Golden district No. 1 has established a complete high school course and is prepared to fit pupils for the college or university course; districts No. 6, 8 and 22 are doing the first year's work of the high school. In the rural districts greater effort is being made to secure better teachers and more thorough work than ever before. The work of grading and systematizing the work in rural schools has been very successful with the exception of a few schools where they employ a new teacher every four or six months. There is no difficulty in grading or classifying rural schools if competent teachers are kept in charge for two successive years or longer. Some of the very best work that is being done in the county is found in our rural schools, both as to rapid advancement and thoroughness. Pupils who complete the State Course of Study have no difficulty in taking up the work in the high school and continuing it successfully.

Our Normal Institutes have been well attended the past two years.

KIOWA COUNTY.

H. A. LONG.

The schools in this county are in as flourishing a condition as can be expected, considering some of our sparsely settled districts.

We have twenty-one organized school districts, each of which maintains a school from five to ten months.

Financially our schools can well boast, with the Missouri Pacific railroad traversing the county for a distance of eighty miles, and the Union Pacific land grants extending along the entire county.

During the past year there were two school houses built. District No. 5 constructed a substantial brick building at a cost of \$1,000. District No. 21 has just completed a neat frame building at a cost of \$500.

Nearly all of the districts furnish the text books for the pupils, and most of the schools are fairly well supplied with apparatus.

Our teachers are progressive and manifest much interest in their school work.

Teachers' associations are regularly held and the attendance is usually good.

We anticipate profitable work in our reading circle, for our teachers are much interested in its success.

LA PLATA COUNTY.

CHARLES A. PIKE.

The changes made in the last General Assembly in the school law have proven to be of great value; especially so are those relating to levies for the general county funds. The smaller districts are now able to maintain the required length of term with much less difficulty than formerly, and without burdening the taxpayers with exorbitant special rates.

This county has raised, the past two years, the maximum amount for the general fund, and as a consequence the burden of taxation has been more evenly distributed and the poorer districts considerably relieved.

Schools have been maintained in all the districts of the county for more than four months, with but one exception. One district has lost its organization from failure to comply with law, occasioned by sparsity of population and by lack of the necessary qualifications

essential to district organization. It was comparatively new, and its organization was ill-advised and uncalled for, as the sequel proves. The other districts are in a prosperous condition.

Considerable improvement has been made in erecting better buildings and in providing improved apparatus, etc. School district No. 9 has now in process of construction a high school building, at a cost of about \$20,000. The design of this building is excellent, and it will be equipped with all the modern improvements. Two other buildings have been erected by this district at a cost of about \$1,200 to accommodate outlying territory. An excellent school building has also been erected in school district No. 11.

Altogether there has been great improvement in the schools of the county the past year. There is a sentiment among the people in favor of employing experienced and first grade teachers. A large majority of those now engaged in the county hold first grade certificates.

The normal institutes held in the district this year and last have been productive of much good, in stimulating teachers to better work and in arousing interest in educational matters among the patrons of the schools.

KIT CARSON COUNTY.

J. W. AUGUSTINE.

The educational condition of the schools of this county is very good.

Kit Carson county is divided into forty-three school districts, and employs forty-eight teachers, nearly all of whom are residents of this county.

Our teachers are energetic, progressive and alive in the interest of their pupils and schools.

School boards are beginning to realize that it takes live, progressive teachers to teach a good school; hence, wages are better than last year.

Much of the enthusiasm aroused in both teachers and school boards may be attributed to the Normal Institute and the county and district associations of the past year.

The State course of study will be followed more closely than heretofore.

LARIMER COUNTY.

S. T. HAMILTON.

School work in Larimer county is progressing. During the school year ending June 30, 1892, the enrollment in county association has more than doubled, and as a result the interest in school work has increased proportionately. Districts are adopting free text books wherever a change in series is made. This I consider a very important step toward success. The results from the course of study for rural schools are more than was expected at its adoption.

What we most need is a permanent teaching force in each county. I believe that if it were more difficult for transients to secure a license to begin school, our teachers would remain in one locality, and by so doing build up educational work with greater interest. I would recommend the abolition of the temporary certificate, or at least that not more than one such license be granted to the same person, which would require this license to issue from the State office.

LAS ANIMAS COUNTY.

JOHN W. DOUTHIT.

Having assumed the duties of county school superintendent in January, 1892, I am unable to compare the progress made in the past two years with that of the preceding two farther than was shown in my annual report. While our city schools in the past have been efficiently managed, the spirit of success did not seem to permeate the entire work so thoroughly as now apparently exists under the able management of City Superintendent Eugene C. Stevens. About the same can also be said regarding schools in the rural districts; and the interest manifested by the Spanish and English speaking teachers, their good attendance at normal institute, organization of teachers' association, reading circle, number Hale's Lights of Centuries, Page's Teacher and Pupil purchased, and journals of education read by all and brought about during your administration are certainly encouraging and no doubt will be productive of much good in the future.

LINCOLN COUNTY.

H. A. LOWELL.

The schools of this county have progressed well during the past year.

Our school population has not increased to the extent it promised to do two years ago, but the interest of school directors and patrons has surely increased very much. They are working for better school houses, better teachers and better schools.

Teachers are receiving better wages and all are doing good work; while the best of feeling seems to prevail between teachers, directors and patrons.

The length of terms of school throughout the county average about eight months

Special taxes levied average four and one-half mills in the different districts.

Kit Carson, Lincoln and Cheyenne counties have formed a Joint Teachers' Association, and three meetings are held each year; one meeting in each county. The attendance and interest manifested by teachers and citizens, prove beyond question their value in school work.

New school houses have been built at Arriba, Bovina and Limon at an average cost of about \$1,500 each. The schools on the whole are well furnished with desks, maps, charts, etc.

We have to contend with the usual difficulties incident to thinly settled districts. Children have to travel long distances to attend school, and in many cases are not able to attend at all. With an increased population and more districts we hope to improve this condition of affairs.

LOGAN COUNTY.

D. C. FLEMING.

The educational condition of the schools of Logan county has very materially advanced during the year. A large percentage of the districts are well supplied with apparatus, and about one-half own text books. However, owing to the sparsely settled condition of parts of the county some districts are not advancing educationally as they would under more favorable circumstances.

We are laboring earnestly to raise the professional standard, and that we are partially successful is shown by the increased interest of our teachers in their work in the school room and during the District Normal Institute of this county, there being an attendance of eighty-one members, showing an increase of thirty over the past year. An urgent demand among the various districts for teachers of a higher grade and professional ability has proved an incentive that the living teacher cannot resist.

MESA COUNTY.

E. T. FISHER.

The following is a brief report of the schools of Mesa county for the last two years. There has been an increase of fifty per cent. in

the number of teachers, fifty-two per cent. in the school population, fifty-nine per cent. in the number of school buildings, and 145 per cent in the valuation of school property.

According to the annual report of 1892, the total expenditures for school purposes was \$35,660.13, which was an increase of 173 per cent. over that of 1890. This increase in expenses is mostly due to the number of new school buildings. The average cost for each pupil, based on enrollment, in 1890, was about \$3.40, and in 1892 it was \$2.80, a decrease of nearly eighteen per cent.

Most of the districts furnish free text books, use the State course of study, and are well supplied with dictionaries and school appliances.

More than half of the districts have already adopted the uniform series of text books recommended by the committee last spring, and it is hoped all changes in the future by the remaining districts will be in line with this uniform system. School boards are demanding trained teachers and they are willing to pay wages accordingly.

As a result, nearly half of the present teachers of the county have had special preparation for their profession.

We believe that Grand Junction now has one of the best equipped public schools in western Colorado.

Its four years' high school course will prepare students to enter the State University without examination.

Fruita, also, has an excellent three years' course in its high school, and will graduate a class of seven in 1893.

All the teachers, save those of two districts, will do systematic work in the State teachers' reading circle during the present school year.

To be able to say that nearly every school in the county celebrated Columbus Day speaks well for the patriotism of those interested in school work.

While there is room for much improvement, the teachers and school boards are to be congratulated on the interest they have taken in the schools of the county.

During the coming year special attention shall be given to more thorough work in the school room and to the careful grading of the country schools.

School boards are urged to assist in this work by employing first class teachers and retaining them as long as possible.

MONTEZUMA COUNTY.

D. M. LONGENBAUGH.

Two schools and three new houses have been added during the year. A new building in district No. 4 is in course of erection, which when completed will be a credit to the district. The lower story will be used as a town hall, while the upper story will be divided into two school rooms.

The Montezuma county educational association has held regular meetings during the year, which were participated in by teachers, school officers, patrons and pupils, and have resulted in much good to the schools. A Teachers' Reading Circle was organized and carried on by local management during the winter, and will be reorganized during the coming year under the direction of the State Teacher's Reading Circle. There has been an increase in the school population of the county during the year. Columbus day will be generally observed by the schools. The Normal Institute of this, the eleventh district, was held at Mancos, this county, from August 8 to 20, and was attended by all the teachers of the county but one. Better teachers are in demand, and better facilities and buildings are being provided.

MONTROSE COUNTY.

W. J. HORTON.

The following is a statement in part of the condition of the schools in Montrose county as compared with two years ago.

Number of new districts formed, seven.

Gain in number of persons of school age, 197.

Increase in number of teachers employed, seven.

Increase in number of months of school, 25.5.

Increase in teachers' wages, \$2,303.42.

Increase in number of school buildings, five.

Increase in number of graded schools, one.

The efficiency of the work done in our schools is quite noticeable over that of two years ago.

MORGAN COUNTY.

S. A. WALLACE.

The schools of Morgan county are in a good, healthy condition. Since the last biennial report three new districts have been organ-

ized and five new school houses have been built. School houses are all in good repair, and most of the districts are well furnished with apparatus. Most of the districts hold school from six to nine months in a year. As the districts can afford it, they are furnishing the text books, and I think in a few years every district in the county will own the text books. Arbor day was generally observed by the schools. Last year the stars and stripes floated over one school house, but before another year passes I think every school house in the county will float the stars and stripes.

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

OTERO COUNTY.

C. W. FENLASON.

Otero county has a school population of 1,490, a gain of 207, or sixteen per cent. during the past year.

There are nineteen organized districts, employing thirty-two teachers, a gain of four.

We have two graded schools; one at Rocky Ford, in charge of Professor A. L. Tenny, with four assistants; and one at La Junta, under Superintendent W. M. Kollock, with Professor J. M. Daniel, as principal of the high school and seven other teachers.

Each of these districts has a very intelligent and efficient board of directors, with a very able and earnest corps of teachers.

The La Junta high school prepares for the scientific course of the University, and the intention is, as the number of pupils increase, to prepare for the Latin, scientific and classical courses. But I believe, and I think that the superintendent and the board of education of La Junta agree in this opinion, that while the fact exists that less than fifteen per cent. of the pupils enrolled in the primary schools ever enter the high school, and of those that enter the high school only about one-fourth complete the course, and of these not over one-third seek a college education, that it is wise, while working to build up our higher institutions of learning, to remember that the great majority of the children get all of their school training in the primary and secondary schools, and to so arrange the curriculum of these schools, that they shall be first, and preparatory and finishing schools second.

I have found in my experience as an examiner that graduates from some of our best high schools have but a very limited knowl-

edge of arithmetic, the history of the United States, except as a mere collection of facts, and of geography, except as to the location of cities, rivers, mountain peaks, capes, islands, etc.

My relations with the teachers and school officers of the county have been exceedingly pleasant. I have had the most hearty co-operation of both in every effort to improve the schools of the county.

I should not omit here to give due credit to the patrons of the schools and the taxpayers of the county for the interest they have shown in the welfare of the schools, and for their willingness to pay good wages, only stipulating that they shall have good teachers.

I have been able so far to do but little more than to become acquainted with the condition of the schools and the educational needs of the county, and to outline a plan of work for the coming year.

I hope during the year to have the State course of study adopted by every school board in the county, with a resolution giving the county superintendent power of supervision, as far as practicable, similar to that exercised by city superintendents.

I found the finances of many of the districts in very bad condition, owing largely to a lack of knowledge on the part of directors as to the revenue to be expected from the general fund. To remedy this, I made a statement to each secretary of the financial condition of his district, the revenue afforded by each mill of taxation, and the probable revenue from the general fund. Nearly all of the districts responded with a levy sufficient to meet all demands.

Our institute, under the supervision of Professor Kollock, assisted by Professor J. M. Daniel, Professor Combs and Mrs. White, was a success. The teachers were earnest, faithful and eager to improve. We endeavor to arrange our work to meet the needs of the teachers as shown by the examinations and the work in the school room. Each day the instructors prepared an outline of the following day's work on each subject, and before adjournment each member of the institute was furnished with a copy made on a duplicator by Professor Daniel, to whom the committee feel greatly indebted.

The interest in the institute and its lasting benefit was greatly increased by the presence with us of the State Superintendent Honorable N. B. Coy, President Baker of the State University, President Ellis of the Agricultural College, and President Snyder of our State Normal School.

It was the desire of the committee to have the teachers and school patrons learn something of the State educational institutions, and become acquainted with the gentlemen who have them in charge, so that the children may know what the State is doing to furnish higher education, and to assist them in making preparation for the active duties of life.

As a result of the work of these gentlemen in the institute and of the efforts of the instructors and teachers, each of the institutions named will receive pupils from this county next year.

I am very strongly of the opinion, which I expressed at the meeting of the County Superintendents' Association, that the success of the Normal School will directly tend to the building up of the University, and to a less degree of the Agricultural College. Better teaching means better thinking. Children love to think just as they love to eat, and as they learn to think, the pleasure of thinking, as well as its usefulness, will lead to a desire to go higher.

PARK COUNTY.

GEORGE A. MILLER.

There has been a marked improvement in the schools of this county during the past two years, a general revival of educational interest among the people, and particularly among the teachers, who realize the importance and advantage to be derived from the reading circle and county association, and are alive to the methods of the day. The teachers are better, methods are better and the schools are better.

PHILLIPS COUNTY.

CHARLES B. TIMBERLAKE.

The school interests of this county during the past two years have been materially advanced in that the terms have been lengthened and a more efficient teaching force has been secured, which has left its impress in a more lively interest in their work of both pupils and patrons. Better and more commodious buildings have been provided, much needed apparatus has been added and most schools have advanced from no grade at all to a fair system of graded work. Monthly teachers' institutes have been maintained, in addition to the yearly district institute, which have been of great help to the teachers and a strong means of unifying the work in the county. A teachers' reading circle was established about one year ago, meeting

monthly at the county superintendent's office, in which most of the teachers of the county have taken an active part. This year's course has been Hawthorne's American Literature and Baldwin's Art of School Management. The meetings of the circle have been most pleasant and interesting, and, I think, have also been productive of good; and we are glad to be able to say that, while we have had many discouragements to contend with, our schools have gone steadily forward, reaching their present flourishing condition only through the united efforts of all our people.

PITKIN COUNTY.

E. C. STIMSON.

During the school year ending June 30, 1892, there was a general advance in the conditions of the schools of Pitkin county. Five new school districts were organized, and in nearly every district the school was in session a greater number of days than in any previous year.

In many cases salaries have been increased with a view to securing more permanent teachers' tenure of office.

Owing to the condition of the county geographically, the districts are so scattered that general county teachers' meetings are not practicable, but in district No. 1, Aspen, teachers' meetings have been regularly held, and with profit to all concerned.

It may be safely said that the growth and progress of the schools have kept pace with the advancement of this county along other lines.

PROWERS COUNTY.

ARTHUR E. CRAWFORD.

The schools of Prowers county are progressing nicely; the results obtained are abreast with the material progress and development. Everywhere throughout the county, I find directors who are deeply interested in the welfare of the schools, for the reason that there can be no greater impulse given to attract intelligent, energetic and industrious people to our county.

During the past year, school houses have sprung up everywhere; and now an elegant school house is in the process of construction and two large, handsome brick buildings are contemplated.

District No. 19 has the nicest school house in the county outside of Lamar, which is a credit not only to the community but to the

board of directors, who made manifest such magnificent energy and good judgment. I would that every school district in the county might erect such a school house. District No. 9 has a substantial frame school house costing \$890. Several of our school houses are fairly well equipped in apparatus, etc. Lamar has the finest school house in the county. It is a large two-story brick, costing \$10,500. It is neatly finished and well furnished.

Indeed, I regret to say that I have had an immense amount of work in securing annual reports that were in any way near correct, largely from inadvertency of secretaries, and extending the prerogative to teachers to get their salaries without complying with the law.

A teachers' reading circle has been inaugurated, and bids fair to become a prominent factor in the educational work of the county.

Arbor day was observed, and no little amount of interest was taken in the exercises of the day. The vote upon the "State Tree" created enthusiasm of respectable proportions.

The Normal Institute of district No. 8, held in La Junta, August 8 to 19, was a grand success.

The high schools of Lamar and Granada are doing nobly.

May I leave with you this sentiment? That the 13,000,000 pupils coming from all climes and nationalities, soon to be our future citizens, and if taught the immunities of American citizenship, the future is secure. Our nation is greater and grander than any other nation because the public schools have given to every child the rudiments of an education. Our schools are the fountains of culture.

PUEBLO COUNTY.

CHAS. W. BOWMAN.

In administering the public school system in the plains country, we are confronted with peculiar conditions. The scattered nature of the population necessitates large districts, geographically speaking, in order to include the requisite number of children. Result: distance from the school house prevents many from attending; the school and the community lack the *esprit de corps* generated by numbers, and which is found where the population is denser.

During the year one school in the county had but one pupil in daily attendance for one month, and it was necessary to maintain the school during that month to save the organization. Schools with a

daily attendance of from four to ten are not uncommon. It is a question oft-recurring whether there ought not to be provision for the abandonment of a district where the school population drops below ten. In some cases, also, there is such a scarcity of adults as to render it difficult to maintain a school board. Several cases are within this jurisdiction where a man and his wife are members of the same board, and their children the sole beneficiaries of the public funds. Under the above conditions it of course often happens that no school election is held, and the district really has to be held together and carried along by the strong arm of the State. It should incidentally be mentioned that one of the evils of the per diem and mileage system of compensation for county superintendents has been the organization of weak and helpless districts. Happily three counties, including Pueblo, have been placed under the salary system, the tendency of which is to divert the attention of the county superintendent from trying to secure pay for his services to his legitimate duty of promoting the interests of the public schools.

Nevertheless, we are glad to note signs of progress in the rural districts. The older school officers are better informed as to their duties. The older schools are having their influence upon the community, in awakening an interest in education. Weak districts are dropping out. A better grade of teachers is being demanded, and preference is given to those professionally trained. Free text books have been adopted in several districts.

The large increase in school population, in the value of buildings and in the number of teachers employed over last year, is due to the growth of the city schools. Of these, only words of commendation can be written. The boards are composed of leading citizens, who give their services from the highest motives and are deeply interested in making the public schools the equal of any in the State, and in this they have succeeded beyond doubt. The division of the city into two districts tends to promote a healthy rivalry, which, if it remain friendly, must be a stimulus to the highest effort upon the part, not only of the boards of education, but upon the part of teachers and pupils. An important step forward was the adoption by the voters of one of the city districts (No. 20) of free text books. This renders the schools of nearly one-half of the city absolutely free.

An association of the school directors of the county was formed in the spring of 1891, since which, meetings have been held quarterly. Among the good fruits borne through this agency, is the adoption of free text books in at least one district, and an awakened interest in school libraries.

An association of teachers was formed in the spring of 1892, with an enrollment of about sixty members. There was much enthusiasm manifest at the first meeting, and doubtless great benefit will grow out of it.

The key to success in administering school affairs, if success is possible, seems to lie, first, in recognizing the conditions; second, doing the best possible thing for each case; and third, keeping at it.

RIO BLANCO COUNTY.

JAMES LYTTLE.

Notwithstanding a slight falling off in the school census for this year, as compared with last, interest in school matters has not abated. A progressive spirit pervades the work, competent teachers are employed, and all are required to hold certificates as prescribed by State school laws. A handsome and well arranged school building has just been completed in district 2. District 8 held no school during the past school year, although the board built a substantial log building for school purposes. As they took no steps in the direction of holding a school term, I annexed the district to District 6 from which it was originally taken. So there will be two school houses in District 6, for some time to come at least, and a term will be held in each. All things considered, satisfactory progress has been made in educational work in this county during the year 1891-92.

ROUTT COUNTY.

J. H. CAMPBELL.

Since the last biennial report we have organized nine new districts and have built as many new school houses. Frame, with roofs of shingles, now generally take the place of log and adobe, with dirt roofs.

Though most of our districts are from fifty to a hundred miles from railroad stations, several of our houses are furnished with furniture from eastern manufactories. The interest in school work is on the increase.

SAGUACHE COUNTY.

O. C. SKINNER.

In so far as numbers of children are concerned, the increase has been light; but we have added to our school property and introduced

rather a better grade of teachers. Our association meetings are regular (monthly) and well attended.

New districts organized, one.

Number of buildings erected, six.

Increased valuation by same, \$4,760.

Increase in census (pupils), thirty-four.

Average increase in attendance over preceding two years, thirty.

No county institutes were held during the first eighteen months of this period, but during the last six months they were held monthly, and much interest is taken in the work.

Most of the teachers have joined the Colorado Reading Circle.

A persistent and determined effort is now being made, by both the county superintendent and the teachers, to grade the schools, and there is every promise of success, despite the obstacles presented.

The districts are being more thoroughly supplied with needed apparatus, and I believe there is marked improvement in the work done.

SAN MIGUEL COUNTY.

H. C. LAY.

The gratifying improvement and condition of the public schools in this county during the last two years is best shown by the following figures:

ITEMS.	JULY 1, 1890.	JULY 1, 1892.
Number of districts.....	4	6
Number of schools.....	4	8
School population.....	216	379
School enrollment.....	109	269
Average daily attendance.....	64	157
Days school.....	359	750
Average teachers' wages.....	\$65 00	\$75 00
Total teachers' wages.....	\$1,939 00	\$3,067 00

In everything except the number of school houses, the school growth has been even more than proportionate to the increase in the material prosperity of the county at every point; and in this one exception the lagging is not real but only seeming, as it arises from the fact that in several districts buildings have been loaned free of charge, or have been rented until a suitable house could be built.

Telluride has increased its school room accommodations this year and expects to put up a new school building in the spring to cost not less than \$20,000.

SEDGWICK COUNTY.

E. H. STEVENS.

Sedgwick county, being one of the new counties formed in 1889, has made very excellent growth in its educational work.

At the time it was organized, the agricultural resources were but slightly developed, the county having been settled only about four years; still the people were thrifty and fully alive to their own interest in educational matters.

At the time of its organization most of the territory was organized into school districts, but there have been a few formed since, so that now all of the territory is in organization.

The school work in this county has kept pace, yea more, with settlement in the county. The county was not prosperous for two or three years immediately following its organization, but the schools moved onward in a sure line of progress, except that they did not increase any in number of pupils for about the same number of years.

To-day we think they stand second to none with equal advantages, but superior to many in other and older states.

They are small in number of pupils, hence the work of grading has not made equal progress with the general advancement of pupils individually; still we are not wholly without progress in this line.

While we are not supporting any of the higher educational work, we are fast approaching a standard where we will be recognized.

The teaching force is slowly but steadily and surely improving. The teachers, who two years ago were made up very largely of young girls from our schools, but who were earnest and energetic, and did good work, everything considered, have been supplanted by others more thoroughly qualified.

The average monthly salary of teachers in this county has been increased materially, thus bringing in a better class of teachers and crowding out the poorer ones and thereby raising the average qualifications of our teachers much. We have now a very good corps of teachers. I think the teaching force in this county is thirty per centum stronger than it was three years ago.

The equipment of the schools is indeed excellent, better than many much older settled countries.

The people seem willing to spare no pains to make the schools a success, looking only for success in the material advancement of the pupils, which certainly is the only true success in school work.

The school houses, while many are of sod, are comfortable and generally quite tidy. Some new ones are being built each year, and most that are built now are of frame and very good buildings.

We have in the county a number of buildings that are really model.

The work of the normal institutes is very apparent for good. More especially is this true since the State was re-districted, forming more and smaller districts.

We think the county is the ideal normal institute district.

Our teachers have taken hold of the State reading course with a will, and we expect much good to come from it in the way of improving our teaching force.

Upon the whole, we consider the schools of Sedgwick county in a very creditable condition and improving.

SUMMIT COUNTY.

GEORGE H. CLARKE.

As compared with school census of 1891, which numbers 461, we have 500, an increase of thirty-nine. The average attendance is greater and a stronger and more active interest is exhibited throughout, both among teachers and pupils; to some extent, perhaps, attributable to a change in teachers, and to more frequent and prolonged inspection. Changes have also been made in school boards hitherto, in some cases, comparatively inactive, and greater care is taken of school needs, resulting in a visible improvement in interest, attracting more frequent visits from parents and citizens generally. One new school house is now in course of construction in District 3 and increasing interest is apparent in school patrons, born of a visible progress and growing activity.

In three schools of this county I find favorable and most encouraging comparison with the best schools I have visited elsewhere in the State, and I cannot doubt but we shall keep pace with sister schools throughout Colorado.

Better system is obtaining, a closer grading, broader methods, with their commensurate results. There seems however, until wiser plans are formulated, little hope of successful enforcement of the attendance of many children whose parents seem to care little for their educational privileges, and who in consequence, now roam the streets and, as a result, largely drift into courses which cannot but produce evil results, and against which influence the present law seems powerless.

But one district in the county has adopted free text books; I am sanguine however, that this will be followed by all. Three schools only are graded.

A new district is expected to be formed in the extreme eastern part of the county, where there are now thirty children of school age without a school house or any organization.

On the whole, we have reason to be, and are, proud of the schools of this mountain county. They compare favorably in intelligence, attention, method, discipline, attendance and advancement with any with which I am acquainted, and are doing good and real work with credit to themselves, their teachers, county and State, aiding their full part in demonstrating that our State school system, although comparatively young, may claim as high and practically progressive a plane of effort, labor and result as any in the Union.

WASHINGTON COUNTY.

JOHN N. TAGUE.

We have not increased our census lists over that of last year. Two new districts have been organized in the county during the last year. Our schools have manifested increased interest in educational work, as manifested by attendance and the character of work done. Financially, many of our country districts are crippled, partly due to small amount of taxable property situate in the districts, largely due to the mismanagement of the county commissioners in allowing the county treasurer four per cent. commission for collecting, instead of one per cent, as allowed by law.

WELD COUNTY.

W. C. THOMAS.

Supplementary to my annual report I wish to say that the school work of Weld county in general is progressing very satisfactorily. The educational spirit is abroad and steady advancement is marked. A number of school buildings have been erected within the past year, all the school houses in the county are well supplied with apparatus and the educational interests are in no way lagging.

A corps of ninety-five energetic teachers are now at work, sixty-five of whom have been enrolled in the State Teachers' Reading Circle, and are pursuing the work outlined by the committee.

Steps have been taken to establish a teachers' library.

Our county association, which meets semi-annually, is well attended and a large per cent. of our teachers were enrolled in the district institute the past summer.

We are endeavoring to follow the course of study given in the State manual and find that much advantage is derived therefrom.

But few of the districts have yet purchased text books for their schools, although there seems to be considerable of a move in that direction.

YUMA COUNTY.

M. W. HAVER.

The unsettled condition of the people necessary in the development of a new county has worked against the advancement of the public schools as rapidly as we might hope. Many of the schools are located in sparsely settled parts of the county and the attendance is small, while those in the more thickly settled parts have had a steady and healthy growth. While the school population has not increased much during the last year, the average attendance has been greater, a better interest has been awakened, and, on the whole, we think the schools are better than ever before. We have a better class of teachers than at any time within our history and expect to continue to improve.

Several country school houses will be built within a few months, which will be an incentive to better work, both on the part of the pupils and teachers.

Exhibit III.

Lists of School Officers.

- I. County superintendents.
- II. City superintendents and principals.

TABLE I.

COUNTY SUPERINTENDENTS OF SCHOOLS.

1892-1894.

COUNTY.	NAME.	POST OFFICE.
Arapahoe	A. D. Shepard	Denver
Archuleta	C. W. Price	Chromo
Baca	Robert D. Homsher	Springfield
Bent	John A. Murphy	Las Animas
Boulder	W. V. Casey	Boulder
Chaffee	J. A. Condit	Buena Vista
Cheyenne	S. C. Perry	Kit Carson
Clear Creek	William R. Collins, M. D.	Georgetown
Conejos	Frederick W. Robinson	La Jara
Costilla	Richard S. Asay	Mosca
Custer	Henry J. Mueller	Westcliffe
Delta	Frank W. Robison	Delta
Dolores	Francis A. McNeill, M. D.	Rico
Douglas	P. H. Hammond	Castle Rock
Eagle	James Dilts	Gypsum
Elbert	C. F. Lindsley	Elizabeth
El Paso	J. P. Jackson	Colorado Springs
Fremont	Jacob H. Freeman	Canon City
Garfield	S. M. White	Glenwood Springs
Gilpin	E. F. Lake, M. D.	Central City
Grand	Hilry Harris	Kremling
Gunnison	Charles Fueller	Gunnison
Hinsdale	William S. Elmendorf	Lake City
Huerfano	Nelson Rhoades, Jr.	Walsenburg
Jefferson	J. S. Eagleton	Golden
Kiowa	H. A. Long	Sheridan Lake
Kit Carson	J. W. Augustine	Burlington
Lake	J. J. Crook, M. D.	Leadville
La Plata	Charles A. Pike	Durango
Larimer	S. T. Hamilton	Fort Collins
Las Animas	John W. Douthit	Trinidad

TABLE I.—*Concluded.*

COUNTY	NAME.	POST OFFICE.
Lincoln	H. A. Lowell	Hugo
Logan	D. C. Fleming	Sterling
Mesa	E. T. Fisher	Grand Junction
Montezuma	D. M. Longenbaugh	Cortez
Montrose	Wm. J. Horton	Montrose
Morgan	S. A. Wallace	Fort Morgan
Otero	C. W. Fenlason	La Junta
Ouray	W. W. Rowan, M. D.	Ouray
Park	Geo. A. Miller	Fairplay
Phillips	C. B. Timberlake	Holyoke
Pitkin	E. C. Stimson	Aspen
Prowers	A. E. Crawford	Lamar
Pueblo	Chas. W. Bowman	Pueblo
Rio Blanco	James Lyttle	Meeker
Rio Grande	Jesse Stephenson	Monte Vista
Routt	J. A. Campbell	Steamboat Springs
Saguache	Onias C. Skinner	Saguache
San Juan	J. N. Pascoe, M. D.	Silverton
San Miguel	H. C. Lay	Telluride
Sedgwick	E. H. Stevens	Julesburg
Summit	Geo. H. Clarke	Breckenridge
Washington	Jno. N. Tague	Akron
Weld	W. C. Thomas	Greeley
Yuma	M. W. Haver	Yuma



NORMAL SCHOOL, GREELEY.

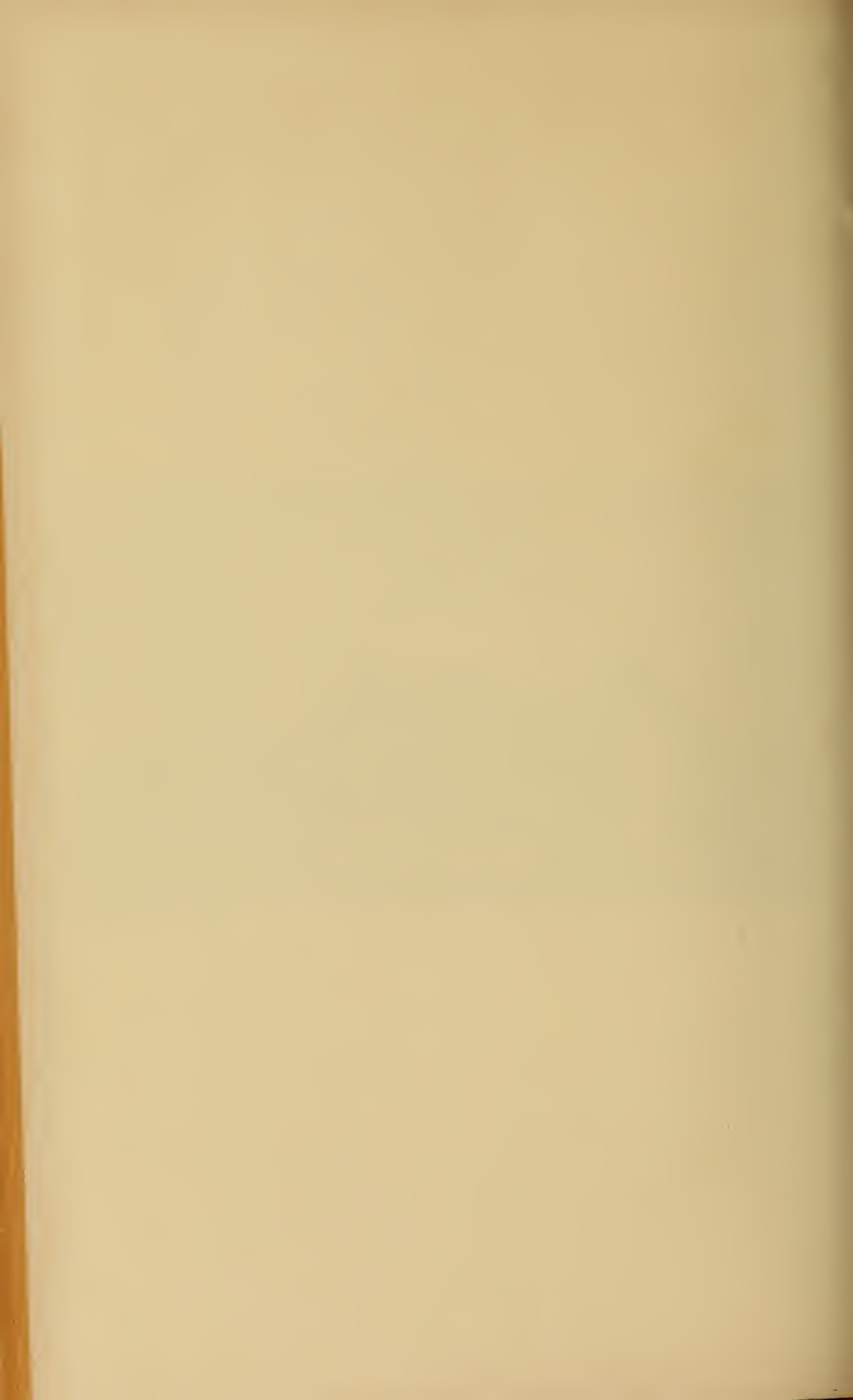


TABLE II.

CITY SUPERINTENDENTS AND PRINCIPALS OF SCHOOLS.
1892.

NAME.	POSITION.	P. O. ADDRESS.
W. T. Eddingfield	Superintendent	Aspen
C. M. Kingsley	Superintendent	Boulder
J. H. Troendly	Superintendent	Central City
P. M. Condit	Superintendent	Colorado City
P. K. Pattison	Superintendent	Colorado Springs
Aaron Gove	Superintendent	Denver No. 1
L. C. Greenlee	Superintendent	Denver No. 2
J. H. Van Sickle	Superintendent	Denver No. 17
C. V. Parker	Superintendent	Fort Collins
W. Triplett	Superintendent	Golden
J. A. Guttery	Superintendent	Grand Junction
A. B. Copeland	Superintendent	Greeley
W. M. Kollock	Superintendent	La Junta
J. S. McClung	Superintendent	Pueblo No. 1
P. W. Search	Superintendent	Pueblo No. 20
E. C. Stevens	Superintendent	Trinidad
Arthur J. Fynn	Principal	Alamosa
D. E. Stevenson	Principal	Alma
M. Isabel Halloway	Principal	Aspen
J. M. Seright	Principal	Black Hawk
W. L. Burdick	Principal	Boulder
Norman Clifford	Principal	Breckenridge
Mrs. Annie Abrams	Principal	Brighton
W. E. Garver	Principal	Brush
A. H. Robinson	Principal	Buena Vista
B. G. Woodford	Principal	Canon City
Prof. J. H. Allen	Principal	District No. 1, Canon City
J. H. Mathews	Principal	Castle Rock
T. I. Cunningham	Principal	Creede
Mrs. Ada C. Moore	Principal	Central City
Tilmon Jenkins	Principal	Cheyenne Wells

TABLE II.—*Continued.*

NAME.	POSITION.	P. O. ADDRESS.
Lillian B. Branschbach	Principal	Colorado City
Geo. B. Trumbull	Principal	Colorado Springs
R. C. Drake	Principal	Como
C. A. Ranney	Principal	Craig
A. E. Phillips	Principal	Crested Butte
G. W. Reed	Principal	Del Norte
Wm. J. Sawyer	Principal	Delta
W. H. Smiley	Principal	Denver No. 1
E. F. Hermans	Principal	Denver No. 2
C. I. Hays	Principal	Denver No. 17
T. O. Baker	Principal	Durango
E. Kesner	Principal	Fairplay
Mrs. R. G. Leake	Principal	Florence
Edgar D. Varney	Principal	Fort Collins
J. A. Pease	Principal	Fort Morgan
Alice M. Murphy	Principal	Fruita
M. H. Lobdell	Principal	Georgetown
J. M. Price	Principal	Glenwood Springs
G. E. Moorhouse	Principal	Golden
J. L. Mayfield	Principal	Granada
Mrs. Frances R. Lang	Principal	Grand Junction
G. A. Walker	Principal	Granite
Alice Biggs	Principal	Gunnison
S. H. Johnson	Principal	Holyoke
W. A. Haggott	Principal	Idaho Springs
Angie Graham	Principal	Julesburg
G. F. Hoff	Principal	Lake City
E. F. Nichols	Principal	Lamar
Walter H. Clarke	Principal	Las Animas
Grace Freeman	Principal	La Veta
Adella Holdridge	Principal	Leadville

TABLE II.—*Concluded.*

NAME	POSITION	P. O. ADDRESS
M. E. Eagleton	Principal	Littleton
G. L. Harding	Principal	Longmont
A. L. Hamilton	Principal	Loveland
W. C. Grafton	Principal	Manitou
G. H. John	Principal	Meeker
Grant Karr	Principal	Monte Vista
L. J. Cramer	Principal	Montrose
William L. Calhoun	Principal	Monument
J. W. Arasmith	Principal	Morrison
Elbert M. Fisher	Principal	Nevadaville
F. H. Danis	Principal	New Castle
Charles E. Filkins	Principal	Ouray
R. D. McClelland	Principal	Poncha Springs
Dimon Roberts	Principal	Centennial School, Pueblo
Lydia A. Webster	Principal	Central School, Pueblo
A. L. Tenney	Principal	Rocky Ford
James M. Stevens	Principal	Saguache
Arthur L. Penhallow	Principal	Salida
N. H. Hayden	Principal	Silver Plume
John J. Barnett	Principal	Silverton
James R. Wylie	Principal	South Denver
M. L. Hunt	Principal	Steamboat Springs
Peter J. Dempsey	Principal	Sterling
Grant E. Finch	Principal	Trinidad
H. H. Brodie	Principal	Walsenberg

Exhibit IV.

Official Decisions of the Department of Public
Instruction, Revised and Indexed, 1888-1892.

Official Decisions.

BIBLE AND PRAYER.

Laws respecting, in school.

1890-1892.

Neither the constitution of the State nor the statutes touch directly the reading of the bible or prayer or any other form of religious or devotional exercises, except to forbid that observance or participation shall be compulsory. The spirit of the constitution permits religious exercises in school if nothing sectarian is introduced and the trustees do not object. The laws of the different states bearing on this point differ. In Iowa "neither the electors, the board of directors nor the sub-directors can exclude the bible from any school in the state." In Missouri, on the other hand, "the directors may compel the reading of the bible." In Dakota "the bible may be read in school not to exceed ten minutes daily, without sectarian comment." In 1869 the Cincinnati board of education forbade the reading of the bible in the public schools of that city. An appeal was taken to the courts, and in 1870 the Superior Court of Cincinnati decided against the board of education. In 1873 the Supreme Court of Ohio reversed this judgment and sustained the board of education. In delivering their opinion the judges "held that the management of the public schools being under the exclusive control of directors, trustees and boards of education" it rested with them solely to determine "what instruction should be given and what books should be read therein." The contest was very excited and attracted wide attention. The discussion in the two courts is probably the most exhaustive to be found on the subject.

The authority conferred on boards of directors by the school law of Colorado (section 51, second), "to fix the course of study, the exercises and the kind of text books to be used," would seem to

make very applicable the decision of the Supreme Court of Ohio. A teacher cannot safely disregard in such a matter the request of the board.

BOARDS OF DIRECTORS.

May certify special tax.

1890-1892.

Section 67, school law, authorizes the school board to certify for a special school fund without instructions from the electors so to do.

Must certify special tax.

1890-1892.

Section 62 provides for the relief of the electors in case the board do not make necessary provisions for the schools.

May rent school property.

1890-1892.

The school directors constitute the custodians of the school property of the district, and may at their option permit the use of the school house for other than school purposes. Any money thus obtained should be considered a part of the district school fund, and should be accounted for accordingly.

May erect out-buildings.

1890-1892.

A district board, having already constructed and furnished a school building, may subsequently erect a coal house or other simple out-building for the convenience of the school, without a special vote of the electors; the out-building to be considered an appurtenance or appendage of the school building.

Vacancies in second and third-class districts, how filled, tenure of appointees.

1890-1892.

Vacancies that for any reason occur in boards of districts of the second or third class, should be immediately filled by the county superintendent, "and the officers so appointed shall hold office until the ensuing regular election."

May require special qualifications of teachers.

A school board has a legal right to require such qualifications of teachers as seem to them to be for the best interests of the school, provided such qualifications do not conflict with those required by the State.

Not entitled to witness fees.

School directors are not legally entitled to witness fees in a case where the district is a party.

Of first and second-class districts may sell school buildings when instructed to.

Directors of first and second class districts have a right to sell a school building when directed so to do by the electors at a special meeting called for that purpose. Such sale should be made in the manner prescribed by the electors, which should be at public sale after proper advertisement.

Of third-class cannot purchase school site.

The directors of a third-class district cannot legally purchase a school site without a favorable vote of the electors.

Cannot be garnisheed.

A school director cannot be legally garnisheed in his official capacity.

Cannot teach.

A school director cannot legally become a teacher in the district in which he holds that office. See section 2606, General Statutes of Colorado, 1883, see page 82.

Empowered to employ and discharge teachers.

1890-1892.

The power to employ or discharge teachers rests solely with the school board, and not with the county superintendent or directly with the electors of the district. This applies also to vacancies that may occur by reason of sickness or any other cause.

Must qualify.

1890-1892.

A person elected to the office of director of a school district cannot legally qualify after the expiration of twenty days from election. By operation of the law, in case of failure of the director-elect to qualify within twenty days, the office becomes vacant.

Not authorized to employ interpreters in Mexican districts.

1890-1892.

A school board has no authority to employ an interpreter in Mexican districts to help out a teacher who does not understand the Spanish language.

Of first class districts, how organized.

1890-1892.

A school district of the second-class having become a first-class district, the board, at the first meeting after election, should proceed to elect new officers (president, secretary and treasurer) as provided in section 41. The officers of the old district do not hold over after the change has been effected.

Secretary, custodian of books and papers, authorized to draw warrants.

1890-1892.

The secretary is the proper custodian of the books, papers and documents of a district school board, and is the one authorized to draw all warrants issued by the board, these to be countersigned by the president and treasurer.

Secretary only paid officer.

1890-1892.

The secretary is the only officer of a district school board whom the law allows to draw pay for his services, and his pay is fixed by the board.

Vacancies, in second and third-class districts, how filled.

Vacancies in school boards of the second and third classes must be filled by appointment made by the county superintendent, and the person so appointed holds the position until the next annual school election.

Vacancies in, what may constitute.

The appointment of persons to fill vacancies in districts of the second and third classes is solely with the county superintendent. If a director is absent from his district four months, it is a valid reason for appointing his successor in office.

May expel pupils.

A pupil can be expelled by the board of directors for any offense that in their judgment deserves such a penalty.

Legal custodians of school property.

A tax payer of a district cannot dictate for what purpose the school building can be used. The school directors are the legal custodians of the school property.

Contract by two members legal.

Two members of a board in a district of the third-class can legally contract for furniture for their school house, but such contract should be made or ratified by a vote at a regular or special meeting of the board. The third member of such board cannot legally refuse to sign warrants issued in payment of such furniture simply upon the ground that he considers such furniture unnecessary. If illegality or fraud exist then he can refuse, but the fact that he considers the furniture unnecessary is only a matter of opinion, and he should be governed by the opinion of the majority.

A contract to teach made by two directors with the proposed teacher is valid, and the person so engaged to teach can collect the amount named in the contract as compensation for his services if he perform such services in accordance with the terms of the contract.

Two members of a school board in districts of the second and third classes can make a legal contract without the consent of the third member, providing such contract is made at a regular meeting, or at a special meeting legally called, and of which all the directors had legal notice.

In districts of the first-class, may examine and license teachers.

School boards, in districts of the first-class, have entire control of the examination and licensing of applicants to teach in their districts. They also have a legal right to renew certificates without examination.

Two members may dismiss teacher.

Two members of a school board have a right to dismiss a teacher, providing their action is taken at a regular or special meeting of which all members of the board have notice. But a teacher having a contract with the board cannot be dismissed without good cause for such action being shown. (Section 60, last clause.)

May purchase desks.

A school board of a district of the third class has a legal right to purchase desks for a school building without a vote of the electors of the district.

Cannot change site of school building.

A board of school directors cannot legally change the site for a school building which has been selected by a legal vote of the electors of such district.

Must file oath of office.

All school directors are required by law to file an oath of office with the county superintendent. This applies to such cities or districts in Colorado, as are organized under a special charter.

Cannot loan school money.

A school board cannot legally loan the money of the district.

How appointed, in default of annual election.

If the annual election of school directors is not held, and a special election is not called within the required ten days thereafter, it then devolves upon the county superintendent to fill vacancies by appointment.

May purchase text books for pupils of district only.

If a school board purchase books to be used by the pupils of the district, such books are for the use of pupils attending school within such district and for no other. If residents of the district see fit to send their children into adjoining districts, they can not compel the district in which they reside to furnish the text books for their children.

In divided districts.

Where a division of a school district places a member of the school board in the new district, it works a vacancy in the board of the old district, and does not make such person a member of the board in the new district. A full board must be chosen in the new district, and all vacancies in the old district filled by appointment made by the county superintendent.

BONDS.

Limit of, in new district.

A school district created from organized territory, which is already bonded for building purposes, can issue new bonds to an amount not to exceed the difference between its share of the present bonded indebtedness and three and one-half per cent. of the assessed value of its property, both real and personal.

Lands exempt from.

Lands to which title has not been obtained from the government at the time school bonds are issued by a district of which such lands form a part are not subject to tax for the payment of such bonds. Hence, if said lands are set off or detached from the district before title is perfected, they are not subject to a bond tax in the original district when title is complete.

Maximum amount, basis of.

In estimating a maximum amount of bonds that can be issued by a school district the estimate must be based upon the last complete assessed valuation.

Lands under contract or purchase, liable.

1890-1892.

State or government lands occupied under contract of purchase, title having already been acquired and land deeded, are subject to assessment the same as other lands for the payment of bonds issued by the school district of which they form a part, or such portion of said bonds, if any, that remain unpaid; *Provided*, "That said lands were deeded before said bonds had matured."

Legal petition for meeting to vote upon.

1890-1892.

The petition asking that a meeting be called for the purpose of voting school district bonds must be signed by not less than twenty legal voters. A majority of the qualified electors assembled at such a meeting may vote bonds; *Provided*, "That such qualified electors shall have paid a school tax in such district for the year next preceding such election."

Only tax payers may vote on question of issuing.

1890-1892.

Any person not a taxpayer, but otherwise a legal voter, is entitled to a vote at a regular or special district school meeting upon all matters coming before such meeting, except upon a proposition to contract a debt by loan.

Three and one-half per cent. limit.

1890-1892.

In no case shall the aggregate bonded indebtedness of any school district exceed three and a half per cent. of the assessed value of the property of said district.

CENSUS.

Defined.

1890-1892.

A school census is defined in section 80 of the school law to be a census embracing all persons between the ages of six and twenty-one years; a school age to be any age over six and under twenty-one years.

When and by whom taken, penalty for failure to report.

1890-1892.

The school census is taken annually in Colorado between the tenth day of April and the first day of May. The work is delegated to the secretary of each district, who is authorized to make a list of all persons of school age who were *bona fide* residents of the district on the tenth day of April. These lists should be forwarded, on or before the first of June, to the county superintendent, who embodies them in his annual report to the state superintendent, and uses them as a basis in apportioning the general school fund. Failure, therefore, on the part of any district to report census, causes that district to forfeit its portion of the general fund until satisfactorily explained.

Avoid duplicating names.

1890-1892.

Care should be taken to avoid duplicating names.

Includes the deaf and the blind.

Deaf mutes and blind persons between the ages of six and twenty-one should be included in the school census.

Of attached territory.

If territory is attached to a district after the annual census of that district has been taken, the names of persons of school age residing in the annexed territory should be added to the census list and the district given its *per capita* for such additional names.

CERTIFICATES.

Of other states.

State certificates issued by other states are not recognized by the law of Colorado. Persons who wish to teach in this State must hold certificates issued upon examination by the proper district, county or State authority.

Temporary, term of.

Temporary certificates are valid only until the next examination subsequent to the date of issue, and a teacher holding such temporary certificate cannot legally continue the school after the expiration of that time without a certificate legally issued upon examination. The law which applies to other certificates in such cases does not apply to temporary certificates.

Not revoked without cause.

A certificate to teach cannot be annulled or withdrawn from a holder without cause for so doing. Section 16 of the Colorado school law especially provides for such cases.

In divided counties.

A person holding a certificate issued by the county superintendent of one of the counties that was divided by the last General Assembly, and wishing to teach in the new county created by such division, should be treated the same as one living in a different county from the one in which he wished to teach. If he holds a first grade certificate the county superintendent may issue a duplicate certificate, according to section 16, otherwise the applicant must be examined and receive a certificate from the county superintendent of the county in which he proposes to teach.

Alleged exorbitant wages no bar to.

Alleged exorbitant wages named in a contract between a county superintendent and the directors of a district would not be lawful reason for revoking a certificate unless fraud of some kind could be shown.

Revocation, pending an appeal.

When a certificate is revoked by a county superintendent, such revocation takes effect on the day named by him, and the holder thereof cannot lawfully teach during the pendency of an appeal to the State Board of Education.

When not renewable.

A certificate issued under section 16 of the school law terminates at the expiration of the time for which the original was issued and cannot be renewed.

A first grade certificate cannot be renewed after the expiration of the time for which it was issued.

A first grade certificate issued in one county cannot be renewed by a county superintendent of another county.

Valid only within district where issued.

Certificates issued by districts of the first-class are valid only within such district.

Dated, when.

All certificates to teach should be dated as if issued on the last day of a regular examination.

State Superintendent's authority to grant.

The State Superintendent has no authority to grant a certificate to teach except when directed to do so by a vote of the State Board of Education in cases of appeal and of State examinations.

Offer to teach for low wages, no bar to.

An offer to teach for unreasonably low wages is neither a good nor a sufficient reason for refusing to grant a certificate.

Second temporary can not be granted.

A second temporary certificate cannot be issued to the same person, no matter in what county the first certificate may have been issued.

Temporary, discretion of with county superintendent.

The State department will not pass upon the right of an applicant to a temporary certificate. The decision of the county superintendent in such cases is final.

Second temporary, absolutely forbidden.

Neither a county nor State superintendent has any discretion in the matter of granting a *second temporary* certificate. The school law absolutely forbids it.

"Duplicate" optional with county superintendent.

The granting of a "duplicate" first-grade certificate is optional with the county superintendent to whom application is made.

Valid pending an appeal.

A person holds a certificate that expires September 8. He begins school under contract on September 1. He fails to obtain a certificate in the examination held on August 29, 30, and appeals to the State Board of Education. Held, that he may continue his school during the pendency of an appeal.

Should accompany appeal papers.

1890-1892.

In case of appeal from the decision of county superintendent to the State Board of Education by an applicant for certificate at a regular examination, the certificate, if any, issued to said applicant upon such examination, should accompany the papers sent to the State Board.

Entitles to full rights.

1890-1892.

A teacher holding a certificate to teach, issued by the proper authority, is entitled to all the rights and emoluments implied thereby until certificate is revoked for cause.

Second temporary cannot be granted.

1890-1892.

Attention is called to the following passage taken from the school law of Colorado, section 16, lines 14-16: "It shall not be lawful to renew a temporary certificate, nor to grant a second one to the same person." Under "Official Decisions," page 83, third decision from

bottom of the page, of the seventh biennial report, may be found the following: "Neither a county nor a state superintendent has any discretion in granting a second temporary certificate. The school law absolutely forbids it." Also on page 87 of the same, last decision reads as follows: "A second temporary certificate cannot be issued to the same person, no matter in what county the first certificate may have been issued." These references indicate that the school law and the official decisions of this department are very plain and explicit on the subject. They are intentionally so, because of the error which may easily creep in through an abuse of the temporary certificate privilege. There is a strong feeling among school officers that it ought to be entirely done away. In the face of this feeling and the definiteness of the law and official decisions relating thereto, the request for a second temporary certificate to the same person should not be granted.

County superintendent's discretionary power respecting, should be cautiously exercised.

1890-1892.

The discretionary power vested in county superintendents in the granting of certificates should be used cautiously; especially when the applicant averages low in such important branches as arithmetic and grammar.

Failure in botany and science does not debar from third grade.

1890-1892.

Failure in botany and natural sciences does not preclude an applicant from receiving a third grade certificate, if the standing attained in the other studies fulfills the conditions.

First grade indefinitely renewable.

1890-1892.

A first grade certificate may be renewed, indefinitely, without examination, in the county in which it was originally issued.

COUNTY SUPERINTENDENT.

Must require bond of district secretary.

A county superintendent has authority to require a district treasurer to give bond in double the amount of money liable to come into his hands, if such amount exceeds \$20.

Has advisory powers only in certain matters.

As between school directors and the county superintendent, the latter has advisory powers only in arranging course of study, selection of books and grading of schools.

May change district boundaries.

A county superintendent may legally change the boundaries of a school district without a vote of the electors of the district when it is for the purpose of harmonizing the district boundaries.

Can issue only authorized certificate or permit.

A county superintendent can issue no certificate or "permit" to a person to teach in the public schools of Colorado except the certificates mentioned in the school law, namely: a first, second or third, or a temporary.

May teach in his county.

There is nothing in the school law of this State to prevent a county superintendent from teaching in his county on account of his holding that office.

Examination for certificate.

If a county superintendent desires to obtain a certificate to teach in the county in which he resides, he is advised to appoint a deputy to conduct the examination and pass upon the answers given to the questions propounded, also to issue the certificate in accordance with the result of the examination.

Compensation for attending Normal Institutes.

A county superintendent is legally entitled to receive full compensation, both *per diem* and mileage, for attendance at the Normal District Institutes.

Passes upon bond of directors.

A county superintendent is the proper person to approve of the official bond of a school director, and if a person elected to that office cannot give a satisfactory bond it works a vacancy in the board after twenty days from his election. (See section 47.)

Cannot remove a director.

A county superintendent cannot remove a member of a school board from office.

Legitimate compensation of.

1890-1892.

County superintendents should be allowed compensation for time taken up by official correspondence. In the case of Smith vs. The Board of County Commissioners of Jefferson County, 10th Colo. Report, is the following: "Among the rejected items of his (the county superintendent's) account are charges for official correspondence with teachers, school officers and others, all pertaining to school affairs. These services constitute legitimate office work, and entitle appellant to compensation therefor. This mode of transacting business affairs is employed to some extent in nearly, if not all, departments of business, and we perceive no reason why it should not be as efficient in the administration of school affairs as in other departments of business."

Qualifications for.

1890-1892.

In addition to other qualifications, a person to be eligible to the office of county superintendent must have resided in the county at least one year preceding his election.

COUNTY TREASURER.

Fees for collecting school taxes.

A county treasurer is entitled to fees for collecting school taxes as follows: In counties of the first-class, one per cent.; in counties of the second-class, one per cent., which per cent. may be increased by the board of county commissioners, but not above four and one-half per cent.; in counties of the third-class, one per cent., and such additional per cent. as the board of county commissioners may allow, not to exceed ten per cent. in all.

Commission for sale of school bonds.

A county treasurer is legally entitled to two per cent. commission on money paid to him from the sale of school bonds. He is also entitled to a commission for collecting taxes to be used in paying both principal and interest on school bonds, but he is not entitled to a commission for paying out the money.

Can legally pay what warrants.

A county treasurer can legally pay only such warrants as are issued against the school fund of the current year.

DISTRICT.

Organized territory of, how legally detached.

Organized territory cannot be legally detached from one district and added to another by the county superintendent without a petition from the residents of the territory, except in cases where the boundaries are conflicting.

Joint.

In the organization of new counties by the last General Assembly, the county lines, in a few cases, divided organized school districts into two parts, leaving the district in two counties; in such cases, the district should be considered as a joint district.

Newly organized, proceedings void, when.

Failure to open a school in a newly organized district within six months from the date of organization, makes void all proceedings pertaining to the formation of the district, unless the time for opening a school therein be extended to eight months by the county superintendent.

Organization, amount of school necessary to maintain.

Four months of school in each school year are necessary in order that a district may hold its organization. (See sections 30 and 77.) Three months of school are necessary to entitle a district to its share of the public funds. (See section 75.) This practically makes four months of school necessary in each district.

New, legal organization.

A new district cannot be legally organized with less than ten persons of school age residing therein.

In the organization of a new school district, the law requires two-thirds of the votes cast to be favorable.

New, when entitled to share of funds.

A new school district, as soon as its organization is complete, is entitled to its share of the special fund standing to the credit of the old district of which it was formerly a part, also to receive each month its share of the uncollected special tax; providing always that a school has been commenced in the district in good faith.

When not divisible.

A school district cannot be legally divided so as to leave fewer than fifteen persons of school age in the old district.

A district having an area of less than nine square miles cannot be divided for the purpose of forming a new district.

A school district cannot be divided, nor territory taken from it, if in so doing it will leave less than fifteen persons of school age in the district.

Not annulled for failure to make annual report.

1890-1892.

A school district, having kept up its organization and maintained a four-months' school during the year, cannot be annulled merely for the reason of having failed to make the annual report. The secretary of the district is the culpable party in such a case, and is liable on his bond for any loss that may result to the district by reason of his negligence.

Not entitled to funds until duly organized.

1890-1892.

No school, except one duly organized according to law, is entitled to recognition as a public school, either in the distribution of funds or in any other official way.

Conditions of organization unlike.

1890-1892.

The conditions prescribed for the formation of a new school district out of unorganized territory do not apply to the formation of a new district out of one or more old districts. (Section 27 of the school law.)

New, county superintendent's discretion in organizing.

1890-1892.

The county superintendent exercises his own discretion in the matter of organizing a new district, even though a petition may have been duly presented.

ELECTIONS.

When held, notice of.

1890-1892.

The regular annual election for members of school boards is held on the first Monday in May throughout the State. Any business pertaining to schools and school interests may be transacted at that time. Notice, however, must be given of the "time and place" of such business. (Section 44.)

Manner of conducting.

1890-1892.

Sections 44, 45 and 46 of the school law prescribe the manner of conducting the election—including the "previous notice"—(not the same in all districts) "the time during which the ballot box or boxes shall be kept open," who "shall be entitled to vote," "counting the votes," "qualifying," "administering the oath of office," etc.

Secretary's report of.

1890-1892.

Immediately after the election of one or more directors according to law, the secretary shall transmit to the county superintendent a statement, giving the name and post-office address of the president, secretary and treasurer, respectively, of the new board. (Section 54.)

As to first-class boards.

1890-1892.

School boards of the first-class shall, at the first meeting after their election, elect a president, who shall be a member of the board, a secretary, who may or may not be a member of the board, and a treasurer, who shall not be a member of the board, and who shall hold office for one year and until their successors are elected and qualified. (Section 41.)

1890-1892.

In districts of the first and second classes the boards, after organization, shall exercise all the power given the electors of districts of the third-class, as specified in section 63.

1890-92.

District boards of the first class shall also have power to fill any vacancy which may occur in the board, until the regular election, at which time the vacancy shall be filled for the unexpired term. (Section 48.)

Legal voters at.

1890-1892.

Every person, male or female, over the age of twenty-one (21) years, who shall be a citizen of the United States, or, not being a citizen, shall have declared his intention to become such citizen not less than four (4) months immediately preceding the election at which he offers to vote, and shall have resided in this State six (6) months immediately preceding the election at which he offers to vote, in the county ninety (90) days and in the district thirty (30) days, shall be a legal voter at an annual school election.

In new district.

1890-1892.

Again, when directors for a new district (not of the first-class) are elected they hold office only until the ensuing regular election (section 28), when a full board shall be elected, as indicated for all districts of the first and second class in section 41, viz: one (1) president for three (3) years, one (1) secretary for two (2) years and one (1) treasurer for one (1) year; and annually thereafter there shall be elected for three (3) years a person to fill the vacancy occurring.

Citizenship.

1890-1892.

"The citizenship of the wife follows that of her husband." (Morse on Citizenship, pp. 203, 248 and 301.)

Who are eligible to office.

1890-1892.

"Every qualified elector shall be eligible to hold any office of the State for which he is an elector, except as otherwise provided by the constitution." (Section 1153, General Statutes 1883.)

Uniformity to be aimed at.

1890-1892.

Evidently the law works against uniformity of elections in the different school districts. It can only be said that uniformity may be observed as nearly as possible in each county, without any attempt at State uniformity. At the approaching election let the office that becomes regularly vacant in the majority of districts of a county be regarded as vacant in other districts as far as can be done without friction.

Vacancies in second and third-class districts.

1890-1892

Vacancies that may occur in a district of the second or third class through failure to qualify or through absence from the district, death, resignation, removal or otherwise, are to be filled by appointment of the county superintendent only until the ensuing regular election (section 23), at which time the vacancies shall be filled for the unexpired terms, not for regular full terms. Failure to regard this has often led to confusion.

EXAMINATIONS.

In first-class districts in charge of board.

In districts of the first class, the school directors have entire charge of the examination of applicants for positions in the schools of their district.

Quarterly cannot be taken in parts.

The quarterly examination cannot be taken in parts. If an applicant is successful in some of the subjects and unsuccessful in others, the entire examination must be taken at some future time.

State Superintendent cannot excuse from.

The State Superintendent has no authority to excuse a person from taking an examination.

FINES AND FORFEITURES.

School moneys from, county superintendent's responsibility to.

1890-1892.

More than any other person, the county superintendent is the one to look after that portion of the school fund arising from fines, for-

feitures, etc. (Section 69, school law.) He should examine the books of county treasurers, records and fee books of justices of the peace and clerks of courts, to ascertain whether or not the fines have been collected, and if collected, whether they have been placed to the credit of the proper fund and paid over.

County treasurer's responsibility.

1890-1892.

The county treasurer is responsible if moneys are turned into the wrong fund by him. It is his duty to place money collected from fines, forfeitures, etc., to the fund designated by law.

Institution of proceedings for.

1890-1892.

The county commissioner should institute proceedings in the name of the people for the use of the county after the same has been looked into and reported by the county superintendent.

Bring suit for.

1890-1892.

The district attorney or county attorney should bring suit; this on forfeited recognizance, etc., etc.

Before municipal courts.

1890-1892.

In case of fines before municipal courts, moneys properly belong to the town or city or libraries.

To what fund credited.

1890-1892.

As a rule, the money for schools from these sources should be turned by the county treasurer, into the general school fund of the county, rather than into that of a particular district; although fines assessed by justices of the peace may, in some cases, go to the credit of the school district in which the action occurred. Generally speaking, the proceeds of all fines or forfeitures should be placed by the county treasurer to the credit of the general school fund of the county, unless otherwise expressly provided by statutes.

FUNDS.

General, not for purchase of organ.

School directors of a district of the third-class may purchase an organ for the use of the school and pay for it out of the special fund. The general fund cannot be used for that purpose.

Nor for singing school.

The school funds cannot be legally used for defraying the expenses of a singing school.

General, forfeit money turned into.

All money which shall become forfeited by a school district shall be put into the general fund of the county and re-apportioned as other money. (Section 26.)

Balance June 30.

All moneys remaining to the credit of any district on June 30, should remain to the credit of such district, and cannot be turned into the general school fund of the county for re-apportionment.

General, money from fines turned into.

County treasurers should place the money arising from fines collected, and belonging to the school fund, in the general fund.

Apportionments, when made.

1890-1892.

There are only two apportionments of the school fund by the State Superintendent during the year, one in January and one in July. Other apportionments, if any, are made by the county superintendents. (See sections 11 and 19, respectively, of the school law.)

The proper custody of funds derived from the sale of bonds; proper custodian of.

1890-1892.

The custody of the money derived from the sale of school district bonds is a subject of frequent controversy between school boards and county treasurers. The latter contend that it should be deposited with them, and that they are entitled to the three per cent. commission provided generally by statute for the collection of funds not specifically named therein; while the school officers insist that the district

treasurer is the proper custodian of such funds, and that they thereby escape all charges for the compensation of the county treasurer. The State Superintendent, having been applied to by several parties during the first year of his administration for advice upon this question, referred it to the Attorney General, and obtained the subjoined statement as to the proper construction of the law thereon. The construction reverses a former decision of this office. (See Seventh Biennial Report of the Superintendent of Public Instruction, pages 78 and 82.)

"The statute nowhere gives express directions as to where or with whom money derived from the sale of school district bonds shall be deposited. In such cases the courts consider the general nature of the duties pertaining to the respective offices, and hold that, in creating and mentioning offices, law-makers have reference to the general class of duties which, by common acceptance, belong to such offices respectively. Applying this principle to the fact that the principal duty of the treasurer of any institution is the custody of its funds, it appears that, except as otherwise provided by law, the principal duty of the county treasurer is the custody and disbursement of county money, and the principal duty of the district treasurer is the collection and disbursement of the funds belonging to the school district.

"But the law provides that the county treasurer shall collect all revenues derived from taxation, and that he shall pay out the funds so derived and belonging to the different districts of his county (except money for the redemption of school bonds) on warrants drawn by certain school officers against such funds. The fact that, in the majority of cases, school districts have no money from any other source, and that consequently the county treasurer is by law the custodian of the funds of the majority of the districts in his county, easily leads to the inference that he is primarily entitled to the custody of the money of all districts, no matter from what source or for what purpose the money has been collected.

"But I am inclined to think the law provides for the disbursement of school moneys derived from taxation through the county treasury merely for the purposes of convenience, and that this fact does not justify the assumption that the duties naturally pertaining to the office of school district treasurer are further curtailed than by express provision of law, or necessary implication therefrom.

"If this view is correct the district treasurer is the proper custodian of money derived from the sale of school bonds. This conclusion appears to be further supported by certain provisions of the school law; *e. g.* section 47, which requires the school district treasurer to give bond in double the amount of any money likely to come into his possession, if such sum exceeds \$20; also sections 92 and 93,

which require the money collected by taxation through the county treasurer for the purpose of redeeming school bonds to be paid to the district treasurer, and by him used in the payment of said bonds; or, if such bonds cannot be redeemed, invested in United States bonds until the maturity of the school bonds.

"The convenience to the school board of having the money for building purposes directly under its own control adds force to the inference that the Legislature intended that such money should be in the possession of its own treasurer."

HOLIDAYS.

Designated by law.

The legal holidays recognized by the laws of Colorado are: New Year's; Washington's Birthday; Arbor Day, third Friday in April; Decoration Day; Fourth of July; Labor Day, the first Monday in September; Thanksgiving and Christmas.

Legal, banks the guide.

1890-1892.

In the observance of legal holidays, the banks are a good guide. Washington's Birthday, last, having fallen upon Sunday, the banks observed Monday.

LABOR DAY.

Legal, for transacting business.

1890-1892.

A meeting held on Labor Day, for the purpose of voting bonds, fixing a site for a school house, or for any other business that might properly be brought before such meeting would be legal.

MILEAGE.

Included in \$100 limit.

The charge for miles traveled under section twenty-five forms a part of the limit of \$100 per district.

NORMAL INSTITUTES.

Credits for attendance at.

The credits, which county superintendents are instructed to give to applicants for certificates by reason of attendance at the Normal Institute, should be given to those persons only who have attended an institute in Colorado.

NOTICE.

Legal, defined.

A legal notice, under section 68, is a publication for twenty days in some newspaper, published at the county seat of such county. (Session Laws, 1887, page 405.)

Of special meeting of electors.

More than one question can be voted on at a special meeting of the electors of a school district, provided each question is separately stated in the notice of such meeting.

PHYSIOLOGY AND HYGIENE.

Meaning of, the act providing for the study of.

1890-1892.

The act providing for the study of the nature of alcoholic drinks and narcotics, and their effects upon the human system, requires the study of physiology and hygiene in all the public schools throughout the State.

PARENTS.

Right of to withdraw children before close of school.

1890-1892.

The right can hardly be conceded to parents to withdraw their children from school prior to the close of a session, in order that they may take a lesson in dancing or music, when such withdrawal interferes with the regular work of the school. To admit the right would be to introduce irregularities which would tend to disturb and weaken the entire school management. A school board can make such rules as may seem best for the schools under its charge. On the other hand, a

parent may *reasonably* request that his child be excused from school at a specified time. It may be for the good of the child that he take dancing lessons; but a sensible parent ought to see that such exercises may be taken outside of school hours. It is possible also to obtain the assistance of the dancing master by suggesting that he set hours for public school children that will not interfere with the regular school work. This has been done in certain schools. There seems to be no necessity for serious trouble over a matter of this kind.

Right of, to select studies.

1890-1892.

Section 51 of the Colorado school law prescribes the powers and duties of school boards, among which is "to fix the course of study, the exercises and the kinds of text books to be used" Common school law requires that pupils shall study the particular branches of the course which the teachers, with the consent of the directors, shall prescribe, unless honest objection is made by the parents. If objection is made in good faith, the present tendency is to allow parents to select from the prescribed course, those branches which they wish their children to study; and for the exercise of such right of choice the children shall not be liable to suspension or expulsion.

RESIDENCE.

Non-residence defined.

A non-resident of a school district is one whose permanent dwelling place is not within the boundaries of that district.

Of a minor.

The residence of a minor is the residence of his parent or guardian.

Decision of Supreme Court, Wisconsin, respecting.

If a person moves his family into a school district for the purpose of availing himself of the advantages afforded by that district, and subsequently, during the school year, removes from the district, he is not a resident of such district, within the meaning of the term as used in the school law of Colorado. The following is taken from a decision of the Supreme Court of Wisconsin (N. W. Rep., vol. 41, page 1,014): "Effort has been made to guard against the precipitancy of non-residents to points where superior advantages exist, and schools of high order are maintained, by holding that such children only are entitled

to free tuition as are actually residing in the district for other reasons as a main purpose, than to participate in the advantages which the school affords."

Of wife.

The wife of an alien becomes naturalized upon the naturalization of her husband, and is a citizen, as the term is used in the school law.

Which exempts from provisions of school law.

Section 2, page 67, of the Colorado school law, exempts persons living more than two miles from a school house from the provisions of that act.

"In good faith."

1890-1892.

Considerable difficulty is sometimes experienced in determining "*bona fide*" residence. The law defines the residence of an unmarried person of school age (that is, of a minor) "to be identical with the bona fide residence of the parent or guardian of such person; *Provided*, that such parent or guardian be a resident of the State."

Where a family resides regularly a part of the year in one district and a part of the year in another, the residence for school purposes should be the one held *in good faith* on the 10th day of April.

1. "That place shall be considered and held to be the residence of a person in which his habitation is fixed, and to which, whenever he is absent, he has the intention of returning.

2. "A person shall not be considered or held to have lost his residence who shall leave his home and go into another state or territory or county of this State for temporary purposes merely, with the intention of returning."

SPECIAL TAX.

Special, how certified.

A district board of the third class can legally certify a special tax to the board of county commissioners without a vote of the electors of the district.

Special, when may be reconsidered or amended.

After a district has voted a special tax, and such tax has been certified to the county commissioners by the directors, it cannot be reconsidered or amended, nor can the board of directors make a new levy; but it may be reconsidered if the certificate has not been filed.

Colorado School for the Deaf and the Blind.



SCHOOL BUILDING.



MAIN BUILDING.



GIRLS' HALL

Colorado Springs, Colo.

For building, vote of electors essential.

A vote in favor of levying a tax for building purposes is not sufficient to authorize the directors of a district to erect a school building, when such tax has been collected. There must be a vote by the electors directly upon the question of building a school house.

Special for teacher's residence.

When the electors of a school district, at a legal meeting, vote to erect a building on the school site of the district to be used as a teacher's residence, and vote a special tax for that purpose, such action legally authorizes the directors of the district to contract for the erection of such a building.

Special, may be certified without vote of electors; with vote, must be.

The directors of a school district have a legal right to certify a special tax to the county commissioners without a vote of the electors. In districts of the third class such tax must not exceed fifteen mills on the dollar. If a vote of the electors has been taken in the district, then the directors should certify the amount voted.

SCHOOL SITE.

In third-class, school site, how determined.

The site for a school building in districts of the third class can be selected or changed only by a vote of the electors taken at the annual meeting, or a special meeting legally called.

School must be held within.

School must be held in a building situated within the boundaries of the district.

Departments.

The departments of a school cannot be legally considered as separate schools.

SCHOOL YEAR.

Defined.

The term "year" used in the act entitled, "an act to secure to children the benefit of an elementary education," is defined to mean the school year. And the term, "a court of competent jurisdiction," used in the same act, is defined to mean a justice, a county or a district court.

Ten months, not five.

Two schools in one district, holding a five months' session each, do not conform to the requirements of the law as prescribed in section 71.

TUITION.

Determined by directors.

1890-1892.

The payment of tuition for the school privileges afforded to children attending outside of their own district is a matter which the boards of the respective districts must arrange between themselves.

May be required from those who have attained majority.

1890-1892.

A person, having attained the age of twenty-one years, is not thereby debarred from school privileges, but the board may require tuition of him. This ruling applies to those who may have been under the age of twenty-one at the time the last school census was taken.

Paid by parents.

There is no legal provision for the payment of tuition out of a fund belonging to a school district. If a tuition is charged pupils who attend school in a district other than that in which they reside, that tuition must be paid by the parents, and not by the district from which the pupils come.

TEACHER.

Salary of, legally increased.

A teacher's salary can be legally increased during the term for which he is employed only at a regular or special meeting of the school board.

Salary of, annual, monthly.

If a teacher is engaged by the year, at an annual salary, vacations are not deducted. If he is employed by the month, and paid a fixed sum per month, vacations are deducted if there is no contract to the contrary. A teacher could just as lawfully claim pay for the long summer vacation as for the customary holiday vacation.

Forfeits pay while taking examination.

A teacher is not entitled to receive pay for the time lost while attending a teacher's examination.

Cannot be dismissed without cause.

A teacher cannot be legally dismissed before the expiration of the time for which she is engaged "without good cause shown," and, if so dismissed, she can collect full salary, provided she holds herself in readiness to fulfill her part of the contract.

Cannot teach without authorized certificate.

A person cannot be legally employed to teach in the public schools for any length of time, however short, unless such person has a certificate to teach, issued by the proper authorities.

May collect full salary for period of engagement. Contagious disease no bar to contract.

1890-1892.

Section 60, school law of Colorado, contains the following statement as the closing sentence :

"No teacher shall be dismissed without cause shown, and such teacher shall be entitled to receive pay for services rendered. At the top of page 80, Seventh Biennial Report of the Superintendent of Public Instruction, an official decision states 'that a teacher cannot be legally dismissed before the expiration of the time for which she is engaged, without good cause shown,' and if so dismissed she can collect full salary, provided she holds herself in readiness to fulfill her part of the contract." The following is the decision of the Supreme Court of Michigan (April 30, 1880) in the case of Dewey vs. Union School District: "If the school board closes the school during the term because of the prevalence of a contagious disease, the teacher does not lose his pay, unless he consents to lose it, provided he holds himself in readiness to teach subject to the order of the board. There may be a condition of things which makes it eminently expedient and prudent to stop the schools, but no rule of justice will entitle the district to visit its misfortunes upon the teacher who had no agency in bringing it about." (Dewey vs. District 43, Michigan 480.) It will thus be seen that the official decision of this department contained in the Seventh Biennial Report is sustained by the highest judicial authority in the State of Michigan.

Depopulation of district no bar to contract.

1890-1892.

Under a written contract with a school board to teach a stated length of time, a teacher is entitled to compensation for the full time, although the school should lapse by reason of the residents leaving the district; provided the teacher has fulfilled her part of the contract and expresses her willingness to complete the requirements of her agreement. The school board should have taken into consideration the possibility of such an event at the time the contract was made.

Contract, power of retiring board respecting.

1890-1892.

A retiring school board cannot impose upon a succeeding board an obligation to retain a teacher for a longer period than the close of the current school year.

May be dismissed for cause.

1890-1892.

The school board has it in its power to dismiss a teacher for incompetency or immorality. But according to section sixty, last clause, school law of Colorado: "No teacher shall be dismissed without good cause shown, and such teacher shall be entitled to receive pay for services rendered." In order to make good charges of immorality, specific acts must be declared and supported by affidavits of witnesses. The possession of a proper certificate of qualification is *prima facie* evidence of competency and fitness. Hence the law, section sixteen, line seven, provides that a county superintendent "may revoke certificate of any grade at any time for immorality, incompetency or any other just cause." If satisfied that the charges can be sustained by proof, the proper course for the board is to bring the matter to the attention of the county superintendent, with a request that he make use of the power granted him by the law.

Jurisdiction over pupils.

1890-1892.

Respecting the jurisdiction of teachers over pupils on their way to and from school, it may be stated that the legal decisions in the majority of states recognize the authority of the teacher as concurrent—that is, joint and equal—with that of the parents. In some states, decisions have been made which give the school authorities some control over pupils and their conduct after they have reached home

from school. However, authority over pupils when not on the school premises should be confined to protecting and promoting the welfare of the school. Such acts only as directly affect harmfully the discipline and teaching of the school should be taken cognizance of. For example, truancy, wilful tardiness, quarreling with other children, the use of indecent and profane language, etc. The teacher should seek the co-operation of the parent, if possible, in such matters, for the sake of avoiding unnecessary friction.

Last month's salary withheld until report is filed.

1890-1892.

No part of the last month's salary of a teacher should be paid until the reports required by law are made and filed according to specifications.

No qualification of age in Colorado.

1890-1892.

There is no qualification of age for teachers in this State.

WARRANTS.

Illegal, liability of treasurer for.

1890-1892.

As to whether a school district warrant is legally drawn when signed by the president and secretary and not by the treasurer, is a question for the county treasurer of the proper county, to pass upon when the warrant is presented for payment. Should he pay such warrant and afterward, upon investigation, it be found to have been issued to some person or persons to whom the district was not justly indebted, he, the treasurer, would be liable on his official bond by reason of the fact that the warrant was not sufficiently authenticated as provided in section 58, school law, which reads: "It shall be the duty of the treasurer to countersign all warrants drawn by the president and secretary on the county treasurer."

The law does not require the county treasurer to keep several accounts of the *special fund* of a district.

The only provision for the payment of teachers' salaries.

1890-1892.

A teacher having accepted a stipulated salary, can receive that salary only by warrants drawn by the district secretary, and takes them for what they are worth. It would not be proper for the board to simply supplement, by an additional warrant, the shrinkage of irregular warrants on account of the discount in the market. The deficit may be made good by the board, at a regular meeting, voting to advance the salary so as to cover the shrinkage in value of the depreciated warrants.

Must be signed by president of board.

1890-1892.

The president of the school board being the principal functionary, a warrant drawn without his signature is illegal.

Holder must bear discount.

1890-1892.

When school district warrants are sold at a bank or elsewhere and a discount is charged, the holder of the warrant must bear the loss.

Not invalidated by special rate of interest, nor date of payment.

It does not invalidate a school warrant to specify a rate of interest not exceeding eight per cent. nor to have a date of payment specified therein. A county treasurer would undoubtedly follow the legal directions as to the rate of interest and time of payment, regardless of what might be written in the warrant in addition to the usual form.

Legality of, essential conditions.

The auditing of bills against a school district must be performed by the board of directors at a meeting thereof, and vouchers or warrants issued for the payment of such bills are legal only when issued by a vote of a majority of the board at such meeting.

Issue of, limit.

The total amount of school warrants issued must not exceed the amount of tax levy for the current year.

Excess, not valid.

A school warrant payable two years from date of issue and in excess of the special tax levy for the current year is invalid.

Legal restrictions in matter of issuing.

The only legal restrictions placed upon school directors in the matter of issuing warrants are that they must be issued to persons to whom the district is legally indebted, and the total amount issued must not be in excess of the special tax levied for the current year.

WOMAN.

Not barred by marriage from teaching.

The school law of Colorado does not prohibit married women from teaching in the public schools of this State.

Age for voting.

1890-1892.

A woman must be twenty-one years old in order to fulfill the requirements of the statute granting to her the right to vote at school district elections.

When a tax-payer, may vote on bonds.

1890-1892.

If in addition to being a legally qualified elector a woman is a tax-payer in her own right, she is entitled to a vote on the question of contracting a bonded debt.

May serve as deputy county superintendent of schools.

A woman can legally act as deputy county superintendent of schools, and a county superintendent is legally entitled to a *per diem* for work performed by such deputy.

Not eligible to office of county superintendent.

A woman is not eligible to the office of county superintendent of schools.

May vote to organize a new district.

1890-1892.

A woman may vote at a meeting called for the purpose of organizing a new district.

May vote on question of site for school house.

Sex does not disqualify a person from voting upon the selection of a school site.

Exhibit V.

State Association of County Superintendents.

1891.

- I. Officers.
- II. Circular: State Superintendent to county superintendents.
- III. Programme. (Colorado Springs, May 13, 14, 15.)
- IV. Minutes and report.
- V. Register of membership.
- VI. Circular: State Superintendent to county superintendents.
- VII. Minutes and report. (Denver, Dec. 28, 1891.)
- VIII. Register of membership.

1892.

- I. Officers.
- II. Circulars: State Superintendent to county superintendents. State Superintendent to county commissioners.
- III. Programme. (Aspen, June 15, 16, 17, 18.)
- IV. Minutes and report.
- V. Register of membership.
- VI. Circular: State Superintendent to county superintendents. Programme. (Denver, Dec. 27.)
- VII. Minutes and report.
- VIII. Register of membership.

State Association of County Superintendents 1891.

OFFICERS.

President, Hon. Nathan B. Coy.

First Vice-President, E. C. Stimson, Pitkin county.

Second Vice-President, Reuben Berry, El Paso county.

Secretary, P. M. Condit, Delta county.

Treasurer, B. C. Killen, Elbert county.

Executive Committee, A. D. Shepard, Arapahoe county; W. V. Casey, Boulder county; D. S. Harris, Kit Carson county.

CIRCULAR.

DEPARTMENT OF PUBLIC INSTRUCTION, }
DENVER, COLO., April 22, 1891. }

To County Superintendents:

An attractive and suggestive programme has been issued by the executive committee of the State Association of County Superintendents for the meeting at Colorado Springs in May. It is hoped that the committee's request for a full attendance will meet with a hearty response. No educational gatherings during the year bear closer, more important relations to the public schools of the State. The good accomplished by the few already held is great; the possibilities of good to come are beyond estimate. The privilege of attending these meetings should be eagerly embraced. No county superintendent can afford to miss them. Their value to the schools of the State, severally and

collectively, is so great as to justify the Department of Public Instruction in authorizing *per diem* and mileage compensation to the county superintendents for attendance upon them. The hope is indulged that no board of county commissioners will take so narrow a view of the welfare of their own schools as to contest this claim with their county superintendent.

PROGRAMME.

1. Address of welcome by Reuben Berry, of El Paso county.
2. Topic: "Best Method of Securing School Libraries," C. B. Timberlake, of Phillips county; James Dilts, of Eagle county.
3. Five-minute reports by county superintendents.
Discussion.
4. The State Normal School, President Thomas J. Gray.
5. Topic: "Course of Study for Normal Institutes," J. S. Eagleton, of Jefferson county; E. H. Stevens, of Sedgwick county.
6. Topic: "Examinations and Certificates," A. D. Shepard, of Arapahoe county; B. A. Arbogast, of Summit county.
7. Topic: "Supervision of Schools," E. C. Stimson, of Pitkin county; T. M. Duffy, of Park county.
8. Topic: "The Work of County Associations," W. V. Casey, of Boulder county; P. M. Condit, of Delta county.
9. Topic: "Official Records of Directors and County Superintendents," S. T. Hamilton, of Larimer county; C. W. Foreman, of Rio Blanco county.
10. Recommendations to county superintendents, Nathan B. Coy, State Superintendent.

W. C. THOMAS, of Weld county; .

S. T. HAMILTON, of Larimer county;

J. J. TOBIN, of Montrose county,

Executive Committee.

MINUTES AND REPORT.

The State Association of County Superintendents convened in regular annual session at Colorado Springs, May 13, 1891, in the lecture room of the First Presbyterian church.

In the absence of the president, Hon. Fred Dick, Superintendent W. C. Thomas of Weld county was elected temporary chairman.

In the absence of the secretary Superintendent E. T. Fisher, Superintendent S. T. Hamilton was elected secretary *pro tem*.

The opening address by Superintendent R. Berry of El Paso county, and response by State Superintendent Nathan B. Coy, were followed by an address of welcome to the county superintendents of the State by Mayor Sprague of Colorado Springs.

The regular programme was then taken up.

The first topic, "Best Method for Securing School Libraries," was presented in a short paper by Superintendent Timberlake of Sedgwick county. An animated discussion followed, at the close of which a committee, consisting of the State Superintendent and the principal of the Normal School, was appointed to prepare a list of books for school libraries, and to confer with publishers as to prices.

This was followed by a five-minute report from each county superintendent present.

Superintendent J. E. Ray of the school for the Deaf and the Blind of Colorado, then gave the convention an invitation to visit the school, which was accepted.

The convention then adjourned to meet at 8:30 a. m., May 14, in the chapel of the school for the Deaf and the Blind, to listen to a lecture by a deaf mute, which was interpreted by Superintendent Ray. After inspecting the various departments of this school, the superintendents again convened at the Presbyterian church to resume the work of the convention.

The programme for the day was as follows:

1. Paper by J. S. Eagleton. Subject: "Course of Study for Normal Institutes."

Discussion of paper led by Superintendent Condit, Delta county. The general opinion seemed to be that a uniform course of study for all districts was not desirable at present.

The next number on the programme was a paper by Superintendent A. D. Shepard, Arapahoe county. Subject: "Examinations and Certificates."

He was of the opinion that the State Superintendent should be very careful in the kind of questions selected for the quarterly examinations, and believed that first-class certificates should be granted only to first-class teachers, and that there should be such uniformity in grading the papers of applicants that a certificate of a certain grade from one county would be equal to a certificate of like grade in any other county.

Principal Gray, of the State Normal School, then addressed the convention. In a brief manner he explained the work of the school and indicated that the need of the Normal trained teacher was apparent.

This address was followed by a paper by P. M. Condit, of Delta county. Subject: "County Associations." Mr. Condit said these meetings should be made as attractive as possible to secure the attendance of teachers.

A paper was then read by E. C. Stimson, Pitkin county. Subject: "Supervision of Schools." One of the points made was to secure first-class teachers and leave them to do the work.

The next in order was a paper on "Official Records," by S. T. Hamilton, Larimer county, which showed the importance of many needed changes in the form of official blanks, and how poorly records are kept by many school boards. At the close of the discussion, by request of State Superintendent Coy, a committee consisting of S. T. Hamilton and A. D. Shepard was appointed to confer with the State Superintendent in remodeling the blanks for official records.

Hon. N. B. Coy then gave the superintendents some suggestions on unity and system in school work. He thought the county superintendents should look after the school boards and endeavor to create a healthful sentiment. The teachers should be supported in their work, and whatever is undertaken should be done well.

The following named officers were elected for the ensuing year :

President, Hon. N. B. Coy.

First Vice-President, E. C. Stimson.

Second Vice-President, R. Berry.

Secretary, P. M. Condit.

Executive committee, A. D. Shepard, M. V. Casey and D. S. Harris.

On the evening of the 14th, the superintendents were very pleasantly entertained at the residence of President Slocum of Colorado College.

Friday, May 15, 1891, convention adjourned to meet at Aspeh, June 15, 16, 17 and 18, 1892.

REGISTER OF MEMBERSHIP.

Arapahoe county, A. D. Shepard.

Baca county, Charles Smith.

Boulder county, M. V. Casey.
 Delta county, P. M. Condit.
 Eagle county, James Dilts.
 Elbert county, B. C. Killen.
 El Paso county, Reuben Berry.
 Gunnison county, Chas. Fueller.
 Jefferson county, J. S. Eagleton.
 Kit Carson county, D. S. Harris.
 Larimer county, S. T. Hamilton.
 Lincoln county, H. A. Lowell.
 Morgan county, W. E. Garver.
 Phillips county, C. B. Timberlake.
 Pitkin county, E. C. Stimson.
 Prowers county, G. T. Feast.
 Sedgwick county, E. H. Stevens.
 Weld county, W. C. Thomas.

E. T. FISHER,
Secretary.

CIRCULAR.

STATE OF COLORADO,
 DEPARTMENT OF PUBLIC INSTRUCTION. }
 DENVER, COLO., December 7, 1891. }

To County Superintendents:

GENTLEMEN—Your attention is called to the meeting of the State Association of County Superintendents, to be held in Denver, December 28, announcement of which has already been made by the Executive Committee.

All who can should attend this meeting. It is the purpose to make it of special value to the superintendents recently elected, who will constitute sixty per cent. of the entire number on the new list.

Besides the address of the State Superintendent, there will be practical talks based upon the experience of those who have been a long time in the service.

Among the topics that will be considered, are the following:

Difficulties Peculiar to the Beginning of a County Superintendent's Work and How to Meet Them.

The County Superintendent in his Office.

The County Superintendent and the District School Boards.

School District Funds and the New Tax Law.
The County Superintendent and his Teachers.
The County Superintendent and County Supervision.
The County Superintendent and County Associations.
The County Superintendent and the Public.
The County Superintendent and the State Superintendent.

Those who are wholly without experience in the work will do well to study up carefully in advance the school law relating to the duties of county superintendents, and to bring to the meeting, note book and pencil.

You are requested to be on hand promptly at the time set for the opening of the meeting, 9 a. m., and to come prepared to stay through the sessions of the State Teachers' Association, which promise rare entertainment in the papers to be presented, the address of Mr. Bardeen (famous for his bright talks), and the social features, which are expected to be unusually attractive.

Urge your teachers to come also, that there may be a large and enthusiastic gathering.

Especially do not slight the Superintendents' meeting, but by individual effort help to secure a full attendance, that the occasion may be one of welcome to the incoming, God-speed to the out-going members of the association.

You are requested to indicate what are the probabilities of your coming.

Most cordially,

NATHAN B. COY,
State Superintendent.

MINUTES AND REPORT.

The State Association of County Superintendents met informally at Denver, December 28, 1891, in the High School building, District No. 1. The meeting was called to order by the president, Hon. Nathan B. Coy, who in a brief address, called attention to the practical character of the meeting; that it was not an occasion for theorizing; that the word "supervision" covers duties of county superintendent. He then considered supervision as applying to relation with directors, teachers and school work as a whole. The ideal school man is an educational philosopher, as well as man of affairs. He fol-

lowed with statistical summary of school matters gathered from county superintendents' reports. He offered criticism and suggestions upon reports sent to his office.

Discussion by Superintendents Shepard, Casey, Lay, Lake, Thomas, Stevens and others.

Superintendents Coy, Shepard, Condit, Hamilton, Garver and others considered the question of issuing certificates. The general opinion seemed to be that temporary certificates were necessary evils; that markings should honestly indicate the actual result of the teacher's examination; that teachers are responsible for their own failures; that the county superintendent should ever have the good of the school before him; that more care should be exercised in business affairs of superintendent's office. In answer to question by Superintendent Fueller, Mr. Coy recommended that every applicant be expected to write upon all subjects.

Subject: "County Superintendent and County Association," discussed by Superintendent Eagleton. He called attention to the relation of city and county superintendents' duties. Considered the county course of study the important feature; insisted that practical work should be done and alone by competent teachers. Discussed by Fenlason, Hamilton, Thomas, Casey, Jackson, Garver, Stevens, Condit and others. In the discussion it was stated that the common ignorance of the average teacher of graded work made the county superintendent's efforts difficult; that he should take upon himself this responsibility. He should visit his schools with the determination of carrying out a specific plan; he should try to establish a uniformity of text books and district ownership as means to the end of grading schools.

Adjourned to meet at 1:30 p. m.

AFTERNOON.

Superintendent Thomas discussed "County Superintendent in His Office." He considered visiting schools the most important part of superintendents' duties. Business of county superintendent when he takes his office is to familiarize himself with all its requirements. Discussion outlined by Superintendents Hamilton, Shepard and Stevens. Superintendent Stevens raised the question whether county superintendent has any authority to declare a vacancy. Opinion of State Superintendent that he has.

Superintendent Harris presented "Difficulties of a New County Superintendent." Greatest difficulty to be met is want of familiarity with the educational condition of his county.

Discussed by Superintendents Fenlason, Dilts and others. Topic: "County Superintendent and District School Board," presented by Superintendent Casey. He argued that no school could rise above its school board. He urged cultivating acquaintance of directors and frequent examinations of directors' books.

Many important points in connection with school law were discussed by Messrs. Dilts, Shepard, Thomas, Hamilton, Eagleton, Jackson and others.

Superintendent Shepard was asked to explain object of section 64, school law, and general objects in reference to general and special tax. His remarks were of value to every one interested in school matters.

Moved, that Mr. Knapp be instructed to inform Mr. Bardeen that county superintendents have adjourned to meet in regular session to-morrow at 9 a. m. and request his presence. Motion prevailed.

Meeting adjourned to meet in Gumry Hotel during evening.

DECEMBER 29, 1891.

State Superintendent Coy rapped meeting to order.

"The County Superintendent and His Teachers" was presented by Superintendent Dilts. He gave emphasis to responsibility of the teacher and the need of high-minded teachers. Aim of the superintendent should be to help his teachers. His full sympathy should be with them.

Remarks commented upon by Superintendents Harris, Fenlason, Shepard and Thomas. It was argued pro and con that county superintendents had nothing to do with bettering teachers; that it was the duty of the teacher to first learn how to teach before trying; that it is largely a matter of business; that county superintendents must be in advance in educational progress.

At this point Mr. Bardeen came into the room and was gracefully introduced by State Superintendent Coy.

Mr. Bardeen paid a fine tribute to the advanced condition of Colorado's educational interests; continued the discussion of the relation of the superintendent to his teachers; referred to the New York plan of issuing certificates. "If schools are supported by a state tax, every child of the state is entitled to help from the state." Explained the "omnibus plan" in vogue in New York. "The help of a conscientious superintendent is invaluable."

President Baker of Boulder followed. He spoke of the efficiency of the Boulder University. Urged the elevation of the teacher's work as fast as possible.

President Snyder of Greeley was next introduced. He spoke highly of the educational advancement and sentiment; urged still higher standards; spoke of ideal requisites of a superintendent; believed that a superintendent should be a "teacher of teachers;" an individual possessed of wide sympathy.

The teachers' reading circle was discussed, led by Superintendent Stevens.

J. P. Jackson spoke of such action as would arouse enthusiasm.

P. M. Condit offered the following resolution:

"Having learned of the recent death of Superintendent E. L. Byington, honorary member of this Association, be it

Resolved, That we, the County Superintendents of Colorado, express our sorrow at his loss, and our condolence with his bereaved family.

"That we recognize the valuable educational work of Professor Byington in this State; that in his Christian character we have an example that we commend."

Moved by Superintendent Hamilton and seconded by Superintendent Shepard, that resolution be adopted by Association and spread upon the minutes of this meeting.

Unanimously adopted.

State Superintendent Coy briefly reviewed the work of the meeting and discussed the duties before us.

Adjourned to meet at 10:30 a. m. December 30, 1891.

DECEMBER 30, 1891, 10:30 A. M.

State Superintendent called upon Mr. Shepard to state object of this called session. Object given—to prepare subjects for June meeting and show county superintendents why they should be present.

Normal Institute course of study discussed at some length.

Superintendent Coy spoke of Columbian Exposition; advised forming committees as soon as possible for Normal Institutes.

Mr. Dilts gave it as the prime object of the Institute to learn method; to grow—cultivate skill and strength of mind.

Superintendent Stevens moved that a committee be appointed to outline a course of study for the coming Institutes of 1892, committee to report their deliberations in *Colorado School Journal*, in April number, and report to be presented at June meeting of the County Superintendents, to be held at Aspen.

Motion sustained.

State Superintendent Coy and President Snyder, of State Normal, chosen to act upon that committee.

Meeting formally adjourned to meet in regular session at Aspen, June 15, 16, 17 and 18, 1892.

REGISTER OF MEMBERSHIP.

Nathan B. Coy, State Superintendent.
 Arapahoe, A. D. Shepard.
 Boulder, W. V. Casey.
 Chaffee, James A. Condit (elect).
 Clear Creek, W. R. Collins (elect).
 Delta, P. M. Condit.
 Eagle, James Dilts.
 Elbert, B. C. Killen, C. F. Lindsley (elect).
 El Paso, Reuben Berry, J. P. Jackson.
 Fremont, B. G. Woodford.
 Gilpin, E. F. Lake (elect), F. B. McLeod.
 Gunnison, Charles Fueller.
 Hinsdale, J. C. Logan (elect).
 Huerfano, Nelson Rhoades, Jr. (elect).
 Jefferson, J. S. Eagleton.
 Kit Carson, J. W. Augustine (elect), D. S. Harris.
 Larimer, S. T. Hamilton.
 Lincoln, H. A. Lowell.
 Logan, D. C. Fleming (elect), F. A. Long.
 Morgan, W. E. Garver, S. A. Wallace (elect).
 Otero, C. W. Fenlason (elect).
 Park, George A. Miller (elect).
 Phillips, Charles B. Timberlake.
 Prowers, A. E. Crawford (elect), G. T. Feast.
 San Miguel, H. C. Lay.
 Sedgwick, E. H. Stevens.
 Summit, B. A. Arbogast, George H. Clarke (elect).
 Weld, W. C. Thomas.

P. M. CONDIT,
Secretary.

State Association of County Superintendents

1892.

OFFICERS.

President, Hon. Nathan B. Coy.

Vice-President, Superintendent Chas. B. Timberlake, Phillips county.

Secretary, Superintendent E. C. Stimson, Pitkin county.

Treasurer, Superintendent James Dilts, Eagle county.

Executive committee: J. P. Jackson, El Paso county; J. S. Eagleton, Jefferson county; J. W. Douthit, Las Animas county.

CIRCULAR.

Attendance at the regular meetings of the County Superintendents of Schools is an official duty, for the performance of which a county superintendent is legally entitled to the usual *per diem* and mileage. This applies to all counties except counties of the first and second class, viz: Arapahoe, El Paso and Pueblo.

NATHAN B. COY,
State Superintendent of Schools.

Denver, May 1, 1892.

CIRCULAR.

STATE OF COLORADO,
DEPARTMENT OF PUBLIC INSTRUCTION, }
DENVER, May 28, 1892.

To the Honorable, the Boards of County Commissioners :

GENTLEMEN—Your sympathy and support are earnestly solicited in behalf of the State Association of County Superintendents, whose annual meetings, instituted only about three years ago, have already wrought very beneficial results, and justify more generous public support than they have hitherto received.

It is exceedingly desirable that every county superintendent in the State should be enabled to attend these meetings. I myself would favor making their attendance obligatory; but to do this, provision should be made for their expenses. County commissioners have it in their power to make this provision by allowing the usual *per diem* and mileage granted for services within the county. Ample authority for this may be found in the Supreme Court decision rendered in favor of County Superintendent Smith *versus* the commissioners of Jefferson county. (Colorado Reports, Vol. X, p. 17.) The law herein set forth plainly regards the public school system as a State, not a county, system. Hence the necessity of uniform, systematic organization—an end difficult to attain with the frequent changes of superintendents and teachers from which country schools commonly suffer. At the biennial State election, fifty to sixty per cent. of the county superintendents regularly go out of office. The disadvantages resulting from such sweeping changes may be largely lessened by giving the new officers the opportunity of personal conference and counsel with those more experienced. Such opportunity is afforded by the annual meeting of the State Association. Some county commissioners do not hesitate to grant *per diem* and mileage; others refuse, probably through ignorance of the value of the meetings. Therefore, this communication is sent out, trusting that it will secure your ready acquiescence in the recommendations offered and thereby the advancement of school organization in the State.

Respectfully,

NATHAN B. COY,
State Superintendent.

PROGRAMME.

WEDNESDAY, JUNE 15, 2 O'CLOCK P. M.

Opening address by the president, Hon. Nathan B. Coy.

"To What Extent Should Civics be Taught in the Public Schools?"—Jesse Stephenson, Rio Grande county; J. P. Jackson, El Paso county.

THURSDAY, JUNE 16, 9:30 A. M.

Examination of teachers.

This subject to be presented by the executive committee:

FIRST—That the committee recommends that each topic should contain questions confined exclusively to the branch in which the applicant is examined.

SECOND—Concerning what would constitute a proper answer to a general question, instructions should be given to the applicant not to exceed a given number of lines.

THIRD—Fixed rules for the grading of examination papers should be adopted, similar to those in use by the United States Civil Service Commission.

FRIDAY, JUNE 17, 9:30 A. M.

"Barriers to the Progress of the Public Schools of Colorado"—E. H. Stephens, Sedgwick county; J. H. Freeman, Fremont county.

SATURDAY, JUNE 18, 9:30 A. M.

"Is the Tendency of the Public School Toward Immorality?"—Charles Fueller, Gunnison county; E. F. Lake, Gilpin county.

2 O'CLOCK P. M.

Miscellaneous business and election of officers.

MINUTES AND REPORT.

The State Association of County Superintendents convened in fourth annual session at Aspen, June 15.

The meeting was called to order in the court room of the county court house at 2 p. m., President Nathan B. Coy in the chair.

Judge Ingraham of Aspen, who closely resembles President Harrison, having been introduced by Superintendent Stimson, cordially welcomed the visitors to the Queen City of the Mountains, in words of high praise for the free school system of Colorado.

On behalf of the Association, Superintendent Shepard responded tersely and appreciatively.

The address of President Coy which followed, drew attention to the happy auspices under which they met in the beautiful city of the mountains, the large attendance, which bespoke the manifest interest in educational work in the State and the unusual dignity given the meeting by the presence of the heads of three of the State institutions which were related to the common school system of our State, as spires to cathedrals, as the peaks to the mountain ranges.

The value of the Association might be learned by a glance at what it has already accomplished. Important recommendations made at the first meetings, held only a few years since, had secured a better system and increased the efficiency of the schools throughout the State. A course of study had been prepared which was gradually being adopted with gratifying results; summer Normal Institutes had become well established; attendance of pupils at school was more closely looked after; county supervision was more efficient, and a more earnest educational spirit had been awakened.

Much more remained to be done by the Association. A growing popular interest was enriching the educational system of the State at its roots, and thereby giving increased vigor to trunk and branches.

The remarkable extension of higher education throughout the country was equally manifest in Colorado. While the general increase of attendance in the schools for the past two years was about ten per cent., that in academies and higher institutions, both public and private, was more than forty per cent.

The number of pupils enrolled in high schools had increased during this period from 1,414 to 2,112; the value of school houses and property from \$3,838,353 to \$5,079,770; total receipts from \$2,037,251 to \$2,803,465.51; total expenditures from \$1,585,519 to \$2,419,513.46; number of teachers from 1,924 to 2,534.

While the total school population had increased twenty per cent., the number enrolled and the average daily attendance had increased twenty-five per cent.

There had been a decided increase in the expenditure per capita of pupils, which might be explained in part by the fact that the rapid

increase in population had led to provision for the future in substantial, commodious buildings. The improvement in the architecture of country school buildings is especially marked.

The importance of bringing good literature within the reach of the schools is being emphasized. The volumes in school libraries had increased from 20,016 in 1889 to 33,002 in 1891.

Appreciation was expressed of the difficulties experienced by county superintendents in combining proper supervision of schools with office duties, and means for overcoming these difficulties were suggested. The vigor with which the work had been prosecuted during the new term was highly praised, and justified some changes made by the last election. Those who are serving continuous terms of office do not find that familiarity with the work lessens responsibility or the amount of labor, but reveals constantly more to be accomplished; while the new incumbents, who are faithful, soon learn that the office is no sinecure. In spite of difficulties, progress would be steady and uninterrupted if the noble efforts now making were continued.

Free schools, like free governments, seem to be of American inspiration; in fact, however, they are but the realization of the best thoughts of all ages. The American system was the dream of philosophers and statesmen from Plato to Charlemagne, Gustavus Adolphus and Luther.

The greatest educational problem of to-day is the improvement of public schools. Secondary schools and higher institutions of learning need less thought. The trouble with the country schools arises largely from poor teachers. This is true not only of Colorado, but of all the states. Unquestionably the deterioration of agricultural interests as compared with other industrial pursuits explains in large degree the country school problem. Schools are generally on a level with their surroundings; and, as farming seems about to recover from the degenerate tendency of past years, so also may we expect the country school to be elevated. Much is expected from our State Normal School in extending to country teachers professional training and spirit. Its phenomenal success during its brief existence warrants for it a future of great results.

It must ever be borne in mind, that the mere routine work of the school room does not fulfill the chief end of education. The growing teacher will idealize her work by contact with the stimulating thought of the best minds in the profession and, beyond that, in general literature. Help in this direction may be had through normal institutes and teachers' reading circles. The teacher who ignores these essen-

tial aids to growth has no more realizing sense of the scope of her work than would the traveler who should pretend to know our mountains by having passed up one of the canons, or more narrowly crossed them through a tunnel.

The address closed by calling the attention of the county superintendents to their forthcoming annual reports, and the importance of having them accurate and complete in every detail.

Information having been received that the court room would be required during the remainder of the week for an unexpected session of court, the Patriotic Order Sons of America very hospitably tendered the Association the use of their comfortable and attractive assembly room, and further extended the compliments of the order for Friday evening. These courtesies were appreciatively accepted.

Superintendent Stephenson, to whom was assigned the preparation of the paper of "Civics in the Public School," being absent, upon motion of Superintendent Shepard, the regular programme was waived for a time, and the presidents of the State institutions were invited to address the Association.

President Baker expressed his sympathy with the superintendents in their duties; called attention to their relation to higher education; observed that a gap existed between the rural schools and the university, and urged as a remedy the establishment in every county of at least one high school, that should prepare students for college.

President Snyder spoke glowingly of the country school, its advantages and its needs. By country schools he meant the schools of the smaller towns and the rural districts; called attention to the fact that ninety per cent. of the eminently successful business men were educated in such schools. Their great need is the right kind of teachers. The Normal School is intended to supply that need. It is the peoples' school, and the one at Greeley will carry out to the letter the work imposed on it by the people, namely, the development of sentiment in education.

President Ellis remarked upon the difficulty of securing for the country schools talent equal to that of the city. Good pay usually secures good teachers. Some means should be devised for securing better pay for country teachers.

At the close of these remarks, motion was passed that a committee of three be appointed by the chair, to receive resolutions relating to the co-operation of the county superintendents with the State institutions of higher education and professional training, such reso-

lutions to be acted upon by the Association before its final adjournment. Messrs. Stimson, Jackson and Freeman were appointed upon this committee.

Superintendent Stephenson still failing to appear, the subject of "Civics in the Public Schools" was opened by Superintendent Jackson. He claimed that civics should be carried along with all disciplinary and culture studies; advocated less time for grammar, geography, arithmetic, etc., that the significance of citizenship and its duties might be taught; considered that a special text book for Colorado should be introduced.

This discussion was participated in by Superintendents Stimson, Thomas, Freeman, Fisher, Hamilton, Condit, Fenlason, Casey, Eagleton, President Baker and Mr. J. H. Miller, Lincoln, Nebraska, editor of the *Northwestern Journal of Education*.

All persons present were invited to join in the discussions of the meeting.

The question of a text book on State civics was referred to the Committee on Resolutions.

A resolution was adopted that all invitations, excepting that to visit kindergarten exhibits, be placed on file, to be acted upon as the Association might deem best. A general invitation was extended by Superintendent Eddingfield to visit the schools of Aspen.

At the morning session, June 16, called to order by President Coy, reports of the meetings held in Denver in December last were read and approved. Motion carried that secretary hereafter read reports of meetings daily. Motion carried that the question of engaging a stenographer to report proceedings in full be referred to the Executive Committee and be reported on at the next regular meeting.

The Executive Committee, through its chairman, Superintendent Shepard, introduced for discussion "The Examination of Teachers." He held that questions should be specific and pertinent, so that applicants should have no cause for quibbling. County superintendents should have a uniform scale of marking. The rules adopted by the United States Civil Service commissioners were recommended.

Superintendents Hamilton and Casey sanctioned the recommendations of Superintendent Shepard, and invited free discussion.

Superintendents Lake, Jackson, White, Freeman, Fenlason, Condit, Douthit, and Presidents Ellis and Snyder joined in the discussion, which occupied the greater part of the day.

It was suggested by the chair that a State Committee to examine the papers of all applicants would be essential to uniformity of marking. It was generally agreed that marks should indicate the actual work done, and certificates be issued accordingly; and that great care should be exercised in issuing certificates.

President Ellis agreed that long experience in the examination of teachers only added to his confusion in giving advice. He held that honesty and capability, based on successful experience as a teacher, were necessary for a good examiner. Considerable latitude could safely be allowed such an examiner. Personal power of the teacher, as well as scholarship, should receive recognition.

Superintendent Freeman denounced stereotyped rules; believed in personal acquaintance with the teacher, and would give weight to professional knowledge.

At the afternoon session in which the discussion of the subject of examinations was continued, Superintendent Lake held that, when a teacher had once passed a satisfactory examination, another should not be required at the hands of the same examiner.

Superintendent Jackson urged that close attention be given to the fundamental subjects.

Superintendent Shepard thought that there was danger of giving too much latitude to the examiner on the sentiment basis, and illustrated by an incident from his own observation.

Superintendent Stevens argued for scholastic preparation as the first requisite, and professional training the second, both being essential in a good teacher.

Superintendent Fenlason considered uniformity of marking very important.

Superintendent Condit favored two sets of questions: those for first grade certificates to be more difficult than those for second or third.

President Snyder, in response to a call, closed the running discussion by declaring that in addition to technical scholarship, good common sense and practical knowledge were desirable in a teacher; advocated some way of determining these qualifications; the law could be changed so as to give county superintendents more authority and make examinations less frequent; would not lay too much stress on uniformity which was the death of some things; held that professional training meant something more than mere sentiment; it meant professional worth.

Motion carried that the recommendations of the Executive Committee be referred to the State Superintendent, with the suggestion that he make such use of them as he saw fit. The recommendations are herewith submitted :

First. That the committee recommends that each topic should contain questions confined exclusively to the branch in which the applicant is examined.

Second. Concerning what would constitute a proper answer to a general question, instructions should be given to the applicant not to exceed a given number of lines.

Third. Fixed rules for the grading of examination papers should be adopted, similar to those in use by the United States Civil Service Commission.

The following resolution, offered by Superintendent Shepard, was adopted by the Association: "That it is the opinion of the county superintendents that the State department should prepare certificates so that they shall show the actual standing of the applicant in the several branches, said certificates to indicate the averages in first and second groups and also the general average; also the county superintendent's estimate of the teacher's practical ability; and that a separate certificate be prepared in accordance with section 16 of the school law."

The following resolution was offered by Superintendent Douthitt:

Resolved, That it is the opinion of this Association that there should be but two teachers' examinations held each year, and that a fee of one dollar should be charged each applicant for a certificate, said fee to be placed to the credit of the Normal Institute fund of the district in which the fee is paid; and, further, that the Committee on School Law be instructed to see that the resolution is made a part of the school law by appropriate legislation."

After prolonged and animated discussion, during which various conflicting proposals were offered, it was finally decided that the resolution be referred to the Committee on School Law, with the request that they report the same at the next regular meeting.

Superintendent Eddingfield, as chairman of the State Committee on Teachers' Reading Circle, asked permission to modify the course that had been adopted for the first year by the State Teachers' Association, by substituting Hale's "Lights of Two Centuries" for Montgomery's "History of England," and urged the co-operation of superintendents in introducing the course; the professional part of it would be Page's "Theory and Practice."

By request, Mr. Miller recounted the experience of the Teachers' Reading Circle in Nebraska, and gave it a thorough endorsement.

Further discussion led to the conclusion that the Teachers' Library and Reading Circle were of great value.

The Association, by resolution, approved of the changes recommended by the committee.

An evening session of an informal character was held in the court room, in which troublesome questions of school law were discussed for the benefit largely of the new members.

On the morning of June 17, the association resumed its work, with the president in the chair, and, after the usual reading of the minutes of the previous day's proceedings, listened to a paper by Superintendent Stevens on "Barriers to the Progress of the Public Schools of Colorado." Mention was made of unfit school buildings, ownership and uniformity of text books, inefficient teachers, superintendents and boards, and, finally, a lack of public sentiment in the community. Superintendent Freeman led in the discussion and advanced the following points: 1. School advantages should be extended to every boy and girl. 2. School attendance should be increased by the enforcement of the compulsory law. 3. Weak districts should be strengthened by the assistance of the strong. 4. High schools should be promoted. 5. Better teachers, with more secure tenure of office, should be obtained. 6. Text-books should be free. 7. Sanitary conditions of buildings should be improved. Superintendent Hamilton held that the greatest barrier was the weakness of the teaching force, and the next, want of funds.

President Baker emphasized the need of skilled teachers; of longer terms in rural districts; hoped some wise legislation would be enacted to remedy existing evils. "Something must be done," said he, "to bridge the chasm between the schools and the colleges." An animated discussion took place on the significance of the law touching the establishment of high schools.

A telegram from Mr. Mather, proprietor of Glenwood Springs bath houses, offering the freedom of the establishment to the Association, was referred for answer to the Executive Committee.

The afternoon lesson of this day was devoted to an exhibit of kindergarten work by Mrs. Collar and daughter; which confirmed in the minds of those who witnessed it, the value to very young children of this kind of training.

In the evening, the Association were guests of the P. O. S. of A. One hundred or more sat down to a delicious repast of strawberries, ice cream and cake. Literary exercises preceded the refreshments. Superintendent Fueller's paper on "Is the Tendency of our Public Schools towards Immorality," received hearty commendation for its staunch support of the schools.

Addresses from prominent members of the P. O. S. of A. set forth the origin and spirit of the order. Following the supper came a number of brief toasts, which, with the music, prolonged the evening's entertainment to past midnight.

The short session of Saturday a. m. was devoted to reports of officers and committees.

In the absence of the treasurer-elect, Superintendent Hamilton presented a statement of the finances of the Association.

Committee on Nominations, consisting of Superintendents Fisher, Stevens and Feulason, submitted the following, which was unanimously accepted: President, Hon. Nathan B. Coy; vice-president, Superintendent C. B. Timberlake; secretary, E. C. Stimson; treasurer, James Dilts; Executive Committee, J. B. Jackson, J. S. Eagleton, J. W. Douthit.

The Committee on Resolutions submitted the following report:

Be it resolved, by the Association of the County Superintendents of the State of Colorado, assembled at Aspen, this the 18th day of June, 1892, that it is the sense of this Association that the subject of civics be taught in every school in the State; in the lower grades by general instruction, given orally by the teacher, and in the higher grades of the common school course in connection with United States history, followed by a brief text book on the subject, and that this be followed by a more extensive work, to be taught in the high schools. As a further aid in teaching the subject, it is thought highly advantageous to have published in a cheap form a small book relating especially to the government of our own State.

That we, the County Superintendents of the State of Colorado, recognizing the importance of unifying the work of our various educational institutions, believe that a very great necessity exists for well equipped and thorough working high schools, in every county in the State, which shall give one or more of the courses of study recommended by the State Teachers' Association, and which shall be free to all boys and girls of the county who are able to pass the required examination for admittance.

That we will use our influence to inspire a desire for a liberal or special education, and as loyal citizens of Colorado, we will direct all such to the higher institution, which meets the need of each.

That we extend our grateful thanks to the D. & R. G. railroad company for the many courtesies shown us; to the county of Pitkin and citizens of Aspen for their cordial hospitality; to the press of Aspen for its excellent reports of our proceedings; to County Superintendent Stimson for his special interest and successful efforts in making our stay pleasant; and especially to the Patriotic Sons of America, do we wish to express our lasting obligation for the use of their hall, their unstinted hospitality and the abiding interest which they show in the public school system of our country, and warmest support which they manifest on all occasions in the cause which we represent.

Signed,

J. W. DOUTHIT,
J. H. FREEMAN,
J. P. JACKSON,
W. C. THOMAS.

A spirited contest between the friends of Boulder, Greeley and Fort Collins for the next place of meeting, resulted in the selection of Boulder, with a provision for giving a day each to the Greeley State Normal School and the State Agricultural College. President Snyder reported the action of the Committee on Normal Institute work, already published in the April number of the *School Journal*.

The report of the Committee on School Libraries was accepted and the committee continued.

Superintendent Shepard reported for the Committee on School Records and Blanks. The report was accepted and the committee continued, with the request that they consider suggestions which had been offered during the present meeting. The question of publishing the full proceedings of the Association in pamphlet form for general distribution, referred to the Executive Committee.

Manager Knapp, of the National Educational Association, spoke briefly upon the meeting at Saratoga.

The secretary reported, as received from membership fees, \$28. Expended for telegrams, \$3.

Before adjournment, the president acknowledged the compliment paid him by a re-election; expressed his appreciation of the courteous treatment which had lightened his duties as presiding officer; congratulated them on the successful work of the meeting, from which he felt that they would return to their labors more intelligent and more enthusiastic.

The Association, having accepted the invitation to make free use of the baths at Glenwood Springs, adjourned in time to reach the D. & R. G. depot for the 11:30 a. m. outgoing train. A delightful afternoon at the Springs prepared them for their homeward trip, which was resumed at 9 p. m.

REGISTER OF MEMBERSHIP.

Nathan B. Coy, State Superintendent.
 Arapahoe, A. D. Shepard.
 Boulder, W. V. Casey.
 Chaffee, James Condit.
 Cheyenne, S. C. Perry.
 Clear Creek, W. R. Collins.
 Delta, F. W. Robison.
 Eagle, James Dilts.
 Elbert, C. F. Lindsley.
 El Paso, J. P. Jackson.
 Fremont, J. H. Freeman.
 Garfield, S. M. White.
 Gilpin, E. F. Lake.
 Gunnison, Charles Fueller.
 Hinsdale, J. C. Logan.
 Jefferson, J. S. Eagleton.
 Kit Carson, J. W. Augustine.
 Larimer, S. T. Hamilton.
 Las Animas, J. W. Douthit.
 Lincoln, H. A. Lowell.
 Logan, D. C. Fleming.
 Mesa, E. T. Fisher.
 Morgan, S. A. Wallace.
 Otero, C. W. Fenlason.
 Park, George A. Miller.
 Phillips, Charles B. Timberlake.
 Pitkin, E. C. Stimson.
 Routt, J. A. Campbell.
 Sedgwick, E. H. Stevens.
 Summit, George H. Clarke.
 Weld, W. C. Thomas.

P. M. CONDIT,
Secretary.

CIRCULAR.

DEPARTMENT OF PUBLIC INSTRUCTION, }
DENVER, COLO., December 14, 1892. }

The Annual Mid-Winter Meeting of the State Association of County Superintendents will be held in Denver, Tuesday, December 17, beginning at 9 a. m., in the high school building.

No formal speeches are expected, but the following topics will be presented for informal discussion. It is hoped that every superintendent will come prepared to say something on one or more of them:

PROGRAMME.

1. An Informal Address on the Condition of the Work, Hon. Nathan B. Coy, Superintendent of Public Instruction.
2. Free Text Books.
3. The Normal Institutes and How to Improve Them.
4. Compulsory School Law.
5. Some of the Weak Points in the School Law.
6. How to Get Better Results in the Records of District Treasurers and Secretaries.
7. The State Teachers' Reading Circle.
8. Uniformity of Text Books and How to Get Them.

J. P. JACKSON,
J. S. EAGLETON,
JOHN W. DOUTHIT,
Executive Committee.

To County Superintendents:

Undoubted progress has been made of recent years in systematizing the educational work of this State. The progress may be traced largely to closer supervision, which is materially aided by frequent consultation of educational leaders with each other. In view of these palpable facts, you are urged to attend the meetings to be held in Denver during the holiday season, especially the one on the 27th instant, announced above. If you have any choice in the subjects named, please indicate by numbering in the order of preference.

Cordially yours,

NATHAN B. COY,
State Superintendent.

MINUTES AND REPORT.

The State Association of County Superintendents convened informally at Denver, December 27, in the high school building, district No. 1.

The Association was called to order by the president, Hon. Nathan B. Coy, Superintendent of Public Instruction. Secretary Stimson being absent, Jacob H. Freeman was chosen secretary *pro tem*.

President Coy extended to the superintendents the compliments of the season, and then proceeded to give an outline review of the progress of education in the State during the past two years.

"In addition to the formal statistical reports required by law, the county superintendents were requested to furnish brief statements of the growth and condition of the schools under their supervision. Forty-eight out of a total of fifty-five responded. These statements may be said to reflect the educational tone or standard of the communities to which they relate. The representations are for the most part highly creditable. A healthful, encouraging state of educational affairs is generally reported. The facts most frequently brought out are:

"*First*—An increased interest on the part of teachers, shown by their eagerness to avail themselves of the means of self-improvement afforded by county associations, normal institutes, teachers' reading circles, libraries, educational journals, etc.

"*Second*—Greater interest on behalf of the directors, shown by their demand for better teachers and the offer of better wages to secure and retain them; the requirement of a higher grade of scholarship, some school boards refusing to employ any but those holding first or second grade certificates; the desire to have better buildings, brick taking the place of frame and frame the place of sod and adobe; improvement of school grounds with neat out-houses, fences, trees, water, etc.

"*Third*—Growth of public spirit among patrons, leading them to unite with teachers and officers in promoting school interests; an appreciation of higher education and a recognition of the schools as the best means of promoting material welfare.

"Several counties report improved financial condition of districts, warrants that were at a discount having advanced. One of the oldest

counties, strange to say, organized its first county teachers' association during the past year, and reports a flourishing, enthusiastic organization. On the other hand, some county teachers' associations convene twice a year regularly. Still others hold meetings quarterly. One county reports an enrollment of 98 per cent. of the school population, another a demand for additional high school privileges, another 'the largest number of good teachers' and hence 'the most successful school year in many years. One county superintendent hopes to have the Stars and Stripes flying from every school house in his county before the end of another year.

"The fruit-growing county of Mesa makes the most remarkable statement of growth, namely: an increase of 50 per cent. in the number of teachers, of 52 per cent. in school population, 59 per cent. in the number of school buildings, 145 per cent. in valuation of school property; the adoption of free text books and the State course of study in most of the districts; enrollment in teachers' reading circle of all the teachers except those of two districts, and a high school that will prepare pupils to enter the university without examination.

"Huerfano county reports great success attending the establishment of a kindergarten 'as the long-looked-for redeemer of the children of mining towns.'

"The effect upon the future of the schools of this quickened interest on the part of those responsible for results cannot be other than favorable. Better teachers and more interested officers and patrons mean better school management, better system, closer grading, broader methods, longer terms, better enrollment and attendance, better classification, more efficient and economical administration.

"A few counties only report unfavorably and complain of falling off in attendance, mostly in the parched districts of the plains, which residents have been forced to leave on account of drought. In some mining camps 'a floating population works disadvantageously to the schools.' Other complaints are 'frequent changes of teachers,' 'need of free text books,' 'lack of public spirit,' 'too many weak districts,' 'lack of funds,' 'crippled financial condition, sometimes due to dishonesty of county officials.' Usually progress of schools will be found to be most marked in counties where the superintendents are the most energetic and the most capable."

Superintendent Aaron Gove then made an announcement concerning the *Colorado School Journal*; each superintendent is expected to receive the *Journal* complimentary. They are urgently requested to make it what they would have it.

The summary presented by President Coy was, by motion of Mr. Freeman, requested for publication in the papers of the city.

Superintendent Thomas of Weld county opened the discussion on the subject of "Free Text Books." Many arguments were offered in favor of public ownership of books. Experience in every city where the system has been fully tried, has been very satisfactory.

A motion by Freeman, seconded by Shepard, that the present law of Colorado on the subject of free text books is satisfactory, was unanimously carried.

The evil of weak districts was presented by President Coy, who argued that when districts are able to send but two or three pupils to school, some provision should exist abolishing such districts.

Superintendent Skinner, of Saguache county, has districts in which school is maintained for the benefit of a single scholar. Others present had similar trouble.

Superintendent Perry of Cheyenne county agreed with Superintendent Bowman of Pueblo, that such small districts should be abolished.

Superintendent Eddingfield of Aspen thinks it the duty of the State to provide schooling for every child. Possibly the amount appropriated to each child should be limited.

Superintendent Hamilton of Larimer county thinks the law is about right as it now stands. Let remote and thinly settled districts be supplied with a few months school at the expense of the district to which they belong.

Superintendent Lake of Gilpin county has one very weak district in which the patrons assist in maintaining the school.

Shepard of Arapahoe has the weakest as well as the strongest districts in the State. One district has a valuation of only \$450. Thinks the law is now the best of any.

Superintendent Augustine of Kit Carson county thinks every child should be provided for.

Superintendent Lake of Gilpin county spoke regarding acknowledgment of certificates.

The general opinion seemed to be that superintendents should use discretion in the matter.

President Coy introduced to the Association the superintendent-elect, Hon. J. F. Murray, of Colorado Springs, who spoke briefly, announcing that he had chosen as his assistant, Professor Young, of Cheyenne, Wells.

President Snyder was then introduced. He promised us the best Normal School in the United States.

Professor Work, in charge of the Sloyd department of the Normal, was introduced, and spoke of the character and importance of his work, especially for city schools. Country education gives many of the advantages that Sloyd offers.

Miss Tefft, of the kindergarten department of the Normal, was introduced, and complimented Coloradans upon their readiness to take up and help forward the work of kindergarten culture.

A communication from the officers of the National Teachers' Association was read, in which they offer their services to assist those who become members of the Association to secure accommodations in Chicago during the World's Fair.

Superintendent Shepard spoke on the subject of illegal school warrants.

At 12:10 the Association adjourned until 2 o'clock.

The afternoon session was called to order by the secretary at 2:40. Chairman Coy being absent, Superintendent Fleming, of Logan county, was chosen chairman *pro tem*.

The subject of the reports of district officers was taken up and discussed by Superintendents Fenlason, Miller, Skinner, Hamilton, Freeman and Bowman.

Changes in the blanks now in use and in the law were urged.

Superintendent Miller, of Park county, moved that a committee of three be appointed to confer with the State Superintendent in regard to the preparation of more satisfactory blanks.

After much discussion as to the propriety of such action, Superintendent-elect Murray asked that such a committee be appointed. The chairman then appointed as such committee Superintendents Bowman, Hamilton and Miller.

Superintendent Douthit, as a member of the Executive Committee, requested that the superintendents report to the committee such topics as they desire to discuss at the May meeting.

At 6 o'clock the meeting adjourned.

A special meeting, called by the Executive Committee, was held in room D, Wednesday evening, December 28, at 7:30.

Superintendent Fenlason was chosen chairman *pro tem*.

The question as to whether the Association will have a president after the expiration of the term of office of Mr. Coy was discussed at some length.

It was moved by Freeman and seconded by Long, that the Executive Committee be instructed that, after the expiration of the term of office of Mr. Coy as Superintendent of Public Instruction, a vacancy will exist in the office of president of this Association, which they are required to fill by appointment.

Superintendent Shepard moved that the Executive Committee be instructed to correspond with Mr. Timberlake, the Vice-President of the Association, and ascertain if he will be present at Boulder to take charge of the meeting, and if not they are to appoint a president.

The substitute was carried.

The Executive Committee announced that J. S. Eagleton was chosen secretary of the committee.

At 8:45 the session adjourned.

REGISTER OF ENROLLMENT.

Nathan B. Coy, State Superintendent.

Arapahoe, A. D. Shepard.

Chaffee, James Condit.

Cheyenne, S. C. Perry.

Delta, F. W. Robison.

Eagle, James Dilts.

Elbert, C. F. Lindsley.

El Paso, J. P. Jackson.

Fremont, J. H. Freeman.

Garfield, S. M. White.

Gilpin, E. F. Lake.

Jefferson, J. S. Eagleton.
Larimer, S. T. Hamilton.
Las Animas, J. W. Douthit.
Lincoln, H. A. Lowell.
Logan, D. C. Fleming.
Otero, C. W. Fenlason.
Park, George A. Miller.
Pueblo, C. W. Bowman.
Saguache, O. C. Skinner.
Summit, George H. Clarke.
Weld, W. C. Thomas.

JACOB H. FREEMAN,
Secretary pro tem.

Exhibit VI.

State Normal Institutes.

1891.

- I. Organization.
- II. Circular: State Superintendent to county superintendents.
- III. Circulars: State Superintendent to Institute conductors and instructors; to teachers; to county superintendents.
- IV. Suggestive Outlines for State Normal Institute work.
- V. Circular: State Superintendent to executive committees and conductors of State Normal Institutes.
- VI. Reports of secretaries of State Normal Institute committees.
- VII. Circular: State Superintendent to county superintendents.

1892.

- I. Organization.
- II. Circular: State Superintendent to county superintendents.
- III. State Superintendent to State Normal Institute executive committees; to county superintendents; to teachers.
- IV. Reports of secretaries of State Normal Institute executive committees.

Colorado State Normal Institutes.

1891.

ORGANIZATION.

Among the resolutions adopted by the State Teachers' Association at its meeting in Denver, December, 1890, was the following, offered by Professor Paul H. Hanus of the State Normal School:

WHEREAS, The State Normal Institutes held during the past two years have been very successful, and have been a great help in directing attention to the value of professional training for teachers, and

WHEREAS, The time has come when further progress is attainable, and when a more definite plan for State Institute work throughout the State should be devised; therefore be it

Resolved, That a committee, consisting of the State Superintendent of Public Instruction, one or more representatives of the State Normal School, one representative of the city superintendents and one representative from the executive committee of each Normal Institute district, be appointed by the president of the State Teachers' Association to devise a bill for holding and maintaining Normal Institutes in the State of Colorado; said bill to be properly introduced in the Eighth General Assembly, and its adoption urged in lieu of the present Institute law.

The principal features of the bill prepared and adopted in accordance with the above resolution were:

First. The increase in the number of districts from six (6) to thirteen (13).

Second. The association of the president of the State Normal School with the State Superintendent in the general supervision of the Institute.

DISTRICTS.

No. 1. Counties of Sedgwick, Phillips, Logan, Yuma, Washington and Morgan.

No. 2. Counties of Weld, Larimer and Boulder.

No. 3. County of Arapahoe.

No. 4. Counties of Gilpin, Clear Creek and Jefferson.

No. 5. Counties of Douglas, Elbert and El Paso.

No. 6. Counties of Kit Carson, Lincoln and Cheyenne.

No. 7. Counties of Fremont, Custer and Pueblo.

No. 8. Counties of Kiowa, Otero, Bent, Prowers and Baca.

No. 9. Counties of Huerfano and Las Animas.

No. 10. Counties of Saguache, Costilla, Conejos and Rio Grande

No. 11. Counties of La Plata, Montezuma, Archuleta, Dolores and San Juan.

No. 12. Counties of San Miguel, Ouray, Hinsdale, Mesa, Delta, Montrose and Gunnison.

No. 13. Counties of Chaffee, Lake, Park, Pitkin, Eagle, Summit, Garfield, Routt, Rio Blanco and Grand.

OFFICERS.

Directors, *ex-officio*.

Nathan B. Coy, State Superintendent of Public Instruction.

Thomas J. Gray, President of the State Normal School.

EXECUTIVE COMMITTEES AND CONDUCTORS.

District No. 1—

President, Superintendent C. B. Timberlake, Phillips county.

Secretary, Superintendent E. H. Stevens, Sedgwick county.

Treasurer, Superintendent William E. Garver, Morgan county.

Conductor, President Thomas J. Gray, Greeley.

District No. 2—

President, Superintendent W. V. Casey, Boulder county.
Secretary, Superintendent S. T. Hamilton, Larimer county.
Treasurer, Superintendent W. C. Thomas, Weld county.
Conductor, President Thomas J. Gray, Greeley.

District No. 3—

President, secretary, treasurer, Superintendent A. D. Shepard, Arapahoe county.
Conductor, Principal W. E. Knapp, Denver, District No. 2.

District No. 4—

President, Superintendent Henry Bowman, Clear Creek county.
Secretary, Superintendent J. S. Eagleton, Jefferson county.
Treasurer, Superintendent F. B. McLeod, Gilpin county.
Conductor, Superintendent W. Triplett, Golden.

District No. 5—

President, Superintendent B. C. Killen, Elbert county.
Secretary, Superintendent P. H. Hammond, Douglas county.
Treasurer, Superintendent Reuben Berry, El Paso county.
Conductor, Superintendent Eugene C. Stevens, Trinidad.

District No. 6—

President, Superintendent S. C. Perry, Cheyenne county.
Secretary, Superintendent H. A. Lowell, Lincoln county.
Treasurer, Superintendent D. S. Harris, Kit Carson county.
Conductor, Superintendent D. S. Harris, Kit Carson county.

District No. 7—

President, Superintendent B. G. Woodford, Fremont county.
Secretary, Superintendent J. P. Thurmond, Pueblo County.
Treasurer, Superintendent Price Walters, Custer county.
Conductor, Principal Edgar L. Hewett, Florence.

District No. 8—

President, Superintendent F. E. Torbit, Kiowa county.
Secretary, Superintendent F. C. Ford, Bent county.
Treasurer, Superintendent G. T. Feast, Crawford.
Conductor, Superintendent W. T. Eddingfield, Aspen.

District No. 9—

President, Superintendent T. D. Baird, Huerfano county.
Secretary, Superintendent George C. Shiels, Las Animas county.
Treasurer, Superintendent A. Levy, Walsenburg.
Conductor, Superintendent P. M. Condit, Delta county.

District No. 10—

President, Superintendent Jesse Stephenson, Rio Grande county.
Secretary, Superintendent T. M. Lyons, Saguache county.
Treasurer, Superintendent Fred. Elter, Costilla county.
Conductor, Superintendent E. C. Stevens, Trinidad.

District No. 11—

President, Superintendent D. M. Longenbaugh, Montezuma county.
Secretary, Superintendent W. P. Underwood, Archuleta county.
Treasurer, Superintendent Charles A. Pike, La Plata county.
Conductor, Superintendent J. R. Durnell, Durango.

District No. 12—

President, Superintendent E. T. Fisher, Mesa county.
Secretary, Superintendent P. M. Condit, Delta county.
Treasurer, Superintendent Philip H. Shue, Ouray county.
Conductor, Principal J. A. Guttery, Grand Junction.

District No. 13—

President, Superintendent James Dilts, Eagle county.
Secretary, Superintendent Lee Champion, Chaffee county.
Treasurer, Superintendent Edward C. Stimson, Pitkin county.
Conductor, President Thomas J. Gray, Greeley.

CIRCULAR.

STATE OF COLORADO, }
DEPARTMENT OF PUBLIC INSTRUCTION. }

To County Superintendents:

Pending the issuance of a new revised edition of the school law, the Department of Public Instruction has prepared copies of the bill relating to Normal Institutes for distribution among the county superintendents of the State. The bill passed as recommended by the State Teachers' Association. An allowance of fifty dollars for each district is provided for in the general appropriation bill, and the railroad authorities have consented to a one and one-fifth rate fare throughout the State. Thus every inducement is offered for energetic and enthusiastic work in behalf of the Institutes. The importance of at once organizing the various executive committees is apparent, as the time remaining for preparation is already short.

"Course of Study for Normal Institutes", having been selected as a topic for discussion at the May meeting of the County Superintendents, it is very desirable that the several executive committees be on hand to aid in that discussion. Each committee should come prepared to offer suggestions as to the kind of work that would best suit its district. From these suggestions it may be possible to arrange a skeleton course for the State, which can be adapted by special features to the needs of each district. Thus may the school interests of the State be harmonized without violating the welfare of any part, and the essential benefits of co-operation be amicably secured.

The State Superintendent anticipates with pleasure the opportunity of the May meeting for a better personal acquaintance with the county superintendents of the State.

Respectfully,

NATHAN B. COY,
State Superintendent.

Denver, April 22, 1891.

CIRCULAR.

STATE OF COLORADO. }
DEPARTMENT OF PUBLIC INSTRUCTION. }

To Institute Conductors and Instructors:

It has been found impracticable to prepare such a syllabus of work for institutes as was contemplated for use this summer. In the first place, the time allotted was too short for satisfactory work. In

the second place, because of the unusual delay this year in letting the contract for the State printing, and the precedence of certain official documents over all other matter for publication, it will be impossible to get the printing of such a pamphlet and also the new issue of the school law done in time. Hence only the school law will be printed at present. The directors of the various institutes will therefore prepare their own programmes in accordance with the following suggestions:

Let the "State Course of Study for Public Schools," as prepared last year by a committee of county superintendents, furnish the basis for institute work.

Bear in mind that the chief object of an institute is to impart a knowledge of the principles and methods of teaching and of school management. The instruction should consist not merely in teaching several branches of study, but in teaching *how to teach* those branches.

The instruction should be specially adapted to the needs of *country* teachers. The wants of teachers in the particular localities should be ascertained as far as possible, and the instruction made prominent in those branches in which there seems to be the greatest need.

By reason of the limitation of time, the instruction should aim particularly at *definiteness* and *clearness*. There is danger of presenting too much matter and of passing over the ground too lightly and too rapidly. A clear distinction should be made between the important and unimportant. A few of the more *essential* parts of arithmetic, grammar, geography, etc., should be selected, and these should be presented so clearly as to leave a *permanent* impression.

Every lesson should have a *plan*, and this plan should be outlined on a blackboard and copied by the teachers in their note books. The institute recitation should be a *model* in every respect. The same order should be maintained and the same attention exacted as the teachers are taught to maintain in the school room. Thus are *didactics* made *practical*.

As the object of the institute is to aid each teacher in developing innate teaching ability, the work should be *individual* and *personal* in its character as far as possible. The spirit of *inquiry* should be encouraged. There should be frequent opportunities for questions and answers, for exchange of thought, for *suggestions* coming directly from the members of the class.

While the most practical professional work should be in the instruction given in those *elementary* branches that are taught in our common schools, *some* attention should be given to school organization and school management, ethics (civil and social), supplementary reading in connection with history, geography and physiology and hygiene as applied to the common laws of health, especially to the effects of intoxicating drinks, narcotics and stimulants. An outline of work in these subjects will be sent out in a few days as a supplement to the State course of study.

Systematic study of the school law under the direction of the county superintendents is heartily commended. Particularly should an *exercise* on the subject of *school reports* be given in each institute, in order that the value of the statistics compiled from school *registers* may be thereby improved, and thus district secretaries and county superintendents be relieved of much unnecessary annoyance in connection with the making of *annual reports*. At least one half-day should be set apart at each institute for the discussion of the subjects relating to the *duties* of *school directors*.

Certain evenings of the institute may properly be devoted to such exercises as will interest and instruct the people. On these occasions the teacher should be lost in the citizen, and education considered in its wider, more popular aspect. Lectures, scientific and literary, interspersed with music, readings, etc., may well have a place. But entertainment should not be the *only end* in view. Better ideas of education should be imparted, and a livelier public interest and wider co-operation in the work of school improvement should be awakened.

The whole spirit of the institute should tend toward creating and sustaining a desire for continuous self-improvement. To this end teachers should be urged to take and read some educational paper, and to read each year at least one educational book. As an aid to this a list of standard educational works will be published with the supplement to the State course of study.

Conductors are requested to report to this department the subjects presented, the amount of work done and the special topics discussed in each subject. These reports will be preserved for reference in determining the work of succeeding institutes.

The Superintendent will be glad to confer, either by correspondence, or, where possible, by personal interview, with Executive Committees and institute instructors.

To the Teachers of the State:

You are reminded that the summer institutes are for your especial benefit. The aim is to give to the teachers of the rural districts a taste of the professional training afforded by the State Normal School, the privileges of which they may be unable to enjoy. The demand for the professional training of teachers is constantly increasing, and likewise the facilities. The Normal schools in the east are overflowing with students preparing for better work. The trend of the profession everywhere is upward. More and more each year bright young men and women are entering its ranks for permanent work. In many places remuneration is appreciating. Among the measures warmly urged by the school superintendents of the country at the national meeting in Philadelphia last February were: "The establishment of Normal Schools, colleges for the preparation of teachers, schools of pedagogy in the universities, courses of lectures on the science of teaching, educational periodicals, the principles of civil service as applied to the teachers of the public schools, and the enactment of laws in the several states requiring from all candidates for the office of teacher, certificates of qualification from the state authorities." The successful teacher of the future cannot afford to ignore these indications of progress, nor to slight the facilities afforded for professional training and improvement. Experienced teachers can do much for the success of the institutes by giving the conductor and instructors their hearty co-operation.

These suggestions carry with them the hope that the institute work of the present season may bear abundant fruit in the subsequent work of the schools.

Cordially,

NATHAN B. COY,
State Superintendent.

Denver, June 15, 1891.

CIRCULAR.

STATE OF COLORADO, }
DEPARTMENT OF PUBLIC INSTRUCTION. }

To County Superintendents:

You are requested to give as wide circulation as you can through your local papers, and otherwise, to the information contained in the enclosed circular concerning Normal Institutes, especially that part of it addressed to the teachers of the State.

The figures on the margin of the enclosed list of county superintendents show the attendance at the Normal Institutes of 1890. Without doubt, distance from the place of meeting had much to do with the poor representation from some counties. It is hoped that the reapportionment into smaller districts will bring out a better representation this year. Much will depend upon the efforts made by the county superintendents themselves to stimulate the interest and ambition of teachers. It is believed that the well known energy and efficiency of these officers will not be depended upon in vain.

Those of you who have not already done so are earnestly requested to report upon the census returns and teachers' examinations before July 1.

I heartily approve of the recommendation made by my predecessor, that district school directors allow at least one week's wages to teachers who shall attend one of the summer institute courses, but refusal ought not to keep teachers away; the benefit of them should be considered worth the individual expense.

Please state, in your local announcements, that the law respecting Normal Institutes authorizes the adding of five per cent. to the standing, at ensuing examinations, of teachers who shall have attended one of the summer institutes; also, that a rate of one and one-fifth fare has already been agreed to by the Railway Passengers Association of the State.

It is hoped that the date and place of holding each district institute will be reported to this Department in time for announcement in the July issue of the *Colorado School Journal*.

Respectfully,

NATHAN B. COY,
State Superintendent.

Denver, June 15, 1891.

Suggestive Outlines for Normal Institute Work.

In the preparation of the following outlines, free use has been made of the similar work of others. Especially helpful have been the reports of New York (1891), Indiana (1888), Michigan (1886) and Illinois (1888).

It is not expected that the outlines will be strictly adhered to, but that they may serve as suggestions, not merely to institute instructors, but also to teachers in the regular work of the term. Hence, they may be regarded as supplementary to the State course of study.

United States history, civil government and ethics are introduced as kindred studies, of great importance in the training for intelligent citizenship, for which in these times there are so great demand and need.

The aim throughout has been to suggest work that is practical and within the reach of all teachers.

The circular will serve its best purpose if it but simply arouse the spirit of honest and thorough inquiry among those for whom it is prepared and to whom is herewith extended cordial greeting.

THE ORGANIZATION OF DISTRICT SCHOOLS.

1. Preparatory.

- a* Choice of schools. Young teachers should not select a difficult school at first.
- b* Contracts should be made in writing and conditions definitely stated. Both parties should have a copy.
- c* Obtain information respecting the condition of the school, the school house, etc. Consult the former teacher, the board and parents. Be sure that the school room is neat, comfortable and clean. Friendly visits to the families of the district cannot be too highly recommended.

2 First day.

- a* Be early. This is all-important.
- b* Take the names of the pupils as they enter the room. Endeavor to make the first impressions pleasant. Learn what you can of each pupil's studies, advancement, etc.
- c* Call to order exactly on time.
- d* Have a definite plan of work for the day :
 - 1. What you will do.
 - 2. How and when you will do it.
- e* Let the opening exercises be short.
- f* Assign lessons promptly. Commence with last lesson of preceding term and with a short advance lesson.
- g* Complete the enrollment. Take
 - 1. Full name of pupil.
 - 2. Full name of parent or guardian.
 - 3. Age of pupil.
- h* Hear lessons assigned according to temporary programme.

3. *Permanent organization.*

- a* In the preparation of a daily programme the following rules should be observed :
1. There should be as few classes as possible.
 2. The studies that require the greater mental effort should come in the early part of the day.
 3. The recitations of the youngest pupils should be short and frequent.
- b* District schools would be greatly improved by being graded. Suggestions about grading. Sample programmes, both for a graded and ungraded school, to be made out by members of the class.

SCHOOL GOVERNMENT.

1. *Ends to be attained.*

- a* To train the pupils in self-government and self-direction, as the foundation of character.
- b* To secure industry, order and regularity in the school work. Successful government and successful teaching are inseparable.

2. *Basis.*

- a* Moral—That is, power making itself felt without appeal to pains and penalties. It depends for its efficiency upon
1. The character of the teacher.
 2. Upon the nature of the pupils, and
 3. Upon the relation between the two.
- b* Physical—That is, power making itself felt, when necessary, by pains and penalties. The need of this will continue in schools and in society so long as human nature remains as it now is

3. *Teachers' qualifications.*

- a* Strength of will and energy.
- b* Self-control and orderly habits.
- c* Thorough knowledge of subjects taught.
- d* Definite plans and clear notions of what to do.
- e* A manifest interest in the pupils.

4. *Means of governing.*

a Training the will and forming correct habits of feeling, thought and action.

b Punishment:

1. Object, to prevent wrong-doing.

a By reforming wrong-doer.

b By deterring others from wrong-doing.

c By condemning wrong-doing.

2. Kinds:

a Certain rather than severe.

b Just; bearing a proper relation to the offense.

c Natural and consequential, as the forfeiture of rights and the loss of privileges. Suspension or expulsion is a natural punishment for insubordination; limits to use.

d Corporal; when justifiable.

e The spirit and manner in which punishment should be inflicted.

f Improper punishments; illustrations.

3. Aids to punishment:

a Good eyes and good ears; the ability to know what is going on.

b Common sense; practical wisdom and tact.

c A positive moral character and life.

d The possession by the teacher of requisite authority with confidence and co-operation of school officers.

e Parental co-operation :

1. In preventing tardiness and securing regular attendance.
2. In influencing home study and in various other ways assisting and encouraging the teacher.

f School recreations; collections, botanical, zoological, geological, archæological, etc.

5. *The practical problem.*

In all governing, to secure the necessary order and unity of action in the whole body, and to allow the greatest possible individual freedom.

6. *Practical suggestions.*

- a* Have the fewest possible rules.
- b* Have only such rules as will commend themselves to fair-minded pupils.
- c* Do not attach specific penalties to general rules.
- d* Have no penalties which are unnecessarily irritating and offensive.
- e* Govern as far as possible without appearing to govern.
- f* Cultivate the honor and manhood of pupils by trusting them, even though you are sometimes cheated.
- g* Remember that a child cannot entirely "put away childish things."

METHODS OF INSTRUCTION.

1. *Teaching processes.**a* Instruction—Its aims or objects:

1. To occasion the pupil's acquisition of knowledge and power.
2. To impart knowledge directly.

b Drilling—Its functions:

1. To deepen the impressions and to impart skill of mind and bodily organs.
2. To give power to apprehend again with ease and precision, and ability to pupils to rediscover or retrace knowledge.
3. Principle. By repetition the mind gains power and skill to act again more easily in any defined direction.

c Testing—Its purposes:

1. To disclose results of instruction and drill.
2. To arouse interest, secure attention and to assist in classification.

d Show that these three processes support and assist each other, and that they all unite in occasioning those activities which result in culture, power, knowledge and skill.

2. *Teaching exercises.*

- a* A lesson, when the chief end or object is to impart knowledge or skill, or both.
- b* A recitation, when the chief end or object is to test the pupils' knowledge or skill, or both.
- c* Most of the exercises in the primary classes should be lessons; in intermediate grades they should be about evenly divided between the lesson and the recitation, and in advanced classes more of the exercises should be recitations.

3. *Comparison of the lesson and the recitation.*

- a* The objects of the lesson in the order of importance are:
 1. To instruct.
 2. To drill.
 3. To test, testing being incidental.

- b* The objects of the recitation in order of importance are:
 - 1. To test.
 - 2. To drill.
 - 3. To instruct, instruction being incidental.
- c* The test should be thorough, a test of knowledge, not of memory merely.

4. *Relation of the lesson and the recitation.*

- a* The oral lesson preparatory to the pupil's study and to the recitation proper, instruction before study.
- b* In primary classes every subject should be first developed orally.
- c* In more advanced classes less preparatory instruction required; pupils should be trained to obtain knowledge from books.
- d* The lesson and the recitation in advanced classes may often be combined, the one being made subordinate to the other.
- e* When the pupil fails to recite for himself, the mistake of the teacher reciting for him should be avoided. In such cases another lesson should be given.

1. *The recitation.*

- a* Importance, as an index of the teacher's real power and work. It is here that contact of teacher's mind and heart with pupil's is closest.
- b* General purposes:
 - 1. To cause the pupil to restate, so far as possible, in his own language, the matter contained in the assigned lesson.
 - 2. To give additional clearness to the pupil's knowledge by means of illustration and explanation.
 - 3. To create an interest in the subject by supplying suitable motives to pursue it, and by engaging the pupil in the art of thinking.

c Marks of a good recitation:

1. Good order and active attention.
2. A lively interest in the subject under discussion.
3. An intelligent restatement of the matter contained in the lesson.
4. A sharp appetite for knowledge.
5. A disposition to think.

d Essential personal traits:

1. A good knowledge of the subject and a living interest in it.
2. A graceful, kindly manner.
3. Enough of the nervous temperament to give quick discernment of eye and ear.
4. The ability to ask questions which are clear, definite, pointed and suggestive.
5. Skill in stimulating pupils to self-activity.

e Certain mechanical aids:

1. A simple system of signals for calling and dismissing classes.
2. A comely and uniform posture of pupils.
3. Assigning lessons which are neither too long nor too short.
4. A time-table well planned and faithfully followed.

f Teacher's preparation:

1. A thorough and fresh knowledge of the subject-matter, logically arranged and clearly in mind.
2. Familiarity with, but independence of, the text book.
3. A knowledge of the nature of the pupils, as well as the subject-matter and the best way of presenting it; also, a knowledge of principles to be observed and method to be employed in each exercise—uniform method not always the best.

4. Consideration in the assignment of work for
 - a* The ability and advancement of the class.
 - b* The time available for work or study.
 - c* The nature of the work or task.
 5. Advantage of teacher's preparation.
 - a* In lessening the burden of government, and reducing worry and fret.
 - b* In keeping the mind fresh and vigorous, begetting enthusiasm and promoting health.
- g* Methods of conducting recitations.
1. The catechetic or question method.
 - a* Its advantages or merits.
 1. Thoroughness as a test.
 2. In permitting a logical unfolding of the subject.
 3. In permitting the imparting of incidental instruction.
 - b* Its disadvantages.
 1. It is not a good drill in the expression of thought consecutively.
 2. It does not necessitate the logical analysis of a subject.
 3. It does not require a systematic arrangement of the different parts of a subject by the pupil.
 - c* Questioning:
 1. Purpose (to direct, to incite, to lead, to arouse, to test).
 2. Subject-matter of questions.
 3. Form of questions.
 4. Logical order.
 5. Importance of first question.
 6. Study the answer before asking.
 7. Answers to questions (to the point, clear, direct, concise, definite, complete).

2. The topical method—

a Its advantages or merits:

1. It cultivates the power of expression by requiring the pupil to tell what he knows in consecutive sentences.
2. It requires a logical analysis of the subject and a systematic arrangement of the facts and principles by the pupil, both in study and recitation.
3. It is an excellent preparation for writing and speaking.

b Its disadvantages:

1. It is superficial when not directed by the teacher; mere talking too often accepted for reciting.
2. It is imperfect as a test of knowledge.

3. Union of these two methods:

a The lesson prepared and recited, in the main, topically.

b Wrong and incomplete statements or other evidence of imperfect knowledge being followed by careful questioning.

h Methods of calling on pupils:

1. The consecutive method.

a Advantages:

1. Rapidity; no time lost in designating the pupil to recite.
2. It is easy for the teacher.
3. It gives all the pupils an opportunity to recite.

b Disadvantages:

1. Failing to hold attention of entire class.
2. Permits a partial preparation of the lesson.
3. Prevents thorough and effective testing.

2. The promiscuous method.
 - a Advantages:
 1. Secures and holds attention of entire class.
 2. Necessitates preparation of entire lesson by each pupil.
 3. Permits effective testing and makes the recitation a thorough mental drill.
 - b Disadvantages:
 1. Less rapid than the consecutive.
 2. It is not so easy for the teacher.
 3. Pupils often omitted and tests improperly distributed.
3. The simultaneous or concert method.
 - a Not reliable as a test.
 - b When it may be used.
4. Show how all these methods may be effectively and profitably combined.

REVIEWS AND EXAMINATIONS.

1. *Purposes of reviews.*
 - a To test results of previous instruction and drill.
 - b To fix in the mind important facts and principles passed over.
2. *Kinds of reviews.*
 - a Periodical; as daily, weekly, monthly, term, annual.
 - b Topical; of a given subject or of a section or division of a book, when completed.
3. *Methods of reviews.*
 - a By oral questions in the recitation.
 - b By written questions to be answered in writing.
 - c By topics assigned to guide in study, and also in the recitation.
 - d By outlines, presenting an analysis of the subject.

4. *Purposes of school examinations.*

- a To test the pupil's knowledge and skill, and to compare the results with some standard.
- b To give the pupil a correct idea of his attainments, and to indicate what he knows and what he ought to know.
- c To afford a basis for classification and promotion.
- d To afford the teacher a tangible means of measuring his own success.
- e To furnish an incentive to both teacher and pupil to do faithful work.

5. *Methods of examinations.*

- a Oral; advantages and defects.
- b Written; advantages and abuses.

6. *Character of tests.*

- a They should not be narrow and technical, emphasizing "all the lumber of the text books."
- b They should test knowledge of important facts and principles of the subject taught.
- c They should test the pupil's understanding; should train, rather than cram, the memory.

PSYCHOLOGY.

- 1. *Definition: science of mind.*
- 2. *Educational value.*

"The nature of education is determined by the nature of the mind."

3. *The mind.*

- a What it is and what it does.
- b The laws of its growth.
- c Means of its culture.
- d The right methods of using the means of culture.
- e Practical knowledge of, necessary to the teacher.

4. *Attention.*

- a Defined.
- b How secured.
- c How retained.
- d Conditions of.
- e Importance of.

"To education the conception of attention is the most important of all those derived from psychology."—*Rosenkranz*.

"The one serviceable, safe, certain, remunerative, attainable quality in every study and in every pursuit is the quality of attention."—*Dickens*.

It is suggested that the work covered by the above outline be considered the minimum in this study for each institute. The subject-matter is embraced in the first fifty (50) pages of "Baker's Elementary Psychology," and still more fully in the first eighty-five (85) pages of "Sully's Teacher's Hand-Book of Psychology." "The Art of Securing Attention," by Professor Fitch, of Cambridge, England, and reprinted by Hitchcock & Walden, Cincinnati, Ohio, is a most estimable little book, and should be in the possession of every teacher. It contains about forty (40) pages, and costs not to exceed twenty-five cents.

5. *How knowledge is gained.*

Perception.

- a Ideas of pressure and resistance—The sense of muscular resistance.
- b Ideas in regard to the surface of objects—Touch and its organs.

- c* Ideas of flavor—Taste.
- d* Ideas of odor—Smell.
- e* Ideas of sound—Hearing.
- f* Ideas of light and color—Sight.
- g* Secondary (or acquired) perceptions.
- h* Law: Ideas belonging to one sense cannot be conveyed through another sense. Application of this law in teaching.
- i* Sense training.
 1. Neglect of.
 2. Importance of.
 3. Best means of.

6. *Memory.*

Two-fold character; reproduction and recognition, spontaneous and voluntary.

Kinds—

1. Arbitrary—rote learning.
2. Suggestive—learning by heart.
3. Associative.

Growth of memory—"Plastic period."

How best cultivated.

Educational value.

On what depends.

7. *Imagination.*

Kinds—

1. Reproductive.
2. Constructive.

Necessity of training.

Its utility in education and in life.

Means of cultivation.

Relation to general school work.

Relation to preceding powers.

Results to be aimed at by teacher.

8. *Reason.*

Kinds—

1. Inductive—Deductive.
2. Analytical—Synthetical.
3. Demonstrative—Dogmatic.

Means of cultivation.

9. *Principles of mental culture.*

Senses trained by object teaching.

Ideas before words; thoughts before sentences.

Knowledge before definitions; facts before inferences; processes before rules.

Power to do comes by doing; power to think comes by thinking; right habits result from acts frequently and rightly performed.

PHYSIOLOGY AND HYGIENE.

1. *Utility of the study.*

a Practical.

1. For self-knowledge. An acquaintance with the delicate mechanism of the body tends to prevent trifling with it. One does not tinker with a fine watch nor give it to a blacksmith for repairs. Quacks and nostrums do not find favor with one that understands the body.
2. As an aid to correct personal habits and practices.

b Educational.

1. For the study of things as opposed to words and abstractions, thus training the powers of observation and comparison.
2. As an exercise in tracing out adaptations of means to ends.
3. For the cultivation of accurate diction through its precise nomenclature.
4. For developing the idea of analogy as distinguished from similarity.
5. As a centre about which group the beginnings of the most important elementary facts of biology and physics.

2. Subject matter.

- a* Framework of the body.
1. Bones and joints.
 2. Muscles.
 3. Skin and appendages.

b Vital processes :

1. Digestion.
2. Absorption.
3. Circulation.
4. Respiration.

3. Methods of teaching.

- a*
1. Make the study eminently practical.
 2. Let hygiene be the end aimed at ; teach no more anatomy and physiology than is needed to set forth the conditions of life and health.
- b*
1. Make the recitation mainly topical.
 2. Preface assigned lessons with oral instructions.
 3. Describe the parts in common language before applying technical names.
- c*
1. Illustrate with blackboard, charts, manikin or skeleton, microscope, prepared specimens, and, when possible, the part or object described taken from the lower animals.
 2. Teach pupils to become familiar with the location of organs by touching those parts of their bodies beneath which the organs are situated, and to compare functions and adaptations of these corresponding parts of lower animals.
- d* Emphasize the ill-effects of stimulants and narcotics, but avoid extravagant statements which the observation and experience of children would contradict ; especially should care be used not to hurt the feelings of children that suffer from the drink-habit in others.

- e* How to use specimens: When fresh joints, etc., are used for illustration, take the utmost pains to secure neatness. Use dinner plates, plenty of tissue paper or white cloth, pins and needles. Cover every part except what is to be shown. Keep all covered until the proper time comes. Have water and clean towels handy. The exhibition of the muscles and nerves, and even of the organs of respiration, circulation and digestion of a small cleanly animal, *e. g.*, a red squirrel, if well managed, arouses intense interest and is very instructive.
1. *Bones.*
 - a* Head and face, calling attention to their structure, in manner of joining, etc.
 - b* Shoulders, arms and hands.
 - c* The trunk, including spinal column, ribs, breast and hip bones.
 - d* The legs and feet.
 - e* Position of the body.
 - f* Effect of tobacco on bones, especially of the young.
 1. Stunting of growth; consequent dwarfing of bodies of youth.
 2. *The muscles, voluntary and involuntary.*
 - a* Their use.
 - b* Hygiene of the muscles; *e. g.*, need of good food, exercise, rest, change of position, etc.
 - c* Effect of alcoholic drinks on muscles.
 1. Frequent abnormal formation of fat.
 2. Inferior quality of the fat formed, and its effects on movement of the muscles; its deceptive appearance.
 3. *Food, divided into three classes.*
 - a* Mineral, as lime, salt, phosphorus.
 - b* Tissue-making, as meat, eggs, grains.
 - c* Heat-making, as butter, fats, sugar, etc.
 - d* Alcohol as food, not useful.
 - e* Effect of alcohol on tissues:
 1. Hardens tissues, making foods into indigestible substances.

4. *Digestion.*

- a* Teeth and salivary glands.
- b* Stomach and intestines.
- c* Proper care of these organs.
- d* Effects of alcohol upon them :
 - 1. Separation of pepsin from gastric juice.
 - 2. Undue stimulation of mucous coat.
 - 3. Mucous coat robbed of its moisture ; consequent irritation and shrinking ; exciting and distending blood-vessels, forming sores and at times ulcers.
- e* Effect of tobacco upon them :
 - 1. Injury of lining of stomach.
 - 2. Formation of gastric juice impeded.

5. *Respiration.*

- a* Nostrils, bronchial tubes, lungs, diaphragm ; their structure.
- b* Why we breathe ; what we exhale.
- c* Importance of good ventilation.
- d* Effects of tight clothing, stooping posture, etc.
- e* Effect of alcohol on the lungs :
 - 1. Insufficient action of the diaphragm and intercostal muscles.
 - 2. Injury to air-cells of lungs
- f* Effect of tobacco smoke on throat and lungs ; irritating to air passages.
- g* Proper care of throat and lungs.

6. *Circulation.*

- a* Anatomy, physiology and hygiene of the heart, arteries and capillaries.
- b* Action of alcohol on the circulatory organs and the blood :
 - 1. Quickens and weakens the pulsation.
 - 2. Insufficient rest allowed.
 - 3. Occasional fatty degeneration of heart.
 - 4. Distension and weakening of the walls of the blood vessels.

c Action of tobacco on the heart :

1. Excited pulsation and loss of rest.
2. Weakened pulsation.
3. Other dangerous complications of the heart's action.

7. *The skin.*

- a* Its structure.
- b* Absorbent powers.
- c* Need of frequent bathing.
- d* Caution against wet clothing, strong drafts, chills, etc.

8. *Animal heat, how produced and maintained.*

- a* Alcohol as a protection against extremes of heat and cold, deceptive.

9. *The nervous system.*

- a* The brain and its divisions.
- b* The spinal cord; its connections, situation and means of protection.
- c* Proper care of these organs.
- d* Effect of alcohol on the brain and nerves.
 1. Stagnation of blood in swollen blood vessels.
 2. Liability of weakened cerebral arteries to rupture from violence of circulation; result apoplexy.
 3. Brain robbed of moisture.
 4. Dæadening of brain and nerves; powers of thought deranged or overcome.
 5. Effect on character; a legacy to posterity.
- e* Effect of tobacco, tea, coffee, opium, etc., on brain and nerves;
 1. All are narcotics, that is, active poisons; and when used to excess tend to injure the intellect and character.

Hygiene for the teacher.

- a The teacher's liability to ill health; breathing impure air, absorbing exhalations, etc.
- b Overwork, worry and anxiety.
- c Care as to diet, exercise, rest, sleep.

School hygiene.

- a Condition of outbuildings, grounds, well, etc.
- b Lighting room, shape and location of windows.
- c Heating.
 - 1. Modes of heating.
 - 2. Temperature.
 - 3. Effects of overheating.
- d Ventilation.
 - 1. Methods.
 - 2. Benefits.
 - 3. Necessity of.
- e Condition of room.
 - 1. Arrangement of desks.
 - 2. Adornment of walls.
 - 3. Position of pupils at desks.
 - 4. Closets for clothing, dinner-pails and apparatus.
- f Recess, outdoor and indoor exercise.
- g Sitting in drafts, in damp clothing, by hot stoves.
- h Care of person.
- i Contagious diseases.
- j Amount of work to be required of pupils.
- k The will to be trained to obey hygienic law.

Reference books.

- Colton's Practical Zoology (gives very full directions for the study of organs of animals).
- Blaisdell's Our Bodies and How We Live (contains numerous and practicable experiments).
- Martin's Human Body, briefer course (makes prominent the doctrines of energy and gives good directions for demonstrations).
- Buckalew & Lewis' Practical Work in the Schoolroom (primary lessons).
- Woodhull's Manual of Home-Made Apparatus.
- Woodhull's Simple Experiments for the Schoolroom.
- Lind's Easy Experiments in Chemistry and Natural Philosophy.
- In teaching the nature and effects of alcoholic drinks and narcotics, the Primer of Physiology and Hygiene, by William Thayer Smith, is excellent for supplementary reading.
- The Information Reader No. 1, Foods and Beverages (Boston School Series), recently published, is also very good for its information on food materials and their hygienic values.

UNITED STATES HISTORY.

1. *Objects to be attained.*

- a Creation in pupils of a taste for the reading and study of history.
- b Information on the part of pupils.
1. As to books to be read, and
 2. As to methods of reading and study.
- c Knowledge.
1. Which shall serve as a basis for future reading and study.
 2. Which shall render reading intelligible by enabling the pupil to understand historical references.

2. *Matter.*

1. For intermediate grade, some good primary history.
2. For advanced grade, any good text book, or books, on United States history.

3. *Helps.*

Some larger books on United States history for reference, blackboards, slates, outline maps, biographical dictionary, lives of prominent men for general reading and reference, newspapers and magazines.

4. *Methods.*

a Select some topic for study.

b Find out through pupils what text books and other works on United States history are in the neighborhood and can be made available.

c Read from the different books and converse with class on the topic.

d Teacher and pupils read in class, stories, anecdotes and biographical sketches from other books bearing on topic in hand.

e Stories and anecdotes bearing on topic may be given orally by members of class, but in all such cases "authorities" should be required of pupils.

f Reproduction by pupils, both orally and in writing, of the substance of what has been read or related.

g Make constant use of maps to fix locations. If possible, keep before class an outline map of North America, including the West Indies. Have pupils sketch on blackboards and slates maps of localities studied about.

h Refer pupils to books of history and biography for subsequent reading.

i Direct and suggest to pupils matter for future reading and reference.

j Require pupils occasionally to write short biographical sketches of prominent persons spoken of in text books.

TOPICS.

a. Aborigines. Discoveries.

Columbus—Sketch of life, theories, voyages.

Vespucci—The Cabots.

b. Explorations.

Spanish (results). French (results). English (results). Dutch (results).

c. Settlements and colonies.

By whom settled and time of each; reasons for settlements; forms of government of colonies and changes in such forms; customs and manners of colonists; wars with Indians; French and Indian wars; cause of each and results.

d. Taxing the colonies.

1. Reasons for taxation.
2. Stamp act; principle involved.

e. Growth of ideas of independence.

Efforts made by England, during ten years from 1765 to 1775, to crush out the spirit of liberty and keep colonies in subjection.

f. Revolutionary war.

Beginning; Declaration of Independence; continuance; results; Articles of Confederation; formation of Constitution; the principal events and leading men from the Revolution to the War of 1812.

g. War of 1812.

Causes; results; chief characters.

h. Mexican war.

Causes; results; prominent actors.

i. Slavery.

1. In the colonies.
2. In the Constitution.
3. Prohibition of foreign slave trade.
4. Missouri compromise.
5. Compromise of 1850.
6. Kansas-Nebraska bill.
7. Dred Scott decision.
8. John Brown's raid.
9. Emancipation proclamation.

*1 The war of the rebellion.**a Causes:*

1. The doctrine of States' rights.
2. Nullification.
3. Abolition movements.
4. Election of Lincoln.
5. Secession.
6. Firing on Fort Sumter.

b Events, civil and military.

1. Of 1861.
2. Of 1862.
3. Of 1863.
4. Of 1864.
5. Of 1865.

*c Results.**d Constitutional amendments resulting therefrom.**e Prominent men connected with.**f Growth and development of the United States.*

1. Territory—

- a* Thirteen colonies and northwest and southwest territories.
- b* Louisiana and Oregon.
- c* Florida.
- d* Texas.
- e* California, etc.
- f* Gadsden purchase.
- g* Alaska; show on maps territory acquired.

2. Population.

3. Agriculture, commerce, manufactures, education, literature.
4. Inventions.

CIVIL GOVERNMENT.

1. *Reasons for teaching.*
 - a As an essential factor in human history.
 - b As a preparation for the duties of citizenship.

2. *Origin and necessity of the state.*
 - a Theories as to source of authority. { Divine.
Human.

3. *Kinds of government.*
 - a Patriarchal.
 - b Theocratic.
 - c Monarchial. { Absolute.
Limited.
 - d Democratic. { Pure.
Representative—A republic.

4. *The ends of civil government secured by—*
 - a Constitution. { Written.
Unwritten.
 - b Statutory law.
 - c Common law.
 - d Officers.

5. *Government of the United States.*
 - a Its complex character:
 1. National.
 2. State.
 3. Local.
 4. Advantages of this system.

b Periods:

1. Colonial.
2. Under Articles of Confederation; insufficiency of.
3. Under Constitution.
 - a* Origin and preamble.
 - b* Formation.
 - c* Adoption.
 - d* Ratification.

c Branches:

1. Legislative, law-making—Congress:
 - a* House of Representatives.
 1. How composed.
 2. How apportioned.
 3. Eligibility.
 4. Term.
 5. By whom elected.
 6. Vacancies; how filled.
 7. Powers—concurrent; exclusive.
 - b* Senate:
 1. How composed.
 2. Eligibility.
 3. Term.
 4. When and by whom chosen.
 5. Vacancies; how filled.
 6. Powers—Legislative, executive, elective, judicial.
2. Executive—Law-enforcing:
 - a* Officers.
 - b* President and Vice-President.
 1. How elected.
 2. Eligibility.
 3. Tenure of office.
 4. Compensation.
 5. Powers.
 6. Duties.
 7. Impeachment of President.

- c* Cabinet.
 - 1. Names.
 - 2. How chosen.
 - 3. Salary.
 - 4. Duties of each.
 - 5. Present Cabinet officers.
- 3. Judicial—Law-interpreting:
 - a* Courts—Supreme, circuit, district.
 - b* Appointment and tenure of office.
 - c* Jurisdiction and duties.
- d* Special constitutional provisions:
 - 1. Prohibitions on United States; *habeas corpus*, *ex post facto*, etc.
 - 2. Personal rights.
- e* State governments.
 - 1. Relation to general government.
 - a* Rights of states.
 - b* State prohibitions.
 - 2. Branches of state government:
 - a* Legislative: Branches, powers, number of members, eligibility, term.
 - b* Executive: State officers, powers and duties, term, eligibility.
 - c* Judiciary:
 - 1. Justice courts: Jurisdiction, functions.
 - 2. County courts: Jurisdiction, functions.
 - 3. District courts: Jurisdiction, officers.
 - 4. Court of appeals: Jurisdiction, officers.
 - 5. Supreme court: How constituted, where held.
 - 3. County government.
 - 4. Municipal government.

f Civil ethics :

1. Definition ; treat of the duties of citizenship.
2. Duties :
 - a* Obeying law and authority.
 - b* Intelligent voting.
 - c* Opposing bad men for office.
 - d* Taking interest in local, state and national affairs.
 - e* Sustaining schools.
 - f* Serving on juries.
 - g* Making honest returns of property for taxation.
 - h* Becoming educated as far as possible.

NOTE.—The idea of the above outline is to suggest some of the things that every voter ought to know. There is a growing popular demand that the next generation of voters shall have a good general idea of the underlying principles of our government. There are many text books upon the subject written especially for schools.

ETHICS (MORALS).

1. *Definition.*

Treat of the things that ought or ought not to be done.

2. *Educational aim.*

Right conduct.

3. *Agencies.*

School, home, church, society, etc. In many instances school is sole agency, hence responsibility of teachers.

4. *Methods.**a* Indirect :

1. Training in moral practices, and thus establishing the habit of right doing. A wisely managed school in its regular exercises and modes of discipline furnishes the best of training in the elements of good character, viz: Obedience, punctuality, cleanliness, good manners, rights of others, a trained will, self-control, industry, etc.

2. Needful moral qualities in teacher :

a Sincerity, prudence, courtesy, even temper, warm heart, genial nature, earnest manner, exemplary habits, etc.

b Knowledge of child nature, enabling him to supply right motives and bring to bear right influences.

b Direct :

1. Topics to be treated at stated times or as occasion offers : Honesty, kindness, truthfulness, unselfishness, reverence, purity (in thought, word and deed), obedience (to parents, teachers and laws), integrity, patriotism, benevolence, frugality, hope, cheerfulness, self-reliance, mercy, etc.
2. Correction of evil and bad habits : Idleness, profanity, lying, stealing, obscenity, use of tobacco and intoxicating drinks.
3. Materials : Current incidents, anecdotes, stories, noble lives, heroic deeds, sentiments in the school lesson, didactic talks.
4. Sources of material : School reader, histories, biographies, standard prose and poetical selections ; the memorizing of gems and appropriate mottoes, especially for young children, is a great help in enforcing moral precepts.
5. Attack prevailing evils by a kind and thorough general talk ; special ones singly and in private.

TOPICS SUGGESTED FOR DISCUSSION AND ILLUSTRATION.

1. *Duties to self.*

a Improvement—physical, mental and moral.

b Self-respect—not self-conceit nor hypocrisy.

c Industry—essential to health, happiness ; safe-guard against temptations to vice.

d Worthy aims—not pleasure, nor riches, nor honor, but subordination of self to common good and contribution to common possessions (physical, mental, moral).

e Patience, perseverance, courage.

f Fidelity in trusts.

Others.

- a* Duties for rights—life, liberty, property, reputation, etc.
- b* Honesty.
- c* Truthfulness.
- d* Benevolence.
- e* Duties to parents and teachers ; superiors, inferiors, equals, brutes.
- f* Duty of courtesy ; respect for sacred places ; respect for works of art and nature.
- g* Duties in regard to public buildings and public gatherings.

FRIDAY AFTERNOON LITERARY EXERCISES.

1. *Importance.*

- a* Properly conducted, may be made the most interesting and profitable school exercises of the week.

2. *Value to pupils.*

- a* In school life for practicing the art of independent thinking by expanding topics considered or suggested in the regular class work.
- b* In after life in permanent ability and taste for reading, thinking, writing and speaking which may be developed.
- c* As a preparation for special occasions, as closing exercises of term or year : observances of national holidays, and thus a most valuable means of cultivating the sentiment of patriotism.

3. *Should include.*

- a* At first, principally reading and gems of thought.
- b* Later, recitations, compositions and declamations.
- c* Work supplementary to the regular school work, especially in language, reading, geography and history.

4. *Methods.*

- a Selections approved and compositions corrected by the teacher.
- b Large schools divided into sections.
- c Interest of pupils first gained by making exercises supplement regular school work.

THE DISTRICT LIBRARY.

1. *The essential part of the equipment of every school.*2. *Value.*

a To the school:

- 1. In furnishing books of reference for supplementary work.
- 2. In cultivating a love of good reading—the best safeguard against folly and vice.

b To the community:

- 1. As a center of common interest and association.
- 2. As an educating agency.

3. *Means of acquiring.*

- a Donation.
- b Subscription.
- c Assessment.

4. *Selections.*

Should be made with special reference:

- 1. To the varied capacity of readers.
- 2. To supplementary school work.

VALUABLE BOOKS FOR INSTRUCTORS AND MEMBERS OF
NORMAL INSTITUTE CLASSES.

ON METHOD WORK.

TITLE.	AUTHOR.	PRICE.
Methods of Teaching	Swett	\$1 25
School Room Guide	De Graff	1 50
Talks on Teaching	Parker	1 00
Methods of Teaching	Raub	1 50
Normal Methods of Teaching	Brooks	1 50
Object Lessons in Teaching	Calkins	1 50
Methods and Principles of Teaching	Winship	1 25
Principles and Practice of Teaching	Johonnot	1 25
Manual of Elementary Instruction	Sheldon	1 50
How to Teach	Riddle	1 00
Development Lessons	De Graff	1 00
Methods of Instruction	Wickersham	1 50
Mind Studies for Young Teachers	Jerome Allen	25
Art of Teaching	Ogden	1 00
The Sentence Method	Farnham	50
Primary Reading—How to Teach It	Boston Method	20
Addition Manual	Giun	15
Topical Study of Geography	Miss Ida L. Griffin	50
Grube Method	Soldan	20
Topical Analysis	Wedgwood	50
Graded Language Lessons	Richardson	25
How to Teach Penmanship	Burritt	25
Primer of Pedagogy	Putnam	25
A Study in Pedagogy	Vincent	60
Practical Hints to Teacher	Howland	1 00
Object Teaching and Methods	Barnard	1 25
Quincy Methods	Partridge	1 50
Graded Exercises in English	Eaton	15
Methods in Teaching Geography	Crocker	50
Lessons on Color	Crocker	10
A Practical Analysis of Words	Kennedy	35

VALUABLE BOOKS FOR INSTRUCTORS—*Continued.*

ON METHOD WORK.

TITLE.	AUTHOR.	PRICE.
Outlines of Map Drawing.....	Bangs.....	\$ 30
Industrial Drawing.....	White.....	---
The Prang Course of Instruction in Drawing.....	Prang.....	---
Normal Drawing Class.....	Prang.....	---

ON SCHOOL ECONOMY.

TITLE.	AUTHOR.	PRICE.
General School Laws.....	Dept. of Public Instruction.....	---
Theory and Practice of Teaching.....	Page.....	1 25
The Art of School Management.....	Baldwin.....	1 50
School Management.....	Raub.....	1 25
School Management.....	Holbrook.....	1 25
School Economy.....	Wickersham.....	1 50
School Management.....	Landon.....	85
Common School Law.....	Bardeen.....	50
Hand-Book for Young Teachers.....	Bardeen.....	75
School Discipline.....	Kennedy.....	15
School Management.....	Jewell.....	1 00
What Every Teacher Ought to Know.....	Chapin.....	15
Theory and Practice of Teaching.....	Doty.....	25
Practical Hints to Teachers.....	Howland.....	1 00
Art of Securing Attention.....	Hughes.....	50
The Art of Securing Attention.....	Fitch.....	15

GENERAL EDUCATIONAL WORKS.—FOR REFERENCE.

TITLE.	AUTHOR.	PRICE.
Philosophy of Education.....	Tate.....	1 25
Lectures on the Science and Art of Education.....	Payne.....	1 25
History of Education.....	Painter.....	1 25

VALUABLE BOOKS FOR INSTRUCTORS—*Continued.*

GENERAL EDUCATIONAL WORKS.—FOR REFERENCE

TITLE.	AUTHOR.	PRICE.
History of Pedagogy.....	Compayre.....	\$1 75
Outlines of Psychology.....	Sully.....	1 00
Lectures on Teaching.....	Fitch.....	1 25
Habit in Education.....	Hall.....	1 25
Educational References.....	Quick.....	1 00
The Education of Man.....	Proebel.....	1 00
Common School Education.....	Curry.....	1 50
Education—Intellectual, Moral and Physical.....	Spencer.....	1 50
The Science of Education.....	Ogden.....	1 25
Life and Works of Pestalozzi.....	Krusi.....	1 00
Outlines of Psychology.....	Chautauqua As- sembly.....	1 00
Elements of Mental Science.....	Porter.....	1 50
Kindergarten Culture.....	Hailman.....	1 25
Education as a Science.....	Bain.....	1 75
Elementary Psychology.....	Baker.....	1 35
The Senses and the Intellect.....	Bain.....	1 50
Outline Study of Man.....	Hopkins.....	1 25

REPORTS.

District No. 1.

Institute District No. 1 held a two days' session in Sterling, Logan county.

The conductor, Professor Thos. J. Gray, taught geography, psychology and general methods. These subjects were presented in such a way as to be beneficial to the teacher of them.

Professor Gray endeavored to get the teachers to observe the methods of thought and to follow out the thought process in all their work.

Much lasting good was done the teachers of the district.

Great interest was shown in the primary work as presented by Mrs. Timberlake with classes of little folks. The observation of actual work was proven to be far superior to the expounding of methods or the spinning of fine theories.

Superintendent E. H. Stevens of Sedgwick county presented school law in a very able and interesting manner.

Geo. H. Martin of Logan county considered a few points in arithmetic, but being somewhat of a farmer his attention was divided between his crops and the Institute.

The parties to whom grammar and orthography were assigned failed to attend and these subjects were handled by Superintendents Timberlake and Garver.

The lecture course consisting of three lectures was one of the interesting features of the meeting.

The first lecture of the course on the subject, "Physical Health Necessary to the Strongest Mental Activity," was delivered before the Institute by Dr. J. N. Hall of Greeley.

The second was an evening lecture by Professor T. J. Gray. Professor Gray spoke to a full house and held his audience for more than an hour.

The third lecture was delivered by State Superintendent Nathan B. Coy. Professor Coy chose for his subject, "The Trip to Toronto, and the N. E. A." Owing to the inclemency of the weather a small audience attended this lecture.

The attendance on Institute reached sixty-seven, fifty-two of whom lived in Logan county, six in Sedgwick county, five in Phillips county and four in Morgan county. Yuma and Washington counties were not represented even by their county superintendents.

These six counties sent but two representatives to Institute last year, because of the great distance from the place of meeting.

District No. 2.

Institute District No. 2, comprising the counties of Boulder, Larimer and Weld, held its session at Greeley, August 10 to 21.

Conductor, Thomas J. Gray.

Instructors, J. T. McCleary (music), Mrs. E. Davis, J. R. Whiteman and S. T. Hamilton.

Attendance, 141.

The teachers manifested much interest by regular attendance and close application to work.

The programme was carried out each day.

The opening exercise from "The Lady of the Lake," proved a very attractive feature.

All instructors did good work, but Professor McCleary deserves special mention for winning the hearts of the teachers from the beginning.

Lectures delivered during the session were by Rev. Geo. T. Crissman of Longmont, on "The Friend of the Centuries;" Chancellor McDowell on "To-morrow and the Day After;" Professor Hays on "Attention;" and Professor E. L. Byington with stereoptican views.

The following resolutions were adopted before the Institute adjourned:

Resolved, That we as teachers, appreciate the liberality of the taxpayers of Colorado in providing for the maintenance of Normal Institutes.

That we extend thanks to the executive committee for securing us instructors of such eminent ability and wide experience in normal work.

That we express our gratitude to the several instructors for the interesting and profitable manner in which they have presented the subjects under consideration, and to the lecturers and musicians who have contributed so much to our enjoyment.

Resolved, That our thanks are due the county commissioners of Weld county for the use of the court house; the Methodist and Congregational churches of Greeley for the use of their respective churches; the citizens of Greeley for their hospitality and kindly interest in our work; the press of the surrounding towns for notices, and especially the press of Greeley, for gratuitous copies of the reports of our proceedings.

Resolved, That we extend our thanks to the different railroads for favors shown the members of this Institute.

Resolved, That we severally extend our heartfelt thanks to Captain Boyd for his valuable gift of a copy of the History of the Greeley Colony, to each of us.

The institute next year will be held at Boulder. We congratulate ourselves upon the most successful institute ever held in this part of the State.

W. C. THOMAS,
Secretary.

District No. 3.

The Normal Institute of the Third District, composed of Arapahoe county, convened, at the Franklin school building in Denver, Monday, August 10, at 8:40 a. m., with W. E. Knapp as conductor, L. P. Norvell, Miss Rose Malone, W. J. Whiteman and A. D. Shepard, as instructors, and W. M. Spears, recording secretary.

The Institute opened by singing "America," followed by the regular programme.

8:40 a. m. to 9:10, roll call, music, Whiteman.

9:10 a. m. to 9:40, primary numbers, Miss Malone.

9:40 a. m. to 10:10, reading, Norvell.

10:10 a. m. to 10:40, history, Knapp.

10:40 a. m. to 10:50, recess.

10:50 a. m. to 11:20, primary reading, Miss Malone.

11:20 a. m. to 11:50, arithmetic (alternate), Knapp and Norvell.

11:50 a. m. to 12:15, pedagogy (alternate), Knapp and Norvell.

12:15 p. m. to 12:55, noon recess.

12:55 p. m. to 1:20, school law, Shepard.

1:20 p. m. to 1:50, primary methods, Miss Malone.

1:50 p. m. to 2:00, recess.

2:00 p. m. to 2:30, grammar or geography, Norvell.

2:30 p. m. to 3:00, physiology, Knapp.

The Institute was in session two weeks, and during the entire session the most intense interest was manifested on the part of the teachers, most of them remaining for an hour or more after the session each day to take notes from the blackboard, with reference to the work of the morrow.

The record of the Third District Normal Institute is as follows: Number of teachers enrolled, 225; instructors, 7; total, 232. Average number of visitors daily, 15; average daily attendance based on enrollment of teachers, 194; average number of days attended, 9; per cent. of attendance, 86½; number who paid the registration fee, 222.

The institute closed with singing the "Star Spangled Banner," and adopting the following resolutions:

We, the members of the Normal Institute of district number three, Colorado, deeming it expedient to express our sentiments, do hereby resolve that we heartily approve of the plan of work as laid down by the executive committee of the Institute now about to close, believing that it very fully meets the varied wants of our teachers, both in method and matter, and that we appreciate the compliment so gracefully bestowed by the management in consulting us as to our preference in future Institutes.

Second—That our thanks are due, and are hereby tendered the school board of district number two, West Denver, for the use of Franklin school building and apparatus.

Third—That we tender our thanks to the several railroad companies that have so kindly aided the cause by granting reduced rates to those in attendance.

Fourth—That we likewise tender our thanks to the press of this city, which has so freely extended all aid that could be asked or given.

Fifth—That the hearty thanks of this Institute are due to Mr. E. A. Durbin for the material aid rendered the physiology class, to the ice company for courtesies in explaining the artificial manufacture of ice, and to Chancellor McDowell of Denver University for the use of its telescope.

Sixth—That we tender our thanks to Hon. N. B. Coy, the State Superintendent of Public Instruction; to President Snyder and Professor Hays of the State Normal School; to Professor Greenlee, Superintendent of the West Denver schools; Miss Murphy, and others, for their very instructive addresses; and that we express our appreciation of the many valuable suggestions therein contained.

Seventh—That the members of the Institute tender their heartfelt thanks to the instructors, who have labored so earnestly and diligently to present approved methods of instruction, and especially to Miss Malone for her work in that most difficult yet most important department, Primary Education. Miss Malone has sown good seed which, it is hoped, will bring forth bountifully; and, if it does not the fault will not be with her.

MARTHA INGRAM,
IRA C. ADAMS,
JAMES B. WESTHAVER,
JENNIE F. YOUNG,
HELEN M. BROWN,

Committee.

A. D. SHEPARD,

Secretary Executive Committee.

District No. 4.

The Fourth Normal Institute District, comprising Clear Creek, Gilpin and Jefferson counties, held a very interesting session, beginning August 10 and closing August 21.

The instruction was confined to the first eight grades of school work.

W. Triplett, superintendent of the Golden schools, conducted the Institute and had charge of the advanced work.

Miss Laura P. Mellon, of Denver, had charge of the primary work.

The teachers were favored by very interesting lectures during the session by Superintendent Coy, Professors Hays of the State Normal, Chauvenet and Ihlsing of the State School of Mines.

Superintendent Bowman, of Clear Creek county, gave ten very interesting lectures.

Superintendent McLeod, of Gilpin, gave instruction in physiology.

Superintendent Eagleton, of Jefferson, gave instruction in school law.

Notwithstanding District No. 4 is small, the teachers are alive to the interests of school work and are determined to have first-class institutes.

The following resolutions were adopted :

WHEREAS, The Normal Institute of the Fourth Institute District of Colorado is drawing to a close, and we deem it proper to give expression to our feelings in reference thereto; therefore be it

Resolved, That the county superintendents are to be commended for their judgment in arranging the work of the Institute, their zeal in the cause of education and the courtesy they have ever shown to the teachers.

Second, To the conductor, Superintendent Triplett, we owe our sincere thanks for his patience and untiring effort, and the consideration he has shown to the teachers during the Institute, and that he is entitled to our respect for the instruction he has so ably rendered.

Third, Miss Mellon deserves our most earnest esteem and gratitude for her enthusiastic and vivid presentation of the various phases of primary work.

Fourth, To Professors Coy, Hays, Chauvenet, Ihlsing and Bowman we feel indebted for their instruction and profitable lectures.

Fifth, That we fully appreciate the instruction in school law as closely explained by Superintendent Eagleton and the efficient instruction given by Superintendent McLeod in physiology.

Sixth, To the teachers residing in Golden, who so kindly provided the pleasant social entertainment on Tuesday evening, we offer our sincere thanks. Also, we feel grateful to the people of Golden who have added to our pleasure and comfort by receiving us into their hospitable homes.

J. H. SMITH,
LIZZIE C. KLEIN,
CORA E. WHITE,
Committee on Resolutions.

District No. 5.

Institute District No. 5, comprising the counties of Douglas, Elbert and El Paso, held its session at Colorado Springs, August 10 to 21.

Conductor, Eugene C. Stevens.

Instructors, L. B. Grafton, Minnie M. Van Pelt, Carrie B. Palmer, Clara Eckhardt, Fannie Muchmore, Fonette Flausburg.

Attendance, 112.

Mr. Stevens, as conductor, proved to be the right man in the right place; his development lessons were instructive, interesting and inspiring; nothing lagged.

L. B. Grafton, of Manitou, handled in a masterly manner the subjects of arithmetic and grammar, especially that pertaining to advanced grades.

Miss Van Pelt, of Col. Parker's Normal of Chicago, presented new methods of objective teaching in primary classes.

Miss Palmer's pupils in physical culture made great progress and teachers so benefited by her instruction as to be able to carry on the work among their own scholars.

Miss Clara Eckhardt's rapid system of penmanship showed great superiority over others.

Miss Muchmore presented Mrs. Pollard's synthetic system of reading. It was calculated to gain followers and admirers.

Miss Flausburg's classes in English literature illustrated how much work could be done to awaken a love for good reading among children.

During the session Mrs. Leslie Mae Bassett gave an elocutionary entertainment.

Superintendent Nathan B. Coy talked upon the meeting of the National Association at Toronto.

Professor Z. X. Snyder, of the State Normal, lectured on the "Model Teacher."

Professor A. J. Fynn, of Alamosa, gave his lecture, "An Excursion to Canterbury."

Professor J. M. Dickey, of Colorado Springs, delivered his latest, "Our New Heritage—A Rocky Mountain Outlook."

Mrs. Jacobs, of Denver, ably presented the claims of kindergarten and urged its incorporation as an essential element of our public school system.

The importance of libraries in ungraded schools, and of free and uniform text books was universally conceded by the majority of members present.

By way of diversion, excursions were made to Austin's Bluffs, Green Mountain Falls, Broadmoor Casino. Also a visit to the *Gazette* printing office, all of which were highly enjoyable.

The institute closed at 4 p. m. of the twenty-first, after a most successful, entertaining and instructive session, reflecting great credit upon the executive committee, conductor and instructors.

REUBEN BERREY,
Secretary.

District No. 6.

The first annual session of the Normal Institute for the sixth district was held at Burlington, Colorado, July 6 to 17, 1891, with the following instructors in charge: Principal, J. S. Young, of Cheyenne Wells, Colorado, Miss Fannie Muchmore of Orleans, Nebraska; Superintendent D. S. Harris, of Kit Carson county, conductor; Superintendent H. A. Lowell, of Lincoln county, secretary.

Thirty-seven teachers were in attendance. They were earnest, careful workers, and made the Institute a most successful one.

Arithmetic and United States History, by J. S. Young, synthetic reading by Miss Muchmore, grammar and didactics by Superintendent Harris, occupied most of the time.

Particular attention was given to the manner of presenting the subject to pupils, the plan of recitations and the methods for study. These recitations were made particularly instructive by the prompt, earnest work of the teachers.

Lectures were delivered before the Institute upon "School Law," by County Attorney T. J. Edwards; "Contracts," by Deputy District Attorney J. W. Clements.

These lectures were instructive and were appreciated by the teachers.

Note-taking was insisted upon by the instructors. Each teacher prepared lists of "Ten things to be avoided;" "Ten things to be remembered and used;" list of poems, songs and books to be used in connection with the study of United States History. These lists were given to committees and from them all a list was made and given to the Institute.

The best of feeling prevailed between instructors and teachers, with nothing to mar the pleasure of the meetings.

At the close of the Institute the teachers presented Conductor D. S. Harris with a gold pen and holder, also a fine autograph album, containing the names of teachers in attendance.

A Normal District Teachers' Association was organized and plans made for holding a meeting during the year in each of the counties comprising the district.

H. A. LOWELL,
Secretary.

District No. 7.

Normal Institute, district number seven, met at Canon City, August 3 and closed August 28.

Conductors, Edgar L. Hewett, of Florence, and O. S. Moles, of Canon City.

Assistants, J. P. Thurmond, B. G. Woodford, J. H. Lacey, Mrs. Bond and Mrs. Baughman.

Owing to the fact that a four weeks' session was to be held, it was thought best to not restrict the work to that of a school of methods exclusively. While it was the object of each instructor to secure from every lesson a model recitation, the actual work of instruction in the common branches was made one of the prime features of the Institute.

Thirty minutes daily was devoted to the discussion of miscellaneous queries pertaining to school management, methods, etc. This was found to be a valuable feature of the work.

Exercises in rapid calculation, conducted by Messrs. Hewett and Moles, brought out many interesting and valuable processes.

Mrs. Bond's exercises in primary work and Mrs. Baughman's in school music were highly appreciated.

Work in the natural sciences comprised ten lessons in each of the following subjects: Zoology, geology, physics, astronomy, botany, physiology and chemistry, presented by Messrs. Hewett, Moles and Lacey.

Five lessons were given in civil government by Superintendent Thurmond, of Pueblo, and five in school law by Superintendent Woodford, of Canon City.

Mr. Moles gave five lessons in geography and a daily drill in physical culture throughout the entire session; also, presenting the subjects of arithmetic and didactics in twenty lessons each. His work in didactics was a most able exposition of all the most valuable methods of presentation of subjects taught in the common schools; also five lessons devoted to a searching analysis of the laws of mental growth.

Mr. Hewett presented the subjects of grammar and reading in fifteen lessons each; also, penmanship and United States history, continuing during the entire term.

In reading, his work comprised a daily drill in the elements of elocution, three lessons in orthography and the critical reading of Evangeline. The idea of supplementary reading in all grades was particularly emphasized. The work in history comprised a complete review of the history of America from the discoveries of the Northmen to the present day. Historic pictures, biographical sketches and current events were prominent features. Biography was made especially prominent.

In penmanship Mr. Hewett gave the teachers the benefit of a series of drills equal to any that can be obtained in the best of commercial colleges.

The practice of muscular movement drills with music was a novel and interesting feature and one of the most practical and valuable of the Institute work.

Mr. Hewett's perfect system, and its adaptability to every grade or kind of school will be a valuable acquisition to the school work of this district.

Ninety-five teachers were enrolled, mostly from Pueblo and Fremont counties.

The superior standing on examination of those who attended the Institute over those who did not attend, completely justified the theory of those in charge that the majority of our teachers need actual instruction in the common branches.

Hon. Nathan B. Coy delivered an interesting lecture on the subject "An Educational Outlook."

Professor James A. Hays spoke to the Institute on the "Requisites of a Successful Teacher;" also giving a useful exercise in English grammar.

Rev. Robinson, of Canon, gave an instructive lecture on the "Origin of the Heavens and Earth," and another upon the "Origin of Man."

District No. 8.

The teachers of the Eighth District commenced a two weeks' session August 10, at Las Animas.

The enrollment of fifty-five was soon swelled to eighty.

The enthusiasm which was aroused the first day, and augmented by the reception of Wednesday evening, at which the teachers all became thoroughly acquainted, continued and grew to the close of the session.

There was no division into classes except for special class work, partly because of the limited number in attendance, making it easy for one instructor to interest the whole school, partly because the majority of teachers were from ungraded schools, but more particularly because of the unsatisfactory results of *too much* classifying at the Pueblo session last year.

We were especially fortunate in the selection of instructors. W. T. Eddingfield, of the Aspen city schools, and W. M. Kollock, of the La Junta schools, linked together in institute work, are a force indeed.

Our aim was high. In an estimate based upon the census of school children, or the number of teachers employed, we aimed to place the enrollment of district No. 8 in the van. Did we succeed?

FRED C. FORD,
Secretary.

District No. 9.

Normal Institute district No. 9, closed its session July 31, at La Veta, Colo., having had an attendance of sixty-five.

There is no question of its being a success.

Under the skillful management of Professor P. M. Condit, of Delta county, the teachers left well satisfied with their work.

During the day no long, tedious lectures were given. Classes of children were brought in and given regular drills with fine success under the tutelage of Miss Mary A. Wilson, Miss Mary Reese and Mrs. Taylor, the latter two of Huerfano county.

Professor A. E. Beardsley, of Las Animas, took the classes into the mountains and instructed them in *practical* geology, chemistry, botany, etc., and these subjects were made extremely interesting.

In the evenings lectures by Professors Condit, Beardsley, Rev. Mr. Post and Professor H. E. Gordon, of Tillotson Academy, Trinidad, were interspersed with declamations and music.

Miss Grace Freeman, of Huerfano county, and Miss Rilla Quisenberry, of Trinidad, aided very materially in this work.

All other subjects were handled by master hands; in fact, the executive committee selected instructors for their specialties.

Each instructor knew his subject thoroughly, and the best evidence of the interest taken is that but one teacher left during the session, and he had private business.

To the people of La Veta the teachers of district No. 9 extend their warmest gratitude. Nothing could have been improved upon.

A banquet given by the La Vetans to the teachers showed that in La Veta hospitality and good will are engendered in the hearts of its cultured inhabitants. A reception on the first night of the Institute demonstrated this.

Some of the finest piano music can be heard in La Veta, and all our teachers listened night after night to the master touch of Dr. Morse's accomplished daughters. Von Bulow or Rubinstein might be proud of such pupils.

The Institute in district No. 9 will long be remembered as a red letter in the hearts of those attending.

Next year it meets in Trinidad.

The following resolutions were passed:

WHEREAS, The session of the Normal Institute, District No. 9, having completed its session of two weeks' normal teaching on July 31, 1891, your committee begs leave to offer the following resolutions, to-wit:

Resolved, That we heartily endorse the action of the State legislature at its recent session creating Normal Institutes and providing for their maintenance.

Resolved, That the Normal Institute offers invaluable opportunities to teachers for self improvement, through the instruction and discussions there offered, and strongly tends to elevate the teachers' occupation to the dignity and worth of a profession.

Resolved, That we, as teachers and as individuals, feel, that in the Institute we have amply been repaid for our trouble and expense in attending said Institute.

Resolved, That our thanks are due especially to Professor P. M. Condit, B. S., for his practical methods of instruction in psychology and didactics, for his care in making the Institute a success, and for his efficient management as conductor of the Institute.

Resolved, That we express our high appreciation of the able and efficient labors of our county superintendents, T. D. Baird and G. C. Shiels in their interest in this Institute. We further desire to express our appreciation of their liberal and advanced ideas on education. We believe their work to be in the direction of progress and of such high value to the educational interests of our district as to merit the approbation of all who are in sympathy with the work of educational advancement.

Resolved, That we desire especially to make known the gratitude we feel for the courtesy and hospitality shown us by the citizens of La Veta and surrounding neighborhood in providing for our social entertainment and personal comfort, and for the lively interest taken in the works of our Institute.

Resolved, That we hereby tender our thanks to Professors H. E. Gordon and A. E. Beardsley, of Trinidad, to Rev. Mr. Post, of La Veta, and to Mrs. Higgins, president of the W. C. T. U., for their special and instructive lectures before the Institute.

Resolved. That we tender our thanks to our instructors, Miss Wilson, Miss Reese, Miss Freeman, Miss Quisenberry, Mrs. Taylor, Professor Beardsley, Dr. Baird, Mr. Shiels and Mr. Bayles for the excellence of their work in their special branches.

District No. 10.

The teachers of the Tenth district held their institute in the high school room of the Alamosa public school building, commencing July 27 and ending August 7.

Fifty-one members were enrolled, forty-nine of whom are in active work in the school room.

Superintendent Norland, of Conejos county, had done everything in his power to make all attending comfortable.

Professor E. C. Stevens, city superintendent of Trinidad, was employed as conductor and took charge of the work in a manner that won the attention and admiration of all present.

He was assisted by Jesse Stephenson, county superintendent of Rio Grande county, and Miss Sarah McNaughton, primary instructor of the Alamosa school.

Reverend Marsh, of Monte Vista, on Thursday evening, July 30, gave a very entertaining and instructive lecture on the subject "The Personal Element in the Teacher."

Professor Stevens' daily lectures on pedagogical and psychological subjects were pertinent and convinced all present that he knew what he was saying. He delivered a very able lecture Tuesday evening, August 4, subject: "The Rights of Children."

Superintendent Stephenson's review of the school law was very beneficial to all the teachers.

Miss McNaughton's presentation of primary methods proved to be just the thing for the young teachers present.

Professor Hays, of the State Normal, presented some very fine thoughts regarding the teachers' manner and practice in the school room, and also showed the necessity of special training on the part of the teachers.

Wednesday evening, August 5, Professor Hays delivered a short address to the teachers and citizens of Alamosa with regard to the object of the State Normal.

He was followed by State Superintendent Coy, who gave a very vivid description of the annual meeting of the Teachers' National Association at Toronto.

The Institute closed Friday, August 5, and all went home feeling their time and money were well spent.

THOMAS M. LYONS,
Secretary Executive Committee.

District No. 11.

The Teachers' Normal Institute for the Eleventh Normal Institute District of Colorado, convened at the public school building in Durango, on August 10, and continued in session two weeks, with the following corps of instructors: J. R. Durnell, conductor, A. J. Floyd, Miss Lewie A. Strong and C. A. Pike, instructors.

An interesting programme had been prepared, including instruction in pedagogy, civil government, school law, history, arithmetic, grammar, geography, orthography, reading, physiology, botany, philosophy and primary work.

Thirty-seven teachers were in attendance from three counties of the district. When it is understood that there are less than forty organized school districts in the Normal district, it will be seen that the attendance was altogether satisfactory.

A large majority of the teachers were from La Plata county.

On the first and second days of the meeting the presence of Professor J. A. Hays, of the State Normal School, added great interest to the occasion. His instructive and entertaining talks were of great value to the Institute.

Tuesday evening, August 11, Professor Hays delivered a lecture on the subject of "Attention," which was highly praised by all who heard him.

On Friday evening of the same week, the teachers enjoyed a scholarly and thoughtful lecture from Superintendent T. O. Baker, of the Durango schools.

Much of the time of the sessions was taken up with lectures upon the subjects presented by the conductor and instructors.

Professors Durnell and Floyd and Miss Strong proved themselves able and successful workers in a marked degree, and the teachers were earnest and intelligent in recitation and discussion.

Much work was done upon the recitation plan and was of a thoughtful character not always to be seen at such meetings.

All agree that the session just closed was the most important and successful yet held in this district.

Much regret was expressed that State Superintendent Coy was prevented by other duties from attending some time during the session.

The last day's session was held at Trimble Springs, where the exercises of the day were thoroughly enjoyed by those present.

The school district officers have been very generous in giving assistance to teachers attending the Institute, nearly all complying with the recommendation of the Superintendent of Public Instruction relating to salary.

District No. 12.

District No. 12 held its session at Grand Junction, August 17-28, 1891.

After Institute was called to order by Superintendent Fisher, chairman executive committee, Professor J. A. Guttery, conductor, began a series of lessons on psychology in relation to school work. He first showed by diagram the departments of the brain and explained their functions and mode of action, then how to cultivate the mental powers and the laws of development in relation thereto. He dwelt at length upon sense perception and its value in education. This was followed by a discussion of the worth of a trained mind. The conductor also presented the subject of school methods, dwelling especially upon school room tactics and decorum.

Professor Harding presented the subjects of natural science, physics, botany, zoology and astronomy, giving many illustrations and experiments which made his work thoroughly enjoyable.

Mrs. Timberlake, in primary work and reading, gave the most modern methods in such a way as to impress upon all their value and her ability as a teacher and a "teacher of teachers."

Superintendent Fisher presented the most necessary points of school law in a practical way, confining his work to one subject at a time, well presented.

Superintendent Condit's work in arithmetic was an excellent presentation of the subject, and gave a clearer insight into the sometime puzzling subjects, percentage, metric system, bank discount, stocks, bonds and exchange.

Dr. Thrailkill gave an interesting talk on "Light and the Eye."

State Superintendent Nathan B. Coy, and Professor Hays, of the State Normal School, favored the Institute with instructive talks.

Lectures were given by Superintendent Coy, Chancellor McDowell and Superintendent Condit that were interesting and educative.

Much credit is due the people of Grand Junction for their interest in the Institute, and their efforts to make the teachers' visit a pleasant one.

There were present from Mesa county, 34; Delta county, 15; Montrose county, 7; Ouray county, 9; San Miguel, 1; Hinsdale, 1; Gunnison, 0. Average daily attendance, 53.

W. J. SAWYER.

District No. 13.

One of the most successful Normal institutes ever held in Colorado was that of district No. 13, which closed at Aspen on the 4th inst.

The corps of instructors included Professor Thomas J. Gray, conductor, and Miss Emma I. Holloway, Miss Lillian Pike, Superintendents Dilts, Stimson, Champion and Eddingfield as assistants.

Ninety-one teachers were enrolled and a large percentage of that number were in constant attendance.

Evening lectures were delivered at the Opera House during the session by the Hon. J. W. Dean, Professor James H. Hays, of the Normal School, State Superintendent Coy and others.

New fields of thought have been revealed, and a desire for investigation has been stimulated that will be productive of the best results.

To some it seemed that two weeks of Institute work immediately preceding the opening of school would leave the teachers in a tired-out condition, but the reverse seemed to be true. They are aroused to new life, and are eager for work. Recognizing this fact, a course of reading for the year was proposed, and a committee, consisting of Miss M. I. Holloway, Mrs. Leake, Miss Pike, Mrs. E. V. Fritz and Mr. Robinson, was appointed to arrange for the work. This is undeniably a sign not only of life but of vigorous growth. If but this one result can be secured the Institute instructors will not feel that time and energy had been spent in vain.

Another very important work of the Institute was the appointment of a committee for the purpose of encouraging and overseeing the preparation of work for the Columbian Exposition, and also for the next Normal Institute.

The following are the names of members of the committee, and the respective counties they represent: W. T. Eddingfield, Pitkin; Professor W. S. Webster, Garfield; Miss B. Anderson, Chaffee; A. H. Robinson, Rio Blanco; T. W. Duffy, Park; James Dilts, Eagle; Miss A. Holdredge, Lake; Mr. Q. B. Kelley, Routt; Dr. B. A. Arbogast, Summit; Mr. Pettingal, Grand.

W. T. Eddingfield was elected president; A. H. Robinson, vice president, and Miss A. Holdredge, secretary.

The Thirteenth Institute district of Colorado proposes to stand shoulder to shoulder with any and all other districts in the Union, and it is believed her teachers and pupils are able to do this.

Mr. Kelley moved a vote of appreciation and thanks to the instructors who have made this Institute such a grand success; also, a vote of thanks to the citizens of Aspen, including the lecturers, and especially Rev. S. H. Beavis, for their kindly interest and helpful encouragement.

If the choice of place for the next annual meeting was left to a vote of the teachers who have spent two weeks here, there is no doubt it would be unanimous for Aspen.

CIRCULAR.

STATE OF COLORADO, }
DEPARTMENT OF PUBLIC INSTRUCTION, }

To County Superintendents:

I take pleasure in herewith extending to the county superintendents and their teacher associates congratulations upon the very successful Institute season of 1891. To their united efforts mainly is due the extraordinary success of that work. I shall be greatly deceived if the fruit of their efforts is not manifested in a marked improvement of school room achievement during the year. Testimony to the value of the Institute's instruction in the stimulus and suggestions imparted has come to me from many sources.

Meanwhile, increased interest and efficiency ought to attach to the County Teachers' Association. If nothing more should be accomplished in those gatherings than a review of some of the work of the Normal Institutes, that work would thereby be materially deepened and strengthened. I trust that a strenuous effort will be made to hold at least one meeting during the present school year in each county of the State. One meeting at each of the several different places would benefit a much larger number of teachers.

It is with a view of ascertaining the condition of the county work that I have prepared a set of questions to be submitted to the county superintendents of the State. I beg that the answers be as full and explicit as possible, and be forwarded to the State Superintendent at the earliest possible date.

Any assistance in organizing and carrying out the work of the county associations that can be rendered from this office will be gladly given. When possible, the State Superintendent will take pleasure in attending the meeting.

President Snyder, of the State Normal School, and his associates, have kindly consented to lend a helping hand to this work. Friday and Saturday nights would be most convenient for them, interfering least with their regular duties.

Teachers' Circulating Libraries and Reading Circles are made subjects of especial inquiry in the accompanying circular.

The present time seems ripe for advancement in the work of county Associations. May it not be confidently expected?

Cordially,

NATHAN B. COY,
State Superintendent.

Denver, October 14, 1891.

Colorado State Normal Institutes.

1892.

OFFICERS.Directors, *ex-officio*:

Nathan B. Coy, State Superintendent of Public Instruction.

Z. X. Snyder, Ph. D., President State Normal School.

EXECUTIVE COMMITTEES AND CONDUCTORS.

District No. 1—

President, Superintendent D. C. Fleming, Logan county.

Secretary, Superintendent E. H. Stevens, Phillips county.

Treasurer, Superintendent S. A. Wallace, Morgan county.

Conductor, Superintendent P. M. Condit, Colorado City.

District No. 2—

President, Superintendent W. V. Casey, Boulder county.

Secretary, Superintendent S. T. Hamilton, Larimer county.

Treasurer, Superintendent W. C. Thomas, Weld county.

Conductor, Professor Ira M. De Long, Boulder.

District No. 3—

President, secretary, treasurer, Superintendent A. D. Shepard, Arapahoe county.

Conductor, Principal W. E. Knapp, Denver, district No. 2.

District No. 4—

President, Superintendent Dr. E. F. Lake, Gilpin county.

Secretary, Superintendent Dr. W. R. Collins, Clear Creek county.

Treasurer, Superintendent J. S. Eagleton, Jefferson county.

Conductor, Superintendent J. Allen Smith, Central City.

District No. 5—

President, Superintendent P. H. Hammond, Douglas county.

Secretary, Superintendent J. P. Jackson, El Paso county.

Treasurer, Superintendent C. F. Lindsley, Elbert county.

Conductor, Superintendent T. H. Kirk, deputy State Superintendent Public Instruction, Minnesota.

District No. 6—

President, Superintendent J. W. Augustine, Kit Carson county.

Secretary, Superintendent S. C. Perry, Cheyenne county.

Treasurer, Superintendent H. A. Lowell, Lincoln county.

Conductor, Principal J. S. Young, Cheyenne Wells.

District No. 7—

President, Superintendent Charles W. Bowman, Pueblo county.

Secretary, Superintendent Jacob H. Freeman, Fremont county.

Treasurer, Superintendent W. E. Bruce, Custer county.

Conductor, Professor Ira M. DeLong, Boulder.

District No. 8—

President, Superintendent C. W. Fenlason, Otero county.

Secretary, Superintendent A. E. Crawford, Prowers county.

Treasurer, Superintendent H. A. Long, Kiowa county.

Conductor, Principal W. M. Kollock, La Junta.

District No. 9—

President, Superintendent J. W. Douthit, Las Animas county.
 Secretary, Superintendent Nelson Rhoades Jr., Huerfano county.
 Treasurer, Principal G. E. Finch, Trinidad.
 Conductor, Superintendent P. M. Condit, Colorado City.

District No 10—

President, Superintendent Richard S. Asay, Jr., Saguache county.
 Secretary, Superintendent F. W. Robinson, Conejos county.
 Treasurer, Superintendent Jesse Stephenson, Rio Grande county.
 Conductor, Professor James H. Hays, Greeley.

District No. 11—

President, Superintendent C. W. Price, Archuleta county.
 Secretary, Superintendent C. A. Pike, La Plata county.
 Treasurer, Superintendent D. M. Longenbaugh, Montezuma county.
 Conductor, Superintendent A. B. Copeland, Greeley.

District No. 12—

President, Superintendent E. T. Fisher, Mesa county.
 Secretary, Superintendent J. C. Logan, Hinsdale county.
 Treasurer, Superintendent F. W. Robison, Delta county.
 Conductor, Principal G. L. Harding, Longmont.

District No. 13—

President, Superintendent James Dilts, Eagle county.
 Secretary, Superintendent James Condit, Chaffee county.
 Treasurer, Superintendent Edward C. Stimson, Pitkin county.
 Conductor, Professor L. W. Parish, Iowa State Normal School.

CIRCULAR

STATE OF COLORADO,
DEPARTMENT OF PUBLIC INSTRUCTION. }

To County Superintendents:

The committee appointed by the State Association of County Superintendents at their meeting in December last, to consider a uniform course of study for Normal Institutes, met in Denver March 19, and after a thorough discussion of the question, submitted the following as their views:

First—It is the sentiment of the committee that the work of the District Normal Institutes should be largely professional, embracing methods of teaching and science, philosophy and history of education; and that in no case should the Institutes be used as a preparation for examination to get a certificate.

Second—The committee recommends that Institutes, where it is practicable, be divided into grades to correspond to the kinds of work the teachers do, as primary and grammar, and that instruction be given to suit the particular grades.

Third—It is recommended that each district mark out such a course of work as is best suited to the existing conditions in the district.

Fourth—It is recommended that a two weeks' course is long enough.

NATHAN B. COY,
Z. X. SNYDER,
J. S. EAGLETON,
J. P. JACKSON,
W. C. THOMAS.

Using this report as a basis, the State Superintendent will have ready in a few days a circular to county superintendents, setting forth the ends to be sought and the means to be employed in the preparation and management of the Institutes. Meanwhile, districts that have not yet organized are requested to do so at an early date, and report to this office.

NATHAN B. COY,
State Superintendent.

Denver, April 1, 1892.

CIRCULAR.

STATE OF COLORADO,
DEPARTMENT OF PUBLIC INSTRUCTION. }

To the Executive Committees :

The various Normal Institute Districts have inaugurated preliminary arrangements for the summer meetings to the extent of choosing Executive Committees. Now let programmes be presented that will win favor both at the start and at the finish. Reality should more than bear out anticipation. The names and the topics on the programmes will have much to do with inviting attendance. The character of the feast will be thus indicated in advance. Live subjects treated by live instructors will insure a lively attendance. The best talent available should be secured in every instance. There is an ample supply of good institute ability in the State. In some districts it may be local, in others it cannot be. Conductors and instructors should be selected from a higher motive than a desire to get or to give profitable summer employment.

It is lamentably true that limited finances will prevent some of the committees from procuring such assistance as they would otherwise wish ; but the assistance should be the best that the limited resources can command. The State Superintendent has a list at his office which includes some names of excellent talent, both home and foreign.

The uppermost thought in all the preparation should be the needs of the average district school. Conditions vary in different localities. This should not be lost sight of. County superintendents must be relied on largely for specific information on this point. A generous spirit should rule in locating the meeting. General, not sectional, interest should determine the question.

The grand purpose of the Institute is to improve the quality of teaching by practical, illustrative methods applied to that which is of most importance in each branch of study. Theory and practice and school management should come in for a large share of attention.

The programmes should offer something new each year. Only thus can the best teachers be induced to attend, and their stimulating presence, so essential to the best results, be counted on.

No time should be lost in the preparation of the programmes. If possible, they should be ready in time to distribute among the teachers before they disperse for the summer.

It is probable that the higher institutions, both public and private, will contribute generously to the lecture bureau.

Not stagnation nor retrogression, but progression should be the watchword.

NATHAN B. COV,
State Superintendent.

Denver, May 1, 1892.

CIRCULAR.

STATE OF COLORADO,
DEPARTMENT OF PUBLIC INSTRUCTION. }

To County Superintendents :

All county superintendents should actively interest themselves in the approaching State Normal Institutes. Teachers are less likely to feel an interest if county superintendents manifest indifference. Each superintendent should head a delegation of his own teachers to the Institute of the district to which his county belongs. The labor and responsibility for the success of the Institutes should not rest wholly on the executive committees.

The Institutes are seriously crippled financially. More help should be received from the State. Larger appropriations should be made for their support and encouragement. Teachers should be enabled to attend them without expense to themselves. But all this will be difficult of attainment, unless it can be shown that the Institutes are well patronized and encouraged by the teachers.

The comfort and convenience of the teachers should be regarded to the fullest possible degree. Responsibility for this must necessarily rest with the county superintendents, and those who constitute the executive and local committees.

Teachers should understand that, if they would secure the benefit of special railroad rates, they must take a receipt for purchase of ticket from agent at the starting point. If there be no agent at starting point, ticket and receipt therefor should be obtained at the first office reached after the train has been boarded. Failure to observe this has frequently caused forfeiture of special rate privileges.

Pains should be taken to get the best available boarding accommodations for teachers.

A suitable assembly room should also be secured. Good circulation of air, good light, comfortable seats and desks, and necessary materials for class work and blackboard illustrations contribute much to satisfactory results at an Institute.

To the Teachers of the State:

The Normal Institutes are now an essential feature of the educational system of the State. They are designed to be a sort of short school of guidance and inspiration to teachers. That those already held in Colorado have proved valuable to many a help-seeking teacher may be shown by abundant testimony. There is good reason for believing that those of the present season will be of even greater value and assistance than those in the past have been. The attendance has materially increased each year. No exception to the good precedent established should occur during the present season.

It is hoped that this appeal will meet with a hearty response.

Cordially,

NATHAN B. COY,
State Superintendent.

Denver, July 7, 1892.

THE DISTRICT INSTITUTES.

District No. 1.

The Normal Institute of District No. 1 met in the Franklin school building at Sterling, August 1.

The Institute was called to order by the president, Superintendent Timberlake, of Phillips county.

Superintendent Fleming welcomed the teachers to Sterling and invited them to meet at the town hall, where a reception would be given them by the citizens of Sterling.

The conductor, Professor P. M. Condit, was introduced, and spent little time in preliminaries but proceeded at once to outline the work. On psychology he disabused the minds of the teachers of the dread of the subject, showing them it was a subject of vital importance, as it dealt directly with the child-mind.

To many of the teachers, psychology was a new and unexplored field, but with Professor Condit as leader in the work, they found it both interesting and attractive. The first week was given to the elements of psychology and the second to applied psychology.

Model work in language and model work in primary arithmetic were given throughout the session by Professor Condit, in which he impressed on the minds of the teachers the importance of primary principles. One hour each day was spent in practical teaching, after which Professor Condit gave practical talks on methods. A very interesting half-hour was spent each day of the second week with the question box.

Professor A. E. Beardsley conducted the class work in science. The first week was occupied with mineralogy and geology and model work in botany. The second week he gave lessons in zoology and practical work in field botany. Each lesson was supplemented with object lessons on the particular subject before the class. Specimens of minerals, plants, etc., were brought in and placed in the hands of each member of the class. The microscope was used very extensively in studying the lower forms of plant and animal life.

Lessons in primary work, both interesting and instructive, were given by Miss Emma Miller. Much interest was manifested in the hour each day devoted to physical culture, which was also conducted by Miss Miller.

Superintendent E. H. Stevens expounded school law during the first week and presented technical and commercial grammar in a very satisfactory manner during the second.

Very instructive lessons in history and civics were given by Superintendent Timberlake.

The entire corps of instructors gave satisfaction, and much credit is due them for the energetic manner in which they managed their classes and the work they accomplished.

One of the greatest aids and encouragements to the success of the Institute was the interest shown and help given by State Superintendent Coy and representatives of our State institutions. Superintendent Coy, in his work in the Institute, showed the teachers that they were here for a specific purpose, not to gain information on subject matter or text book knowledge, but how they best could use this information skillfully. In the evening he delivered a lecture on the common district county school.

Doctor Ellis, of the State Agricultural College, illustrated mensuration by means of geometrical blocks and figures. At the close of his work the class gave him a vote of their appreciation for his visit and his work with them. In the evening he delivered a lecture on "Reading in the Home" to a large and attentive audience.

At the beginning of the second week, Dr. Snyder of the State Normal, and Professor DeLong, of the University, were with us and ready for work. Professor DeLong gave practical talks on didactics, in which he analyzed the motives and showed what went to make up a good teacher.

Dr. Snyder talked on pedagogics from a psychological point of view.

Professor DeLong gave a lecture on the "Scroll of the Skies."

Dr. Snyder lectured on the subject, "She is a Queen."

The announcement that special pains would be taken to make the social intercourse of teachers, during rest, one of the principal features of the Institute was well carried out. On the first evening the citizens of Sterling gave the teachers a reception.

Mayor Palmer welcomed them to Sterling.

Judge Armor delivered an address which abounded in wit and practical thought for the teacher.

Toasts were responded to by Superintendent Timberlake and others.

During the session, Superintendent Fleming also gave the teachers a reception which was enjoyed by all.

Mr. Sherman, of Sterling, offered a ten dollar dress pattern to the lady who would give the best recitation. Five ladies entered into the contest and, after a very close contest, Mrs. Munson was awarded the prize.

The Institute closed with a spelling match, prizes being offered by the citizens of Sterling. On oral spelling, after a close contest, the first prize, "Hume's History of England," was awarded to Mr. Pereau; the second, Thackery's complete works, to Mr. Crissman. On the written spelling the decision was not so easily rendered—four having spelled ninety-six words correctly out of one hundred. Several unsuccessful attempts were made to break the tie. The first prize, "International Dictionary," was awarded to Mr. Charles Green; the second to Miss Dyer.

At the close of the Institute the following resolutions were adopted:

Believing that the session of our Institute, now drawing to a close, has been one of pleasure and profit to us, inasmuch as the instruction received will enable us to more successfully perform our duty in that important work which devolves upon us as teachers. Therefore be it

Resolved, That we return thanks to Professor Condit for the able manner in which he has conducted the Institute; to Professor Beardsley and other instructors for the way in which they have presented their subjects; to Superintendent Coy, Dr. Ellis, Prof. DeLong and Dr. Snyder for their lectures; to Superintendent Fleming for providing for the comfort of the teachers of the Institute; to the people of Sterling for their hospitality, and to the school board and county commissioners for the use of the school building. Be it

Further Resolved, That a copy of these resolutions be spread on the records of this Institute. Also that a copy be sent to the *Colorado School Journal* and to each of the several county papers included within the district.

District No. 2—

District No. 2 held a very successful and profitable Institute at Boulder.

Professor Ira H. DeLong, conductor, with Professor Hays of the State Normal School; Miss A. D. Wheeler, of Fort Collins, Mr. White-man, of Greeley, and Superintendents Thomas and Hamilton, as assistants.

An excellent two weeks' course of instruction had been laid out and submitted to each teacher before the Institute began, thus giving them opportunity to prepare on the matter under discussion.

At the opening of the Institute each teacher was provided with a note-book, and the conductor gave some suggestions as to the best method of keeping it so that helpful notes could be carried to the school room.

Professor DeLong is a model leader and an ideal Institute conductor. The magnetism of his presence before the teachers, the direct, lucid explanations, the earnest manner, the harmonious working of the Institute had made every teacher his friend.

The work of his able corps of assistants was fully up to the standard, and a unanimous vote of the teachers expressed appreciation of the earnest endeavor to make the work of real help to them.

The work was divided so that the teachers could take just such instruction as they most needed.

Many distinguished visitors were present, impressing upon the teachers the importance of their work and giving some very interesting statistics relative to school matters.

The lectures by President Ellis, of the Agricultural College, and President Baker, of the University, were well attended and thoroughly appreciated.

The reading circle was discussed by the conductor, and by Superintendent Naber of Columbia City, Indiana, and the plan explained. Membership cards were distributed, and seventy teachers enrolled.

President Ellis spent an hour one day on the subject of mensuration, illustrating by means of cardboard, how each of the figures should be made. He advised the teachers to present the object to the pupil and develop the rule for working. Few who heard him can forget how wonderfully simple and plain the subject became as he illustrated by means of paper figures he had made himself.

Professor Baker also gave quite an interesting talk on psychology.

On Friday night a debate was held. The subject, "Are the Results of the Public School System Commensurate with the Outlay?," was well handled by two teachers from each county, one pro and one contra.

The enrollment reached 131, and at the close appropriate resolutions were passed, thanking all who had contributed toward the success of the Institute.

W. V. CASEY,
Secretary District No. 2.

District No. 3.

The Third District Normal Institute, composed of Arapahoe county, held its annual session at Denver in the East Denver high school building, August 15 to August 26.

Conductor, W. E. Knapp.

Instructors, L. P. Norvell, Miss Rose Malone, W. J. Whiteman, Aaron Gove, L. C. Greenlee, J. H. Van Sickle, John C. Dana, James H. Baker, Z. X. Snyder, Alston Ellis, E. H. Cook, of New York, John W. Cook, of Illinois, and County Superintendent A. D. Shepard.

Evening lectures were delivered by James H. Baker, E. H. Cook and Rev. Robert McIntyre.

There were 243 registered members, all of whom paid the registration fee of \$1. Of the above number 186 were persons who have had some experience as teachers and 57 who had no experience in teaching.

There were 27 males, 216 females.

Average daily attendance, 202—18 males, 184 females. In addition to this, there was an average daily attendance of fifty visitors.

The Institute was a decided success in every particular.

At the close of the session a vote of thanks was tendered to the conductor and instructors and also to the board of education of school district No. 1 for the use of building.

A. D. SHEPARD,
Secretary Executive Committee.

District No. 4.

The Fourth Normal Institute district comprises the counties of Jefferson, Clear Creek and Gilpin. Clear Creek and Gilpin lying mostly in the mountains have but few schools outside of the cities, while Jefferson, largely comprising an agricultural section, is more densely populated and employs more teachers than the other two together.

The Institute for 1892 began on August 8, and closed August 19, after an interesting session of two weeks.

The instructors were as follows: J. Allen Smith, superintendent of the Central City public schools, conductor and instructor in arithmetic, advanced reading and United States history.

W. Triplett, superintendent Golden public schools, instructor in grammar, geography, orthography, theory and practice of teaching.

Mrs. Ellen Wallace Collins, of Georgetown, instructor in primary reading, number work and language lessons.

Miss Lydia Hooper, of Idaho Springs, instructor in kindergarten methods as applied in the common schools.

J. S. Eagleton, county superintendent of Jefferson county, instructor in school law.

Dr. E. F. Lake, county superintendent of Gilpin county, instructor in physiology.

Realizing the general deficiency in preparation of teachers in arithmetic and grammar, daily lessons were assigned and prepared in these branches and regular class work done.

The Institute held but one session a day, beginning at 8 o'clock a. m. and closing at 12:30, an arrangement that met with universal approval of the members and praise of the visitors.

Eighty-three members were enrolled, an excess of eight over last year, or an increase of more than ten per cent.

President Baker, of the State University, gave a most entertaining and profitable lecture on "Higher Education."

President Ellis, of the Agricultural College, used the most of one session on his very practical and systematic presentation of mensuration.

President Snyder, of the Normal School, completely won the Institute with his lecture.

Professor L. W. Parish, of Iowa State Normal School, gave a talk one day on didactics.

State Superintendent Coy was present a short time one day, but did not take part.

It was decided to hold the next session of the Institute at Georgetown, Clear Creek County. Good interest characterized the Institute throughout.

District No. 5.

The State Normal Institute of District No. 5 was held at Colorado Springs, in Colorado College, August 15 to 26, inclusive.

The interest was good and the Institute one of the most successful ever held in the district.

Those attending speak of it in the highest terms, many of those from eastern states saying that it was the best Institute they had ever attended.

The plan was new to many, who had been used to the academic instructing method.

The object was not to review, as teachers can do that at home, but to arouse thought and broaden the mind.

T. H. Kirk, assistant State Superintendent of Minnesota, has been conductor of Institutes in Minnesota for many years, and in his work here proved his ability to make an Institute lively and wide-awake, as well as profitable. His work in geography and history was especially helpful.

Psychology, usually considered dry and hard, was made very interesting. Conductor Kirk showed plainly that the teacher should have some knowledge of the human mind, some idea of its development through the successive stages of school life and how the several school studies affect the mind, before he can do intelligent work.

The presentation of "Snow-bound" by Mr. Kirk was one of the best features of the Institute. The teaching of literature is one of the important advances of the day, and the teachers were glad to have this opportunity of fitting themselves for the work.

Dr. Snyder, president of the State Normal, gave a pleasant talk on psychology. All who are familiar with Dr. Snyder's genial manner know what a welcome visitor he is at Institutes.

President Alston Ellis, of the Colorado Agricultural College, was present two days, and gave valuable and practical instruction on the subject of mensuration. As President Ellis has been a teacher for over twenty years, he understands thoroughly what is practical and wastes no time in giving mere theories. His lecture in the evening on "Literature" was very pleasing because of its originality.

As music is a prominent feature in Colorado schools, special attention was paid to it at the Institute. Mrs. B. B. Watts, supervisor of music at Colorado City, conducted the work. Though little can be

accomplished in music in two weeks, the class derived a great deal of benefit from the drill. The work was so thoroughly explained that many teachers will be able to take it up alone and introduce it into their schools.

Many teachers did not realize what a bright and interesting subject reading could be made, until they heard it presented by Miss Carolyn E. Byers, of Highland Park Normal School, Des Moines, Iowa. She also taught the class in physical culture. Miss Byers has the rare faculty of inspiring and enthusing those under her instruction.

If Mrs. Watts and Miss Byers can judge by the number of visitors they had, they may rest assured that their class work was very entertaining.

The teachers had an unexpected treat in the way of a lecture by Mrs. Col. Parker, of Cook County Normal School. The lady happened to be in the city for a few days and kindly consented to talk to the teachers.

Mrs. Parker modestly remarked that as the wife of her husband she was glad to be there.

After hearing her speech Mr. Kirk decided that Col. Parker might be glad to be there as the husband of his talented wife.

Two of the most prominent educators of the State—State Superintendent Coy, and President James H. Baker of the State University—visited the Institute. Unfortunately their time was so limited that they could give only brief talks.

Superintendent Coy spoke of general reading for the teacher.

President Baker spoke concerning the relation of the State University to the public school system.

Principal L. B. Grafton, of Colorado Springs, assisted greatly by giving instruction in arithmetic during the second week. Mr. Grafton is one of our best Institute workers and is well known to the teachers.

In arranging the programme, the committee was careful not to neglect the social part. One great object of these Institutes is to make the teachers better acquainted, and bring them into closer sympathy in their work.

An excursion was made to the Broadmoor Casino to hear the famous Hungarian band.

A small party, composed mostly of teachers recently from the east, climbed Pike's Peak.

The session closed with a social in Palmer Hall.

An interesting musical programme was arranged by Mrs. Watts, who was assisted by Professor Prior and other local musicians of prominence. Mrs. Watts sang some beautiful solos in her exquisite manner, with which the audience was much delighted.

It was much regretted that Superintendent Jackson, owing to injuries received in a railroad accident, was unable to give his intended talks on school management, including course of study, grading and classifying, which would have been of much practical value, especially to the teachers of the country schools. His presence was much missed.

Superintendent Hammond, of Douglas county, and Superintendent Lindsley, of Elbert, were present and gave valuable assistance in the executive management of the Institute, the latter remaining the full two weeks.

The pleasure of meeting so many prominent educators was in itself sufficient pay for the two weeks attendance. The teachers were undoubtedly benefited and strengthened for their work.

Much better work may be expected in our schools during the coming year as the result of the Institute just held.

District No. 6.

Institute was held at Burlington, Colo., July 11 to 22 inclusive.

J. S. Young, conductor and instructor.

Professor R. W. Guss, instructor.

Number of teachers enrolled, thirty-seven.

Also present the superintendents of Kit Carson, Lincoln and Cheyenne counties.

Meetings were held in the school house and lectures were given in the church by the following gentlemen:

State Superintendent Nathan B. Coy; subject, "Educational Work of Our State."

President Ellis, of State Agricultural School; subject, "Reading in the Home Circle."

Professor R. W. Guss, of Greeley Normal School; subject, "The Story of Our Continent; or Geology as an Aid in teaching Geography."

Principal J. S. Young, of Cheyenne Wells; subject, "Education of the Human Will."

The lectures were instructive and entertaining, and were largely attended by citizens as well as members of the Institute.

The attendance at the Institute was excellent, considering the small number of teachers in this district. The average daily attendance was also good.

The teachers deserve much praise for their efforts during the intensely hot weather that prevailed through the entire session. Many of them came long distances, some closing their school in order to attend.

Instruction was given in the following branches: Geography, orthography and reading, grammar, botany, physiology, by Professor R. W. Guss; arithmetic, United States history, bookkeeping, theory and practice, by J. S. Young.

President Ellis, during his two days' visit, also rendered valuable assistance by presenting the subject of "Mensuration," and illustrating by numerous models and devices; also by his talks on "Literature," with list of books for teachers to read.

The efforts and methods of conductor and instructors were entirely satisfactory, and all voted the Institute a success.

H. A. LOWELL,
Secretary.

District No. 7.

The Seventh District State Normal Institute was held at Pueblo, Colo., July 18-29, inclusive, with the following able corps of instructors:

Ira M. De Long, professor mathematics Colorado State University, conductor and instructor in mathematics and school management.

Daniel Ward, principal Hinsdale school, Pueblo, instructor in geography, history and grammar.

David K. Bond, late superintendent schools, Blair, Neb., instructor in common school science.

Miss Nellie A. Hall, Canon City, Colo., instructor in primary work.

The attendance this year was large, the total enrollment reaching 115.

In addition to the regular course of instruction, the Institute was favored with a lecture by Rev. John C. Hay, of First Christian Church, Pueblo, on "The World's Greatest Teacher."

Also an illustrated lecture by Professor J. Raymond Brackett, of the State University, on "The Opening of a Lotus Bud," both of which were highly appreciated.

The Institute in regular session was addressed by President Z. X. Snyder, of the State Normal School, State Superintendent Nathan B. Coy, President Ellis, of the State Agricultural College, and Professor John P. Owen, of the Agricultural College of New Mexico.

Before the close resolutions were passed commending the Executive Committee for the excellent course of instruction which had been presented, and also thanking the instructors for their faithful work.

The teachers were especially grateful to county superintendent Bowman, of Pueblo, Colorado, and to the citizens of Pueblo for their open hearted hospitality in furnishing many pleasant and instructive tours about the city.

JACOB H. FREEMAN,
Superintendent Fremont County,
Secretary Executive Committee.

District No. 8.

The Institute of the Eighth District was held at La Junta, beginning August 8, and continued two weeks.

This Institute district includes the counties of Otero, Bent, Prowers, Kiowa and Baca, the latter furnishing but two representatives as the superintendent of that county organized an Institute of his own.

The Executive Committee, composed of Superintendents C. W. Fenlason, of Otero, A. E. Crawford, of Prowers, and H. A. Long, of Kiowa, was careful in its arrangements, and everything needful was done to insure success in the work.

W. M. Kollock, of La Junta, was the conductor. He was supported by J. M. Daniel and Mrs. White, of La Junta, and G. W. Combs, of Chivington.

Dr. Ellis, of the State Agricultural College, visited the Institute during the first week and his stay here was greatly enjoyed by the teachers. He gave them some valuable talks on books, and with his fine set of apparatus to illustrate object teaching in mensuration, imparted to them some valuable methods. On Friday evening he delivered a lecture on "Literature." Saturday was spent by most of the teachers in a neighboring wood, where they enjoyed a day of quiet rest.

On Monday of the second week President Baker, of the State University, visited the Institute. During the forenoon he talked to the teachers in reference to the University, and during the afternoon gave the class a fine drill on instruction in geography, history and grammar.

David K. Bond, late superintendent of schools, Blair, Nebraska, instructor in common school science.

Miss Nellie A. Hall, Canon City, Colorado, instructor in primary work.

The attendance this year was large, the total enrollment reaching 115.

In addition to the regular course of instruction, the Institute was favored with a lecture by Rev. John C. Hay, of the First Christian church, Pueblo, on "The World's Greatest Teacher," and also an illustrated lecture by Professor J. Raymond Brackett, of the State University, on the "Opening of a Lotus Bud," both of which were highly appreciated.

The Institute in regular session was addressed by President Z. X. Snyder, of the State Normal Institute, State Superintendent Nathan B. Coy, President Ellis, of the State Agricultural College, and Professor John P. Owen, of the Agricultural College of New Mexico.

District No. 9.

The Normal Institute of District No. 9, consisting of Las Animas and Huerfano counties, convened at Trinidad, Colorado, at the Rice High School building, Monday morning, August 15.

The session was opened with prayer by Rev. Casey of the M. E. church, followed by a few appropriate introductory remarks by Superintendent Nelson Rhoades, Jr., after which the Institute was turned over to P. M. Condit, on the part of the executive committee, which consisted of John W. Douthit, president, Superintendent Nelson Rhoades, Jr., secretary, and Professor Grant E. Finch, treasurer.

During the first week five periods of time were occupied by the reading by Professor Shiels, of a paper on the subject of "Methods of Teaching in Spanish Schools," which called forth remarks of interest from all interested in that important department.

The subject was supplemented by Professor H. B. Wise, of Huerfano county.

The discussions on the above subject called forth an interesting paper from Casimiro Cruz, a Mexican teacher of Huerfano county.

Under the competent presentation by Professor Condit, "Model Work in the Fundamental Principles of Arithmetic," received a thorough dissection, much to the gratification of all present.

Miss Fannie Johnston, of Rouse, presented excellent work on "Primary Teaching," taking as her object the subject of "Kindergarten Work."

The feature of "Practical Teaching" was an important one.

One of the most interesting periods of the week was presented by Miss Fannie Brown of Trinidad, in "Primary Reading."

Interesting methods and facts relating to the "Study of History" were presented by Professors Finch and Brodie.

"Civics," as rendered by Professor G. E. Finch, of the Trinidad High School, was quite interesting.

"Composition" was given by Professor Brodie of Walsenburg, and modified by Professor J. J. Matthews, also of Walsenburg.

The works delivered by Professor Beardsley on "Elements of Science," "Model Work on Botany," "Applied Sciences," and "Field Botany," were highly interesting and beneficial, and well appreciated by all.

One of the most popular, beneficial, new and well presented features of the Institute was that of "Physical Culture," given by Miss R. Quisenberry, of Trinidad.

On Monday, the first day's session, we were gratified at two different hours of the day by interesting talks from Dr. Ellis, of the State Agricultural College.

On the evening of the same day the doctor delivered a lecture on "Literature," which was well attended and highly appreciated.

Dr. Baker, president of the State University, was with us Wednesday, and in the evening delivered a lecture at the Christian church.

On Friday we were agreeably favored for a short time with the presence of State Superintendent Coy, who addressed the Institute on the subject of "Columbus Day."

Teachers were much enthused on Tuesday and Wednesday of the second week by the presence and work of Dr. Snyder, president of the State Normal School. Dr. Snyder had with him, and exhibited to the Institute, many specimens of work prepared for the Columbian Exposition. His talks were filled with brilliant thoughts of general interest to the teachers.

The Institute closed on Thursday with an entertainment which brought to our Institute fund an acceptable addition. With a total enrollment of seventy-three thus closed one of the most interesting and beneficial Institute sessions ever held in this State.

Not only were our State institutions well represented, but also many of a private nature, among which we mention the Denver University, represented by Chancellor McDowell, who delivered an interesting lecture to an admiring audience on Wednesday evening of the second week; and Tillotson Academy, of Trinidad, represented by Mr. Gordon, who lectured before the Institute on Monday evening of the same week.

Great energy and interest characterized the efforts of Professor Condit. His plans were well laid and the work well executed. The teachers went away feeling that they had been well guided by him through two weeks of superior educational advantages.

District No. 10.

The second annual Institute of the Tenth district of Colorado was held at the beautiful little city of Monte Vista.

The Institute opened August 1 and closed August 13.

The tenth district comprises the counties of Saguache, Costilla, Rio Grande and Conejos.

The Institute was conducted by Professor James H. Hays, vice-president of the Colorado State Normal School.

He was ably seconded in the work of the Institute by Mr. Grant Karr, principal of the Monte Vista public schools, Superintendent Jesse Stephenson, of Rio Grande county, and Superintendent F. W. Robinson, of Costilla county.

Mrs. Omie Stephenson, an excellent primary teacher of the Monte Vista schools, rendered admirable service in primary work, illustrating her methods with a class of first year pupils.

County Superintendent O. C. Skiuner, of Douglas county, was an enthusiastic attendant at all exercises, and added much to the interest of the Institute.

The work in arithmetic, history, school management, grammar and methods was presented by Professor Hays.

Elementary science and orthography were presented by Principal Karr, a graduate of the Illinois Normal University of Normal, Illinois.

Civics and school law were taught by Superintendent Stephenson.

An interesting exercise in mensuration was given by Superintendent Robinson, who is a civil engineer by profession.

Principal Rud, of the Del Norte schools, gave two good talks on methods of teaching geography.

While the work of the Institute was calculated to strengthen scholarship, yet the primal object of all exercises was to furnish illustrations of improved methods in the several lines.

Professor Hays emphasized the simplification of arithmetic by showing the similarity, and frequently the identity, of many topics in arithmetic. This was especially true in teaching common fractions, decimal fractions and percentage, proving that all three are but one subject.

Mr. Karr neatly illustrated by apparatus of his own construction how most of the topics in physics can be presented to pupils at a limited expense.

His entire apparatus had been prepared by himself and was as successful as that that costs many dollars. Teachers were shown how to make all this apparatus.

The science of history was rendered a grateful service by the suggestion of combining with it biography, literature and the study of ideas and institutions irrespective of limitations of time or period.

The history of slavery in the United States and the acquisition of territory to the original thirteen states were thus studied.

The enrollment of the Institute was forty-one. Many of these teachers came distances which eastern teachers would hardly undertake.

It was the universal opinion of all that this meeting of the teachers of the great San Luis Valley was a very profitable one.

State Superintendent Coy and Dr. Snyder, of the State Normal School, were in at the closing hours of the Institute and both made interesting addresses.

On Thursday evening, August 4, at the Presbyterian church, Professor Hays delivered to an attentive audience his instructive lecture on "English as It Should be Spoken."

For the benefit of the teachers and others this lecture was printed in full in the *San Luis Valley Graphic*.

On Wednesday, August 10, Mr. Grant Karr gave an interesting lecture before the Institute on "The Benefits of Education."

This paper was highly appreciated by those who had the pleasure of hearing it.

At the close of the Institute Professor Hays received many congratulations and kind words from the teachers who were in attendance, as well as their sincere thanks for his efforts on their behalf.

District No. 11.

The Normal Institute in the Eleventh district, comprising Montezuma, Archuleta, Dolores, La Plata and San Juan counties, was held at Mancos, in Montezuma county, for two weeks, beginning August 8.

It was conducted by Superintendent A. B. Copeland, of Greeley, who conducted the first Institute in the State under the law which gives these gatherings a legal status in the school system.

Mrs. Helen P. Look, of Durango, and County Superintendent C. A. Pike, of La Plata county, were the regular assistants and instructors, and valuable assistance was also rendered at times during the session by Principal A. J. Floyd and Mrs. Lina M. Eaton, of Mancos.

Mr. Pike gave instruction in school law, Mrs. Look in the various departments of primary work and also in English grammar, while Mr. Copeland had the work of didactics, arithmetic, geography, reading and United States history.

The attendance was large, considering the number of schools in the county where the session was held, and the remoteness of the other counties of the district. Every teacher in Montezuma county was present but one, and it would be difficult to find a more interested body of educators than those convened at this Institute.

State Superintendent Coy was present one day, and called the attention of the Institute to the Columbian Exposition and also to the special observance of Columbus Day (October 21) in the public schools. In the evening he addressed a large audience on "Our Public Schools."

The conductor also gave two evening lectures, one on "Patriotism in the Public Schools," and the other on astronomy.

District No. 12.

The Normal Institute in district No. 12, comprising San Miguel, Ouray, Hinsdale, Mesa, Delta, Montrose and Gunnison counties, was held at Gunnison, beginning August 15 and lasting until the 26th.

It was conducted by Professor G. L. Harding, superintendent of the Longmont schools.

There was a total attendance of fifty-seven teachers.

County superintendents Charles Fueller, of Gunnison; E. T. Fisher, of Mesa, and F. W. Robison, of Delta, were present and assisted in the work.

Professor Harding conducted lessons in arithmetic, orthography, astronomy and psychology.

Principal W. H. Hoff in civics and history.

Mr. G. F. Hoff in botany.

Mrs. Harding in primary work.

On Wednesday of the first week President Ellis, of the State Agricultural College, gave an instructive talk on methods of teaching mensuration, and in the evening delivered a lecture on "Literature."

During the Institute, lectures were delivered by President Baker, of the University of Colorado; President Snyder, of the State Normal School and the Rev. H. Martyn Hart, of Denver.

Conductor Harding brought with him an excellent telescope which was of great service in the lessons on astronomy. On Wednesday evening of the second week he delivered a lecture on "Leon Gambetta," the great French leader. Altogether the work of the Institute was of a high order.

The following resolutions were passed previous to their adjournment:

We, the teachers in attendance upon the sessions of the Twelfth district Normal Institute, held in Gunnison, in order to show our appreciation of the kindness received and benefits derived, deem it due to give public expression. And therefore, be it

Resolved, That we thank the county superintendents of the Twelfth district for the provisions made for our improvement at the Institute, and congratulate them on the complete success of their plans, especial mention being due.

Resolved, That we tender our most hearty thanks to Professor Harding and his assistants for the able manner in which they have conducted the work of the Institute and the untiring interest manifested in all the objects of our convention.

Resolved, That we most heartily thank the people of Gunnison for the interest shown in our welfare and for courtesies so freely extended to us during our stay, and liberal contribution made to help defray expenses.

Resolved, That we thank the officers of the Methodist and Presbyterian churches and the board of directors of the public schools of Gunnison for the use of their respective buildings, and the management of the D. & R. G. R. R. for favors extended, and to the editors of the Gunnison papers for kindly notices.

Resolved, That we tender our thanks to President Ellis, of the State Agricultural College, to Superintendent Fisher, of Mesa county, and to Superintendent Robison, of Delta county, who deserves our sincere thanks for his care and thoughtfulness in the arrangements made for our comfort and convenience, and by his hearty welcome to the members of the Institute, making with us a lasting impression and a cause for gratitude to the teachers of district No. 12.

To President Baker, of the State University, and to President Snyder, of the State Normal, for their able and eloquent lectures delivered during the sessions of this Institute, and the deep interest they have manifested in our success.

District No. 13.

The State Normal Institute, held at Buena Vista, August 22-September 2, 1892, was the equal of any ever held in that part of the State.

The instructors were specialists in their subjects, and the committee may well feel favored in having secured so strong a corps.

The conductor, Professor L. W. Parish, of the Iowa State Normal School, is a man of force and accurate scholarship, and an inspiring teacher of teachers. His work in educational psychology, primary numbers and special methods was superior and highly appreciated.

Deputy Superintendent Ellen W. Collins, of Clear Creek county, presented primary work skillfully and agreeably.

Principal C. A. Woody, of the Salida public schools, in presenting civics, was clean-cut, helpful and entertaining.

Superintendent James Dilts, of Eagle county, in arithmetic, was direct, logical and practical.

Miss Lillian Pike, recently appointed director of physical culture and elocution in the North Denver public schools, conducted exercises in calisthenics most satisfactorily.

Professor W. J. Whiteman's instructions in singing were marked by his usual thorough energetic manner.

The lecture course before the Institute was unusually strong, and included one lecture from State Superintendent Coy, two each from Chancellor McDowell and Professor De Long, three from President Ellis and four from President Snyder.

The counties of Chaffee, Eagle and Park, of the ten comprising the district, responded by sending nearly every one of their teachers.

The attendance from Pitkin, Summit and Lake was not as large as it should have been. Garfield county had only one teacher present during the entire session.

White, Grand, Rio Blanco and Routt failed to have a single representative.

Only five counties, Chaffee, Eagle, Park, Pitkin and Summit, were represented by their superintendents.

Before adjournment the following resolutions were offered and adopted :

Resolved, That the members of this Institute, teachers of the Thirteenth Normal district, in session assembled at Buena Vista, Colorado, August, 1892, hereby express to Professor L. W. Parish, Mrs. Ellen W. Collins, Miss Lillian Pike, Professor J. W. Whiteman, Superintendents James Dilts and C. A. Woody, our high and most sincere appreciation of their earnest and effective work as instructors during this, our fourth annual session.

Resolved, That our most grateful thanks are due and most heartily tendered to Chancellor W. F. McDowell, President Z. X. Snyder, President Alston Ellis, the Hon. Nathan B. Coy, Professor Ira M. DeLong and Superintendent E. C. Stimson, for their very entertaining and instructive lectures.

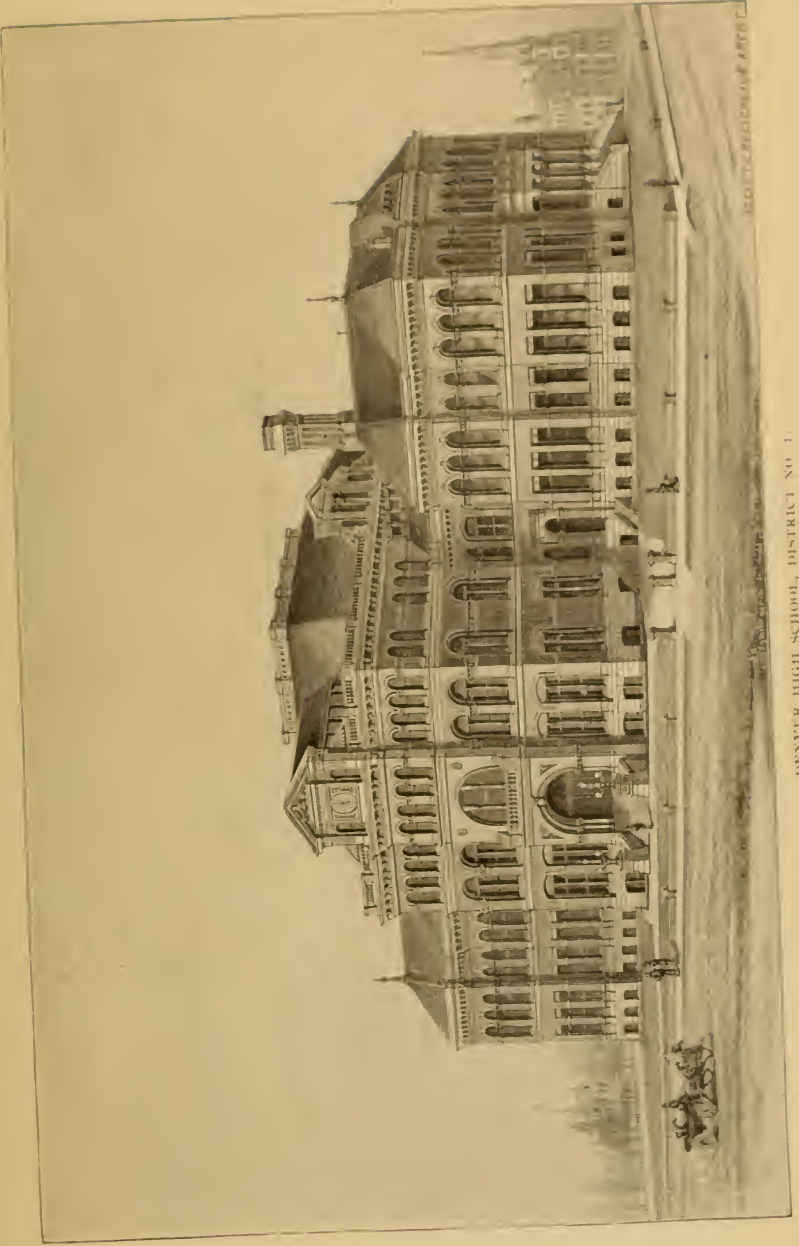
Resolved, That we commend and fully appreciate the able and efficient management of the executive committee.

Resolved, That we herewith tender our respectful thanks to the citizens of Buena Vista and to the proprietor of Cottonwood Springs hotel, for many pleasant courtesies, and to the several railway lines for their generous reduction of rates.

ATTENDANCE AT NORMAL INSTITUTES.

BY COUNTIES, FOR THE YEARS 1889-1892.

COUNTIES.	1889.	1890.	1891.	1892.
Arapahoe	47	63	227	246
Archuleta	--	2	2	--
Baca	--	6	4	2
Bent	2	9	29	15
Boulder	51	25	36	62
Chaffee	8	16	10	42
Cheyenne	--	--	3	4
Clear Creek	6	6	8	11
Conejos	12	3	21	9
Costilla	6	2	4	2
Custer	4	6	3	13
Delta	7	6	15	12
Dolores	--	--	--	2
Douglas	7	7	9	7
Eagle	11	10	12	13
Elbert	--	3	5	4
El Paso	25	63	98	65
Fremont	43	28	58	26
Garfield	4	12	19	--
Gilpin	19	9	9	17
Grand	--	--	--	--
Gunnison	3	--	--	18
Hinsdale	--	--	1	2
Huerfano	1	3	--	23
Jefferson	63	65	58	55
Kiowa	3	21	2	6
Kit Carson	--	2	41	31
Lake	6	20	5	4
La Plata	--	45	30	12
Larimer	31	61	28	25
Las Animas	4	--	2	51
Lincoln	--	--	2	3



DENVER HIGH SCHOOL, DISTRICT NO. 1

SCOTT & BROWN, N.Y.

ATTENDANCE AT NORMAL INSTITUTES.—*Concluded.*

COUNTIES.	1889.	1890.	1891.	1892.
Logan			51	45
Mesa	10	11	34	8
Montezuma		5	3	20
Montrose	12	23	7	13
Morgan	4	1	4	11
Otero	4	3	21	28
Ourray	16	9	9	--
Park	1	7	2	13
Phillips			5	19
Pitkin	5	5	28	10
Prowers	1	5	11	10
Pueblo	22	80	20	77
Rio Blanco		6	7	--
Rio Grande	19	1	15	17
Routt				
Saguache	10		8	11
San Juan		1		
San Miguel	2	3	1	1
Sedgwick		1	6	7
Summit	5	9	10	3
Washington	11			3
Weld	49	40	80	38
Yuma	2			
Totals	536	703	1,063	1,119

COST OF STATE NORMAL INSTITUTES FOR YEARS
1889-1892.

1889.

District No. 1,	Institute held at Boulder.....	\$		243 10
" " 2,	" " Golden			345 75
" " 3,	" " Canon City.....			324 00
" " 4,	" " Red Cliff			321 64
" " 5,	" " Montrose.....			352 95
" " 6,	" " Monte Vista.....			299 49
				\$ 1,886 93

1890.

District No. 1,	Institute held at Fort Collins	\$		410 10
" " 2,	" " Golden			332 51
" " 3,	" " Pueblo.....			465 75
" " 4,	" " Leadville			273 80
" " 5,	" " Montrose.....			186 00
" " 6,	" " Durango.....			295 94
				\$ 1,964 10

1891.

District No. 1,	Institute held at Sterling	\$		189 00
" " 2,	" " Greeley.....			446 25
" " 3,	" " Denver			605 00
" " 4,	" " Golden			221 25
" " 5,	" " Colorado Springs.....			390 25
" " 6,	" " Burlington			91 80
" " 7,	" " Canon City (not complete)...			68 90
" " 8,	" " Las Animas			362 00
" " 9,	" " La Veta.....			284 00
" " 10,	" " Alamosa.....			225 45
" " 11,	" " Durango.....			216 75
" " 12,	" " Grand Junction.....			234 00
" " 13,	" " Aspen, (no report).....			.....
				\$ 3,335 65

1892

District No.	1.	Institute held at Sterling	\$	272 19
"	"	2, " " Boulder		416 70
"	"	3, " " Deuver		755 00
"	"	4, " " Golden		331 71
"	"	5, " " Colorado Springs		258 75
"	"	6, " " Burlington		159 35
"	"	7, " " Pueblo		335 40
"	"	8, " " La Junta		168 00
"	"	9, " " Trinidad		175 00
"	"	10, " " Monte Vista		167 75
"	"	11, " " Mancos		234 00
A	"	12, " " Gunnison		162 90
"	"	13, " " Buena Vista		444 25
				\$ 3,911 00



Exhibit VII.

Teachers' County Certificates.

- I. Circular—Rules governing quarterly examinations for teachers' county certificates.
- II. Circular—Additional instructions concerning quarterly examinations for teachers' county certificates.
- III. Circular—Directions to applicants for teachers' county certificates. Form of applicant's statement.
- IV. Questions prepared for the quarterly examinations, February, May, August and November, 1891.
- V. Questions prepared for the quarterly examinations, February May, August and November, 1892.

Regulations Governing Quarterly Examinations of Teachers.

STATE OF COLORADO,
DEPARTMENT OF PUBLIC INSTRUCTION, }
SUPERINTENDENT'S OFFICE.

To County Superintendents:

The following regulations, in reference to quarterly examinations for teachers' certificates, are hereby prescribed for the guidance of county superintendents.

1. The questions to be used in these examinations will be forwarded to county superintendents in sealed envelopes. These must be first opened in the presence of the applicants, at the time set for the examination.

2. County superintendents should give due notice of the place of examinations, and the hour at which they will begin.

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

4. It is optional with county superintendents whether applicants shall write on both sides of each sheet of paper or on but one side.

5. No names of applicants should be taken, but at the beginning of the examination each applicant should be given an envelope with a number written thereon, by which he will be known during the examination.

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

7. No applicant should be allowed to take any part of the examination except at the time designated.

8. Answer papers of applicants that have been examined in any other county should be accepted only when forwarded by the superintendent of that county.

9. No applicant should be allowed to leave the room until his work has been completed and handed to the examiner.

10. No portion of the time allotted to the examinations should be consumed by needless talk.

11. A written certificate (or a statement with references) of good character should be required of each applicant; also one of past success in teaching.

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

13. For convenience in grading, the topics should be divided into two groups. First group, Nos. 1, 2, 3, 4, 5, 10, 11, 12; second group, Nos. 6, 7, 8 and 9. Issue certificates upon the following conditions:

FIRST GRADE CERTIFICATE.

First Group. Average ninety per cent.; no branch below seventy-five per cent.

Second Group. Average seventy-five per cent.; no branch below sixty per cent.

SECOND GRADE CERTIFICATE.

First Group. Average eighty per cent.; no branch below seventy per cent.

Second Group. Average sixty per cent.; no branch below forty-five per cent.

THIRD GRADE CERTIFICATE.

First Group. Average seventy per cent.; no branch below sixty per cent.

Second Group. Average fifty per cent.; no branch below forty per cent.

A certificate of the third grade shall not be refused for failure in Nos. 8. and 9.

14. All answer papers submitted by applicants should be indorsed in ink by the county superintendent, with the standing attained, and placed on file in his office for at least six months.

15. Besides the standing attained at the examination, practical experience in teaching should be considered in issuing a certificate of any grade.

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

17. The county superintendents should render their reports to the Superintendent of Public Instruction as soon as possible. Blanks will be furnished for the purpose, on which should be placed the names of all applicants.

18. In addition to the regular certificate blanks, failure blanks will be forwarded to county superintendents, in order that all applicants who wish may receive their standing.

19. No private examinations shall be lawful except for temporary certificates, valid only until the next public examination.

20. These instructions should be preserved for future use.

NATHAN B. COY,
State Superintendent.

ADDITIONAL INSTRUCTIONS CONCERNING QUARTERLY
EXAMINATIONS.

STATE OF COLORADO, }
DEPARTMENT OF PUBLIC INSTRUCTION. }

To County Superintendents :

In averaging examination marks for teachers' certificates, the following instructions, in addition to those already given, should be observed:

1. Each group should be averaged on the whole number of subjects in that group; *i. e.*, the average of the first group should *always* be found by dividing the sum of all the marks, *including zeros*, by *eight*; likewise the average of the second group, by dividing by *four*; and the final average, by dividing the sum of *all* the marks by *twelve*, (not by dividing the sum of the averages of the two groups by two). In *no other* way can the averages be correctly found.

2. In averaging, the fractional result should not be given; but if it exceeds one-half, it should be counted as a unit; if it is less than one-half, it should be omitted.

3. *Strict accuracy* in figuring averages should be observed. Errors occur frequently, in some instances to the advantage, in others to the disadvantage, of applicants. They should *never* occur.

4. If five per cent. for attending State Normal Institute is added, it should be estimated on the final average attained, and not on 100 per cent., as a basis.

5. The numbers in parentheses, at the left of the questions, indicate the attainable credits.

6. (a) A temporary certificate is good only until the next regular examination; hence, should be given only upon satisfactory evidence of the ability of the applicant to obtain a certificate at a regular examination.

(b) A first grade certificate may be renewed for the county in which it was issued by the superintendent of that county.

(c) A certificate of "like grade," as provided for in section sixteen (16) of the school law, has not the force of the first grade certificate, in lieu of which it is issued, beyond the unexpired period of that certificate, and is *not renewable*.

7. While failure in 8 and 9 may not exclude an applicant from obtaining a third grade certificate, it should disqualify for any certificate higher than the third grade, however satisfactory in other branches the scholarship of the applicant may be.

8. Inferior teachers should not be employed so long as those of superior qualifications are available. In case a certificate is issued on unsatisfactory scholarship, the reason therefor should be stated on the certificate, and also in the report.

9. A report of the quarterly examination should be rendered by each county superintendent, even if no certificate is issued nor candidate examined.

10. Reports should be complete in every detail for filing, before they leave the hands of the county superintendents.

NATHAN B. COY,
State Superintendent.

DIRECTIONS TO APPLICANTS FOR TEACHERS' CERTIFICATES.

1. At the head of every sheet of paper used at this examination, write your number and the subject.
2. Use a separate sheet of paper for each subject; that is, do not write two subjects on the same sheet.
3. Do not fold the papers.
4. Number your answers to correspond with the questions, but do not repeat the questions.
5. Read each question carefully, that you may answer understandingly.
6. Give complete solutions of arithmetical problems; mere answers will not be accepted.
7. Ask no questions. Any doubt as to the meaning of a question may be submitted in writing, and will be considered when your papers are examined.
8. Collusion between applicants, or any other act of dishonesty, will make worthless the examination.
9. In estimating your standing, the general appearance of the papers, as well as the correctness of the work, will be considered.
10. Morning sessions, 9 o'clock to 12. Afternoon sessions, 1:15 to 4:15.

OFFICE OF COUNTY SUPERINTENDENT, }

No. }
 ----- County, Colorado. }

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

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

Name in full

Post office address?

Age?..... Born in the state of.....

How long have you taught school? calendar months.

In how many different districts of Colorado have you taught?....

.....

In what other states have you taught?.....

In what schools were you educated?.....

Give the date and grade of your last certificate.....

By whom was it issued?.....

How many teachers' examinations have you taken?.....

What educational papers do you read regularly?.....

Do you read the daily papers?.....

What Normal Institutes or Teachers' Associations have you attended in this, or any other state, during the past year?.....

Questions for the Quarterly Examination of Teachers.

FIRST QUARTER, 1891.

FIRST DAY, A. M.

1. *Penmanship (30 minutes).*

1. Name in order of importance three essentials of a good penman.
 2. What elementary instruction should introduce practical work?
 3. Of what may a recitation in this subject consist?
 4. Suggest different methods for criticising and correcting errors in writing.
 5. Analyze the letters g-l-i-d-e.
- 6-10. Your writing in the answers to these questions will be marked as half the examination in penmanship.

2. *Arithmetic (90 minutes).*

1. Define an integer, prime number, decimal fraction, ratio and root. Give an example of each.
2. In how many ways may a fraction be divided? Illustrate each.

3. A teacher having a school of 144 girls and 112 boys divides it into the largest possible equal classes (so that each class of girls shall number the same as each class of boys). How many classes are there, and how many pupils in each class?

4. Express decimally the quotient of $\frac{13}{86} + \frac{45\frac{1}{2}}{327}$

5. What per cent. greater than $\frac{3}{4}$ is $\frac{7}{8}$? What per cent. is gained by buying oil at 80 cents a gallon, and selling it at 12 cents a pint?

6. Traveling west from Boston, which is $71^{\circ} 3'$ west longitude, I find on my arrival at St. Louis that my watch is 1hr. 17m. 24s. faster than the time at the latter place. What is the longitude of St. Louis?

7. How many square inches of surface in a cube containing 1,728 cubic inches?

8. Write in full a sixty day promissory note for \$100, bearing interest at seven per cent. Find the amount due at maturity.

9. In what time will the interest of \$300 at nine per cent. become \$60.75?

10. A plot of ground is eighty rods square. What is the breadth of a driveway around and upon it, containing an area equal to $\frac{1}{4}$ the area of the whole field.

3. *Reading (thirty minutes).*

1. What essentials should be made the aim with primary classes?

2. What faults should be shunned?

3. In reading poetry, what is of the first importance? What errors are to be avoided?

4. Of what value is the dictionary in this study? How do you teach its use?

5. Define emphasis, rhetorical pause.

6-10. Read a stanza of poetry and a paragraph of prose, to be marked by examiner.

FIRST DAY, P. M.

6. *Physiology (45 minutes).*

1. Describe briefly the process of digestion.

2. How would digestion be affected by copious draughts of cold water while eating?

3. Locate and describe the cerebrum. What is its office?
 4. What is the cuticle? What purpose does it serve?
 5. Name and describe five parts of the eye.
7. *School Law (45 minutes).*
1. Give the legal definition of a public school.
 2. State the law of Colorado respecting free text books.
 3. By whom are vacancies in district school boards to be filled?
 4. Name the "National Holidays" designated by the school law.
 5. In whom is vested the power to suspend or expel pupils from school?
8. *Botany (45 minutes).*
1. Describe two important functions of leaves.
 2. What is grafting? How is it effected?
 3. What is germination? What are the requisites for it?
 4. Describe the difference in growth between the exogenous and the endogenous stem.
 5. What parts of plants constitute the organs of nutrition?

SECOND DAY, A. M.

SPELLING will be marked by correctness of orthography in history and geography examination papers.

10. *United States History (90 minutes).*

1. What parts of North America were explored or settled by Vasquez, La Salle, the Huguenots, Dutch, Swedes?
2. Name five great wars between this country and foreign powers. Date the commencement of each.
3. Where and how were the following names prominent: King Philip, Plains of Abraham, Benedict Arnold, Saratoga, Pittsburg Landing.
4. Name the presidents who have died, or have been impeached, in office.
5. What has been the policy of the Government regarding the Indians?

6. Give an account of the recent Indian trouble in our country.
7. Name the last territorial purchase of the Government; price paid. Has it been valuable? Why?
8. Name the five states last admitted to the Union.
9. Name five important subjects discussed in Congress during the Harrison administration.
10. Give a brief account of George C. Bancroft.

11. *Geography (90 minutes).*

1. By a small diagram illustrate the relative positions of the equator, tropics, polar circles and zones, naming each.
2. Name two cities in Europe situated in nearly the same latitude as New York city. Name and locate three rainless districts.
3. Name in order the bodies of water sailed over in a voyage from St. Louis to Constantinople.
4. Name five great imports of the United States and the country from which each comes. Name five great exports and the state producing each.
5. What effect upon our foreign commerce has a high protective tariff?
6. Who is the latest noted African explorer? What can you tell of him and his work?
7. What and where are Samoa, Congo, Yokohama, Morea, Hekla, Oklahoma, Atacama, Baikal, Yukon, Toronto?
8. What do you know of Stanton's recent explorations of the Colorado river; their object, hardships, results?
9. Name five State educational institutions of Colorado; locate each in its town and county.
10. Draw a map of Colorado, indicating its latitude and longitude; locate the Front, Park, Saguache and Sangre de Cristo ranges; South Platte, Arkansas, Grand and Rio Grande rivers; North, Middle, South, San Luis Parks and the Great Plains; Long's and Pike's Peaks, and the Grand Canon of the Arkansas.

SECOND DAY, P. M.

9. *Natural Sciences (60 minutes).*

1. Define and illustrate an element (chem.).
2. Explain artesian wells.
3. What is weight?
4. Name two sources of artificial heat.
5. Why does it require longer time to boil an egg in Denver than in Boston?
6. Define and give an example of stratified rock.
7. What are water sheds? Eltas? Give an example of each.
8. What causes tides? What is the peculiarity of the tides in the Bay of Fundy?
9. Describe the course and beneficial effects of the best known oceanic current.
10. State what you know of the formation of coral islands.

4. *Grammar (90 minutes.)*

1. Write a compound sentence of two members. Change it into a complex sentence. Define a compound sentence; a complex.
2. Write correctly in all particulars the following: john and me done our work quick and writ a letter to mr smith we seen his horse lay on the ground oughtnt we to have told him of it alas what a loss.
3. Give, in separate columns, the first person singular of the present and past tenses, and the present and past participles of the verbs: catch, fly, go, see, lie (recline).
4. Give one or more sentences in which the word "that" is used as a conjunction, adjective, relative pronoun, noun. Write a sentence containing the infinitive mode as its subject.
5. Diagram or analyze—"Tell me with whom you associate and I will tell you what you are."
6. Parse the italicized words in the foregoing quotation.
7. Distinguish between the use of "shall" and "will."
8. Illustrate the use of an adjective modifier as a word, a phrase, a clause.
9. Name five auxiliary verbs, and tell what each denotes.

10. In composition form, write about the best school journal which you read regularly; its name, editor, place of publication, contents, reputation, value to yourself.

5. *Theory and Practice.* (45 minutes.)

1. What ought to determine the length of lessons for a class?
2. What is the duty of a teacher at recess?
3. How should a pupil be taught orthoepy?
4. What are your methods of moral instruction?
5. How do you stimulate punctuality?

SECOND QUARTER, 1891.

FIRST DAY, A. M.

1. *Arithmetic* (90 minutes).

1. A dividend is 5443256; the successive divisors are 9, 14, 600; the remainder is 56. What is the final quotient?

2. A can do $\frac{1}{4}$ of a piece of work in 4 days; B can do $\frac{1}{4}$ in 4 days; C can do $\frac{1}{4}$ in 8 days; D can do $\frac{1}{4}$ in 7 days. How long will it take them all to do it?

3. How deep is a cellar 35 feet long, 27 feet wide, if 245 cubic yards of earth are removed in digging it?

4. Define the meter; give its equivalent in inches. For what is it used?

5. A merchant sold a pair of gloves for $\$ \frac{75}{16}$ which had cost him $\$ \frac{13}{20}$. How many cents did he gain? What per cent?

6. How many square yards in the walls and ceiling of a room which is 25 feet long, 15 feet wide and 12 feet high?

7. An agent received \$5,650 to invest in wheat, after deducting his commission of $3\frac{1}{3}$ per cent. How much was expended in wheat, and what was his commission?

8. A promissory note due in two months is discounted at 10 per cent. by the First National Bank, Denver, Colo., and yields \$491.25. What is the face of the note?

9. Express by proportion that $\frac{5\frac{1}{2}}{17} = \frac{33}{?}$. Find the missing term and prove it correct.

10. Two men start from the same place at the same time. One travels south at the rate of three miles an hour, and the other west at the rate of four miles an hour, for seven hours. Then they travel directly towards each other at the rate of three and one-half miles an hour, till they meet. How many hours do they travel, and how many square miles of area do they travel around?

2. *United States History (90 minutes).*

1. What other cities than Washington have been our national capital? The inauguration of what presidents have they witnessed?

2. The Declaration of Independence was signed when, where, and by what body of men?

3. When and where was slavery first introduced? When and how abolished?

4. When and under what circumstances were women imported and sold for wives? What did they cost?

5. What are state school lands? How obtained?

6. Name, with dates, the presidents twice elected to office.

7. From whom were purchased Louisiana, Florida, the Gadsden Purchase, Alaska?

8. Write the story of the recent Mañá trouble in New Orleans, with results.

9. Name three important bills passed by the Colorado Eighth General Assembly, which have become laws?

10. Explain the historical meaning of the names, "Rock of Chicamauga;" "Stonewall Jackson."

FIRST DAY, P. M.

6. *Physiology (45 minutes).*

1. Why is more food required in cold than in warm weather?

2. Name five glands or kinds of glands which secrete.

3. Name some part or place where each of the following tissues is found: osseous, fibrous, mucous, serous, nervous.

4. Name in order the organs through which the air passes in respiration.

5. Describe fully the spinal column.

8. *Botany (45 minutes).*

1. What are parasitic plants? Give example.

2. To what part of the plant does the edible potato belong? What are its "eyes?"

3. Describe the circulation of the sap in an ordinary exogenous tree.

4. What are the sanitary advantages of house plants?

5. How do trees affect climate? Illustrate geographically.

9. *Natural Sciences (60 minutes).*

1. Define and give an example of capillary force.

2. Give an illustration of the transmission of force which does not move the body through which it is transmitted.

3. Give the meaning of the terminations (*a*) ic, (*b*) ous, (*c*) ide, (*d*) ite, (*e*) ate, as used in chemical nomenclature.

4. If a gun is fired at some distance from the observer, will the light or the sound be perceived first? Why?

5. What are geysers? Give some generally accepted theory to account for their action.

6. Mention a variety of rock of which the chief constituents are remains of former animal life; one of former vegetable life.

7. Name eight principal planets in the order of their distance from the sun.

8. Give four grounds for knowledge of the conditions of the interior of the earth.

9. How high does the atmosphere of our earth extend? Where is it most dense?

10. Describe, in the order of development, the three stages in the life of an insect.

SECOND DAY, A. M.

3. *Geography (90 minutes).*

1. Give two facts in proof of the spherical form of the earth.
2. What is the "land of the midnight sun?" Why so called?
3. What title is given to the sovereign of Russia? Of Germany? Of Turkey? Of Japan? Of Brazil?
4. Name and locate four inland lakes or seas, salt and having no outlet.
5. Name and account for two of the characteristics of Colorado climate.
6. Name and locate five great river basins of North America.
7. Locate Yellowstone Park, and name some of its characteristic features.
8. How many counties has Colorado? Bound the one in which you are located; name its county seat.
9. What and where are the Golden Gate, Crimea, Roman Campaigna, Congo, The Hague, Black Forest, Maelstrom, Soudan, Mammoth Cave, Land's End.
10. In voyaging from Lake Superior to the Atlantic Ocean, name in order the bodies of water over which we pass.

4. *Grammar (90 minutes.)*

1. "And let me tell you, girl,
2. Howe'er you babble, great deeds cannot die;
3. They with the sun and moon renew their light
4. Forever blessing those that look on them."

Alfred Tennyson.

1. In the above, classify the clauses as principal or subordinate.
2. Name the modifiers of "tell."
3. Give the mode of each verb.
4. Name all the "phrase modifiers."
5. Name all the "clause modifiers."
6. Parse tell (1), you (1), girl (1), blessing (4), those (4).
7. Correct where necessary

Each of the boys did their duty.

I do not admire these gaudy sort of colors.

She looked beautifully but acted badly.

He screamed like he was hurt.

8. Be what you seem. Analyze or diagram.
9. "Such as I have, give I unto thee." Parse "as."
10. Describe briefly a model Arbor Day school celebration. (To be marked as composition.)

SECOND DAY, P. M.

5. *Theory and Practice (45 minutes).*

1. What is the teacher's responsibility to the study-class? Give two ways by which pupils below third reading class may be profitably occupied while at their desks.

2. In conducting a recitation, would you call the name of a pupil *before* asking the question? Give reasons for your answer.

3. From what side (right, left, front or rear) should the light of a school room be admitted? Give reason for answer.

4. Who is the United States Commissioner of Education? What are the objects of school discipline?

5. How should a teacher recognize her responsibility for the neatness and preservation of school property?

7. *School Law and Civil Government (30 minutes).*

1. Who constitute the State Board of Education of this State?

2. How are the members of the President's cabinet appointed?

3. What tax levy is allowed in this State for school libraries?

4. From what source does the United States Government derive its powers?

5. When is the district treasurer required to give bond and in what amount?

10. *Orthography and Penmanship (30 minutes).*

1. The following are abbreviations of what: inst., etc., Ph. D., P. M., pp.? Give meaning of each.

2. Define and give example of a suffix; a root.
3. Give five different vowel sounds of e, and illustrate by words.
4. Discriminate between the meanings of enough and sufficient.

Illustrate each.

5. Spell correctly the following: ptisis, thorro, sintilate, parralel, privaledge, receet, preferrable, sillender, embaras, slite.

(Penmanship will be marked in the answers to the above.)

11. *Reading (30 minutes).*

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

Alfred Tennyson.

1. Of what nationality is the author of the above? Is he living or dead? Give in your own words the thought of the above quotation.

2. Apply diacritical marks to *a* in the following words: what, are, brain, pan, call.

3. Write an expression requiring the aspirated tone.

4. Define pitch. Why is it important?

5. How do you conduct the recitation of a reading class?

6-10. Read a paragraph of prose and a stanza of poetry to be marked by the examiner.

THIRD QUARTER, 1891.

FIRST DAY, A. M.

1. *Arithmetic (90 minutes).*

1. Write in words, 802.0000040; 64.000300. Write in Arabic Notation, MDCLXVI. Write in figures, six hundred six millionths; six hundred, and six millionths.

2. Explain and illustrate the principle on which is based the reduction of a fraction to its lowest terms.

3. Express in words the meaning of each of the following :

$$\bar{v} ; \frac{5}{8} ; 9^{\frac{2}{3}} ; \sqrt[4]{\frac{1}{5041.27}} ; 48 \div 4 \times 2 - 6.$$

4. A ship on the Atlantic ocean sails in a straight course until the watches of the passengers are 1 hour, 20 minutes, 24 seconds slow by ship's time. In what direction has she sailed and over how many degrees of longitude.

5. A trader sold two cows for \$25 each ; on one he gained 20 per cent. : on the other he lost 20 per cent. What per cent. did he gain or lose by the transaction ?

6. Write the Metric table for measures of length, with the equivalent United States values.

7. A, B, C, D together own a square mile of ground. A owns $\frac{1}{2}$ as many acres as B; B owns $\frac{2}{3}$ as many as C; C owns $\frac{3}{4}$ as many as D. How many acres does each own ?

8. A standard bushel is represented as a cylindrical vessel $18\frac{1}{2}$ inches in diameter, and 8 inches deep. What would be the dimensions of a similar vessel that would hold two bushels?

9. What is the face of a note for 60 days, which, discounted at a bank at 8 per cent. per annum, yields \$1,000?

10. A rectangle is 408 by 308 feet. A walks from the northeast corner directly to the center; and thence directly to the northwest corner. How far does he walk ?

2. *United States History (90 minutes).*

1. Give some account of the Mound Builders.
2. Give the general history of the Indian race in the United States since its occupation by white men.
3. Name two religious sects which made extensive early explorations, with results in each case.
4. Name an important event associated with each of the following dates: 1541-2; 1638; 1754-63; 1783; December 14, 1799.
5. Explain the Missouri Compromise bill.
6. State the general organization of the United States government (at Washington, D. C.).
7. Name the four different forms of government in the country from 1770 to 1790.

8. Locate by presidential administrations the time of the occurrence of the following events: War with the Barbary States; Gadsden purchase; John Brown's rebellion; Centennial celebration; adoption of the Fifteenth amendment.

9. What action has Colorado taken with reference to the Columbian Exposition?

10. Name the state offices of Colorado.

FIRST DAY, P. M.

6. *Physiology (45 minutes).*

1. Name and describe the bones composing the anterior extremity, (arm, fore-arm, hand).

2. Of what value as foods are pork, beans, bananas, oatmeal, potatoes?

3. Describe the structure of the blood as learned under the microscope; also its functions.

4. What are some of the physical effects produced by excessive drinking?

5. Describe, with examples, the different kinds of levers in the body.

8. *Botany (45 minutes).*

1. Name the kinds of buds, and tell how they are arranged on the stem.

2. Name the parts of a leaf.

3. What is a rhizome; bulb; cotyledon; bract; legume?

4. Name the parts of a flower in the order of their occurrence, commencing at the outer envelope.

5. Give the modes of veining in leaves.

9. *Natural Sciences (60 minutes).*

1. How is coal formed?

2. Name five varieties of quartz found in Colorado, used as jewelry.

3. Name the different classes of heavenly bodies.

4. Name the chemical elements of air? water?

5. Define and illustrate "solid;" "liquid;" "gas."
6. Describe in its three stages the life and work of the silk worm.
7. Give the ruling peculiarities of each of the three kingdoms—mineral; vegetable; animal.
8. Rock salt, how obtained? Locate the most noted country which produces it.
9. What is the chief constituent of marble, and of what kingdom? Whitby-jet? Sandstone?
10. From what and how is chocolate made?

SECOND DAY, A. M.

3. *Geography (90 minutes).*

1. Describe Colorado in relation to its extent, climate, soil, industries and natural products.
2. Locate the zone which has produced the highest development of mankind. Give reasons for this development.
3. Name the principal seas of the Pacific, north of the equator.
4. Locate the Great Pyramids and tell briefly of their history, (construction, shape, object, age, use.)
5. Define and give example of a water-shed, delta, estuary, tributary, glacier.
6. Name the states and territories of the United States and the countries of Europe and Asia crossed by the fortieth parallel of north latitude.
7. What is longitude and from what meridians do we reckon it?
8. Name the three branches of the Caucasian race; the six divisions of nations comprising the most important branch.
9. Bound the county in which you live; give its county seat. How many counties has Colorado?
10. What do you know of the new lake in the Colorado Desert?

4. *Grammar (90 minutes).*

- a* "Alone, but with unbated zeal,
- b* The horseman plied with scourge and steel;
- c* For jaded now and spent with toil,
- d* Embossed with foam and dark with soil,
- e* While every gasp with sobs he drew,
- f* The laboring stag strained full in view."

1. Diagram or analyze the above quotation.
2. Name, and classify as co-ordinate or subordinate, each conjunction and the words or sentences it connects.
3. Give the subject and predicate of each proposition and classify as principal or subordinate.
4. Parse, (*a*) alone, (*c*) now, (*e*) gasp, (*e*) he, (*f*) full.
5. Name all the "phrase modifiers" and the word which each modifies.
6. Correct the following and give reason for correction:
Neither John nor his father were accused of dishonesty.
Can I be excused from reading?
7. Distinguish between the use of "shall" and "will" in declarative sentences, first, second and third persons.
8. Illustrate in sentences, a present participle used as (*a*) subject of a verb, (*b*) object of a verb, (*c*) object of a preposition, (*d*) attribute of a preposition, (*e*) appositive of a noun.
9. Name and illustrate five ideas expressed by adverbial elements.
10. Illustrate "as" used as three different parts of speech. Name each (part of speech).

SECOND DAY, P. M.

5. *Theory and Practice* (45 minutes).

1. Name three advantages and two disadvantages of the "marking system."
2. What basis for promotion do you recommend in graded schools?
3. In what subjects can concert exercises be profitably employed?
4. Make a problem involving the method of finding the average daily attendance and solve it.
5. Give briefly your opinion on the subject of school discipline.

7. *School Law* (30 minutes).

1. Give the steps necessary to be taken in the formation of a new school district.

2. Normal Institute: by whom and how organized? Number of Institute districts in the State?

3. What constitute the Normal Institute fund? Under what conditions and to what amount does the State contribute to such fund?

4. How many directors in districts of the first-class? How and when elected?

5. Name all the qualifications required of an elector offering to vote upon the question of contracting a bonded debt.

10. *Orthography and Penmanship (30 minutes).*

1. Give the plural of hero, money; with a rule for each.

2. Give the abbreviations of the following: take notice, namely, and so forth, that is, in the year of our Lord.

3. Define and illustrate a proper diphthong.

4. What is a synonym? Give example.

5. Spell ten words selected by examiner.

(Penmanship will be marked on the answers to the above.)

11. *Reading (30 minutes).*

“Not enjoyment and not sorrow,
Is our destined end or way;
But to act, that each to-morrow
Find us farther than to-day.”

Henry Wadsworth Longfellow.

1. Give a brief outline of the life of the author of the above.

2. Render the above stanza in prose.

3. Give five important objects to be attained in conducting an advanced reading class.

4. Apply diacritical marks to *o* in not, or, done, move, wolf.

5. How do you teach beginners in reading by the word method?

6. Read a stanza of poetry and a paragraph of prose to be marked by the examiner.

FOURTH QUARTER, 1891.

FIRST DAY, A. M.

1. *Arithmetic (90 minutes).*

1. Give five rules governing the use of letters in Roman Notation, and illustrate by numbers.

2. Define and illustrate exponent, denominator, multiple, power, root.

3. A can shear 41 sheep in a day, B 63 and C 54; what is the number of sheep in the smallest flock that would furnish exact days' labor for each of them shearing alone?

4. Upon what principle is cancellation based? Illustrate.

$$5. \frac{\frac{3}{4} \text{ of } \frac{4}{25} \times 5_3^1 + \frac{4}{9} \text{ of } 9_5^3}{\frac{3}{5} \text{ of } 2_7^1 \times 3_2^1 + \frac{8}{13} \text{ of } 3} = ?$$

6. How many mm. are there in 4 cm.?

How many cm. in 7 m.?

How many Km. in 1675 m.?

How many Hm. in 825 m.?

How many dm. in 82 m.?

7. A man wishing to sell a horse asked 25 per cent. more than it cost; he finally sold it for 15 per cent. less than his asking price, and gained \$7.50. How much did the horse cost him, and what was his asking price.

8. \$2,000.

DENVER, COLO., September 9, 1888.

Six months after date, for value received, I promise to pay Albert Steele, or order, two thousand dollars, with interest at seven per cent.

CHARLES KEELER.

Discounted at the First National Bank November 12, 1888, at ten per cent. Required the proceeds.

9. A ladder fifty-two feet long stands against the side of a house. How many feet must it be drawn out at the base that the top may be lowered four feet?

10. How many strokes does a clock strike in twenty-four hours? Under what subject does this problem come? State formula for finding result.

2. *United States History (90 minutes).*

1. (10) Name, with dates, the discoverers of (a) Pacific Ocean, (b) Florida, (c) Colorado, (d) Cape Cod, (e) Roanoke Island.

2. (10) Locate the part or parts of the New World in North America claimed by five different European nations.

3. (13) Name the thirteen original states, with date of settlement of each.

4. (7) What were "Writs of Assistance?"

5. (10) Give two causes which led to the War of 1812.

6. (10) Explain the doctrine of state sovereignty and its connection with the War of Secession.

7. (10) Give a brief outline of General Grant's life.

8. (10) What presidential act caused, or was the precursor of, the Thirteenth Amendment? In whose administration was it adopted?

9. (10) Name four important events of Pierce's administration.

10. (10) Give a brief outline of the Chilian revolution.

FIRST DAY. P. M.

6. *Physiology (45 minutes).*

1. (25) Define Respiration $\left\{ \begin{array}{l} \text{Inspiration.} \\ \text{Expiration.} \end{array} \right.$ What is its object? What change is made in the air by respiration? What change is made in the blood by respiration?

2. (50) Describe each of the following organs in its connection with respiration: (a) larynx, (b) epiglottis, (c) trachea, (d) bronchus, (e) air cells, (f) pleura, (g) mucous membrane, (i) lungs, (j) heart, (k) diaphragm.

3. (5) In crowded rooms, what two symptoms may indicate the harmful presence of carbonic acid?

4. (10) Name two of nature's provisions for purifying the air.

5. (10) Describe one simple, healthful method of ventilation. Why is this subject important just now?

8. *Botany (15 minutes).*

1. (25) Define ovule, style, cone, umbel, osmose.
2. (20) What causes defoliation? What is a leaf scar?
3. (20) What are deciduous leaves? Persistent? Give examples.
4. (20) Name three classes of flowerless plants. How are they reproduced?
5. (15) What parts are lacking in cryptogamous plants?

9. *Natural Sciences (60 minutes).*

1. (3) What is a satellite? 12 Name the planets of our solar system which have satellites.
2. (10) In what season is the earth nearest the sun? Why is the temperature of the north temperate zone lower in winter than in summer?
3. (10) Give two proofs of the earth's former fluidity.
4. (10) How are coral islands formed?
5. (10) Which has the greater attractive force on tides, the sun or the moon? Why?
6. (10) What are cyclones? Name two most noted regions where they prevail.
7. (6) What is a magnet?
8. (10) What are the fauna of a country? Name three examples of the arctic fauna; three of the temperate; three of the torrid.
9. (10) Define inertia, impenetrability, malleability, ductility of matter.
10. (9) Name the prismatic colors. What causes white? black?

SECOND DAY, A. M.

3. *Geography (90 minutes).*

1. (14) Give the capital cities of the states and territories touching Colorado.
2. (10) In voyaging from Christiania (Norway) to Constantinople, name in order the bodies of water passed over.
3. (10) What and where are Yukon, Canaveral, Bermuda, Tehautepec, Valparaiso, Guthrie, Smyrna, Malacca, Trausvaal, Sydney?

4. (8) Why has the Indian Territory attracted special attention this fall?
5. (14) Draw a map of the county in which you live, locating its county seat and the contiguous counties or states.
6. (8) What can you tell of the Pike's Peak Railroad?
7. (10) Name in order from north to south the states and territories through which the Denver meridian passes.
8. (8) What republics has Europe?
9. (8) What and where are steppes, llanos, selvas, pampas?
10. (10) To what divisions of the Aryan branch of the Caucasian race do the Russians, Irish, Swedes, Spaniards, Persians, respectively belong?

4. *Grammar (90 minutes).*

1. "Are souls straight so happy that, dizzy with heaven,
2. They drop earth's affections, conceive not of woe?
3. I think not. Themselves were too lately forgiven,
4. Through that love and sorrow *that* reconciled so
5. The above and below." *Mrs Browning.*
1. (10) Give the full name of the author of the above; nationality; name of her husband; for what was he celebrated?
2. (20) Diagram *or* analyze the first two verses.
3. (10) Parse fully the italicized that in verse four. Parse below.
4. (10) Give in all tenses of the verb "to be" the second person singular of the indicative and potential modes.
5. (10) In the above quotation give the simple subject and predicate of each principal and each subordinate proposition.
6. (6) Define and illustrate an abstract noun. Give example of a proper noun used as a common noun.
7. (4) Define and illustrate "passive voice."
8. (10) Give principal parts of cleave (split), go, lie (recline), fly, slay.
9. (10) Correct with reasons: "From Pocahontas has descended many of the first families of Virginia." "I intended to have gone to the matinee, but was prevented."
10. (10) Distinguish between a simile and a metaphor, with example of each.

SECOND DAY, P. M.

5. *Theory and Practice* (45 minutes).

1. (25) Name five essential characteristics to be aimed for in the successful management of a school, with reason for each.
2. (20) Give five methods of obtaining co-operation of pupils with teacher.
3. (20) What responsibility has the teacher for the health, manners, morals, carriage, language of pupils?
4. (20) What use would you make of sand-modeling in geography?
5. (15) How do you pass the time of recess?

7. *School Law* (30 minutes).

1. (10) By whom are district warrants drawn? By whom countersigned?
2. (25) When are County Superintendents of Schools elected? When do they take office? Term of office? Amount of bond required and by whom approved?
3. (15) School census: when taken? by whom taken? includes what persons?
4. (30) When a new district is formed from one or more old ones, what becomes of the school funds remaining to the credit of the old district or districts?
5. (20) Give the clause in the State Constitution touching the text book question.

10. *Orthography and Penmanship* (30 minutes).

1. (20) Give meaning and derivation of Liliptian, Utopian, atlas, January, tantalize.
2. (20) Give five rules for forming plurals. Illustrate each.
3. (20) Define and illustrate a prefix; a compound word.
4. (40) Spell ten words given by the examiner.

11. *Reading*.

1. (10) Why should a teacher be familiar with diacritical marks?
2. (10) What is quality of voice? Where should pure, orotund, pectoral, aspirate quality be used?

3. (20) Give briefly a reading programme for the week, each day's lesson to consist of reading and one other exercise pertaining to the subject, and no two lessons alike.

4. (10) How can rhetoric, biography, history, etc., be taught with reading classes?

5. (50) Reading of a stanza of poetry and a paragraph of prose to be marked by the examiner.

Questions for the Quarterly Examinations of Teachers.

FIRST QUARTER, 1892.

FIRST DAY, A. M.

1. *Arithmetic (90 minutes).*

1. Define and illustrate digit, addend, concrete, vinculum, reciprocal.

2. Find the surface of a cube which contains 8 times the volume of another cube whose edge measures 1 foot.

3. A vessel sailed from a certain port at high noon. Next day when the clock showed noon, the sun by observation showed 12 h. 12 m.; how many degrees had the vessel sailed and in which direction.

4. How many yards of carpeting 27 inches wide will be required to cover a floor 22 feet long, 15 feet wide? (Commercial computation.)

5. Find the sum of 325.6 dm., 2,064.3 cm., 23.8 Dm., 2.583 Km., in terms of a meter.

6. A, B and C together own \$14,100 in the proportions of $\frac{1}{4}$, $\frac{3}{8}$, $\frac{5}{8}$ respectively. What is each man's share? (Solve by proportion.)

7. In the examination of a class, 160 questions were submitted to each of the five members. A answered 130; B, 125; C, 115; D, 122; E, 158. What was the average per cent. standing of the class.

8. A merchant sells goods at retail at 30 per cent. above cost, and at wholesale at 12 per cent. less than the retail price. What is the gain per cent. on goods sold at wholesale?

9. Show which is worth most, \$320 due in twelve months, \$310 in six months, or \$300 cash; money worth eight per cent.

10. A walk nine feet wide encloses a square garden; the area of the walk being one-fourth of an acre, what is a side of the enclosed square?

2. *United States History (90 minutes.)*

1. (8) Write concerning the discovery and exploration of America by the Northmen. (Time, persons, places, evidence.)

2. (15) The settlement of Virginia: give time, authority for, object of, character of settlers, religion; name five important events, with dates.

3. (12) Navigation acts: give two important demands; two important causes; two important results.

4. (6) Name and locate three early colonial colleges.

5. (12) Name two events in which Benedict Arnold distinguished himself, one by patriotism, one by treason, with the results of the latter event to his country and to himself.

6. (6) In whose administration was the first tariff act passed? What was its object? Why was it successful?

7. (10) Who invented the cotton gin? What did it accomplish? How did it strengthen slavery?

8. (9) What was the Monroe Doctrine? Its cause? Its result?

9. (10) State briefly how the following names have become celebrated in our history: Elisha Parish Lovejoy, Aaron Burr, Henry Clay, Commodore Perry, James Russell Lowell.

10. (12) Give dates of the presidential administration of Grover Cleveland. Name two prominent events of that period; two prominent deaths; four states admitted.

FIRST DAY, P. M.

6. *Physiology (45 minutes).*

1. (20) Describe the mastication, digestion, absorption, circulation and assimilation of food.
2. (40) Describe briefly the mouth, esophagus, stomach, pylorus, duodenum, small intestines, colons, rectum, peritoneum, mucous membrane.
3. (20) Explain the uses of saliva, bile, and the gastric, the pancreatic and the intestinal juices.
4. (20) What effect on digestion, and why, has strong emotion? alcohol? tight clothing? tobacco? severe exercise?

8. *Botany (45 minutes).*

1. (15) Name the organs of nutrition of a plant, and explain how each acts in nourishing the whole.
2. (10) Describe and illustrate cellular and vascular plants.
3. (15) What other name has the root of a plant? Define spongioles. What relation in growth is there between the roots and branches of a tree?
4. (20) What is leaf arrangement? What is meant by the fractions $\frac{1}{2}$, $\frac{3}{8}$ applied to leaf arrangement?
5. (40) Define calyx, and describe it as to (a) color, (b) parts, (c) regularity. Define pistil and describe it as to (a) carpel, (b) stigma, (c) stalk, (d) ovary, (e) ovule.

9. *Natural Sciences (60 minutes).*

1. (10) Describe platinum as regards weight, color, value, qualities, uses.
2. (20) Name the five geologic ages, with the class, or classes, of animals distinguishing each.
3. (10) What is a phonograph? Name one in the human body.
4. (10) Describe distillation.
5. (12) Define matter, a body, molecule, atom.
6. (8) Distinguish between physical and chemical changes; illustrate each.
7. (8) Define aphelion, perihelion, solstice, equinox.

8. (8) Name four classes of animals included in vertebrates.
9. (6) Prove that the earth's rotation on its axis is from west to east.
10. (8) What effect in the transmission of sound has water, altitude, dry air, a vacuum?

SECOND DAY, A. M.

3. *Geography (90 minutes).*

1. (8) Define great circles; small. Upon what is latitude measured? Longitude?
2. (15) How many races of men are there? Name and locate each.
3. (6) What three motions has the sea? What causes them?
4. (15) Define, name and locate an archipelago; oasis; canon; peninsula; plateau.
5. (10) Locate the Falls of Minnehaha; Yosemite; Shoshone; Giessbach; Schaffhausen.
6. (10) How are the following names famous geographically? Kane; Stanton; Hayden; Kennan; Livingstone.
7. (8) Draw an outline map of the grand division containing Chili; outline Chili and its contiguous countries, and locate Valparaiso, Santiago and the Juan Fernandez.
8. (10) What different waters give continuous transportation from New Haven, (Conn.) to Chicago, through United States possessions?
9. (8) Where is a summer's day six month's long? Explain.
10. (10) Tell briefly of the Creede mining camp. How are the Colorado schools interested in this?

4. *Grammar (90 minutes).*

1. (25) Diagram or analyze: "A ruler who appoints any man to office, when there is in his dominions another man better qualified for it, sins against God and against the state."—*Koran*.
2. (6) Give three ways of pluralizing compound nouns, with an example of each.
3. (10) Illustrate in sentences the infinitive used as (a) subject, (b) predicate nominative, (c) object, (d) adjective modifier, (e) adverbial modifier.

4. (4) Decline the compound personal pronoun of the first person.
5. (3) Give two differences in use between my and mine.
6. (10) Give the case and government of the italicized nouns:
 (a) "Sirrah, knock *me* at this gate."—Taming of the Shrew. (b) *Methought* I heard a cry. (c) "Woe worth the *day*." (d) Heaven send the *Prince* a better companion. (e) The Board appointed him *manager*.

7. (12) *As many as* know how it is done will have no difficulty in parsing *as*. What parts of speech are the italicized words and how governed?

8. (7) Define a defective verb and name two.

9. (3) He is what he appears. Parse what.

10. (20) Punctuate and write correctly:—a stranger in a printing office asked the youngest apprentice what his rule of punctuation was said the boy i sit up as long as i can hold my breath and then i put a comma when i gape i insert a semi colen & when i want to sneeze i make a paragraph

SECOND DAY, P. M.

5. *Theory and Practice (45 minutes).*

1. (20) Upon what principle does the maintenance of order during a recitation depend?

2. (20) By what are you guided in assigning lessons to a class? (two considerations.)

3. (20) What is the inductive method of teaching? Illustrate its use.

4. (20) Why are competitive exercises for prizes harmful? How far may the spirit of emulation be helpfully cultivated?

5. (20) What importance do you attach to reviews? Why?

7. *School Law (45 minutes).*

1. (30) Explain the school law respecting records and reports required of teachers, and the penalty for failure to observe.

2. (20) Temporary certificates; nature, conditions and tenure?

3. (20) What language other than English may be employed in the schools of the State, and upon what conditions?

4. (30) Give contents of the anti-tobacco act, stating when passed.

12. *Reading (30 minutes).*

The High Tide on the Coast of Lincolnshire.—1571.

1. The old mayor climbed the belfry tower,
2. The ringers ran by two, by three ;
3. "Pull, if ye never pulled before ;
4. Good ringers, pull your best," quoth he.
5. "Play uppe, play uppe, O Boston bells !
6. Play all your changes, all your swells,
7. Play uppe 'The Brides of Enderby.' "

Jean Ingelow.

1. (10) Give the sex and nationality of the author of the quotation. Living or dead? Name two other poems by this author.
2. (20) What is a mayor? A belfry tower? Why did the mayor climb the belfry tower? What did it contain? What were the ringers? Why did they run? "Pull" what? "Pull your best" why? "Quoth he"—who was he? "Boston bells" were what? "Play all your changes," etc., meaning? "The Brides of Enderby" was what? Why played? Whom did the mayor first address? In what lines? What did he next address? In what lines?
3. (5) What figure of rhetoric is used in the last three verses? Define it.
4. (10) Give five directions to a class for preparing to read this stanza.
5. (5) Give two good reasons why reading is taught so poorly, as a rule.
6. (50) Read a stanza of poetry and a paragraph of prose, to be marked by examiner.

10 and 11. *Orthography and Penmanship (30 minutes).*

Penmanship will be marked on the writing of this exercise.

1. (10) Indicate by diacritical marks the sound of *i* in each of the following words: Pin, machine, sir, five, ruin.
2. (10) From what language is each of the following derived: pueblo, crevasse, zero, manna, wampum? Define each.
3. (10) Give a noun whose suffix means (*a*) act of, (*b*) to make, (*c*) one who, (*d*) pertaining to, (*e*) state of being. Underscore each suffix.
4. (10) What is the distinction between the phonic and the orthographic spelling of words?

5. (10) Define accent. When is it called primary? When secondary? Give an example of each.

6. (50) Spell ten words given by examiner.

SECOND QUARTER, 1892.

FIRST DAY, A. M.

1. *Arithmetic (90 minutes).*

1. (10) Define and illustrate unit, sign, angle, length, reciprocal.

2. (10) Three men own land fronting as follows: A, 600 feet; B, 720 feet; C, 900 feet. They wish to cut their lots of an equal width. How wide will the lots be and how many will each have?

3. (10) The sum of $\frac{2}{5}$ of $\frac{3}{8}$ and $\frac{4}{5}$ of $\frac{7}{25}$ is equal to how many times their difference?

4. (10) If I make a profit of $15\frac{1}{11}\%$ by selling Worcester's dictionaries for \$.85 above the cost, how much must I advance on the price to realize a profit of $32\frac{1}{2}\%$.

5. (10) What is the use of the meter; are; stere; liter; gram; and what are the English equivalent measures?

6. (10) In 1837 the silver dollar contained $412\frac{1}{2}$ grains of standard silver, but in 1853 the weight was changed to 384 grains. The fineness remaining the same, one dollar of the old coinage was worth what per cent. of the new?

7. (10) Write in full a six months promissory note for \$500 at 9%. Discount the same at a bank for 30-33 da. at 12% and find the proceeds.

8. (10) The cost of the public schools of a certain city for the next school year is estimated at \$36,848. To meet this, what amount of school tax must be assessed, the cost of collecting being 2%, and allowing 6% of the assessed tax to be uncollectible?

9. (10) If the weight of a man 5 ft. 10 in. in height be 180 lbs, what must have been the weight of Goliath, whose height was 10 ft. $4\frac{1}{2}$ in.?

10. (10) If the height of a room fifteen feet square is nine feet, what is the distance from one corner of the floor to the diagonally opposite upper corner of the ceiling?

2. *United States History (90 minutes).*

1. (10) Distinguish between the Puritans and the Pilgrims.
2. (10) Locate in early American history Acadia. For what event was it noted? In what poem is it made memorable?
3. (10) Name three valuable plants indigenous to America.
4. (10) From what was derived the appellation "Charter Oak?"
5. (10) When did the city of Washington become the capital of the United States? What other cities had witnessed presidential inaugural ceremonies? Of whom?
6. (10) Name the two earliest political parties of our nation, and give a distinguishing feature or characteristic of each.
7. (10) What is a protective tariff? Give two desirable results claimed for it.
8. (10) What was the peculiar political situation in the election of President Hayes? How was it decided?
9. (10) Explain the civil service bill.
10. (10) What states were added to the Union during the war? What states since the war?

FIRST DAY, P. M.

6. *Physiology (45 minutes).*

1. (10) What is Hygiene?
2. (35) Describe briefly and locate each of the following: pelvis, iris, aorta, tympanum, cerebellum.
3. (25) Name five organs which carry off the waste matter from the body.
4. (12) What is the physiological difference between a near-sighted and a far-sighted eye?
5. (18) Name three ways in which the skin is of service to the body.

8. *Botany (45 minutes).*

1. (30) Define whorl, bract, cotyledon, defoliation, pollen.
2. (20) What are aerial roots? Give two examples.
3. (20) What is an exogen? Name two examples. How may the age of an exogen frequently be determined?

4. (12) Describe three functions of leaves.
5. (18) Give three ways by which seeds are scattered by nature ; and name three plants which illustrate.

9. *Natural Sciences (60 minutes).*

1. (10) Define and exemplify impenetrability.
2. (10) What is specific gravity? Illustrate.
3. (10) Describe the barometer and tell two of its uses.
4. (10) What are chemical elements? Name two.
5. (10) What are igneous rocks? Why are they non-fossiliferous?
6. (5) What are isothermal lines?
7. (20) Into what four classes are the fauna of the earth divided? Describe each and name a representative.
8. (5) What are neap tides?
9. (10) What is meant by the boiling point? Under what two conditions does it vary?
10. (10) Define the ecliptic and the obliquity of the earth's axis.

SECOND DAY, A. M.

3. *Geography (90 minutes).*

1. (10) What is the greatest longitude a place can have? Why? Name a country or a group of islands which has the greatest longitude from Greenwich.
2. (4) What are nomads? Why so called? Name and locate one class of nomads.
3. (10) What is a constitutional monarchy? Why so called? Give example.
4. (10) What and where is the country of dikes and canals? Explain their necessity.
5. (10) Who is Count de Lesseps? For what is he famous?
6. (6) Name the countries of Asia and of North America on which the sun's rays fall perpendicularly on the 21st of June.
7. (10) What is the language of Brazil? Australia? Holland? Cuba? Corsica?

8. (10) Where and when will the next National Educational Association meet? How is the place celebrated in history? For what is it famous to-day?

9. (10) What river separates Washington from Oregon? Arizona from California? Ontario from Quebec? West Virginia from Ohio? South Carolina from Georgia?

10. (20) Give the parallels of latitude and the meridians of longitude which bound Colorado. Give the number of her counties. Name and locate by counties, with county seat, each of the state educational institutions.

4. *Grammar (90 minutes).*

1. (10) State three important objects of studying grammar.
2. (10) Define syntax; prosody.
3. (10) Use do, be, have, will, art, as (*a*) principal, (*b*) auxiliary verbs.

4. (10) Where is the sign of the infinitive omitted?

5. (10) Define a figure of speech. Illustrate.

6. "There is no Death! What seems so is transition;
 This life of mortal breath
 Is but a suburb of the life elysian,
 Whose portal we call Death."

H. W. Longfellow.

(10) Give the case of Death, (first line); transition, suburb, portal, Death, (fourth line).

(2) Give subject of is (transition); is (suburb).

(16) Parse there, so, but, whose.

(3) Give the modifiers of life (third line).

(10) Give synopsis of is, in second person singular, in all tenses, indicative and potential modes.

(4) Name the principal clauses; subordinate.

(5) Diagram or analyze the last line.

SECOND DAY, P. M.

5. *Theory and Practice (45 minutes).*

1. (20) Name two main objects of education. Name three important objects of recitation.

2. (20) What relation does the public school hold to the State?

3. (20) What is the responsibility of the teacher in school ethics?

4. (20) What are your views respecting self-reporting of pupils?
5. (20) What is the Socratic method of instruction? Name two prominent educational reformers.

7. *School Law (45 minutes).*

1. (20) School districts:—different classes of?
2. (20) School elections:—who are entitled to vote at?
3. (20) School directors:—powers of pertaining to teachers?
4. (40) District meetings:

{	(a) Annual	{	Time of holding?
			Powers of?
{	(b) Special	{	How called?
			Powers of?

12. *Reading (30 minutes).*

1. (10) Define orthoepy. What three points does it embrace?
2. (10) Give five rules for the use of capital letters.
3. (10) Explain and illustrate phonetic analysis.
4. (5) Distinguish between grammatical and rhetorical pauses?
5. (15) Explain and illustrate the apostrophe, caret, diaeresis, asterisk, paragraph.
6. (50) Read a stanza of poetry and a paragraph of prose, to be marked by the examiner.

10. *Orthography (30 minutes).*

1. (10) Indicate the accent and syllabication of acclimate, squalor, vagary, idea, nomad.
2. (10) Name five different organs of speech.
3. (10) Define and illustrate a mute, aspirate, digraph, triphthong, liquid.
4. (10) Give five rules in spelling.
5. (10) Give meanings of the following abbreviations: id., i. e., do., esq., I. H. S.
6. (50) Spell ten words given by the examiner.

11. *Penmanship (30 minutes).*

Penmanship will be marked on the writing of this exercise.

1. (10) Describe a good position for writing.

2. (10) Define space; slant.
3. (10) Name three letters one space in height; two, two spaces.
4. (10) Define and illustrate right curve; left curve.
5. (10) How should the light fall upon the desk in writing?
6. (50) Marking of the penmanship of this exercise.

THIRD QUARTER, 1892.

FIRST DAY, A. M.

1. *Arithmetic (90 minutes).*

1. (6) What is arithmetical language? Illustrate.
2. (14) What is the standard unit of time? How is it determined? Explain "Eastern," "Central," "Mountain," "Pacific" time. Where is it regulated?
3. (10) $\frac{3}{4}$ of the time past noon equals $\frac{3}{4}$ of the time to midnight. What time is it? Give *mental analysis in full*.
4. (10) A ship's chronometer set at Greenwich points to 5 hr. 45 m. 24 sec. p. m., when the sun is on the meridian; what is the ship's longitude?
5. (10) J. H. Crofton has a cellar 45 ft. long, 27 ft. wide, 8 ft. deep, which he contracts to have walled at a cost of \$3.87½ a perch, the wall to be 2 ft. thick, and *one-half* to be allowed for corners; what will be the cost?
6. (10) If a chicken eats 2 dl. of corn in one day, what will it cost to keep 173 chickens a week, when corn is worth \$2.15 per Hl.
7. (10) What is the difference between simple, annual and compound interest? Illustrate in a three years' note for \$100 at 6%.
8. (10) Mr. Chappell gives me his note for \$300, due two years hence, at 8 per cent. I sell it the same day to Mr. Blasdell at 10 per cent. discount. What does Blasdell pay me? Is this note worth more or less than its face? Why?
9. (10) What is the duty at 25 per cent. on 27 tons, 8 cwt., 3 qr., 20 lbs of iron, invoiced at \$48 per ton? At what price per ton must this iron be sold at retail to allow a profit of 10 per cent. to the importer, and 8 per cent. to the retail merchant?

10. (10) Two trees stand on opposite sides of a stream 40 ft. wide; the height of one tree is to the width of the stream as 8 is to 4; the width of the stream is to the height of the other as 4 is to 5. What is the distance between their tops?

2. *United States History (90 minutes).*

1. (10) Give two characteristics which distinguish the Indian from the Mound Builder.

2. (10) Name five characteristics of the Quakers. Give the date, two places and two results of their persecution.

3. (9) Explain the Stamp Act; its injustice; its repeal.

4. (10) Name five immediate results of the Revolutionary War.

5. (9) When, where and by what body was the Constitution adopted?

6. (9) In whose administration was the naturalization law first passed? What was its object? What change in it was later made?

7. (10) Explain the Kansas-Nebraska bill.

8. (10) Who was William Henry Harrison? How noted in U. S. history? Name three important acts or events of the present administration at Washington.

9. (13) Name three constitutional requisites for eligibility to the presidency of the U. S. Who are the Vice-President and the Secretary of State of the present administration?

10. (10) Write of Cyrus W. Field in not to exceed ten lines.

FIRST DAY, P. M.

6. *Physiology (45 minutes).*

1. (20) What is insensible perspiration? Sensible? Name two uses of perspiration. What is the danger from sudden checking?

2. (20) How does the oxygen of the air enter the blood? Give four effects of this action.

3. (20) Name five essential parts of the ear, and describe the office of each.

4. (20) Describe the cerebrum (shape, matter, convolutions, relation of depth of convolution to mental capacity and action).

5. (20) Give five points of contrast between arteries and veins.

8. *Botany (45 minutes.)*

1. (20) The odors of flowers; where located and to what due?
2. (20) Define node, hirsute, tuber, ovule, vesicle.
3. (20) In what manner do roots lengthen? For what purpose? Have they power of choice? How shown? What is the effect upon the plant of crowding the roots?
4. (20) Name and describe the organs of reproduction in phanerogamous plants.
5. (20) Write five lines on fungi.

9. *Natural Sciences (60 minutes).*

1. (12) Name the molecular forces, and give example of each.
2. (10) Distinguish between gravity and specific gravity.
3. (10) Explain the thermometer.
4. (8) What is the peculiarity in the geographical distribution of volcanoes?
5. (10) Name two causes of constant ocean currents, with example of current so caused?
6. (10) Name five important food plants of the tropics.
7. (10) What is petrification?
8. (10) Characterize amphibians; give example.
9. (10) Give two harmful effects of the action of tobacco on the heart.
10. (10) Write five lines on oxygen.

SECOND DAY, A. M.

3. *Geography (90 minutes).*

1. (12) What and where is the greatest latitude a place can have? Give two examples of great circles on the earth's surface; two of small.
2. (8) Name two animals used as beasts of burden in the (a) frigid, (b) temperate, (c) torrid zone. Name two of the largest marine animals.
3. (10) How do the following foods grow: rice, peanuts, oysters, yams, dates?

4. (10) Name and locate the water-shed which separates the Arctic plain from the basin of the St. Lawrence.

5. (10) Name and locate the highest mountain peak of each of the five great continents.

6. (10) Locate the Sahara and the Soudan ; contrast their physical features.

7. (10) Over what waters would a ship sail in a voyage by the shortest water route from Lisbon to Calcutta?

8. (10) Name the five great continents (*a*) in the order of the density of population ; (*b*) in order of the population.

9. (10) Give the names of counties, dates, place of meeting and name of conductor of the summer normal institute to which your county belongs.

10. (10) How is Colorado peculiarly interested in the presidential campaign of 1892?

1. *Grammar (90 minutes).*

1. (10) What five uses of the noun may the infinitive have? Illustrate each.

2. (10) Name and illustrate all the modes of go.

3. (10) Define and give example of an impersonal verb ; a copulative verb.

4. (10) What is essential to a verb that it may have a passive voice? Change the verb in the following sentence to the passive voice, preserving the full sense : "The first fresh dawn awoke us."

5. (10) Correct the following, if incorrect, with reason : "Who do you think me to be?" "I intended to have gone to Chicago."

6. (10) Form the possessive singular and plural of princess, sheep, brother-in-law, lady, monkey.

7. "It is the crown of a nation, one might almost say the chief duty of a nation, to produce great men, for without them its history is but the annals of ants and bees."—*James Russell Lowell.*

(6) Parse it, for, but.

(14) Govern (give case of) crown, duty, to produce, men, them, annals, bees.

(4) Antecedent of its? them?

(4) Mode and tense of might say?

(2) Classify the last clause as principal or subordinate.

(10) Diagram or analyze the last clause.

5. *Theory and Practice (45 minutes).*

1. (20) Name five proper penalties in school government.
2. (20) Discuss, in not more than ten lines, the relation of responsibility between parent and teacher.
3. (20) Give three instances wherein a teacher is responsible for his example in punctuality; two for his example in order.
4. (20) Name five immoral habits which should debar the teacher from receiving a license.
5. (20) Name five of the moral habits which the public schools may be expected to lead the child to form.

7. *School Law (45 minutes).*

1. (25) Name the officers of a school district and the duties of each.
2. (20) Why is it necessary that teachers should be examined and licensed to teach?
3. (20) From what sources are the funds for the support of the public schools derived?
4. (15) What children are required to attend school and for how long each year?
5. (20) What jurisdiction has the teacher over the pupil outside the school building?

12. *Reading (30 minutes).*

1. (10) What is the aim (or object) of reading?
2. (10) Give five means by which a teacher may develop in children a love of good literature.
3. (10) Name ten books worthy of being recommended for reading to children under twelve years.
4. (10) What four characteristics are essential to good oral reading?
5. (10) Explain the value of paraphrasing.
6. (50) Read a stanza of poetry and a paragraph of prose to be marked by the examiner.

10 and 11. Orthography and Penmanship.

Penmanship will be marked on the writing of this exercise.

1. (10) Define orthography ; vowel.
2. (10) Give five rules for punctuation ; illustrate each.
3. (10) Give abbreviations for Doctor of Laws, Member of Congress, Christmas, gentlemen, noon.
4. (10) Give meaning of each of the following as prefixes, and illustrate in use : be, ad, dia, de, per.
5. (10) Discriminate in meaning between (a) hasten and hurry, (b) character and reputation.
6. (50) Spell ten words given by the examiner.

FOURTH QUARTER, 1892.

FIRST DAY, A. M.

1. Arithmetic (90 minutes).

1. (10) Define and illustrate quantity ; usury ; axiom ; aliquot ; repetend.
2. (10) If a pole be $\frac{1}{3}$ in the mud, $\frac{2}{3}$ in the water, and 6 feet out of the water, what is its length ?
3. (10) Draw diagram which shall locate the N. W. $\frac{1}{4}$ of the S. W. $\frac{1}{4}$ of a section of land, and indicate the amount of land it contains.
4. (10) How many square inches of paper will be required to line the four sides and bottom of a square box whose cubical contents are 12,167 cubic inches.
5. (10) Bought 150 boxes of raisins at 5 per cent. less than the first cost, and sold them at 5 per cent. advance on the first cost, thereby gaining \$45. What was the first cost per box ?
6. (10) Reduce $\frac{7\frac{7}{8}-4\frac{1}{4}}{\frac{1}{2} \text{ of } \frac{3}{8}} \times \frac{7\frac{7}{8}}{31\frac{3}{8}}$ to its simplest form.
7. (10) What sum must I lend for 5 years, 6 months, at 8 per cent., to receive on settlement \$957.24.

8. (10) The school tax of a certain town being \$5,625 at the rate of $3\frac{3}{4}$ mills on the dollar of taxable property, what is the taxable property?

9. (10) At what discount must I buy stocks so that by selling at 2 per cent premium, I may gain 20 per cent. on my investment?

10. (10) If it costs \$72 for material to paint a spire 50 feet high, what will it cost for material to paint a similar spire 75 feet high?

2. *United States History (90 minutes).*

1. (10) To what colonies did each of the following persons respectively belong: *a* Miles Standish. *b* Roger Williams. *c* John Smith. *d* Peter Stuyvesant. *e* James Oglethorpe?

2. (10) Why was this country named America rather than Columbia? Name the lands discovered or explored by Columbus in each of his voyages to the New World.

3. (10) Give the origin or meaning of the names of five states of the Union (other than N. H., N. Y., N. J.)

4. (12) Name two political leaders of the Revolution; two patriotic generals; two American Tories; two British generals; two decisive battles, with result of each.

5. (10) What was the Dred Scott Decision? In whose administration rendered?

6. (10) What were the Alabama claims? What was the Geneva award?

7. (10) Name four distinguished generals who became presidents of the United States. How many men have served the nation as presidents?

8. (9) The President's Message, when and to whom addressed? Purpose of?

9. (10) What important tariff legislation was enacted in 1890? What is its characteristic?

10. (9) What three noted men of letters have died since the last Quarterly Examination? Name a memorable literary production of each.

FIRST DAY, P. M.

6. *Physiology (45 minutes).*

1. (20) Describe the pleura and its office.

2. (20) What three formations compose the tooth? What is the office of incisors; of molars?

3. (20) Describe the process by which a broken bone is repaired.

4. (20) Describe the passage of the blood from the veins through the heart to the arteries, (14.) What constitute heart beats? (4.) What is the average number of heart beats per minute in an adult? (2.)

5. (20) Why has the habitual use of alcoholic drinks a tendency to produce redness of the nose and face?

8. *Botany (45 minutes).*

1. (20) If we compare the cross section of a corn stalk with that of a maple, what peculiarities do we notice? What do they indicate? To what classification do they lead?

2. (20) Define and give example of a biennial herb; a perennial.

3. (20) Name five parts of a plant and give function of each.

4. (20) Describe pollen; its office; where produced; to what applied; how scattered?

5. (20) Name two plants valuable for furnishing clothing; two for food; two for narcotics; two for condiments; two for oils.

9. *Natural Sciences (60 minutes).*

1. (10) What is capillary attraction? Give a common example.

2. (9) Mention three conditions that affect the rapidity of evaporation.

3. (10) What is erosion? Locate the most remarkable example of erosion.

4. (12) Name and describe the four classes of clouds.

5. (10) Name five circumstances which affect climate.

6. (12) What is understood by the vertical and the horizontal distribution of vegetation? Name a country noted for both.

7. (5) How is the eclipse of the sun caused?

8. (10) Name five general properties of matter.

9. (10) What causes lightning?

10. (12) Distinguish between vertebrates, articulates, mollusks, radiates.

SECOND DAY, A. M.

3. *Geography (90 minutes).*

1. (8) What is the zenith? The nadir?
2. (8) What place can have neither latitude nor longitude?
3. (10) What and where are Sargasso, Maelstrom, Atacama, Gobi, Manitoba?
4. (10) Locate the Ottoman Empire; name its capital; how was the empire prominent in the early history of the Christian religion?
5. (4) What is the seaport of Paris? Of Rome?
6. (10) Name a group (or chain) of mountains of the Appalachian system in (a) New Hampshire, (b) Vermont, (c) New York, (d) Pennsylvania, (e) Virginia.
7. (10) Mention five seas, bays or gulfs on the southern coast of Europe, with an important city on or near each.
8. (10) Name ten different railroad lines operating in Colorado.
9. (20) Locate, with name of county seat of each, (a) two counties of Colorado important for fruit; (b) two for grain; (c) two for vegetables; (d) three for silver ore; (e) one for gold ore.
10. (10) Describe for the benefit of a tourist, some locality in Colorado worthy of a visit, and locate by outline map.

4. *Grammar (90 minutes).*

1. (10) Of what does each of the following treat: orthography, etymology, syntax, prosody?
2. (10) When does a proper noun become common? When does a common noun become proper? Illustrate each.
3. (9) Show the antecedent of a relative pronoun as (a) a word, (b) a phrase, (c) a clause.
4. (8) Give two examples of personification, one in the masculine gender and one in the feminine, with reason for the gender in each case.
5. (10) Give synopsis of the verb lie (recline), 1st pers., sing. no., inter. form, ind. and pot. modes.
6. "Salt Lake City, the *capital*, which is about sixteen hundred miles distant from *Chicago*, was then an unbroken *wilderness*; but the entire valley now blossoms as the *rose*, through the *industry* of the peculiar people who have made *it* their *home*."

In the above quotation

- (18) Give the case and government of each of the italicized words.
- (4) Name the personal pronouns and their antecedents.
- (2) Give the simple predicate of the first subordinate predicate.
- (5) Parse "about."
- (4) Name and classify the conjunctions.
- (3) Give the modifiers of the second principal clause.
- (12) Give one copulative verb, one regular, one irregular, with principal parts of each.
- (3) Select one "word modifier," one "phrase modifier," one "clause modifier."
- (2) Difference in use between "who" and "which."

SECOND DAY, P. M.

5. *Theory and Practice* (45 minutes).

1. (20) State two respects in which an ungraded school may be preferable to a strictly graded one; three reasons in favor of grading.
2. (10) Give two rules which should be observed in lighting school rooms.
3. (30) Discuss, in not more than a hundred words, the subject of whispering in school.
4. (20) State three dangers to which a teacher is liable, in asking questions to test pupils' knowledge. Of what use are school records?
5. (20) Name five different methods of teaching.

7. *School Law* (45 minutes).

1. (60) Name and explain the various certificates issued to teachers in Colorado.
2. (20) State the school law relating to non-resident pupils.
3. (20) Registers and blank books for the use of teachers and school officers are furnished by whom, and how charged?

12. *Reading* (30 minutes).

1. (10) How should you begin to teach a child to read? Name in order the different steps to be pursued.

2. (10) How do you dispose of the new words which occur in your reading class?

3. (10) What is phonetic analysis? Two reasons for teaching it.

4. (10) How would you encourage a taste for good literature in elementary schools?

5. (10) Give two good results arising from requiring pupils to reproduce the reading lesson in their own language.

6. (50) Read a stanza of poetry and a paragraph of prose, to be marked by examiner.

10 and 11. Orthography and Penmanship.

Penmanship will be marked on the writing of this exercise.

1. (10) Use a prefix or a suffix with each of the following words, and tell how the meaning becomes changed: light, fuse, tough, shower, touch.

2. (10) State two advantages of written spelling over oral.

3. (10) Define, and use correctly in sentences, empiric, weird.

4. (10) Indicate syllables and accent of each of the following: construe, grimace, condolence, visor, abdomen.

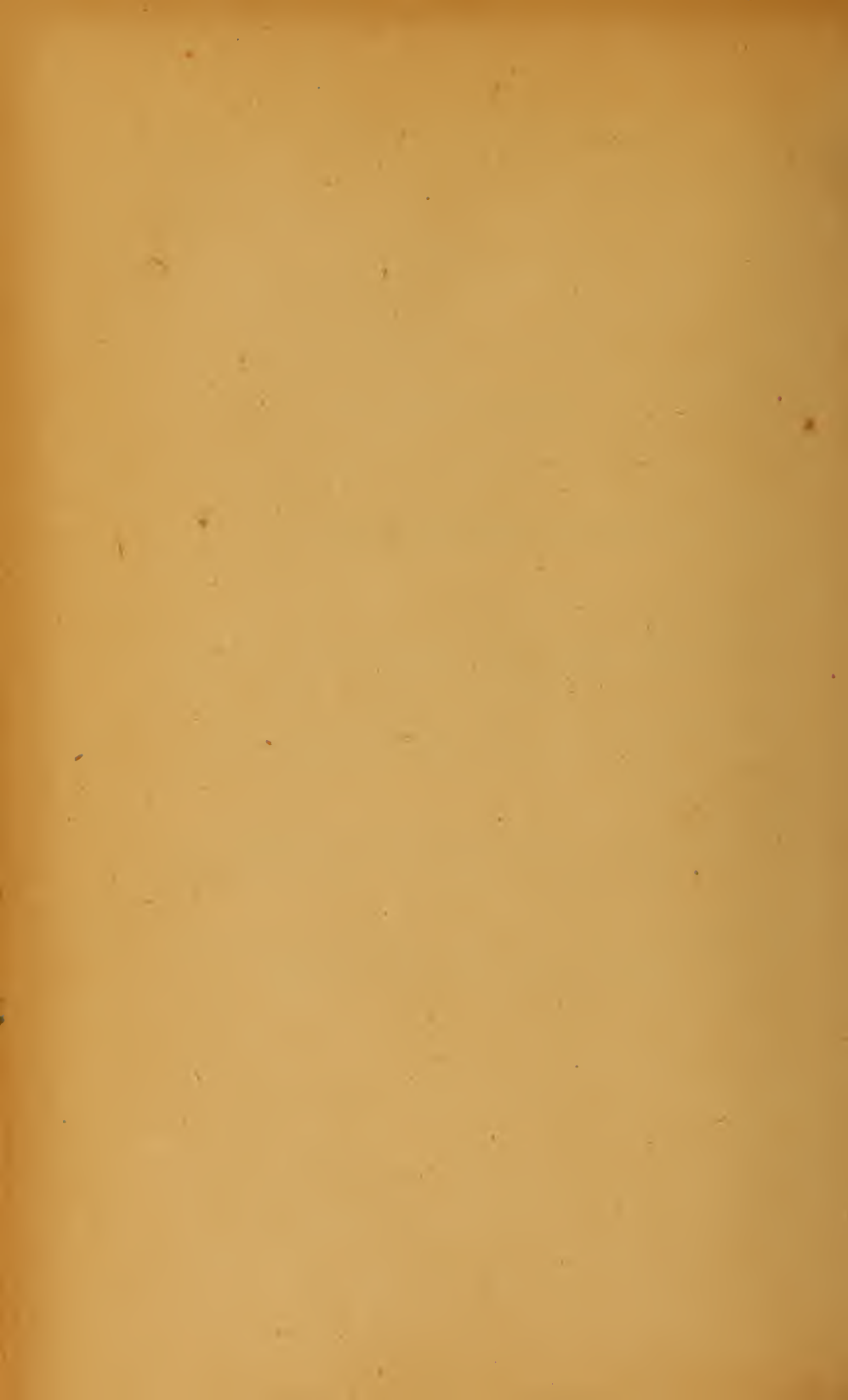
5. (10) Write in full: Alt.; C. O. D.; Cong.; Dwt.; O. S.

6. (50) Spell twenty-five words given by examiner.

Exhibit VIII.

Teachers' State Certificates.

- I. Circular : Relating to examinations for teachers' State certificates.
- II. Circular : Instructions to applicants for teachers' State certificates. Form of applicant's statement.
- III. Questions for the examination of applicants for teachers' State certificates. Denver, June 27, 28, 29, 30, 1892.
- IV. Names of those who have received teachers' State certificates under the law of Colorado.



Examinations for State Certificates.

STATE OF COLORADO, }
DEPARTMENT OF PUBLIC INSTRUCTION. }

Provided there should be applicants, an examination for State certificate will be held in Denver, during the latter half of the month of June. Four days will be given to the examination.

TERMS AND CONDITIONS.

1. Testimonials of character.
2. Successful experience as a teacher, of not less than two years in the State.
3. A thorough knowledge of reading, arithmetic (mental and written), English grammar, modern geography, physical geography, history of the United States, the Constitution of the United States and the Constitution of Colorado, with the elements of civil government, and the theory and art of teaching.
4. A general knowledge of physics, anatomy and physiology, botany, zoology, chemistry, astronomy, geology, mineralogy and psychology; also School Law of Colorado, algebra, the elements of plane and solid geometry (not including spherical geometry), and English literature.

5. Examination in one of the following branches, choice to be made by the candidate: Latin, limited to the first four books of Cæsar and the first two books of Æneid, with questions upon the grammatical principles involved in the passages translated, and Latin composition. German, limited to translations from German into English, and from English into German, with questions on German grammar.

SYSTEM OF MARKING.

Scale 100.

In zoology, physics, chemistry, astronomy and geology, nothing below sixty; in all other branches, seventy; general average not less than seventy-five.

Spelling graded by certain pages of answer-papers.

TERMS AND CONDITIONS FOR STATE CERTIFICATE WITHOUT EXAMINATION.

1. Testimonials of character.
2. A diploma from some other state, or from some institution of learning which represents scholarly attainments equivalent to those required to pass a regular state examination in this State.
3. Eminent services in the educational work of the State for not less than five years. (Eminent services have been defined by the State board of examiners to mean services as superintendent of public instruction, superintendent or principal of city or graded schools (a full course of eight grades), president and professor of a state institution of learning, principal and assistant principals of high school.)

Applicants for state certificates by examination should report to the State Superintendent some time during the month of April. Announcement of the exact time and place of the examination will be made not later than June 1.

NATHAN B. COY,
State Superintendent.

April 4, 1892.

INSTRUCTIONS TO APPLICANTS FOR STATE CERTIFICATES.

1. Admission to the examination for a State certificate is conditioned upon the candidate's having had two years' successful experience in teaching in the State of Colorado, and upon his being present at the beginning of the examination.

2. The candidate will be known during the examination, not by his name, but by the number on his envelope.

3. At the head of every sheet of paper used the candidate should write his number and the subject.

4. A separate sheet of paper should be used for each subject; that is, two subjects should not be written upon the same sheet.

5. Answer papers should not be folded. Only one side of the sheet should be used.

6. Answers should be numbered to correspond with questions, but questions should not be repeated.

7. Each question should be carefully examined, but no more should be written than is necessary for a complete answer. Quantity will not be accepted in place of quality.

8. Complete solutions of mathematical problems should be given. Mere results will not receive credit.

9. Candidates must not take to the examination room books or papers of any description. All necessary materials will be supplied by the examiner.

10. Candidates must not leave the room until work has been completed and handed to the examiner.

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

12. For evidence as to good character and successful experience reference may be made to county superintendents, city superintendents and principals of high schools.

13. Candidates should ask no questions. Any doubt as to the meaning of a passage may be submitted in writing, and will be considered when the papers are examined.

14. Collusion or communication between applicants during the examination, or any other act of dishonesty, will render the examination void.

15. All statements and answers must be written with ink.

16. The examination in each subject is restricted to the half day designated.

17. Candidates will be informed by mail, as early as practicable, of the results of their examination.

18. Morning sessions, 9 a. m. to 12 m.; afternoon sessions, 2 to 5 p. m.

Before entering upon the examination, the candidate will fill out the following statement, and seal it, together with written certificates of character and of success in teaching, in the envelope.

STATEMENT OF CANDIDATE.

Examination held at Denver, Colorado, June 27, 28, 29 and 30, 1892.

Full name.....

Postoffice address..... Age... years.....

Birthplace.....

Successful experience in teaching..... years.

Give three references as to experience, with names and postoffice addresses.

Is this your first examination for a state certificate?

If not, when and where have you been present at previous examination?

Give three references as to moral character, with names and postoffice addresses.

In what schools were you educated?

I hereby certify that the foregoing statement is correct in every particular.

Signature of candidate

Questions for the Examination of Applicants for State Diplomas.

Geography (60 minutes).

1. Give the history of a drop of water.
2. Draw a relief map of North America.
3. What is the altitude of the sun at 12 o'clock, June 22?
4. Draw a drainage map of South America.
5. Locate four of the largest cities in the world.
6. How are mountains formed?
7. Give an account of the people who live in the Arctic regions.

School Management (60 minutes).

1. Prepare an outline of the factors of a school and discuss each.
2. Write twenty lines on "Hygiene of the School Room."
3. Define good school government and state its objects.
4. Discuss scholarship as a factor in the good disciplinarian.
5. State fully the principles which should govern in the preparation of a daily programme.

Algebra (90 minutes).

I.

State and give reasons for the rules of signs for the four fundamental operations in algebra.

Simplify

$$\left\{ (2x + 9)^2 + \frac{(3x-5)(4x+2) - x^3 - 64}{x-4} + \frac{(x^2 + 2x - 15)}{x-3} (x+6) \right\} - \left\{ 16x^2 - (11x + 7)(9x - 3) \right\}$$

II.

How may an expression of the form $x^2 - y^2$ always be factored? What binomial factor may always be found for $x^n - y^n$, n being supposed a positive integer? What for $x^{2n} + 1 + y^{2n} + 1$, with same limitation for n ?

III.

In reduction of fractions, what operations upon the terms are permissible? From these, what rule have you for simplifying complex fractions?

Simplify

$$a + \frac{2b^2}{a} + \frac{b^3}{a^2} + \frac{a}{a^3} + \frac{a^2}{-b^3} \quad \frac{2b^5}{-} + \frac{b^6}{-} \quad 2ab^2 - 2b^3 + \frac{3b^4}{(a+b)}$$

$$(a+b) (a^2 - ab + b^2) (a^2 + ab + b^2) (a^3 - 2a^2b + 2ab^2 - b^3)$$

IV.

State axioms upon which transformation of an equation is based. Explain by one or more of your axioms why, in transposing a term from one member of an equation to the other, its sign is changed.

Explain the various methods of eliminating and illustrate each by applying it to the two equations $\left\{ \begin{array}{l} a_1 x + b_1 y = c_1 \\ a_2 x + b_2 y = c_2 \end{array} \right\}$ for the elimination of y .

V.

State general principles to be observed in the reduction of inequalities.

If $a < b$, is $a^2 < b^2$ necessarily true? Is $a^3 < b^3$?

Show that if $\frac{a}{b} > \frac{c}{d} > \frac{e}{f} > \frac{g}{h}$, all the denominators being sup-

posed positive, then $\frac{a}{b} > \frac{a+c+e+g}{b+d+f+h} > \frac{g}{h}$.

If a , b , and c are unequal, show that $a^2 + b^2 + c^2 > ab + ac + bc$.

VI.

What meaning is attached to an exponent when it is

{ positive and integral?
positive and fractional?
zero?
negative?

Extract the square root of $\frac{9}{25}z^2 - \frac{14}{3}ay + \frac{42}{5}az - \frac{2}{5}yz + \frac{y^2}{9} +$

$49a^2$.

Extract the cube root of $x^6 - 29\frac{3}{8}x^3 - 27 + 4\frac{1}{2}x^5 + 9\frac{3}{4}x^4 - 29\frac{1}{4}x^2 + 67\frac{1}{2}x$.

VII.

Write the expansion of $(a + b)^n$.

Demonstrate the Binomial Formula for the case in which n is a positive integer.

In what order must the terms of the binomial be written, when the exponent is fractional or negative, in order that the expansion by the B. F. may be a converging series.

Find $\sqrt[7]{127}$ by means of B. F.

VIII.

Discuss the solution of the general quadratic equation with a single unknown $ax^2 + bx + c = 0$, giving all the methods of solution with which you are acquainted. What relation must exist among the co-efficients in order that the roots may be real and unequal? Real and equal? Imaginary?

Construct the quadratic whose roots are a and b .

Given $(\sqrt{x+1} - \sqrt{x-1}) : (\sqrt{x+1} + \sqrt{x-1}) :: (4x-1) : 2$. Find x .

Geometry (90 minutes).

1. If two opposite sides of a quadrilateral are equal and parallel, the figure is a parallelogram.
2. An inscribed angle is measured by half its intercepted arc.
3. From two points on the same side of a given straight line (but not in either a parallel or a perpendicular to it,) draw two lines that shall meet each other at some point of the given line, and make equal angles with that line.
4. Let two circles intersect, and from one of the points of intersection draw diameters of each. Now show that the other extremities of these diameters and the other point of intersection of the circles are in the same straight line.
5. Find a mean proportional between two given straight lines.
6. If two straight lines are intersected by three parallel planes, their corresponding segments are proportional.
7. A triangular pyramid is equivalent to one-third of a triangular prism having the same base and altitude.

Psychology (90 minutes).

(Omit any two questions.)

1. Define psychology.
2. Designate the principal modes of the mind's activity.
3. Define sensation, perception, presentation and representation.
4. Give condensed statement of the laws of association.
5. Explain the processes of an act of judgment.
6. Designate the main functions of feeling.
7. Define will.
8. Give theories of determinism and of free will.
9. Practical application of laws of attention.
10. How may the perceptive powers be trained?
11. Value of mnemonics?
12. Ways and means of moral training?

Physiology and Hygiene (60 minutes.)

(Omit any two questions.)

1. You have for breakfast steak, bread, butter, potatoes. Name the alimentary principles present, and state the changes which each undergoes in the process of digestion.
2. Describe the course of the circulation of the blood starting at and returning to the right auricle of the heart.
3. What are the functions of the liver?
4. Describe in a general way the structure and functions of the kidney.
5. Describe accurately and without exaggeration the effects of tobacco smoking. Why is cigarette smoking especially injurious?
6. Describe the mechanism of breathing. What differences in composition exist between inspired and expired air?
7. Describe generally the structure of the brain. What is the function of the cerebral hemispheres?
8. Suppose that the spinal cord is cut or injured below the medulla oblongata, and that the hand is now cut, what effects would be noticed in regard to *pain* and to *movement* of the hand?
9. What are the effects on the body of "moderate" and of "excessive" drinking? What organ is first affected, and in what way?
10. What do you know of the structure of the blood, and of the uses of its several parts?

Zoology (60 minutes).

(Omit any two questions.)

1. Classify the animal kingdom into its main divisions. Mention the book you have studied.
2. What do you understand by mollusca, and into what groups may they be classified?
3. Compare the fore leg of a horse with the arm and hand of a man, noting correspondences and differences.
4. In what ways do (a) insects, (b) crustaceans, (c) mollusca breathe?
5. What do you know of the geographical distribution (a) of the elephant, (b) of the tapir, (c) of the mountain lion or puma, (d) of marsupials?

6. In what respect does an ostrich or cassowary differ from an ordinary bird.

7. How would you distinguish the mouth parts of a butterfly, a beetle and a bedbug from one another?

8. Classify as far as you are able the following animals: Jelly-fish, earth-worm, cuttle-fish, shark, alligator.

9. Name the principal anatomical differences between man and one of the higher apes.

10. What is a coral? What do you know of the manner in which coral islands are built?

Latin (90 minutes).

Omit 1 and 2 or 3 and 4.

1. Translate: (Caesar Bell. Gall. IV. 5.)

His de rebus Caesar certior factus, et infirmitatem Gallorum veritus, quod sunt in consiliis capiendis mobiles et novis plerumque *rebus* student, nihil *his* committendum existimavit. Est enim hoc Gallicae consuetudinis, uti et viatores etiam invitos consistere cogant, et quid quisque eorum de quaque re audierit aut cognoverit quaerant; et *mercatores* in oppidis vulgus circumstet, quibusque ex regionibus veniant quasque ibi res cognoverint pronuntiare cogant. His rebus atque auditionibus permoti de summis saepe rebus consilia ineunt quorum eos in vestigio poenitere necesse est, cum incertis *rumoribus* serviant, et plerique ad voluntatem eorum ficta respondeant.

2. Give construction (case and reason for it) of the above italicized words.

Decline *consiliis, his, quorum.*

Compare *mobiles, summis.*

Give principal parts of *veritus, quaerant, cogant.*

Give reason for subjunctive *veniant*, other than its being indirect discourse.

3. Translate: (Cicero in Catilinam II. 8.)

Sed cur tam diu de uno hoste *loquimur*, et de hoste qui jam *fatetur* se esse hostem, et quem, quia (quod semper volui) murus interest, non timeo: de eis qui dissimulant, qui Romae remanent, qui nobiscum sunt, nihil dicimus? Quos quidem ego, si ullo modo fieri *possit*, non

tam ulcisci studeo quam sanare sibi ipsos, placare rei publicae, neque id qua re fieri non possit, si me audire *volent*, intelligo. *Exponam* enim vobis, Quirites, ex quibus generibus hominum istae copiae *comparentur*: deinde singulis medicinam consilii atque orationis meae, si quam *potero*, adferam.

4. Locate italicized verbs in No. 3.

Give Gen. Sing. Fem. of *uno*; Gen. Pl. of *hoste*; case of *Romae*.

Decline *generibus, hominum*.

5. Translate: (Virg. Aen. I. 579-593.)

His animum arrecti *dictis* et fortis Achates
 et pater Aeneas jam dudum erumpere nubem 580
 ardebant. Prior Aeneas compellat Achates:
 'Nate dea, *quae* nunc animo sententia surgit?
 omnia tuta vides, classem sociosque receptos:
 Unus abest, medio in fluctu quem vidimus ipsi
 submersum; *dictis* respondent cetera *matris*.' 585

Vix *ea* fatus erat, cum circumfusa repente
 scindit se nubes et in aethera purgat apertum.
 Restitit Aeneas claraque in luce refulsit,
 os umerosque *deo* similis; namque ipsa decoram
 Caesariem nato genetrix lumenque juventae 590
 purpureum et laetos oculis adflaret honores:
 quale manus addunt *ebori decus*, aut ubi flavo
 argentum Pariusve lapis circumdatur auro.

6. Give construction of italicized words in No. 5.

Give principal parts of *fatus erat, refulsit, addunt*.

Mark the scansion of lines 587 and 592.

7. Translate into Latin:

a Cæsar sent ambassadors to Ariovistus, who were to say that he ought not to make war upon the Gauls.

b There was nobody in the city who did not fear Catiline.

German (75 minutes).

1. Decline:

Der kleine Garten.
 Eine lange Treppe.
 Das alte Haus.
 Ein dickes Buch.
 Kleines Weib.
 Frische Blume.
 Ein alter Mann.
 Hoher Himmel.
 Die runde Pflaume.
 Das Herz.

2. Give the principal parts of the following verbs :

Tragen, haben, nennen, rufen, sprechen, bringen, schreiben,
 denken, sollen, laufen.

3. Conjugate haben in the active voice.

4. What auxiliary forms the German passive?

5. Write in German the following sentences :

I am older than you.
 I have seven sisters.
 We will talk about it to-morrow.
 Where did you see my father?
 Why did you not tell him so?

6. Translate :

Ein Vater wünschte einmal, dass sein Sohn früh aufstehen sollte, und erzählte ihm die Geschichte von einer Person, welche früh am Morgen eine Börse mit Gold gefunden habe. "Ja," sagte der Knabe, "aber die Person, welche das Gold verloren hat, ist doch noch früher aufgestanden."

7. Write in German a letter of six lines.

8. Use in one or more sentences the following words: Hitze, gut, schlafen, hier, Sommer.

9. Decline the German definite article.

10. Name and decline the German personal pronouns.

Astronomy (60 minutes).

1. Explain briefly the theory of shooting stars.
2. Describe the appearance and the movement of a comet as it approaches and then recedes from the sun.
3. Is the sun cooling off? What is the physical condition of its substances? What is its distance from the earth? Is it a star or a planet? Why do you so class it?
4. During what season of the year are we nearest the sun? To what extent are the changes of the seasons due to the variations in this distance?
5. What major planets have been discovered within historic times? Who discovered them? What planets, apparently, have always been known?
6. Who discovered the moons of Jupiter? Of Mars? What planets are without known moons? What planets have more than two moons?
7. How do the physical conditions of Jupiter and of Mars differ?
8. In days or in years, give the time of one axial rotation for at least three of the planets; also the time of orbital revolution for at least four of them.
9. Describe briefly the rings of Saturn. Of what do you think these rings are composed?
10. Supposing the time to be noon of the 21st day of December, draw a figure showing the position of the sun relative to the horizon, the equinoctial, and the observer's meridian.

English Literature (60 minutes).

1. What races have inhabited Great Britain within historic times? What elements were contributed by each to the English language or literature?
2. Name a pagan poem of war and the sea. Name a Christian Anglo-Saxon poem of religion.
3. Name a long historical poem of the middle-English period, descriptive of the settlement of England.
4. Tell the story of Una and the Lion.
5. Tell the story of Patient Griselda.
6. What position is assigned to Uriel by Milton in *Paradise Lost*?

7. Name a novel written by Fielding.
8. Characterize Addison's Spectator papers.
9. Explain the plot of one of Shakespeare's plays.
10. Give an account of the rise of the Art School in English poetry.

Physics (90 minutes).

(Omit any two questions.)

1. Define specific gravity of a body or substance and describe one method of finding the same experimentally in case of a substance denser than water.
2. Define energy and distinguish between the kinetic and potential state of energy.
3. State the "parallelogram law" for forces acting at one point, using an explanatory diagram with statement.
4. What number on the centigrade scale indicates the same temperature as 63° on the Fahrenheit scale? Explain how you find the answer.
5. (a) State the velocity of sound in air at "ordinary" temperature. (b) Find the length (at same temperature) of the wave caused by a sounding body which vibrates 128 times each second, explaining the process of finding wave length.
6. (a) State the velocity of light. (b) With a carefully drawn diagram, show how a convex lens makes a real image of an object placed at a suitable distance from it. Represent, in this diagram, three pencils of light, marking one source A and its image A', another source B and its image B' and the third source C and its image C'.
7. Describe (using a diagram with your description) the effect of a charge of positive electricity upon an insulated conductor placed near it.
8. Name the essential parts of a voltaic cell.
- 9-10. Suppose two closed circuits, A and B; A having a battery or other current generator included within it; B having no such cause of a current within itself. Describe the effect on B of the following operations: (a) Bring the two circuits nearer together; (b) separate them to a greater distance; (c) suddenly start the current in A by closing the circuit without altering the distance between A and B; (d) suddenly stop the current in A by "breaking" its circuit without changing other conditions.

Arithmetic (75 minutes).

(Omit any three questions)

1. If I buy the N. W. $\frac{1}{4}$ of the N. E. $\frac{1}{4}$ of the N. E. $\frac{1}{4}$ of a section of land, how many acres do I buy? What part of a whole section? Locate the parts by diagram.

2. How many acres in a circular park whose circumference is one mile?

3. Bought of John Smith & Co. a bill of goods amounting to \$2,760, for which I paid $\frac{2}{5}$ cash and gave my note at 4 months, with 6 per cent. interest added, for the remainder. What was the face of the note?

4. Compare the amounts of a \$500, 8 per cent. note, running 4 years, at simple interest, at annual interest unpaid, and at compound interest.

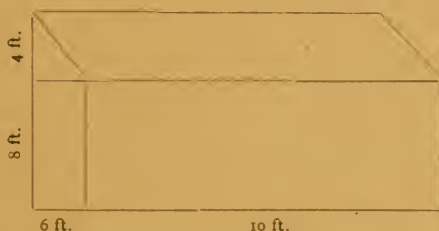
5. Reduce $\left\{ \frac{1\frac{3}{4}}{4\frac{1}{2}} \div \frac{2\frac{1}{3}}{2\frac{1}{4}} \right\} \times \frac{4}{5}$ of $\frac{1}{2}$ to a decimal and write result in words as well as figures.

6. What is the weight of a block of stone 12 ft. 6 in. long, 6 ft. 6 in. broad and 8 ft. 3 in. thick, if a block of the same stone, 5 ft. long, 3 ft. 9 in. broad and 2 ft. 6 in. thick, weighs 7,500 lbs.

7. Picture $\frac{1}{2} + \frac{3}{5}$ also $\frac{2}{3}$ of $\frac{2}{5}$ also $2\frac{1}{4} \times \frac{5}{6}$

8. After $\frac{1}{2}$ the yarn has been taken from a ball 6 inches in diameter, what is the diameter of the ball?

9. If a ton of coal occupies 40 cu. ft., how many tons can be placed in a coal house of the shape and dimensions given in the picture?



10. Find the area of the surface of the largest globe that can be turned from a block of wood 6 in. by 4 in. by 8 in.

11. Show how you explain finding the solid contents of a rectangular solid.

12. $\frac{1}{2}$ of the time past noon equals $\frac{1}{3}$ of the time to midnight. What time is it?

13. A man sold a house and lot for \$3,975.25, receiving for the lot $\frac{1}{3}$ as much as for the house. What was the cost of each, if he gained $\frac{1}{5}$ on the house and $\frac{1}{4}$ on the lot?

Chemistry (60 minutes).

(Omit any two questions.)

1. Discuss the formula of water, ($H_2 O_2$), showing what is indicated directly, and what is to be understood by the symbolism.

2. Give some account of the function of CO_2 gas in nature.

3. If the formula of an oxide is MO ("M" standing for a metal) and if this oxide contains 60 per cent. of the metal, and 40 of oxygen, what is the combining weight of the metal, that of the oxygen being assumed as 16?

4. Name the following compounds: $H_2 SO_4$; NH_3 ; KCl ; $P_2 O_5$; $Na_2 SO_3$.

5. What substances would you take, and how would you proceed, in producing NH_3 gas?

6. Describe the gases of which the atmosphere is composed.

7. If a gallon of oxygen is combined with carbon, forming CO_2 or carbon dioxide gas, what will the volume of that gas be?

8. Name the elements which enter into the composition of the animal body; specify those which are essential to the skeleton.

9. What elements are necessary for fertility in a soil?

10. Give the general laws regulating the combination of gases.

Geology and Mineralogy (60 minutes).

(Omit any two questions.)

1. How do rocks become disintegrated into soils?

2. What is meant by stratified, sedimentary, metamorphic and igneous rocks; give example of each.

3. Explain the origin and history of our Rocky Mountain canyons.

4. Describe the ores from which iron is commonly obtained.

5. What evidences have we of past glacial action in these mountains?

6. Name some of the great geological divisions, *i. e.*, eras and ages.

7. What are fossils and what is their use to the geologist?
8. Give simple tests for distinguishing the minerals composing granite.
9. Name and describe five varieties of quartz used in jewelry.
10. What are the economic values of the common calcareous minerals.

Physical Geography (60 minutes).

(Omit any two questions).

1. What is understood by "The Divide?" What are the three main mountain ranges of the United States?
2. Trace the general course of the Gulf Stream. Explain its origin.
3. Explain the cause of waves on the ocean.
4. Describe the "Trade Winds."
5. Why is the atmosphere of Colorado dry? How would you account for the so-called "rainless regions" of the world?
6. What are glaciers?
7. Explain the change of seasons.
8. Into how many races is the human family divided? Name them.
9. What are volcanoes? What are earthquakes?
10. Explain the formation of clouds.

United States History (60 minutes).

(Omit any one question except 9)

1. Name the principal causes of the rapid settlement of America in the sixteenth century.
2. What difference in character between the settlers in the North and South, and how did this difference influence the subsequent history of the United States?
3. Name the thirteen original colonies, and tell how many years elapsed between the establishment of the first and the last.
4. What accusations are made against the British in the Declaration of Independence?
5. Name the successive seats of the war during the Revolution.

6. Write a brief account of American slavery between 1619 and 1865.
7. Write a brief history of the Indians in this country since the settlement of Jamestown.
8. What good was accomplished by the war of 1812?
9. What problems of national importance are being discussed in the United States to-day?

Civil Government (60 minutes).

(Omit any two questions.)

1. What was the origin of the Constitution of the United States?
2. Suppose the United States should purchase Cuba; how, under the provisions of the Constitution, could that island secure a representation in Congress?
3. How are vacancies in the state's representation in Congress filled? Describe the manner in which a bill becomes a law.
4. In how many instances has the choice of a president devolved upon the House of Representatives? How has Congress settled the order of presidential succession in the event of death, removal, etc.?
5. How may new states be admitted into the Union? In case it were deemed advisable to erect two or more states within the present limits of Texas, what would be the method of proceeding?
6. When shall the United States protect a state against domestic violence? What department of the government shall extend this protection?
7. Who may be impeached? How are impeachments conducted? What punishment may follow conviction?
8. How may an act of Congress be declared unconstitutional? What acts of Congress have been pronounced unconstitutional?
9. Describe the method of ratifying an amendment to the Constitution. What restrictions are placed on the power of Congress by the first amendment?
10. When did Congress pass an act to enable the people of Colorado to form a State government? How may the Constitution of Colorado be amended?

Botany (60 minutes).

1. What is a seed? What do seeds contain?
2. Name the different kinds of buds. What is the relation as to position between buds and leaves?

3. How do plants climb? What is the difference between climbing plants and twining plants?

4. What is a rhizoma? A bulb? A corn? Give an example of each.

5. Define the terms serrate, dentate and sinuate as applied to the outline of leaves. Give the distinctions indicated by the terms lobed, cleft, parted and divided.

6. Name and describe three kinds of indeterminate inflorescence.

7. What is a perfect flower? A complete flower? A regular flower? a symmetrical flower?

8. Explain the terms union and consolidation as applied to the organs of flowers.

9. Name the parts of a pistil and give the office of each.

10. What is a fruit? Explain the structure of the strawberry, the raspberry, the apple.

Grammar (60 minutes).

(Omit any three.)

1. What is the standard of good English?

What are the chief uses of grammar? In what respect is the study of grammar unnecessary?

2. How does the English spoken in America compare with that spoken in England? Mention some points of difference.

3. What classes of words are used in sentence making? Give an example of each class.

4. What are the essential elements of a sentence? Illustrate.

5. How are sentences classified with regard to form? With regard to structure? Illustrate.

6. How do we form the possessive case, singular and plural of nouns? Illustrate. Give example of some exceptional form.

7. Distinguish between the direct and the indirect object of verbs.

8. What is meant by "Objective Predicate"? "Predicate Nominative"?

9. Give the construction (case and government) of the italicized words in the following sentences :

1. Gather *her* a bouquet of roses.
2. Who made *him* *umpire*?
3. Here the river is a *mile* *broad*.

10. Write sentences illustrating the use of a clause: (1) as a noun; (2) as an adjective.

11. Illustrate, in a sentence, the substantive use of an infinitive and state its construction.

12. Analyze: "Who are you who talk of peace?" Classify each word in the sentence.

13. Analyze: "Pardon my asking if you like to read;" parse *pardon, my, asking*.

Reading (60 minutes).

(Omit any two.)

1. The true objects of elocutionary study are only two; name them.

Discuss the relation of physical culture to reading.

2. Name three requisites of intelligible reading.

How is breathing related to the whole subject of expression?

3. What is the duty of the teacher in regard to the preservation of a pure speech?

What is pure tone?

4. Upon what does excellence of pronunciation depend.

Why do few people read naturally?

5. Name the essentials to expressive reading.

What are the three sources of emphasis? Define inflection.

6. Besides that of pausing, what other means has the cultivated reader for the manifestation of the logical division of a sentence?

In intellectual reading, what portion of a sentence is given by itself?

7. How will a good reader pronounce clauses and sentences?

What are the essential parts of a sentence?

8. What is necessary to the proper expression of a sentiment?

What is necessary, beyond comprehension and sympathy, to the proper expression of a thought?

School Law (60 minutes).

(Omit any two questions.)

1. Free text books—law of Colorado respecting?
2. District school boards—vacancies filled by whom?
3. District bonded debt—qualifications required of an elector offering to vote on the question of contracting?
4. New school district—necessary steps to be taken in the formation of?
5. Records and reports required of teachers—law respecting and penalty for failure to observe?
6. School districts—different classes of? How designated?
7. School directors—powers of, pertaining to teachers?

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UNDER THE LAW OF COLORADO.

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Aaron Gove.	Miss N. O. Smith.
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F. J. Annis.	S. A. Wilson.
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H. F. Wagener.	E. L. Byington.
Mary Thomas.	Wm. Eiseman.
Adele M. Overton.	J. H. Freeman.
Ira W. Daris.	J. P. Jackson.
A. E. Chase.	C. V. Parker.
Robert Casey.	W. A. Lindsey.
F. E. Smith.	Miss Atta L. Nutter.
P. H. Hanus.	E. C. Hill.
J. C. Shattuck.	J. A. Guttery.
F. B. Gault.	Mrs. E. K. La Barthe.
C. L. Ingersoll.	W. T. Eddingfield.
W. W. Remington.	A. C. Courtney.
J. S. McClung.	Grace Patton.
E. C. Stevens.	L. S. Cornell.

Issued in 1891-2.

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

Exhibit IX.

State Educational Institutions.

- I. The University.
- II. The Normal School.
- III. The Agricultural College.
- IV. The School of Mines.
- V. The School for the Deaf and the Blind.
- VI. The Industrial School.

The University of Colorado,

Boulder, 1892.

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Professor of Railway and Clinical Surgery.

WILLARD TELLER,

Lecturer on Equity Jurisprudence, Pleading and Practice.

HERBERT B. WHITNEY, M. D.

Professor of the Diseases of Children.

HUGH BUTLER,

Lecturer on Common Law and Code Pleading, and Peculiarities of Colorado Law and Practice.

VICTOR A. ELLIOTT,

Lecturer on the Law of Water Rights and Riparian Privileges.

ROBERT S. MORRISON,

Lecturer on the Law of Mines and Mining.

LEWIS E. LEMEN, M. D.,

Professor of Clinical Surgery.

JOHN CAMPBELL,

Lecturer on the Law of Municipal and Private Corporations.

GEO. B. PACKARD, M. D.,

Professor of Orthopedic Surgery.

OSCAR F. A. GREENE,

Lecturer on Roman Law.

CHARLES S. THOMAS,

Lecturer on the Law of Evidence and Bailments.

CHARLES M. CAMPBELL,

Lecturer on the Law of Personal Property, Bills of Exchange and Promissory Notes.

MERRICK A. ROGERS,

Lecturer on Criminal Law and Procedure, Guarantee and Suretyship.

ALFRED C. PHELPS,

Lecturer on the Law of Personal Rights, Torts and Damages.

EIGHTH BIENNIAL REPORT

WILLIAM C. KINGSLEY,

Lecturer on the Law of Domestic Relations and Partnership.

HENRY T. ROGERS,

Lecturer on the Law of Wills, Executors and Administrators.

ROBERT W. BONYNGE,

Lecturer on the Law of Agency and Insurance.

THOMAS E. TAYLOR, M. D.,

Lecturer on Obstetrics.

JOHN VROOM, M. D.,

Lecturer on Bandaging and Minor Surgery.

ERNEST KENDALL, M. D.,

Lecturer on Histology and Urinary Analysis.

CHARLES H. FARNSWORTH,

Instructor in Music.

CAROLINE M. HYDE, B. S.,

Instructor in Latin.

DELPHINE BELL,

Instructor in French.

EMLEY B. QUEAL, M. D.,

Demonstrator of Anatomy.

FREDERICK F. KRAMER, B. A.

Instructor in Semitic Languages.

HERBERT B. SHOEMAKER,

Instructor in Elementary Law and Common Law Pleading.

CALVIN E. REED,

Assistant Lecturer on the Law of Real Property.

WILLIAM M. MAGUIRE,

Assistant Lecturer on Constitutional Law.

HENRY C. CHARPIOT,

Assistant Lecturer on the Law of Domestic Relations.

EDWIN B. MORGAN,

Assistant Lecturer on Equity Jurisprudence.

ALBERT S. BLAKE,

Assistant Lecturer on the Law of Contracts.

LUCIUS M. CUTHBERT,

Assistant Lecturer on the Law of Wills, Executors and Administrators.

HORACE G. LUNT,

Assistant Lecturer on the Law of Private and Municipal Corporations.

W. H. GOODALL, B. L.,

Instructor in Oratory.

CHARLES E. LOWREY, Ph. D.,

Librarian.

HERBERT B. SHOEMAKER, B. A., LL. B.,

Secretary.

REPORT OF THE PRESIDENT.

To the State Superintendent of Public Schools, Colorado:

DEAR SIR—I have the honor of presenting the Eighth Biennial Report of the State University of Colorado.

I came to the duties of the presidency in January last. Reference to the previous work of the institution has already appeared in public utterances, and need not be repeated here. I shall endeavor to set forth the work of the past few months together with present prospects, needs, etc.

DEPARTMENTS.

The State University is the head of the public school system of Colorado. It is a true university in both the American and the German sense, and it is the one of our public institutions that represents higher and liberal education. It is a university in the American sense, because it contains the college and the professional schools; in the German sense, because it is arranging to offer graduate courses with true seminary methods. The State Preparatory School is connected with the University, but it does not properly rank as a department of it, for the reason that the work of a university cannot include secondary education.

The departments of the University are as follows :

College of Liberal Arts.

Classical course, leading to the degree of A. B.

Philosophical course, leading to the degree of Ph. B.

Scientific course, leading to the degree of B. S.

Literary course, leading to the degree of B. L.

Graduate Courses.

Leading to the degrees of A. M. and Ph. D.

Colorado School of Science.

Technological, to be developed as rapidly as possible.

Colorado School of Medicine.

Colorado School of Law.

Colorado State Preparatory School.

Conducted by the University.

The Colorado Divinity School.

Is located in Boulder in order to use some of the University courses, but it is not governed or supported by the University.

RELATION TO THE STATE.

Since undertaking the duties of my office some things have been done looking toward the growth and usefulness of the University.

It was thought that the University had not performed its whole duty when the departments were organized and made ready for the accession of students. A necessary and proper function of the regents and faculty is to go forth to the people and make known the existence and importance of higher education as provided by the State. Through the voluntary co-operation of a generous press, the efforts of members of the faculty in visiting schools, institutes, etc., and the use of circulars, a wide interest concerning the University has been aroused.

CONNECTION WITH HIGH SCHOOLS.

Since the University is in the line of that general education which begins in the common schools, and since a complete course to and through the University is the ideal attainment for every youth of Colorado, the relation of the high schools to the University is of vital importance. More than a little has been done within a year to effect a recognition of the connection on the part of the high schools, and many of the high schools are adopting the State courses and are modifying or enlarging their work in order to prepare for the University. The natural thing for a graduate of a public high school, who desires a higher education, is to enter the University, and this as much because of the superior work there done, as from the feeling of loyalty which all public-spirited citizens and all pupils in the public schools should entertain toward their State and their school system.

MEDICAL SCHOOL.

The Medical School, which was languishing because of poor clinical advantages, has been completely reorganized with a large and strong faculty, and it has been arranged to conduct the last two years of the course in Denver. This is not in any sense a removal of the department to Denver. The first year of the course, all the executive work, etc., remain in Boulder; the upper classes are taken to Denver to enjoy the necessary and just privilege of clinical work. A building, which is ample and convenient, has been rented on Stout street, near Seventeenth. The work of the school this year is to lay a careful foundation for a strong growth, and the success of the experiment is already assured. The expense of this school to the State is merely nominal. The rents, incidental expenses and salaries of the professors fall within \$4,500 per annum. Practically, the faculty donate their services.

LAW SCHOOL.

Owing to a considerable demand for a law school in the Rocky Mountain region, it was thought desirable to establish one as a department of the University. Judge Moses Hallett consented to become dean and undertook the arduous work of organizing a faculty, aided by the efficient co-operation of the secretary, Charles M. Campbell. The men secured are among the leading practitioners of the Colorado bar, and they constitute one of the strongest faculties the country affords. The school opens with twenty students, a number far beyond the most sanguine hopes of its friends. The hospital has been converted into a dormitory and lecture hall for the Law School. The students have named the place Kent Hall, an appellation which the University is willing to adopt because of its fitness and convenience. At present the instructors and lecturers are performing their work without salary. The incidental expenses of this department are limited for the current year to \$1,500. The foundation of a law library has already been laid. The department is one of large promise, and the University and the citizens of Colorado owe a debt of gratitude to the men who with loyal spirit are doing this work at loss of time and income.

STATE PREPARATORY SCHOOL.

The State Preparatory School, under the government of the University, has increased in size until there is no longer room for all the classes upon the campus. This was foreseen last year and arrange-

ments were made to conduct the first year of the school outside of the college grounds. The city of Boulder offered the use of rooms, and, recognizing the needs of the University, agreed to pay the larger share of the entire expenses. The prompt and generous action of Boulder at this time is deserving of much praise. The relation of the first year to the University is the same as formerly: the students are those who would have entered under any condition; the courses are preparatory courses; the school is conducted as a preparatory school, and it is under the control of the University.

The length of the courses has been changed from three to four years, and the work is most efficient and of the highest standard in every department. The grade is now on a par with that of the best fitting schools in America. Dr. Burdick, the principal, was chosen for his eminent fitness to conduct preparatory work. This department is maintained (1) for pupils from districts in the State of Colorado having no high schools, (2) for those who cannot find at home the desired preparatory course, (3) for students from other States who desire a superior preparation for college. Already nearly half of the students are from remote places. Some of the courses offered are excellent as finishing courses.

It is the purpose to maintain this school, because a central Preparatory School of high grade will long be a necessity for Colorado. The two classes now conducted in the college buildings will be forced out within a year or two by the University students, and it is of vast importance that immediate provision be made for them. There should be an expenditure of \$75,000 for a building and dormitory for the Preparatory School. Should the present arrangement with the city of Boulder be continued and prove satisfactory to our legislators, much of this expense to the State would be saved.

SPECIAL STUDENTS.

The courses of the University are open to all citizens of Colorado of suitable age and attainments, even though they may not aim at a degree, provided good reasons may be offered for pursuing partial work. This privilege has been used in many cases to advantage, and any students, singly or in a body, having satisfactory reasons, are welcomed to the University as specials.

In view of these facts, the Colorado Divinity School, a union organization, has recently been located in Boulder. The faculty is made up of representatives of some eight denominations. The studies of the University that are of service in a theological course are used freely by the divinity students. This requires no additional expendi-

ture by the University, and it is a great saving and advantage to the School. The Divinity School is not governed or supported by the University, but will use some of its courses. This union of theological and secular training will prove beneficial to both institutions. This movement is a long step in advance; if successful, it will make an epoch in church history. The press of the entire country has made extended comment which in the main is favorable to the enterprise.

SCIENTIFIC SCHOOL.

It is apparent that the growing needs of Colorado and the future of the University demand a department which already exists in most state universities. I refer to a scientific technological school. The admirable work already done in the scientific and mathematical departments is a foundation for such courses as are offered, for example, in the Sheffield Scientific School. By the addition of one special professor, work in civil and electrical engineering can be begun at once. In due time we shall aim at mechanical engineering as well as civil and electrical. The courses will be four years in length, and the College standard of admission will be required. There is no purpose to cover the ground of mining and agriculture, since these departments already exist as separate schools in the State. We believe that this school will become an important department of the State University.

BUILDINGS AND GROUNDS.

All the buildings on the campus have undergone some necessary repairs during the past few months and the grounds have been improved to a noticeable extent. The athletic grounds have been put in a good condition.

GROWTH.

There is a large increase in attendance, over seventy-five per cent. more than last year. The most noticeable and important increase is in the freshman class. This numbers thirty-five, and represents every section of the State—only four are from Boulder and vicinity. The Preparatory School has an entering class of over ninety pupils, an unprecedented number. Owing to the adjustment of the new courses, a few of these are located in the second year. The Law School opens with twenty-five members. In spite of its changes and reorganization, the Medical School has an attendance between two and three times as large as that of last year. The entire enrollment for the year, including the Preparatory School, will amount to about 300.

NEEDS.

In my inaugural address, I set forth the needs of the University about as follows :

- Completion of the scientific building.
- Repairing of the main building.
- A new main building.
- A ladies' dormitory.
- An extension to Woodbury Hall.
- A gymnasium.
- A building for the Law School.
- An observatory.
- A library building.
- Facilities for the Preparatory School.
- Improvement of the campus.
- Addition to the library.
- More apparatus and better facilities for all departments.
- More professors.
- Additional income for the Medical School.
- Additional income for the Law School.

The beginning of a scientific (technological) school, like the Sheffield at Yale.

The above is a plain enumeration of needs, and all are genuine. It is unnecessary to say we do not expect all of them to be supplied at once, but we do expect that our legislators will recognize the mission of the great state universities; that they will desire to make the University of Colorado the peer of any; that they will recognize the cost of the many departments; that they will see the necessity of immediate expenditure to secure future growth; and that they will do justice, both absolute and relative, to the State University. The institution invites investigation as to its growth, its needs and its prospects. The University, as a whole, should cost five times as much as any one school or department. With increase of facilities, its growth will be surprisingly rapid.

It is imperatively necessary that the annual income of the University be increased, and that, in addition, certain of the needs enumerated be met this year by special appropriations. A specific statement will doubtless be made by the regents, to the proper committees of the next General Assembly.

DONATIONS, ETC.

Col. Ivers Phillips, a prominent and revered citizen of Boulder, recently donated \$1,000 to the Latin department of the University, to be expended for illustrations in Roman Archæology. Early in the year, the city of Boulder contributed \$2,000 to meet certain needs of the Institution. For both these gifts, the University desires to publicly make grateful acknowledgments.

These donations show a confidence in our work and growth, and they are but the beginning of private munificence which, within a few years, will be shown toward the University. A liberal policy on the part of the State at this time will invite the confidence of citizens and increase the possibility of private assistance.

The Union Pacific railroad has recently consented to run a mid-day train, called the "University train," between Denver and Boulder. It has built a platform and side-track opposite the University for the convenience of students and members of the faculties. These accommodations will be helpful to the University, and its friends are grateful to the liberal management of the road. Mr. George Ady, general agent of the passenger department, and Mr. W. A. Deuel, general superintendent of the Gulf division, Union Pacific railroad, have been especially instrumental in securing a recognition of the need of this train and the advantage that it will be to the railroad.

STANDARDS.

After a careful estimate of the work here, I can say with confidence that the standards of the University of Colorado are high throughout. The freshman class of this year has been admitted upon the standards advertised in the last catalogue, although several applicants have been conditioned. There is promise that many young high schools will improve their courses during the present year in order to reach the standards more fully.

The length of the preparatory work has been increased from three to four years, and the work itself has been put upon a superior basis. The science work in the University is of the very highest grade in amount and quality; the methods are abreast of the

most advanced. The progressive spirit and thorough investigation in all departments, I believe, would surprise any intelligent observer. We proclaim with confidence that no student of Colorado now needs to go east for higher education. If the universities of Michigan, Minnesota, Wisconsin and California have claims upon their young men and women, so henceforth has this University a claim upon the youth of Colorado. And it invites them in the name of a reasonable loyalty to the public school system, and because of the excellence of the work offered. A graduate of last year has just entered the Harvard Graduate School on a par with her own Alumni, and our University has furnished two instructors to Yale and one to Leland Stanford.

There would be less need to speak of our standards were terms used everywhere in the west with discrimination and wisdom. It is desirable that there should be a correct understanding of what constitutes a college or a university. The wrong use of the terms tends to confuse people and harm the cause of education. Probably the majority of our best educators would be glad to limit to higher institutions of liberal education and science schools of college grade whatever should be distinctively characteristic of them. The American college of to-day gives a degree at a point eight (not less than seven) years beyond the grammar school. This standard is maintained by the University of Colorado in all its academic courses.

Unfortunately many expect that under equal conditions a college should contain as many students as a grammar or a high school. The world over, students in higher courses of liberal training are relatively few, but they in the aggregate become of inestimable value to the world. The State University is young, but it has been accumulating strength for vigorous growth. The capital that may be invested now will bring large returns speedily.

ADMISSION.

A carefully guarded certificate system has been employed for admitting students to the collegiate department of the University. A few high schools have already been placed upon the "accredited" list, and the number will be increased as the improved standards of other schools may warrant. Recommendations for admission without examination, coming from non-accredited high and preparatory schools and from normal schools in good standing, are considered by the faculty. I speak especially of the admission of normal gradu-

ates, because of the interest in the subject shown in a department of the National Educational Association at its last meeting. In a prominent group of principals of normal schools there was a strong sentiment favoring a connection between normal schools and colleges such as exist between high schools and higher education. It was further held that one work of normal schools should be to inspire toward higher education, and that many of the graduates should seek the broad training of college before beginning their life work.

THE FUTURE.

The next five years should see 300 students in the college, 200 in the professional schools, and 400 in the preparatory school. This is undoubtedly too conservative an estimate. There is no reason why the glorious history of other state universities should not be repeated in Colorado. Unless ignorance and selfishness stand in the way, it needs no seer to predict a great future for the State University.

FINANCIAL REPORT.

I herewith submit the financial report for the last two years, as presented by the secretary of the Board of Regents and the treasurer of the University; also the report of the librarian.

Very respectfully,

JAMES H. BAKER,
President of the University of Colorado.

Boulder, Colorado, October 1, 1892.

SECRETARY'S REPORT.

I herewith submit my report as Secretary of the Board of Regents, showing the total amount of money expended between October 1, 1890, and October 1, 1892, and for what purpose, to-wit:

Salaries of Professors, Instructors, Librarian and Secretary of the President.....	\$43,591 96
Janitors and Janitors' supplies	1,631 98
Supplies and expenses Chemical Laboratory.....	529 52
Literature and Art	202 07
Greek.....	79 90

Biology, Specimens, etc.	262 17
Physical Laboratory Supplies and Apparatus	415 09
Latin Expenses	16 00
Mathematical Models, etc.	27 45
Law Department	86 47
Regents' Fees and Mileage	1,641 00
Library Books, etc.	839 19
Periodicals, Magazines and Papers	794 70
Expense of Medical Department, including salaries of Professors	8,890 12
Expense of Professors in making tours through this state to examine candidates for admission to the University	276 51
Advertising	1,602 85
Printing, Postage and Stationery	889 45
Expense of keeping Horses and Wagon	583 29
Fuel, Lights and Oil	2,660 57
Furniture and Furnishings	1,093 37
Amount expended on Woodbury Hall, in completing	6,620 35
Amount expended on Hale Scientific Building, not including \$30,000 appropriated by the Legislature	8,583 46
Other expenses on Buildings and Grounds, including salary of teamster	10,622 18
Sundry small accounts	3,669 71
	\$95,609 36

This report does not include the special appropriation of \$30,000 made by the Legislature for a Scientific building. It includes, however, the sum of \$8,583.46 which the regents found necessary to expend on the Scientific building to put it in proper condition to leave after the special appropriation had been exhausted.

Respectfully submitted,

S. A. GIFFIN,
Secretary.

October 1, 1892.

TREASURER'S REPORT.

From October 1, 1890, to October 1, 1892.

RECEIPTS.

Balance cash on hand October 1, 1890.....	\$ 5,799 47
Received from State Treasurer, general fund	78,420 00
Received from State Treasurer, land income fund.....	9,977 47
Received from State Treasurer, special fund.....	83 77
Received from H. M. Hale, president, fees and tuition.....	1,048 00
Received from H. M. Hale, president, chemicals furnished to students.....	129 80
Received from Prof. Palmer, chemicals furnished to students..	65 90
Received from Prof. Dennett, material furnished students.....	14 00
Received from Jas. H. Baker, president, fees and tuition	412 45
Total	\$95,950 86

DISBURSEMENTS.

Disbursements as per vouchers.....	\$91,003 96
Cash on hand October 1, 1892.....	4,946 90
Total	\$95,950 86

Respectfully submitted,

C. G. BUCKINGHAM,
Treasurer.

LIBRARIAN'S REPORT.

October 1, 1890, to October 1, 1892.

INVENTORY OF BOOKS.

No.	VOLS.
1892	8,209
1890	6,810
Increase	1,399

PRESENTATIONS.

<i>General Library:</i>	VOLS.
Woodbury, Roger W. Times and Tribune	30
Hale, Horace M. Miscellaneous	30
Blake, George B. Historical	22
Allen, Edward G. Miscellaneous	19
Government, U. S. Educational	13
Brown, John C. Forestry	12
Buckingham, Charles G. Expensive Art	12
Gardiner, Prof. and Mrs. Biological	11
Brackett, Prof. J. R. Literature	2
Lowrey, Charles E. Mathematics and Bibliography	2
Miscellaneous, one vol. each. General	20
	<hr style="width: 10%; margin-left: auto; margin-right: 0;"/> 177
 <i>Public Documents:</i>	
Wolff, Joseph Rebellion Records	33
Teller, Henry M. Miscellaneous Government	20
Officials, State Reports	3
	<hr style="width: 10%; margin-left: auto; margin-right: 0;"/> 56
Total donations	233

COMMENT.

The growth of the Library has been seriously checked from inadequate accommodations. One hundred periodicals are taken, and completed volumes of critical reviews are bound to date. A reading room for the proper distribution and use of periodical literature is much needed.

Since last report, 20,000 cards of bibliography and reference on the books of the general library have been constructed. The use of the library has grown apace with the perfection of these appliances for easy consultation.

The librarian finds no material inconvenience from the extension of the privilege of direct access to the shelves to the University students. Counts on average days indicate a use of 30,000 volumes annually. In 1891-2, the circulation to those officially connected with the University aggregated 3,840 volumes.

The demands of the library for generous appropriations to purchase books and to provide suitable storage and facilities for use are exceedingly urgent. With rapid growth in numbers and departments of work, it is the universal desire that, as heretofore, the library by its excellence attract to the University and retain students and professors of superior scholarship and worth.

CHARLES E. LOWREY,
Librarian.

PAY ROLL OF THE OFFICERS, TEACHERS AND EMPLOYEES.

NAME.	POSITION.	RATE PER ANNUM.
James H. Baker, M. A., LL. D., president.....	Professor of Psychology and Ethics.....	4,500 00
Mary Rippon.....	Professor of the German Language and Literature.....	1,600 00
J. Raymond Brackett, Ph. D.....	Professor of Comparative and English Literature.....	2,000 00
William J. Waggner, M. A.....	Professor of Natural Philosophy.....	2,000 00
Ira M. DeLong, M. A.....	Professor of Mathematics.....	2,000 00
John Gardiner, B. Sc.....	Professor of Biology.....	1,700 00
Maurice E. Dunham, M. A.....	Professor of Greek.....	1,800 00
Lindley M. Kearsbey, Ph. D., R. P. D.....	Professor of History and Political Science.....	1,600 00
Carl W. Belsler, Ph. D.....	Professor of Latin.....	2,000 00
Eugene T. Allen, Ph. D.....	Professor of Chemistry (<i>ad interim</i>).....	1,400 00
Charles H. Farnsworth.....	Instructor in Music.....	500 00
Caroline M. Hyde, B. S.....	Instructor in Latin.....	720 00
Delphine Bell.....	Instructor in French.....	450 00
Frederick F. Kramer, B. A.....	Instructor in Semitic Languages.....	360 00
W. H. Goodall, B. I.....	Instructor in Oratory.....	900 00
Herbert B. Shoemaker, B. A., LL. B.....	Secretary and instructor in Law.....	135 00
	Stenographer.....	

*Services gratuitous.

PAY ROLL OF THE OFFICERS, TEACHERS AND EMPLOYEES—*Concluded.*

NAME.	POSITION.	RATE PER ANNUM.
Charles E. Lowrey, Ph. D.....	Librarian	900 00
William E. Burdick, Ph. D.....	Principal State Preparatory School.....	*800 00
Guy Sternberg, B. A.....	Assistant in Mathematics.....	360 00
J. E. Benius.....	In care of grounds.....	540 00
.....	Janitor main building.....	450 00
.....	Janitor Woodbury Hall.....	225 00
.....	Janitor Medical Hall.....	72 00
.....	Janitor Kent Hall.....	54 00

*The portion paid by University of Colorado.

The entire Medical Department is limited in expenditure to \$4,500 per annum. The members of the Medical Faculty, twenty in number, receive almost none of this in the way of salaries, since it is mainly expended in incidental expenses.

The members of the Law Faculty, twenty-six in number, donate their services to the State, with the exception of George W. Rogers and Herbert B. Shoemaker, the former of whom is paid \$675 per annum, while the latter receives his salary as Secretary of the University.

The Colorado State Normal School,

Greeley, 1892.

TRUSTEES :

C. H. WHEELER, Greeley.	HON. W. H. MEYER.
HON. J. R. FLICKINGER, Pueblo.	DR. JESSE HAWES, Greeley.
ISAAC GOTTHELF, Denver.	HON. J. W. MCCREERY, Greeley.
HON. NATHAN B. COY, <i>ex-officio</i> .	

OFFICERS OF THE BOARD :

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A. J. PARK.....	Secretary and Treasurer

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Sloyd and Drawing.

JOHN R. WHITEMAN,
Vocal Music.

SARAH ALICE GLISAN,
Model School.

HELEN DRESSER, B. P.,
Model Teacher.

MAY CANFIELD,
Model Assistant.

LAURA E. TEFPT,
Kindergarten.

EDGAR L. HEWETT,
Penmanship.

REPORT OF THE PRESIDENT.

GREELEY, COLO., November 1, 1892.

TO THE HON. NATHAN B. COY,
State Superintendent of Public Instruction.

DEAR SIR—I have the honor to submit the second biennial report of the State Normal School of Colorado, for the period ending October 31, 1892.

I took charge September 8, 1891. The school had been open but one year, with an annual attendance of ninety-six. The second year opened with 125 and closed with 272 in the normal department, and forty-one in the model, making a total enrollment at close of second year, 1892, of three hundred thirteen (313).

The present year has opened very auspiciously, with 230 in the normal, sixty-five in the model and forty-five in the kindergarten department, making a total of 340 up to date. At the same rate of increase as last year, the present school year will close with at least 500.

I. FUNCTION OF THE NORMAL SCHOOL.

The function of the Normal School is to make *teachers*. To do this it must not only keep abreast the times, but it must lead the educational van. It must project the future. There must be within it a continual growth in *scholarship, power, culture and influence*; such scholarship, such power, such culture, such influence as will grow strong men and women, equipped for the work of teaching. To this end those who graduate must be scholars and teachers—teachers possessing a high type of character. To make the former there must be strong academic departments; the latter, strong professional training. They must possess a scholarship consisting not in an accumulation of knowledge, but in a trinity of knowledge, power to think, and culture. Such a trinity is the result of very careful training. It demands experts as teachers of the various subjects. Such the school has. Each one was selected because of his or her special fitness for the work of the department.

That phase of training with which the professional department has to deal is *power to teach*. To quicken and develop this power, appropriate stimuli and training are necessary. To know the child and how to lead it give rise to the proper stimuli. These stimuli consist in

observing the activity in children, in observing expert teachers work, in reading professional literature, and in the presence of a living teacher. Training results from a response to the above stimuli. For such a professional training the school is prepared. In short, the function of the school is to promote and elevate the teacher, and by so doing promote and elevate the profession of teaching, which will result in the rise of the general intelligence and culture of the people of the State.

II. COURSES OF STUDY.

Language.

1. English Grammar.
2. Speech.
3. English Composition.
4. Rhetoric and Latin.

Science.

1. Physiology.
2. Chemistry.
3. Zoology.
4. Botany.
5. Geology.
6. Physics and Physical Geography.

Mathematics.

1. Arithmetic.
2. Algebra.
3. Geometry.
4. Mensuration.

History, Literature and Civics

1. United States History.
2. General History.
3. History of Literature.
4. Study of Authors.
5. Civics.

Art.

1. Writing.
2. Drawing.
3. Kindergarten.
4. Sloyd.
5. Music.
6. Painting.

Professional.

1. Theoretical Work.

Psychology.

Science and Art of Education.

History and Philosophy of Education.

School Management.

Methods.

Ethics.

2. Practical Work.

Psychology.

Art of Education.

School Management.

Methods.

Observation and Teaching in Model School.

Observation and Teaching in Kindergarten.

III. SLOYD DEPARTMENT.

This department was established at the beginning of the year, in compliance with the sentiment and fact that a training of the hand and eye should go along with a training of the mind. Its value is not so particularly utilitarian as educational. Education consists in the emancipation of the entire individual—body and mind. The Sloyd has a tonic influence on the entire school. Better work is done in all departments.

The course of work consists of four series :

I. Series I.

Kindergarten occupations and gifts—from 4 to 6 years.

1. Parquetry.
2. Sewing.
3. Stick laying.
4. Paper folding.
5. Clay modeling.
6. Making objects.
7. Games and songs.

II. Series II.

Work in paper and pasteboard—age, 7 to 8.

1. Geometrical solids.
 - a. Cube.
 - b. Prisms.
 - c. Cylinder.
 - d. Cone.
 - e. Original constructions based upon the forms.

III. Series III.

Moulding and carving in clay and paraffin—age, 9 to 10.

1. Fruits and vegetables.
2. Moulding on tablets—raised work.
3. Moulding in tablets—depressed work.
4. Carving designs in paraffin.

IV. Series IV.

Constructions in thin wood—age, 11 to 12; 30 different articles made.

V. Series V.

Constructions in thick wood—age, 13 to 14; 35 pieces constructed.

IV. KINDERGARTEN.

The fundamental principle in kindergarten training is to condition the child for harmonious development by rendering it self-active through the play impulse. In the evolution of public education it is becoming apparent that the kindergarten school is to serve as the transition from home education to primary school proper. It serves to initiate the child into the long-established primary school just as industrial education initiates it into civil society.

It is but a matter of time until it will become a settled part of our public school system. It would be a blessing to civilization if every child could have the benefit of kindergarten instruction during its most formative period.

This department was established at the opening of the present school year and put in charge of a very competent person; so that the school is now prepared to give a complete course in this subject.

V. MISCELLANEOUS.

Below we append a few statistics which may interest the educational people of the State :

Number of counties of Colorado represented in the school.....	40
Number of States represented	17
Average age of students.....	21
Average age of graduates	23+
Number who have taught	133
Graduates of colleges and universities	20
Graduates of other State normals.....	12
Graduates of high schools.....	52

Gain per cent. over last year in the normal department, 181.

Thanking the educational people of the State for their interest in and help to the school, the Department for the special aid and encouragement it gave, and the liberality and fidelity of the Board of Trustees, I am,

Your obedient servant,

Z. X. SNYDER,

President.

FINANCIAL STATEMENT FROM THE ANNUAL REPORT OF THE BOARD OF TRUSTEES, FOR THE YEAR ENDING JULY 31, 1892.

BUILDING ACCOUNT.

Receipts—

Balance on hand, account appropriation, April, 1891..... \$30,000 00

Disbursements—

Completing east wing	\$ 6,007 38	
To architect on account.....	2,000 00	
To work done on central building	5,100 00	\$13,107 38
Balance		\$16,892 62

MAINTENANCE ACCOUNT.

Receipts—

Received from taxes of 1891.....	\$19,300 00
Received from library account.....	613 52
Received from model school, tuition.....	141 75
Balance overdrawn at bank.....	6,424 66
	<u>\$26,479 93</u>

Disbursements—

Balance overdrawn August 1, 1891.		
Books	\$ 1,309	60
Furniture and fixtures.....	1,064	95
Improvement of grounds.....	1,445	45
Faculty	13,058	33
Other employes.....	3,218	00
Trustees' expenses and <i>per diem</i> , 1889-1892.....	1,230	80
Rent	182	50
Fuel.....	415	82
Advertising.....	352	85
Institute expense.....	143	50
Commencement expense, 1891-1892.....	154	25
Postage.....	226	74
Printing.....	181	35
Merchandise.....	248	27
Labor.....	173	28
Insurance.....	375	00
Catalogues.....	171	50
Engraving.....	100	75
Stationery.....	670	43
Chemicals.....	131	36
Water tax.....	183	33
Kindergarten material.....	87	28
Taxidermist material.....	23	77
Model school.....	210	00
Diplomas.....	105	00
Freight.....	62	40
Interest.....	260	23
General expense items.....	586	53
	<u>\$26,373</u>	<u>33</u>
		\$26,479 93

There is an outstanding indebtedness of \$9,400, caused by the failure of the appropriation of 1889 for \$10,000, account building

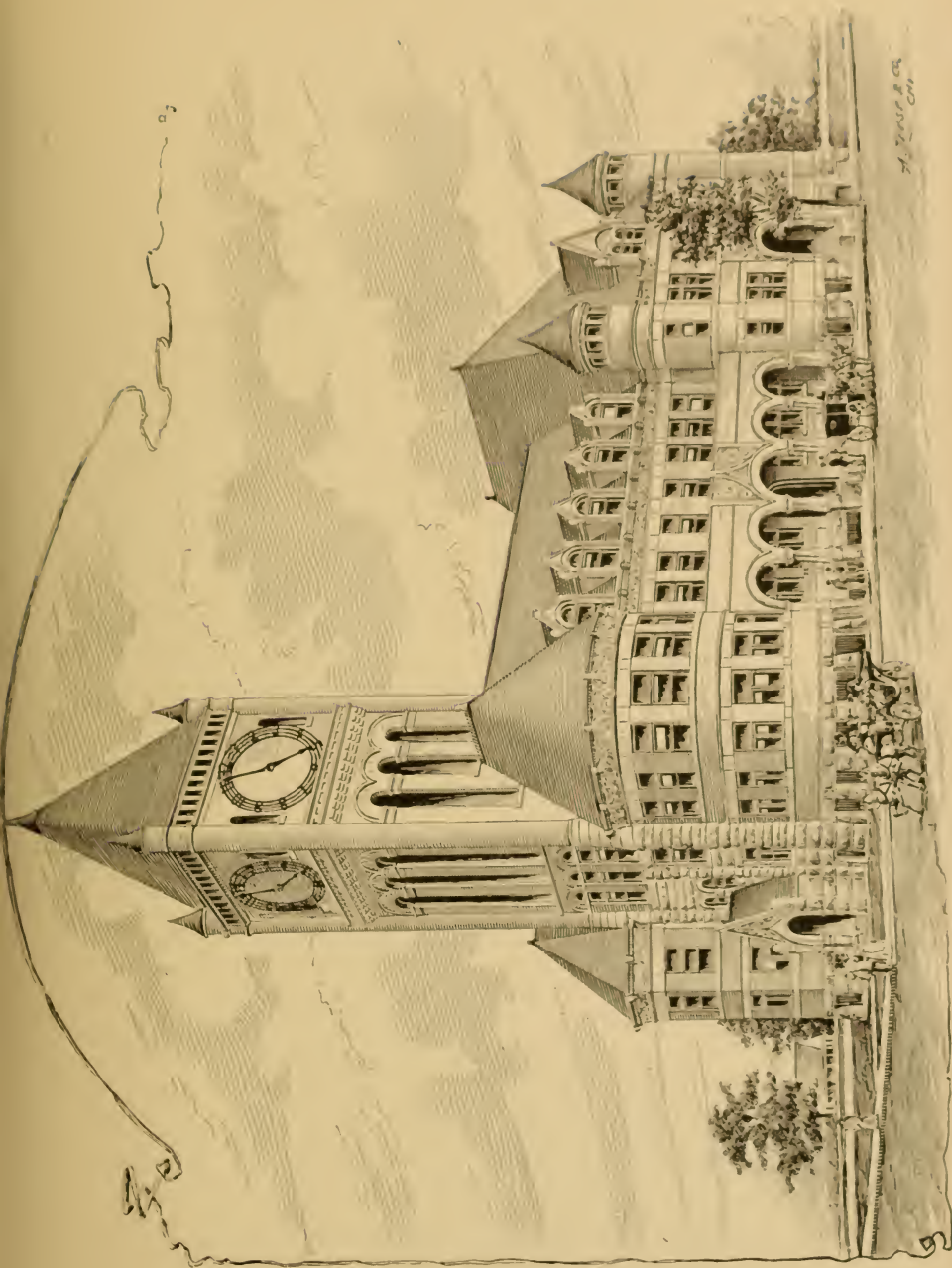
EXPENSES FOR ENSUING YEAR.

There will be required for the ensuing year (estimate) as follows:

For furnishing and maintenance.....	\$ 35,000	00
For completion of building, as per plans.....	125,000	00

SALARY ROLL.

NAME.	POSITION.	TIME OF SERVICE.	SALARY (ANNUAL)
Z. X. Snyder, A. M., Ph. D., president.....	Psychology, History and Science of Education.....	1 year	\$5,000
James H. Hays, A. M., vice-president.....	Pedagogics and Latin.....	1 year	2,100
Elma Ruff, preceptress.....	History, Literature and Composition.....	8 months	1,500
Roland W. Guss, A. M., M. E.....	Physical Science.....	2 years	2,000
Mary D. Reid.....	Mathematics.....	3 months	1,500
Sarah B. Barber.....	Elocution and Delsarte.....	.....	1,200
H. W. Fenneman, A. M.....	Mathematics and History.....	.....	1,200
A. E. Beardsley, B. S.....	Natural Science.....	.....	1,000
C. F. Work, M. E.....	Sloyd and Drawing.....	.....	1,000
John R. Whiteman.....	Vocal Music (half time).....	.....	400
Sarah Alice Glisan.....	Model School.....	8 months	1,500
Helen Dresser, B. P.....	Model Teacher.....	.....	600
May Canfield.....	Model Assistant (half time).....	.....	300
Laura E. Tefft.....	Kindergarten.....	.....	1,200
Edgar L. Hewett.....	Pennmanship (quarter time).....	.....	200
A. J. Park.....	Secretary and Treasurer Board of Trustees.....	.....	400



A. J. J. & Co.
C.S.

COLORADO SPRINGS HIGH SCHOOL.

THE UNIVERSITY OF CHICAGO PRESS

SALARY ROLL—*Concluded.*

NAME.	POSITION.	TIME OF SERVICE.	SALARY (ANNUAL)
S. F. McCreery.....	Librarian and Secretary of Faculty		*125
W. K. Norcross	Janitor		*60
A. L. Evans	Landscape Gardener		*60

* Per month.

The Colorado State Agricultural College.

Fort Collins, 1892.

STATE BOARD OF AGRICULTURE.

	TERM EXIRES.
HON. B. S. LAGRANGE.....Greeley.....	1899
HON. JAMES E. DUBOIS.....Fort Collins.....	1899
HON. A. L. EMIGH.....Fort Collins.....	1897
HON. JOHN J. RYAN.....Loveland.....	1897
HON. FRANK J. ANNIS.....Fort Collins.....	1895
HON. CHARLES H. SMALL.....Pueblo.....	1895
HON. R. A. SOUTHWORTH.....Denver.....	1893
HON. GEORGE WYMAN.....Longmont.....	1893
HIS EX'L'CY, GOV. JOHN L. ROUNTT } PRESIDENT ALSTON ELLIS..... } Ex officio.....	

OFFICERS OF THE BOARD.

HON. GEORGE WYMAN.....	President.
HON. FRANK J. ANNIS.....	Secretary.
HON. FRANKLIN C. AVERY.....	Treasurer.

FACULTY.

ALSTON ELLIS, A. M., Ph. D., L. L. D., PRESIDENT.

Professor of Political Economy and Logic.

W. S. LAWRENCE, B. S.,

Professor of Mechanics and Drawing.

MAUD BELL,

Professor of History, Literature and Language.

DAVID O'BRINE, E. M., D. Sc., M. D.,

Professor of Chemistry and Geology.

LOUIS G. CARPENTER, M. S.,

Professor of Physics and Irrigation Engineering.

CHARLES S. CRANDALL, M. S.,

Professor of Botany and Horticulture.

JOHN C. DENT, CAPT. 20TH INF. U. S. ARMY.

Professor of Military Science and Tactics.

CLARENCE P. GILLETTE, M. S.,

Professor of Zoology and Entomology.

WALTER J. QUICK, B. S.,

Professor of Agriculture.

GRACE ESPY PATTON, B. S.,

Professor of English and Stenography.

WILLIAM J. MEYERS, B. S.,

Professor of Mathematics.

FRANK J. ANNIS, M. S.,

Secretary of Faculty.

ASSISTANTS.

F. L. WATROUS,

Assistant to Professor of Agriculture.

L. D. CRAIN,

Assistant to Professor of Mechanics and Drawing.

JAY D. STANNARD,

Assistant to Professor of Physics and Irrigation Engineering.

REPORT OF THE ACTING-PRESIDENT.

FORT COLLINS, COLO., November 1, 1892.

HON. NATHAN B. COY,
Superintendent of Public Instruction.

SIR:—I have the honor to submit the following biennial report of the State Agricultural College, for the period ending October 31, 1892.

As the College receives both National and State financial aid, it will be necessary to refer briefly to its relations to both the Nation and the State.

An act of Congress of July 2d, 1862, granted lands and other privileges to certain colleges in the different states, and under various conditions and restrictions.

The principal requirements as set forth by the act of Congress which granted these privileges, are, that the college shall be one "Where the leading object shall be, without excluding other scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and the mechanic arts, in order to promote the liberal and practical education of the industrial classes in the various pursuits and professions of life."

In accordance with this act of Congress, as well as by two subsequent acts, the college is the beneficiary in forms and amounts, as follows:

The government has located within the State boundary of Colorado 90,000 acres of land from the proceeds of the sales of which an income for the college may be derived. This income, as yet, is very small.

By provision of the Morrill bill, there is also a revenue to the College regulated as follows: At the time of the passage of the bill, August 30, 1890, the amount of income was fixed at \$15,000 for the first year, and an advance on this of \$1,000 for each subsequent year until the amount should reach \$25,000, when this amount is to remain fixed at \$25,000 per annum thereafter.

Having the Experiment Station attached, the College also receives moneys from the Hatch fund. This amounts to \$15,000 a year. The amount is the same for each year.

As a State institution, the College receives one-sixth of a mill on every dollar of taxable property in the State. This yielded an income of about \$40,000 for the present year.

Of these funds named, the only one available for building purposes is the State tax fund. The Morrill fund and the Hatch fund have provisions which prohibit the use of the money for building purposes.

The institution is controlled by a Board of Trustees, which is also the State Board of Agriculture, and in them is vested the power of control of all matters pertaining to the institution.

The College is not sectarian, but it does all in its power to have the highest moral principles among the students; to carry along with its educational work such training as will tend to make the best citizens of those who are in attendance.

The institution is maintained at the public expense, and those who are in attendance are expected to perform their duties in such a manner as shall constitute a good return for the generous support of the citizens.

To this end, those who come here wasting their time, or expecting to take things easy, will not be allowed to have the time of the instructors wasted upon them, and cannot remain connected with the institution. Only those who are earnest workers will be allowed the benefit of the excellent educational advantages offered.

The educational tone of the institution is kept high, and it is necessary that all who come here should come here to work and not to idle away their time.

Keeping the age of admission at fifteen, by statutory provision, brings to the institution a class of students who have become mature in their thoughts and ways, and warrants the institution in adhering to a firm policy regarding the work of students while here.

COURSES OF INSTRUCTION.

We recognize the fact that every student has preferences in regard to the line of study he takes up. With some this is simply a matter of taste, while others wish to pursue particular branches with a view to preparing for their future work.

The courses have been arranged so as to meet the wants of the students as far as possible in this respect.

As we consider it desirable to first lay the foundation of a good general education before taking up special branches, the requirements for the first three years are made the same for all students. At the beginning of the junior year the choice of the following courses is given.

1. The Agricultural Course.
2. The Mechanical Course.
3. The Irrigation Engineering Course.
4. The Ladies' Course.

The College, as at present conducted, has the following departments :

1. Agriculture.
2. Botany and Horticulture.
3. Mechanics and Drawing.
4. Mathematics.
5. History, Literature, Language.
6. Chemistry and Geology.
7. Physics and Irrigation Engineering.
8. Military Science and Tactics.
9. Zoology and Entomology.
10. English and Stenography.
11. The Experiment Station.

The students are expected to be in their various classes from 8 a. m. to 11:30 a. m., when active exercise in the form of military drill is engaged in by the young men for fifty minutes.

Work on the farm and garden is required of the lower classes for two hours in the afternoon, while the upper classes are assigned to the various laboratories to make practical demonstration of the theoretical work discussed in the class-room.

Study hours are from 7 to 10 p. m.

Constant improvements have been made in the equipment of the various laboratories.

The study of history and literature is aided by large collections of photographs of people and places.

The English and stenography department now possesses a number of first-class typewriters, and literature pertaining to the work in English.

The mathematical department illustrates its work by sets of suitable models. The drawing department is suitably equipped for instruction in industrial drawing.

The botanical laboratory, the well-arranged green-house and forcing-house, afford excellent instruction for the students in that work.

The chemical laboratory, now enlarged and improved, is well designed to secure the best work in that direction.

Collections of mounted specimens, illustrative of the natural history of the country, are provided.

A good supply of surveyors' instruments is furnished for the instruction of students in surveying in the field.

The farm department is supplied with fine breeds of horses, cattle and sheep, for the benefit of the students studying along that line. The farm of 240 acres affords excellent facilities for instruction in agriculture and irrigation in its various branches. Students also have the benefit of experiments on farm products.

The irrigation engineering department has lately come into possession of numbers of photographs, models, etc.

The department of physics is constantly gaining in equipment.

Suitable shops have been provided for thorough instruction in various branches of the Mechanic Arts.

A gymnasium, with bath-rooms attached, is provided for the use of the students. The young ladies are provided with a regular instructor, who sees that the work is intelligently directed for their best good.

The library at present contains 4,270 bound volumes and 6,880 pamphlets. The books are all carefully classified and indexed according to the Dewey decimal system, and cover a wide range of subjects. It is especially strong in history and literature and in books treating of scientific subjects.

The attendance by years has been as follows :

YEARS.	MALES.	FEMALES.	TOTAL.
First	14	11	25
Second	35	22	57
Third	49	32	81
Fourth	40	37	77
Fifth	50	46	96
Sixth	45	42	87
Seventh	63	42	105
Eighth	71	38	109
Ninth	73	34	107
Tenth	56	18	74
Eleventh	77	29	106
Twelfth	101	45	146
Thirteenth (to date)....	125	35	160

Up to the present time, there are thirty-two graduates, many of whom are already well established in their chosen callings.

IMPROVEMENTS IN THE MATERIAL EQUIPMENT.

A number of new buildings have been erected, which are materially aiding in the progress of the various departments.

An agricultural hall has been completed and put in running order, and a dwelling house has also been built on the farm. The farm has been laid out in drives, which greatly adds to the facilities for inspecting, in an agreeable manner, the work done there.

The mechanic shop has received an addition in front, and another addition which has been fully equipped as an iron foundry.

Six other buildings have been constructed upon the College premises, in addition to those above mentioned. One of these is designed for curing and drying tobacco, another for holding the hose carts connected with the College, a third for the housing of implements, two for the College live stock, and a forcing and potting house in connection with the horticultural department.

During the past year a railroad depot has been erected on the College grounds, so that people coming to the College will find it a great convenience instead of being obliged to go into the city as heretofore.

A well kept dormitory furnishes a stopping place for a portion of the students, although it is far too small to meet the requirements in that direction. Many of the young men board in private families in the town. All the young ladies, who come from a distance, are obliged to lodge in private families, for as yet there is no dormitory for their accommodation.

SALARIES OF FACULTY.

Alston Ellis.....	\$6,000
J. W. Lawrence.....	1,800
Mand Bell.....	1,500
David O'Brine.....	1,500
L. G. Carpenter.....	1,500
C. S. Crandall.....	1,500
J. C. Dent (detailed from United States army).....	
C. P. Gillette.....	1,500
W. J. Quick.....	1,500
Grace Patton.....	1,500
W. J. Meyers.....	1,500

ASSISTANTS.

F. L. Watrous, Assistant to Professor of Agriculture.....	\$1,200
L. D. Crain, Assistant to Professor of Mechanics and Drawing...	1,000
J. D. Stannard, Assistant to Professor of Physics and Irrigation Engineering.....	1,000

SALARIES EXPERIMENT STATION.

W. J. Quick, Director and Agriculturist.....	\$1,250
F. J. Annis, Secretary.....	500
C. S. Crandall, Botanist and Horticulturist.....	500
David O'Brine, Chemist.....	500
L. G. Carpenter, Meteorologist and Irrigation Engineer.....	500
C. P. Gillette, Entomologist.....	500
C. M. Brose, Assistant to Horticulturist.....	900
R. E. Trimble, Assistant to Meteorologist.....	800

Charles R. Baker, Assistant to Entomologist	800
Charles Ryan, Assistant to Chemist.....	600
F. A. Huntley, Superintendent Arkansas Valley Station.....	800
G. F. Breninger, Superintendent Divide Station	800
E. M. Bashor, Superintendent San Luis Valley Station.....	800

THE STATION COUNCIL.

ALSTON ELLIS, A. M., PH. D., LL. D.,
President.

WALTER J. QUICK, B. S.,
Director and Agriculturist.

FRANK J. ANNIS, M. S.,
Secretary.

C. S. CRANDALL, M. S.,
Botanist and Horticulturist.

DAVID O'BRINE, E. M., D. Sc., M. D.,
Chemist.

L. G. CARPENTER, M. S.,
Meteorologist and Irrigation Engineer.

C. P. GILLETTE, M. S.,
Entomologist.

ASSISTANTS.

FRANK L. WATROUS,
To Agriculturist.

CHARLES M. BROSE,
To Horticulturist.

R. E. TRIMBLE, B. S.,
To Meteorologist.

CHARLES F. BAKER,
To Entomologist.

SUB-STATIONS.

ARKANSAS VALLEY STATION, ROCKY FORD, COLORADO.
F. A. Huntley, B. S. A., Superintendent.

DIVIDE STATION, TABLE ROCK, COLORADO.
George F. Breninger, Superintendent.

SAN LUIS VALLEY STATION, MONTE VISTA, COLORADO.
Edwin M. Bashor, Superintendent.

BULLETINS ISSUED BY THE AGRICULTURAL EXPERIMENT STATION.

NO. BULLETIN.	DATED.	SUBJECTS TREATED.
1	August, 1887	Experiments in Irrigation and Meteorology.
2	December, 1887	Grains, Grasses and Vegetables.
3	December, 1887	Duties of the Secretary and Distribution of Seeds and Plants.
4	February, 1888		Potatoes and Tobacco.
5	October, 1888	Experiments in Apiary.
6	January, 1889	Insects and Insecticides.
7	April, 1889	Potatoes and Sugar Beets.
8	July, 1889	Alfalfa. Its Growth, Composition, Digestibility, etc.
9	October, 1889	Soils and Alkali. Fertility, Irrigation, etc.
10	January, 1890	Tobacco.
11	April, 1890	Sugar Beets.
12	July, 1890	Some Colorado Grasses and their Chemical Analysis.
13	October, 1890	The Measurement and Division of Water.
14	January, 1891	Progress Bulletin on Sugar Beets.
15	April, 1891	Two Insect Pests, The Codling Moth and the Grapevine Leaf-Hopper.
16	July, 1891		The Artesian Wells of Colorado and their Relation to Irrigation.
17	October, 1891	A Preliminary Report of the Fruit Interests of the State.
18	December, 1891	Index Bulletin for 17 Previously Issued.
19	May, 1892	Observations upon Injurious Insects, Season 1891.
20	August, 1892	1. The Best Milk Tester for the Practical Use of the Farmer and Dairyman. 2. The Influence of Food upon the Pure Fat Present in Milk.

The purpose for which these bulletins are issued is to eliminate unprofitable ways of conducting farming operations, to show by well authenticated tests, how these methods may be improved upon, and in every way possible, to advance the interests of the farmer and put farming upon a basis of scientific principles.

In their preparation, the aim has been to investigate, in an unprejudiced manner, the various methods employed in agricultural pursuits, with a view to comparing, improving and testing the same.

The experiments recorded often extend over a period of several years, in which the various plants treated have been grown under different conditions of soil, slope, dampness, etc. The results are then carefully studied in order to ascertain, if possible, the conditions most favorable to their growth and the development of those qualities for which they are cultivated.

Almost every interest of the farmer is touched upon in these bulletins. The best products for different soils, the profitable conducting of vegetable gardening, the means for destroying the insect pests that are troublesome to our farmers, all have been carefully studied and reported upon. A knowledge of these points is of inestimable value in endeavoring to carry on a farm practically and profitably.

The stock raising interests of our State have not been overlooked, as is shown by the bulletin devoted to the feeding qualities of alfalfa. Another bulletin along the same line treats of the effect upon the quality of the milk produced by difference of food and treatment.

The Station distributes each year seeds of various kinds, thus making the results of their experiments in this line available to the farmers of the State.

In several cases, the yield per acre on the College farm has also exceeded any reported elsewhere in the State, showing that farming upon scientific principles pays in practical life.

Our Station, being situated in the midst of an irrigated region, has turned its attention to the most satisfactory means of measuring the water used for irrigating purposes, so as to prevent the injustice that so often occurs in the division of water.

The work has not been wholly expended on those lines of agriculture already known in the State, but has sought to increase its usefulness by proving that other products than those already widely introduced may be grown successfully and with profit. Thus experiments have been made, upon quite an extensive scale, to determine the adaptability of our State to the raising of such products as sugar beets, tobacco, sorghum, etc.

The Station hopes to do much towards introducing new interests and improved methods, and in determining the kinds of grain and other products best suited to our soil and climate.

It desires to materially aid the farmers of our State and help to raise Colorado to that rank as an agricultural region, which she is capable of holding, when time and research have turned her natural advantages to the best account.

In conclusion, I may say that the College is steadily increasing in usefulness. It is being placed very near to the wants of the people, and every effort is being put forth to make the education which the student receives of as great practical value as possible to him in the work of life.

The institution is becoming better known throughout the State, and is receiving most gratifying recognition from all quarters.

There has been a steady increase in the number of students. Two vigorous literary societies, a scientific society, and a College paper are conducted by the students, and throughout the entire institution, a cheerful educational spirit prevails.

Very respectfully yours,

J. W. LAWRENCE,
Acting President.

The Colorado State School of Mines,

Golden, 1892.

TRUSTEES.

F. STEINHAUER.....	Denver.....	Arapahoe county
JAMES T. SMITH.....	Denver.....	Arapahoe county
A. A. BLOW.....	Leadville.....	Lake county
EDW. F. BROWNE.....	Aspen.....	Pitkin county
J. P. KELLY.....	Golden.....	Jefferson county

OFFICERS OF THE BOARD.

President.....	F. STEINHAUER
Secretary.....	JAMES T. SMITH
Treasurer.....	MORITZ BARTH

FACULTY.

REGIS CHAUVENET., A. M., B. S.,
Professor of Chemistry.

ARTHUR LAKES,
Professor of Geology and Drawing.

MAGNUS C. IHLSENG. E. M., C. E., PH. D.,
Professor of Engineering.

PAUL MEYER, PH. D.,
Professor of Mathematics.

BENJAMIN SADTLER, A. M., B. S.,
Professor of Metallurgy and Mineralogy.

GEORGE C. TILDEN, C. E.,
Professor of Analytical Chemistry.

LEWIS C. HILL, C. E., E. E.,
Professor of Physics and Electrical Engineering.

ELBRIDGE G. MOODY,
Librarian and Registrar.

CLARENCE S. KING,
Gymnasium Instructor.

REPORT OF THE PRESIDENT.

GOLDEN, COLORADO, December 1, 1892.

To His Excellency, the Governor, and the General Assembly of the State of Colorado :

GENTLEMEN—In compliance with the statute governing State institutions the board of trustees of the State School of Mines, by their president and secretary, beg leave to submit the following report, covering the management of the institution for the past two years, and making known, in the briefest convenient form, the special needs that are incident to its growth.

RESOURCES OF THE SCHOOL.

The Eighth General Assembly changed the direct tax of one-fifth of one mill on the dollar of the taxable property of the State, which constituted the chief item in the school's resources, to one-sixth of one mill. This was done to accommodate the State Normal School at Greeley, in order that that institution might be cared for without diverting a larger share of the State's rather limited income to the support of higher and special education. By this change in the law the School of Mines suffered a loss of revenue in the past two years equal to \$10,189.11; the total receipts from all sources, as shown in the secretary's statement, being \$82,555.19, as compared with \$92,744.30 in the two years ending November 30, 1890.

In the report to the Eighth General Assembly attention was called to the status of the Teller bill, which passed the United States Senate at three different sessions, without practical opposition. It proposes to set aside for the State School of Mines, on certain conditions which the school can readily meet, 50 per cent. of the total receipts from the sale of mineral lands within the limits of Colorado. The bill is now pending in the House of Representatives, in charge of the committee on education. Were it enacted into law the institution would probably derive a yearly cash revenue of about \$7,500 under its provisions, the amount varying with the activity in taking up coal, iron and other lands designated as mineral.

It should be noted, however, that the general government is no longer confronted with a surplus. On the contrary, the authorities of the treasury department report a deficit of some \$50,000,000, which

the present or succeeding Congress will be called upon to provide for. This state of affairs will seriously affect the prospects of the Teller bill in the house. In fact, unless all signs prove deceptive, the hope which was indulged two years ago, that the bill would be considered on its merits and passed, might as well be given up, and the Legislature reminded that the School of Mines, in the future as in the past, must depend upon the State tax, and an occasional special appropriation, for current expenses and improvement purposes.

For the information of the Ninth General Assembly the full text of the Teller bill, as reported favorably to the House by the committee on education, is given below :

AN ACT

TO AID THE STATE OF COLORADO TO SUPPORT A SCHOOL OF MINES.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled :

SECTION 1. That each state and territory having within its limits public land undisposed of shall receive annually for the maintenance of any school of mines that is now or may hereafter be established in any such state or territory fifty per centum of all moneys paid to the United States for such lands; *Provided*, That said sum so to be paid shall not exceed ten thousand dollars per annum, nor shall it exceed the amount expended by such state or territory for the support of a school of mines within its limits.

SEC. 2. That before any money shall be paid to any state or territory claiming the benefits of this act, the governor of such state or territory shall annually certify to the secretary of the interior that a school of mines is being maintained within its limits, in which students in attendance are given instruction in chemistry, metallurgy, mineralogy, geology, mining, mining engineering, mathematics, mechanics and drawing, *that students from other states and territories are received into such school of mines on the same terms and conditions that students residing therein are received, and he shall also certify the amount of money appropriated and actually used by such state or territory during the preceding year in support of its said school of mines.*

SEC. 3. That upon receiving the certificate required by the next preceding section, and being otherwise satisfied that the terms and provisions of this act have been fully complied with, the secretary of

the interior shall certify to the secretary of the treasury the amount of money derived during the preceding year from the sale of public lands within the limits of the state or territory claiming the benefits of this act, together with the amount which such state or territory is, by virtue hereof, entitled to receive, and the secretary of the treasury shall thereupon cause the amount so certified to be paid to the treasurer of such state or territory for the support and use of its school of mines.

REDUCTION OF DEBT.

Two years ago, by reason of the construction of a new building at a cost of some \$37,500, the debt of the institution, represented by moneys borrowed from the City National Bank, of Denver, was \$11,481.22. At the date of this report, December 1, 1892, the debt at the bank is \$10,655.46, partly offset by a cash deposit of \$5,682.74, leaving the net debt at \$4,972.72, showing a reduction in two years equal to \$6,508.50. This reduction was accomplished despite a falling off in revenue of over \$10,000, as compared with the preceding two years, and the expense incident to a largely increased attendance.

The expenses of the school for December, 1892, and January, 1893, will be met by the cash on hand at the date of this report. This will keep the institution on a cash basis, without further borrowing, until returns are made to the state treasurer from the tax levy for 1892.

NEW BUILDING NEEDED.

With the present buildings in full use, attendance at the State School of Mines is necessarily limited to 130 students, provided they are fairly distributed among the classes. This fair distribution is not feasible at the present time, because the large increase in new students swells the first year or freshman class to abnormal proportions, and has caused the management to turn away quite a number of applicants for admission since the beginning of the present school year. There is yet some unoccupied room in the second, third and graduating classes for students from other institutions of learning, or applicants who can pass the required examination, which is more exacting at the State School of Mines than at any other institution of its class in the United States. The management has not sought numbers at the expense of quality. It has insisted upon quality regardless of numbers and with excellent effect.

If the demand for admission to the school continues to increase as it has in the past two years, at the rate of 67.6 per cent., another building, to be designed especially for the use of the engineering

department, should be started in the spring of 1893, in order that the basement may be ready for use by the opening of the fall term. This proposed new building, the site for which has already been secured, is estimated to cost, properly fitted up, about \$25,000. If the money can be taken from the State's improvement fund, as it was two years ago for the benefit of the State University at Boulder, and the State Normal School in Greeley, the revenues designed to meet the current expenses of the commonwealth will not be interfered with, and permanent value will be shown for the sum expended.

The School of Mines can no longer follow its established practice of building and fitting up by drafts upon the one-sixth mill designed for current expenses. This revenue, with the growth of the school, can no longer be diverted. Hence an appeal is made for a special appropriation from the State's improvement fund, in confidence that it will be granted if the merits of the claim shall be intelligently tested by the governor and the General Assembly.

MUSEUM OF MINERALS.

Since date of last report, two years ago, the value of the mineral and geological collection has been increased from \$2,825 to \$4,525, a difference in favor of the institution of \$1,700, represented by the purchase of the Randall cabinet, formerly located at Georgetown, Clear Creek county, and by the addition of rare mineral specimens, by purchase and gift, from widely scattered districts. The collection, taken as a whole, is the most complete in the State, and one of the finest in the country. It will add largely, without other additional cost than that included in proper care and supervision, to the State's display at the World's Columbian Exposition.

When the Chicago fair has adjourned, the museum of minerals will be fitted up at the school for convenient display. By that time increased transportation between Denver and Golden will place the collection within easy reach of the large number of tourists who yearly visit the capital of the State. In fact, Golden is even now a suburb of the capital city, and daily becoming more so, the county line having already been crossed by Denver and Highland additions.

FIELD WORK OF THE FACULTY.

Owing to lack of funds, the field work of the faculty—Colorado's substitute for a geological survey—has been limited during the past two years to a survey of the application of electricity to mining in this State by Professor Lewis C. Hill, the result of which is appended to this report.

During 1891 Professor M. C. Ihlseng published a manual of mining, which is now in its second edition, and has been adopted as a text book at every known mining school in the country. It meets with quite a demand from practical miners.

The *School of Mines Scientific Quarterly*, a publication edited by the students, was commenced in the spring term of 1892. It reaches, by exchange, the educational and scientific circles of the older states, and has a paid subscription list of over three hundred.

The reports heretofore issued, containing the results of the faculty's field work, may be found in college libraries all over the land. The demand from miners, mining companies, libraries and capitalists has practically exhausted the entire supply. This is especially true of the 1887 report, in which were included the following papers, which are here cited to show the nature and scope of the work :

"Iron Resources of Gunnison County," by Regis Chauvenet.

"Notes on Leadville," by Magnus C. Ihlseng.

"Western Assay Methods," by George C. Tilden.

"The Ore Chutes and Recent Developments of Iron Hill, Lake County, Colorado," by A. A. Blow, M. E., member of the board of trustees.

"Geology of Colorado Ore Deposits," by Arthur Lakes.

The report for 1889 was an exhaustive review of the geology of Colorado coal deposits by Professor Lakes. It has met with a steady demand from capitalists interested in coal mines in this State.

INSTRUCTION AND ATTENDANCE.

As noted in the report of two years ago, special courses for students have been entirely eliminated. All students are limited to the regular four-year course. The change from optional courses to the strictly regular has not unfavorably affected the attendance, which showed an average, regulars and irregulars included, of 38 students at the end of 1888, as compared with 65 at the end of 1890, all regular, and 109 at date of this report.

The average age of students now on the register is between twenty and twenty-one years. The minimum age of admission is seventeen years, which is considered too young for the best results.

Students in attendance at this time give residence as follows :

Colorado	76
Delaware	2
Missouri	2
Montana	2
California	5
New York	1
Illinois	1
New Mexico	2
Ohio	4
Kansas	1
Maryland	1
Pennsylvania	2
Iowa	3
Nebraska	1
Utah	1
Canada	1
Australia	2
South America	1
France	1
Total	109

Students registered from territories, other states and foreign countries are in most cases connected, by their parents or guardians, with mining or smelting enterprises in Colorado. The graduation of such students is no loss to the State, even when the calculation is made from the monetary standpoint, as one of them, now located in a mining district in Clear Creek county, has brought more capital to the State than the institution has cost the taxpayers from the date of its establishment up to the present.

The division of students into classes is as follows :

Seniors, fourth year, to graduate next June	6
Juniors, third year	24
Sophomores, second year	27
Freshmen, first year	52

The present junior or third year class is the first product of the organization of departments in the regular four-year course.

The graduating class last June included nine young gentlemen, four of whom earned diplomas as mining engineers (E. M.), and five as metallurgical engineers (M. E.). Seven of the class are engaged in active positions, among them being the chief chemist of the Pueblo Smelting and Refining Company, at a salary of \$250 per month.

EMPLOYMENT OF GRADUATES.

One of the difficulties, the management of the school is called upon to contend with, is the calling away of students in their second or third year. This arises from the offer of paying positions in mines, smelters or sampling works. Among recent graduates and undergraduates whose present address is known, the following are noted as specimen cases :

E. W. Johnson, chemist at Pueblo Smelting and Refining Company.

Charles D. Smith, chemist at the International smelting works, Monterey, Mexico.

D. E. Heller, Parrot smelting works, Butte, Montana.

W. E. Hindry, Little Chief mine, Red Cliff, Colorado.

William B. Lewis, in charge of sampling works, Deming, New Mexico.

Charles H. McMahan, chemist at International smelting works, Monterey, Mexico.

Edward C. Small, mine manager, Pioche, Nevada.

E. A. Thies, mining superintendent, Mexico.

George K. Kimball, representative of McArthur-Forest gold process in mining states and territories.

William B. Budrow, chemist at Denver cement works.

William H. Muzzy, chemist at Iron Mask mine, Leadville.

Louis W. Shaffer, assayer at the Chamberlain sampling works, Idaho Springs, Colorado.

James W. Stubbs, mining superintendent, Barberton, South Africa.

Harry S. Piper, gold milling, Cripple Creek, Colorado.

Charles W. Comstock, late instructor at Cornell University, now engaged with bridge building firm, Chicago.

Henry L. Bellam, chemist at Virginia City, Montana.

Carl Ambrosius, mining superintendent, Leadville.

William H. Craigue, chemist and assayer, Cripple Creek, Colorado.

Jerry Kingman, analytical chemist, Helena, Montana.

Frank D. Aller, chief chemist at Pueblo Smelting and Refining Company.

Charles A. Gehrmann, mining and milling superintendent, Idaho Springs, Colorado.

William F. Oden, mining superintendent, Ni Wot, Montana.

John B. Garvin, instructor in chemistry, Denver High School.

Victor C. Heikes, mineralogist, with State Board of Managers World's Columbian Exposition.

Dana C. Irish, mining superintendent, Mexico.

William K. Eveleth, metallurgist, Butte, Montana.

Edmond C. van Diest, superintendent of Maxwell land grant in Colorado.

Levi S. Preston, surveyor, Maxwell land grant, New Mexico.

John H. Moreland, mining superintendent, Central America.

Bela I. Lorah, mining superintendent, Central City, Colorado.

L. J. W. Jones, chemist, Pueblo.

E. V. Bensusan, metallurgist, Australia.

James L. Wells, mining surveyor, Park county, Colorado.

Charles W. Meade, mining, Virginia City, Montana.

RECEIPTS AND EXPENDITURES.

The records, checked up by the auditing committee, show receipts since November 30, 1890, date of last report, to be as follows :

Receipts—

Warrants drawn on State auditor.....	\$76,872 45
From students, for chemicals, etc.....	5,446 19
From sale of reports.....	236 55
Total receipts.....	\$82,555 19

The total was transferred to Moritz Barth, treasurer of the school, and is accounted for in his report. It falls below the total of the preceding two years by \$10,189.11.

Disbursements—

Following were the disbursements for the two years beginning December 1 1890, and ending November 30, 1892, date of this report :

Buildings and grounds.....	\$ 4,635 72
Furniture and fittings.....	5,559 00
Permanent apparatus.....	6,690 97
Library.....	1,038 14
Salaries.....	36,109 99
Repairs.....	3,191 46
Supplies.....	7,922 80
Fuel, lights and incidentals thereto.....	2,308 47
Printing, advertising and stationery.....	2,239 72
Sundries, insurance and expenses.....	7,176 18
Total of warrants issued.....	\$76,872 45

In the treasurer's report the amount of warrants issued and paid during the two years is stated at \$76,835.90. This is \$36.55 less than the expenditures for the same period, which is accounted for by the fact that the warrants outstanding November 26, 1892, when the accounts were audited, were ascertained to be \$36.55 in amount.

The first four items in the table of expenditures, namely, buildings and grounds, furniture and fittings, permanent apparatus and library, reaching a total of \$17,923.83, represent 23 per cent. of the total expenditures, and also the additions made to the permanent property of the institution during the two years. The sum represented by the other items, \$58,948.62, is 77 per cent. of the total, and is correctly reported as current running expenses, the average being \$2,456 per month, as compared with \$2,000 per month in the two years ending November 30, 1890. The increase in running expenses is, therefore, 22.8 per cent., while the increase in attendance is 67.6 per cent.

JAMES T. SMITH,
Secretary.

REPORT OF THE TREASURER.

Statement of the Treasurer of the State School of Mines, showing receipts and payments from November 30, 1890, to December 1, 1892 :

Receipts—

Cash on hand December 1, 1890.....	\$ 26 40
Received from State Treasurer.....	77,698 21
Borrowed from City National Bank of Denver, on tax levy for 1892.....	10,655 46
Received from James T. Smith, secretary.....	5,682 74
Total to account for.....	\$94,062 81

Payments—

Warrants paid between November 30, 1890, and December 1, 1892	\$76,835 90
Warrants outstanding November 30, 1890, since paid and turned in	51 40
Paid City National Bank, Denver	11,481 22
Cash on hand November 30, 1892	5,694 29
Total credits	\$94,062 81

MORITZ BARTH,
Treasurer.

SALARY LIST.

	PER ANNUM.
Regis Chauvenet, A. M., B. S., President	\$3,000
Arthur Lakes	1,800
Magnus C. Ihlseng, E. M., C. E., Ph. D.	2,100
Paul Meyer, Ph. D.	1,800
Benjamin Sadtler, A. M., B. S.	2,100
George C. Tilden, C. E.	1,800
Louis C. Hill, C. E., E. E.	1,800
Elbridge G. Moody	\$100 per month during session of school.
Clarence S. King	\$100 per month during session of school.

STUDENTS, 1892-93.

SENIORS.

Collins, Philip Montague	Georgetown	Colorado.
Hawley, R. Howard	Pueblo	Colorado.
*Jewell, Gilbert S.	Sydney	New South Wales.
Milliken, Wm. B.	Coal Creek	Colorado.
Osborne, Arthur H.	Golden	Colorado.
*Stephens, Wallace A.	Denver	Colorado.

* "B. S." course.

The Colorado School for the Deaf and the Blind.

Colorado Springs, 1892.

TRUSTEES.

	TERM EXPIRES.
DANIEL HAWKS, President.....Greeley	1895
JOSEPH E. HUMPHREY, Secretary... Colorado Springs	1897
ANDREW L. LAWTON..... Colorado Springs	1893
JOSEPH A. DAVIS..... Westcliffe	1895
HENRY BOWMAN..... Idaho Springs.....	1897
J. H. THEDINGA, Treasurer of Board.. Colorado Springs.	

EDUCATIONAL DEPARTMENT.

JOHN E. RAY, A. M.....Superintendent

DEAF DEPARTMENT.

TEACHERS.

D. C. DUDLEY, A. M. J. A. TILLINGHAST, A. D.
G. W. VEDITZ, A. M. E. C. CAMPBELL

MISS TILLIE GARMAN

MISS ADA R. KINGTeacher of Articulation
MISS PRUDENCE E. BURCHARDAural and Articulation Classes

BLIND DEPARTMENT

TEACHERS.

F. H. MANNING, A. M. MISS MARY P. WRIGHT
 MISS JESSIE BAKER
 MISS M. E. CHURCHMAN.....Vocal and Instrumental Music

KINDERGARTEN DEPARTMENT.

TEACHER.

MISS MARGARET H. TAYLOR.

DOMESTIC DEPARTMENT.

B. P. ANDERSON, M. D. Physician
 S. W. MORRISON, M. D. Oculist
 MRS. LENA B. ELDER Matron
 MRS. MARY E. MILLER Assistant Matron
 MRS. JOHN W. TAYLOR Boys' Supervisor
 MISS HATTIE SWILER Girls' Supervisor
 MISS EDITH ELDER Clerk and Visitors' Attendant
 JOHN W. TAYLOR Engineer
 WILLIAM SHIDELER Night Watchman

INDUSTRIAL DEPARTMENT.

TEACHERS.

H. M. HARBERT Printing and Editor Index
 MISS KATE CREE Needle Work
 SAMUEL GALE Carpentry
 JOHN W. TAYLOR Broom and Mattress Making
 SARAH ARMSTRONG Baking
 E. C. CAMPBELL Art

REPORT OF THE SUPERINTENDENT.

To the Board of Trustees of the Colorado School for the Deaf and the Blind:

GENTLEMEN—I have great pleasure in handing you herewith, a detailed account of the progress of our school for the past biennial period.

Since the time of my last regular report, the growth of the school has been constant and rapid. The enrollment has increased from year to year, until it has reached 176

The efficiency of the school, too, has kept pace in all directions with the numerical growth, nor has there been any hindrance to our work, in the way of sickness, during this period, there having been no death and but one case of serious illness among the pupils, that of a small boy of frail constitution, who suffered from pneumonia last winter. Through the skillful efforts of our excellent physician, Dr. B. P. Anderson, he recovered and now seems to be as well as ever.

This is a most wonderful record, when we consider the liability of sickness among all children, and more especially so among those whose constitutions are often, if not generally, seriously impaired by the diseases which produce deafness or blindness. These things subject our pupils to inroads of disease of which normal children know nothing.

There are three departments in our school; the literary, the domestic, the industrial. In each of these are employed the most skilled instructors it is possible to secure, each a specialist in his or her particular line of work. These enable us to cultivate to the highest possible degree, the minds, the hearts, the hands, the bodies of our pupils. We strive to fit each one for usefulness, and to turn out into the world at the end of their stay with us, not helpless, worthless *unfortunates*, but independent, self-supporting, self-respecting *citizens*; ladies and gentlemen in that highest sense, which renders every man and woman a wealth producer. That we fail sometimes goes without saying, but a mechanic must not be considered culpable if he fails to turn out a good product when he has only poor material with which to work. We do the best we can with the material in hand.

Believing fully in that old adage, that "An idle brain is the devil's workshop," we are putting forth special efforts to keep every pupil employed as much of the time as possible. The larger ones spend

three hours daily, including Saturdays, in the industrial departments. The smaller ones, during the afternoon, are placed under ladies who keep them employed in such handiwork, games, walks, instructions, etc., as will engage their little busy minds and hands, and so close many of the avenues to temptation which would otherwise be thronged with evil. These exercises are so varied as to prevent monotony and fatigue. In addition to being kept out of mischief, the little ones are thus taught habits of industry, and their little hands are started in the directions which lead to usefulness and happiness.

Let it always be borne in mind that this is a *school* for the education of those children who are deprived, by reason of deafness or blindness, of the privileges of the ordinary public schools, and not an asylum for the unfortunate, nor a home for the afflicted, nor yet a refuge for the homeless. *We are a part of the public school system of the State.*

LITERARY.

The school is peculiarly well supplied with teachers in this department. Without a single exception they are men and women of large experience and decided ability. They have been selected from some of the oldest and best institutions in this country, and bring with them experience, enthusiasm and successful records. And our new school building is most admirably adapted to our needs.

There is, however, one serious hindrance to complete success in this department, that without which no school can prove a thoroughly ideal one—school apparatus. The lack of the necessary appliances has operated seriously against us. With the exception of a set of anatomical models and a few maps, we have nothing—not even an air pump, nor a spirit lamp, nor a retort. It is very evident that we are most seriously hampered in our efforts at instruction. In teaching the deaf or the blind, there are many difficulties with which we have to contend naturally. Let these not be increased for the lack of necessary appliances, nor the embarrassment be intensified.

DEAF DEPARTMENT.

Years of experience and observation have convinced us that the modes of instruction used in our school are the best and most successful, taking all the deaf into consideration. That the "combined system" will prove the greatest good to the greatest number, there can be no doubt to the unprejudiced mind.

A large number of our pupils have some power of hearing. These are taught through the ear. Others, who have no hearing, can

be taught to speak by proper effort. These we teach articulation and lip reading. Others still belong to neither of these classes and can not be taught through the ear, nor can they be taught to speak. This is proved by actual and faithful experiment, and then they are turned over to the teacher of the manual methods, where it has been proved beyond a doubt, that every deaf child of reasonable intelligence can be taught to use the English language well. By the manual methods, I mean the sign language, used as a medium of communication, the manual alphabet and written language. It will thus be seen that we use all the methods of instruction employed by any school for the deaf. The prime object is the same in all cases—a correct use of the English language.

We have a regular course of instruction, similar to that pursued in our public schools, in which the work of the teacher of each grade is mapped out and well defined. At the close of the past session, June 1, 1892, Maximilian Kestner, of Denver, having completed the prescribed course of study and passed satisfactory examinations, was graduated from the school. He goes to Washington, D. C., this fall, to pursue more advanced studies at the National Deaf-mute College.

ARTICULATION.

The work in this line has been of such encouraging character during the past session, that an additional teacher has been employed for the present session. It is the plan of the school to give every child who enters an opportunity to learn to speak. Such as make commendable progress, after a fair trial, are given lessons in articulation and speech reading daily. Those who show no aptitude for acquiring either are placed in the manual classes.

AURAL CLASS.

Twenty-two of our pupils have received all their instruction through the ear during the past session. I do not claim that the regular use of the ear *improves* the child's hearing, but I do claim that there is as much reason in supposing that the aural apparatus is rendered healthy and active by use as that the hand or the arm is strengthened by use. I claim also that a child's ability to distinguish sounds improves by daily practice. So long, then, as we have pupils possessing a sufficient power of hearing to receive aural instruction this class should be maintained. There are many children who have to drop out of our public schools because they are hard of hearing to whom this class will prove a great blessing.

OUR ART DEPARTMENT

has kept pace with the other features of the school, and the work done will compare very favorably with that done in any of our public schools. Some of the work done during the past session has attracted much attention and called forth much praise. The handsome drop curtain for our assembly hall, as well as the scroll work and screens for the stage, were executed by our art teacher, assisted by his pupils.

THE KINDERGARTEN.

Only a year ago last September was this new departure tried in our school. It is no longer an experiment. The work accomplished by both the deaf and the blind children has been of so satisfactory a character as to establish this as one of the permanent features of the school. It is no less popular with the pupils than with the teachers and management. All has been excellent, but I regard the clay modeling as peculiarly fine. Many competent judges have pronounced it the best they have ever seen.

THE BLIND DEPARTMENT.

The attendance here has been greater even than in the deaf department. Five years ago there were but thirteen blind children in the school. Last session alone we enrolled forty-eight, and the present biennial term has brought the number up to sixty.

The course of study is the same as that prescribed for the city schools, and a good many of our pupils' progress will compare very favorably with that of their seeing brethren.

We still use the system of raised type, which has been in the school since the establishment of the department. An effort is made to teach every pupil the line print—or the raised type, as it is generally called—first. Most of those who come to us in early life learn to read this quite well, but there are some who cannot. After this, we teach the New York point system, which is much more readily learned, for the reason that it is easier to feel a point than a line.

This point print consists of a regular system of semi-perforations, or indentations, made in thick, stiff paper by means of a blunt-pointed little stiletto, a certain number of these points, occupying a certain position with respect to each other, representing the respective letters of the alphabet.

At the recent meeting of the convention of instructors for the blind, held at Brantford, Ontario, the American Printing House for the Blind was authorized to print hereafter all books in this New York point system, thus making an effort for uniformity in type for the blind, which is so desirable.

Another advantage in the use of the point print is that the blind not only read, but can also write it, and thus communicate with friends at a distance. Their music lessons, as well as their literary exercises, are written off in this type, which is a wonderful aid to them in their regular work.

A few of the American schools for the blind use a different system of point print, known as the Braille, invented by Louis Braille, of France, many years ago; but the original arrangement has undergone so many and so great changes, and there are so many modifications of it, that it is really confusing to know what is really meant now, when one speaks of Braille. But a still more important feature of the situation is that it requires much more space to write or print it, and the greater length of the letters is vertical instead of horizontal, and it is so much more difficult to read, since it requires a greater effort to grasp the letters.

During the past year our blind boys have given a series of entertainments, to which a small admission fee was charged, and by this means have raised a sufficiency of funds to purchase a fine set of band instruments, upon which they have learned to play quite well, paying for their instruction as well.

THE DOMESTIC DEPARTMENT.

The homelike character of this department has been rendered even more efficient in several ways. An assistant matron has been appointed to look after all the little ones while out of school for certain hours, and the little girls all the time. She is to be with them constantly, to attend to all their needs, to teach them lessons of neatness, propriety, gentleness, industry and usefulness. While not in the care of the assistant matron, the little boys are to be in charge of a lady whose own child is one of our pupils and who can fully sympathize with all mothers who have children with us.

The girls are admirably well provided with sleeping apartments so nicely furnished, in our elegant new Girls' Hall, erected out of funds appropriated by the last General Assembly. In their own house, entirely separate from all the other buildings, under the immediate supervision of the assistant matron and girls' supervisor day and

night, they are well protected against all improper influences and dangers. As an additional safeguard, the apartments of the superintendent and his family are in this building, and the night watchman pays hourly visits through the halls.

The daily routine of work is outlined in the following schedule :

INDUSTRIAL.

The larger pupils are all taught some species of handicraft, at which they may hope to make a living after leaving school. Such trades have been selected as have been practicable and have suggested themselves as best adapted to the learner and the country in which he is to live.

The larger deaf boys have been taught carpentry, cabinet-making and printing. The larger blind boys have broom and mattress-making and chair-seating. All these departments have proved very satisfactory and a source of small revenue to the school, since we find ready sale for all our products. But the most pleasing and important feature of it is that we have turned out persons from these shops who are now doing well at their trades.

The larger girls are taught the various branches of house work, together with dressmaking, needle-work, hammock-weaving, embroidery, etc. The larger deaf girls took lessons in bread-making and baking last session, which proved very helpful to them. They made all the bread we used for months. This year we are giving lessons to two classes of the deaf boys, whose parents requested that they be taught baking.

ATTENDANCE.

The attendance for the past two years has reached 176. Of this number 134 have been enrolled the present session.

The enrollment at the last report was.....	108
Admitted during the two years.....	68
Total enrollment for two years.....	176
Removed from the State.....	7
Graduated.....	1
Dismissed as feeble-minded.....	3
Expelled.....	2
Voluntarily remaining at home.....	29
Total diminutions.....	42
Present enrollment.....	134

These are classified as follows :

Deaf boys	49
Deaf girls	38
Blind boys	29
Blind girls	18
Total	<u>134</u>

CAUSES OF DEAFNESS.

In my last two reports I have given much space to the discussion of this subject, and so shall not deal in detail with the subject here. For particulars I refer the reader to the tabulated statements at the end of this report. I should like, however, to throw out just a word of warning to parents. If the causes of deafness and blindness assigned are all to be credited, one can readily see that the utmost care possible should be exercised, since several of our pupils have lost their hearing or sight from apparently very trivial causes. Parents cannot be too careful of their childrens' eyes and ears.

Of the 116 deaf children enrolled, the following are the assigned causes of deafness:

Congenital	26
Unknown	15
Spinal meningitis.....	13
Scarlet fever	12
Cold in head	7
Brain fever	6
Typhoid fever.....	2
Other fevers.....	4
Cold and inflammation in head.....	6
Measles	5
Diphtheria	4
Whooping cough.....	4
Catarrh	4
Teething	3
Fall	2
Muscular rheumatism.....	1
Throat disease.....	1
Sunstroke	1
Total	<u>116</u>

Seventy-five of these were born deaf, or became deaf before they were two years of age; twenty-two became deaf before they were five; seven were deaf at ten, or before; two became deaf at eleven.

CAUSES OF BLINDNESS.

Of the sixty blind pupils enrolled I find the following causes of blindness assigned:

Congenital	8
Unknown	11
Inflammation	10
Cold	4
Smallpox	4
Spinal meningitis	3
Stuck fork in	2
Fall	2
Cut with scissors	2
Powder explosion	2
Ashes blown into eyes of	1
Scarlet fever	1
Struck by snowball	1
Snow blind	1
Atropy	1
Cut with bone	1
Scratched with knife	1
Pricked by glass	1
Measles	2
Scrofula	1
Total	60

Twenty of these became blind at two years of age, or younger; fifteen at five, or under; nine at ten, or under; one at eleven; two at twelve; two at twenty-seven; one at twenty-eight and one at thirty-eight.

CHANGES.

Since the publication of our last report a number of changes have taken place in our corps of officers and teachers. The Honorables Henri R. Foster, of Denver, and J. W. Stillman, of Colorado Springs, who had served the school most faithfully and efficiently as members of the Board of Trustees, the former six years and the latter three,

whose terms of office having expired in March, 1891, were succeeded by Colonel Henry Bowman, of Idaho Springs, who had previously been connected with the Board four years, and Honorable J. F. Humphrey, of Colorado Springs. Both these gentlemen have been long identified with educational interests in their respective counties.

Mrs. E. A. McWhorter succeeded Mrs. Anna Richards, as matron, at the close of the school year, 1891, and she was succeeded by Mrs. Lena B. Elder, July 1, 1892. Mrs. Elder's daughter, Edith, has been appointed clerk and visitor's attendant. Miss Ada R. King, for a number of years at the head of the articulation department of the Hartford, Connecticut, school for the deaf, succeeded Miss L. K. Thompson as teacher of articulation, in 1891. Miss Prudence S. Burchard, who has had charge of the articulation work in the school for the deaf, at Rome, New York, has been added to this department of our school. Mr. A. J. Tillinghast, himself the son of deaf parents, a full graduate of one of our best colleges, and having taken a special course at the National Deaf Mute College, at Washington, D. C., has been added to our corps of teachers in the deaf department, Mr. S. W. Gilbert, who filled the place for him last year, having taken a position in the Indianapolis school for the deaf.

Mrs. C. C. Wynn, who has been connected with the blind department of the school since its establishment in 1883, resigned her position as teacher in June, 1892, and the position is now filled by Miss Mary P. Wright, who comes to us from the Ohio school for the blind, bringing a most satisfactory record. The growth of this department has made it necessary to add another teacher, and Miss Jessie Baker, of Columbus, Ohio, who has taught the blind several years, takes the place.

The Kindergarten, already referred to, was established and is still presided over by Miss Margaret H. Taylor, who for some time was a teacher in the Royal College for the Blind, in London, England, and has since been connected with the Illinois school for the blind.

Mrs. A. C. Manning resigned her position as teacher of the aural class in the spring of 1891, and was succeeded by Mrs. Mary F. Miller, who has since been appointed assistant matron. Miss Mary Harbert, for a long time girls' supervisor and seamstress, on account of feeble health resigned in the summer of 1891. Miss Kate Cree, an experienced dressmaker and most efficient officer, succeeds Miss Harbert as seamstress, and Miss Hattie Swiler succeeds to the position of girls' supervisor.

Dr. E. M. Marbourg, who for three years has served the school most successfully as oculist and aurist, without charge, resigns, and Dr. S. W. Morrison, of this city, succeeds him. Mr. John W. Taylor

now gives his whole time to the care of the heating plant and the broom and mattress shops, and Mrs. Taylor succeeds him as boys' supervisor. Mrs. Taylor has had charge of the small boys for two years. Mr. H. M. Harbert has also given up his class in the literary department to devote his time to the printing office.

OUR THANKS.

are due and are hereby most heartily tendered to the newspapers of our city, which have shown the school innumerable favors; the merchants and other citizens who have contributed in so many ways to the pleasure and comfort of the pupils; the various railroads of the State for reduced fare for the pupils, as well as for other special favors; the publishers of several of the newspapers of the State, and most of the institutions of the various states, who have furnished us with their papers; the American Printing House for the Blind and the Society for the Distribution of Evangelical Literature Among the Blind, for a number of publications.

PERMANENT IMPROVEMENTS.

The Girls' Hall, for which an appropriation was made by the last General Assembly, has been completed and is now in use. The structure is of white lava stone, trimmed with pink lava, has two stories and a basement, with a separate projection in the rear, connected by a corridor, in which are all the lavatory, bathing and water-closet conveniences. The arrangement renders any trouble from sewer-gas or other stench in the sleeping rooms impossible. In the building proper in the basement are four large play and reading rooms. Upon the main floor are to be found the girls' work-room, the assistant matron's room, the supervisor's room, the superintendent's apartments, and two large, well-lighted, well-ventilated dormitories for the smaller girls. Upon the upper floor are thirteen nice rooms large enough to accommodate four large girls each, thus providing a privacy which is so desirable. The building is so constructed as to permit the sun to shine into every room at some time every day.

The sickness which prevailed in the school three years ago showed the absolute need of a separate building for hospital purposes. A neat wooden structure of five rooms, with all modern conveniences, including a sun bath for convalescents, was erected at a cost of \$4,000.

The unsightly old wooden fence, which was so dilapidated, has been replaced by a handsome iron fence which cost \$2,141.50. Laundry machinery has been put in at a cost of \$1,250. The new school house has been furnished with new desks and the assembly hall with

neat folding chairs. A piano and cabinet organ have been purchased for the blind department. There are many other items, of which space forbids mention, which belong to the ordinary improvements.

CONVENTIONS.

During the past summer our school had the privilege and pleasure of entertaining the "Conference of Superintendents and Principals of American Schools for the Deaf," August 7-11. This meeting was attended by 130 persons, representing the institutions of most of the states of the Union, from Massachusetts to California, and two of the Canadian schools. A good many of the most eminent, active and distinguished men and women in the profession were present, several of whom have an international reputation in this particular field of labor. The discussions and the papers read were interesting, instructive and inspiring to an unusual degree. It was pronounced by competent judges to be one of the most pleasant and successful meetings of the Conference ever held. It was a great blessing to our school, and I feel that the impetus given the work among us will be of lasting assistance to us. The spirit of the meeting was truly a benediction.

In addition to the above meeting, it was my privilege, through your kindness, to attend for four days the sessions of the "American Association to Promote the Teaching of Speech to the Deaf," which met at Lake George, N. Y., July 28-August 8; and the "Convention of Instructors of American Institutions for the Blind," held in Brantford, Ontario. Both these meetings were very largely attended and were most helpful in their character. Space forbids a detailed account of the proceedings. These are to be had in pamphlet form, to which I respectfully refer the reader.

SOME SUGGESTIONS.

In my last report I suggested the propriety of having the manual, or "deaf and dumb" alphabet, as it is generally called, published in the text books of our public schools. As many communities now furnish free text books for the pupils, the suggestion can be the more easily carried out. Any one can readily see that the object of this is to familiarize our public school children with a method of communicating with the deaf, who are so frequently shut off from many social pleasures which they would otherwise enjoy.

For four years past I have been urging the necessity of a school for feeble-minded children. The need of such an institution is so apparent to any one who has thought along this line, that I need not

again argue its importance. I have in my possession the names of fifty or more children who so much need the fostering care of such a school. I most sincerely hope that the efforts now making for the establishment of such an institution may succeed.

IN CONCLUSION.

Permit me, gentlemen of the Board, to thank you for the uniform kindness, the cordial support and the wise counsel which I have received at your hands, as well as for the deep interest your labors have manifested in the welfare of the school, and without which it could not have attained its past success, its present standard of usefulness and its prospects for so bright a future. To those of us who have watched with so much interest the strides which have been made during these recent years the success attained is most gratifying, and the outlook most pleasing and encouraging. May these prove to be only the buddings of what we may expect and hope for in the future.

JOHN E. RAY,
Superintendent.

OFFICERS AND TEACHERS AND THEIR SALARIES.

NAME.	POSITION.	SALARY.
John E. Ray, resident.....	Superintendent.....	\$1,500 00
D. C. Dudley, non-resident.....	Teacher of the deaf.....	1,500 00
F. H. Manning, non-resident....	Teacher of the blind.....	1,100 00
C. W. Veditz.....	Teacher of the deaf.....	1,000 00
E. C. Campbell, non-resident.....	Teacher of the deaf and art.....	1,000 00
H. M. Harbert, non-resident....	T'ch'r of printing and edit'r Index	900 00
A. J. Tillinghast, resident.....	Teacher of the deaf.....	800 00
J. W. Taylor, resident.....	Engineer, and broom and mat- tress making.....	780 00
Samuel Gale, non-resident.....	Teacher of carpentry.....	675 00
M. E. Churchman, resident.....	Teacher of music.....	650 00
Tillie Garman, resident.....	Teacher of the deaf.....	650 00
M. H. Taylor, resident.....	Teacher of kindergarten.....	650 00
Ada R. King, resident.....	Teacher of articulation.....	600 00
P. E. Burchard, resident.....	Teacher of articulation and aural class.....	600 00
M. P. Wright, resident.....	Teacher of the blind.....	550 00
Jessie Baker, resident.....	Teacher of the blind.....	550 00
Lena B. Eldet, resident.....	Matron.....	500 00
Mary F. Miller, resident.....	Assistant matron.....	400 00
Mrs. J. W. Taylor, resident.....	Boys' supervisor.....	400 00
Kate Cree, resident.....	Seamstress.....	360 00
Hattie Swiler, resident.....	Girls' supervisor.....	270 00
Edith Elder, resident.....	Clerk and attendant.....	150 00

Value of Buildings and Grounds—

Value of buildings and grounds November 30, 1890.....	\$157,076 00
Increase in value since.....	38,818 00
Present value.....	\$195,894 00

The Colorado State Industrial School, Golden, 1892.

BOARD OF CONTROL AND OFFICERS.

President.....	Hon. M. N. Megrue.....	Of Pueblo
Secretary.....	Hon. J. M. Morris.....	Of Golden
Hon. J. C. Hummel.....		Of Denver
Superintendent.....		D. R. Hatch
Matron.....		Mrs. Rose Fisk
Physician.....		J. P. Kelly

REPORT OF THE BOARD OF CONTROL.

TO THE HON. NATHAN B. COY,

State Superintendent of Public Instruction:

The Board of Control of the State Industrial School respectfully submit this, their sixth biennial report for the two years commencing January 1, 1891, and ending December 31, 1892.

The Eighth General Assembly appropriated for the general support and maintenance of this institution the sum of \$70,000, with the cash receipts of the institution for the two years.

They also appropriated out of the internal improvement fund \$12,500 for a new building.

The tables accompanying show the expenditure of the money thus appropriated.

With the \$12,500 we have erected a cottage for fifty of the youngest boys. We feel that the erection of cottages for our other three families is an absolute necessity, as any one can see by visiting the institution. We ask for \$37,500 for that purpose.

We have in the past two years dug and walled a new well, twenty-one feet in diameter and twenty-eight feet deep. We found it necessary to put in a new pump, which we have done at an expense of \$500. We are now reasonably sure of a sufficient supply of water for all purposes.

We still use stoves to heat our buildings. We should have steam heat. We ask for \$5,000 for this purpose.

We ask for \$100,000 for the maintenance of the institution for the next two years.

The superintendent's and physician's reports are attached.

Respectfully submitted,

M. N. MEGRUE,
President,

J. M. MORRIS,
Secretary,

J. C. HUMMEL.

STATEMENT OF RECEIPTS AND EXPENDITURES

Expenditures—

Provisions	\$15,476 81
House furnishing	2,996 03
Dry goods and furnishing	6,468 49
Repairs and improvements	2,418 37
Tools and implements	634 33
Shoe shop supplies	1,833 87
Stoves and furnaces	50 30
Carpenter shop, bakery and tailor shop	161 52
Laundry	590 79
Brickyard	207 84
Feed	1,677 63
Water supply	1,690 81
Farm	1,165 11
Fuel and light	4,532 06
Police expense	908 45
Amusement and library	172 65
Telephone and telegraph	210 84
Office, printing and stationery	657 81
Officers' salaries	20,796 98
Postage	389 15
School requisites	214 74
Funeral expenses	93 60
Drugs and medical attendance	886 43
Board	59 75
Live stock	559 30
Insurance	220 00
Wagons and harness	430 77
	<u>\$65,504 43</u>

Maintenance.

Total of vouchers issued	\$65,504 43
Appropriation	\$70,000 00
Cash received	2,809 78
Balance from 1890	37 48
Voucher destroyed	1 05
Transferred to general fund by State Auditor November 30th, 1891	4,414 94
Balance	<u>2,928 94</u>
	<u>\$72,848 31</u> <u>\$72,848 31</u>

BUILDING FUND.

Appropriation.....	\$12,500 00	
Vouchers drawn.....	12,496 48	
Balance.....		\$ 3 52

SUPERINTENDENT'S REPORT.

GOLDEN, COLO., Oct. 29, 1892.

To the Board of Control :

GENTLEMEN—I respectfully submit my report for the past two years.

The usual tables show movement of population, etc.

Besides the new cottage and well we have built in the last two years :

A brick pump house, $22\frac{1}{2} \times 22\frac{1}{2}$ feet.

A brick ice house, 20×30 feet.

A macadam roadway from the gate to the Administration Building, a distance of 900 feet.

Two macadam walks 500 feet in length.

We have put in 833 feet of eight-inch, 546 feet of six-inch and 300 feet of four-inch sewer tile, draining all buildings except the officers' quarters.

We have planted 300 shade trees, 120 fruit trees, 600 grape vines, 1,500 blackberry plants and one acre of strawberries.

We have graded and seeded two and one-half acres of lawns.

This work has been done by the boys, including the cutting of the stone curbing for the roadway and laying the brick in the ice house and pump house.

We have started a brick yard, making in 1891 one hundred thousand brick and in 1892 two hundred thousand. The boys have learned something of moulding, setting and off-bearing.

Our expenditures have come within the amount appropriated by the Legislature and we have wanted for nothing essential. I wish it had been possible to use more money for the purchase of books

for the library, school apparatus and amusements. I hope we may be able in the next two years to attend to these matters and also provide a new organ and new band instruments.

I urge upon the board the imperative need of new buildings. Our present buildings are badly constructed, continually out of repair and too small! If we could have three new cottages our families would then be comfortable, and we could use our present dormitory buildings for domestic departments and shops. This would give us room enough for the present. Boys are now *crowded* out of the Institution. We release the majority simply and solely to make room for new commitments.

I ask also for enough money to establish a printing office and a cabinet shop. I think \$2,000 will suffice for the former and \$500 for the latter.

It would be well also to have a brush or broom department for winter employment.

We should have laundry machinery and so release many boys from the drudgery of such work to learn something more useful and practical.

I would also strongly urge upon the Board the crying need of radical changes in our law. We are twenty years behind; we have a time sentence; we teach trades only incidentally; we do not look after released inmates. I am ashamed of my State when I give the above information to people from states which have kept up with the times in such matters. It seems time that this Board should *demand* something better.

1. There should be some restriction on the committing power. This power is now in the hands of justices with no restriction except the right of appeal. One man or woman can take a boy before a justice and have him committed to this School for three years, without witness, without trial, without counsel, without advice. This is done in a large proportion of the cases. Boys who are expensive or troublesome or diseased are thus easily disposed of. It is an injury to the institution. It is an imposition on the State. It is an injustice to the boy. We do not want good boys sent here. A bad boy should not be sent here until all other remedies have failed. A boy who is bad enough to deserve to be sent here is bad enough to receive the attention of district and county courts.

I therefore recommend and strongly urge the restriction of this power of committal to courts of record.

2. Another change equally imperative is the adoption of the minority commitment. Boys are now sent for a specified term of from nine months to three years. It needs no argument to persuade thinking intelligent persons of the great desirability of the indeterminate sentence, especially with juveniles. Our law regards these boys as criminals and punishes them. A proper law treats a juvenile delinquent, as a subject for education and reformation. I would lay great stress on the education of the boys. They should be given a common school education at the least. Such as are old enough should acquire the elements of some handicraft whereby they can make an honest living. These things cannot be done in nine months nor one year. Under our present law we cannot give him enough schooling, nor could we teach him a trade if we had a trade school, as we should have. We cannot even control him when paroled. He can be as tough as he pleases the moment he is outside our gates and we have no power to restrain him. This is not the way progressive people do these things nowadays. I therefore ask that the only sentence allowed be for minority.

These changes must be made if we would be up with the times; if we would prevent imposition on the State; if we would make the institution efficient; if we would do justice to these boys. It seems to me that the importance of this institution has been underrated. We are working here with plastic material; something can be made of it; vice and crime and misery can be prevented. I ask the board of control and legislature to give us the facilities for doing this work; give us comfortable buildings; give us trades to teach the boys; give us a chaplain to watch over their spiritual interests and care for them when paroled; give us a proper and modern law.

In my opinion, the time has come when we should consider an entire change in the daily routine. The plan contemplates the division of the school into two divisions or shifts, one working in the forenoon and going to school in the afternoon, the other going to school in the morning and working in the afternoon. This would enable us to lengthen our working day, have boys attend school more regularly, and give the evenings to family work and amusements.

This change would necessitate the employment of but two teachers of the present, whose whole time would be devoted to teaching. One of these should be a lady.

I would also call the attention of the board to the fact that at present we depend upon the services of persons from Golden for our religious exercises, whose influence is exerted an hour each week. I would

also mention the fact that, if minority commitment is adopted, some one will have to visit paroled inmates. In other words, the time is soon coming when we shall need a chaplain and visiting agent.

We are pleased to acknowledge many kindnesses from many friends.

The Unity Club have given the boys two entertainments and a Christmas tree with presents for all the boys. This club gave an entertainment in Denver and repeated it in Golden, netting our library some four hundred books. Although not well fixed in the way of a reading room, these books are in general use among the boys, from 80 to 100 being taken out weekly.

Mrs. H. H. Beach, of Golden, has been of great service in our Sunday school.

Mrs. J. H. Brown and the Golden flower mission have furnished us many bouquets.

Mrs. Harsh and many others have supplied us with magazines. We wish thus publicly to acknowledge these courtesies.

ESTIMATE OF MONEY NEEDED FOR THE NEXT TWO YEARS.

At the present rate of increase our number will be 184.

184 boys at \$224.92 per year for two years	\$2,770 56
Re-insuring present buildings, 1893.....	500 00
Establishing printing office.....	2,000 00
Establishing cabinet shop.....	500 00
School apparatus needed.....	150 00
Library, \$200 per year.....	400 00
Band instruments.....	300 00
Organ.....	100 00
Amusements, \$100 per year.....	200 00
	<hr/>
	\$86,920 56
New fence.....	\$800 00
Material besides brick for new barn.....	600 00
	<hr/>
	\$88,320 56

If the new buildings are built.

Insurance.....	\$600 00
Beds, 100 at \$9.00 each.....	900 00
Seats, each cottage 80 feet, at \$1.00.....	240 00
Other furniture for cottages, including bedding, \$250....	750 00
Maintenance, 50 boys, one year.....	11,246 00

Very respectfully submitted,

\$102,056 56

DORUS R. HATCH,
Superintendent.

PHYSICIAN'S REPORT.

GOLDEN, COLORADO, October 21, 1892.

To the Honorable Board of Control:

GENTLEMEN—I have the honor to submit for your consideration the Sixth Biennial Report of the medical department of the State Industrial School.

During the past two years 261 sick have been treated in the hospital.

The death rate continues very low, only two having died.

The present epidemic of diphtheria forcibly illustrates the necessity of a new building for the isolation of all contagious diseases.

“Diphtheria is one of the most dangerous and fatal diseases known to mankind.” Very contagious, principally by personal contact with patients or articles which have been in the sick room. Children under fifteen years of age are most susceptible to it.

The State Board of Health requires the following precautions, and thinks they are necessary in all cases of this disease. The patient must be kept in a room alone, and no one admitted excepting nurses. No other person should, under any circumstance, occupy the same bed with a person sick with diphtheria. Nurses should not go near any well children. Everything that the patient touches or breathes upon is a source of danger. The secretions and excretions are especially dangerous. The clothing and bedding of the patient is poisonous and should be thoroughly fumigated, then boiled for two hours, etc., etc.

Respectfully submitted,

JOHN P. KELLY,
Physician for School.

EXHIBIT No. 1.

Showing number of inmates received each month, from November 10, 1890, to November 10, 1892.

	RECEIVED.
November, 1890.....	7
December, 1890.....	12
January, 1891.....	7
February, 1891.....	5
March, 1891.....	13
April, 1891.....	9
May, 1891.....	8
June, 1891.....	15
July, 1891.....	11
August, 1891.....	6
September, 1891.....	13
October, 1891.....	8
November, 1891.....	11
December, 1891.....	11
January, 1892.....	18
February, 1892.....	19
March, 1892.....	22
April, 1892.....	9
May, 1892.....	12
June, 1892.....	14
July, 1892.....	11
August, 1892.....	3
September, 1892.....	10
October, 1892.....	16
Total	270

EXHIBIT No. 2.

Showing from what sources children were received and who were complainants.

Sent by courts on complaint of parents.....	69
Sent by courts on complaint of others.....	199
Boarders	2
Total	270

EXHIBIT No. 3.

Showing length of sentences.

Three months.....	1
Six months.....	2
Nine months.....	18
Ten months.....	1
One year.....	65
One and one-quarter years.....	1
One and one-half years.....	8
Two years.....	44
Two and one-quarter years.....	1
Two and one-half years.....	4
Two and three-fourths years.....	1
Two and eleven-twelfths years.....	1
Three years.....	103
Four years.....	3
Five years.....	2
Five and one-half years.....	1
Six years.....	1
Seven years.....	2
Eight years.....	2
Minority.....	7
Boarders.....	2
Total.....	270

EXHIBIT No. 4.

Showing from what counties children have been sent.

Arapahoe.....	121
Chaffee.....	4
Cheyenne.....	1
Clear Creek.....	5
Conejos.....	2
Eagle.....	1
El Paso.....	9
Fremont.....	4
Garfield.....	2
Gunnison.....	3

EXHIBIT No. 4—*Concluded.*

Huerfano	2
Jefferson	17
Lake	19
La Plata	5
Larimer	2
Mesa	4
Otero	3
Park	1
Prowers	1
Pueblo	23
Pitkin	6
Rio Blanco	1
Rio Grande	2
San Miguel	1
San Juan	1
Weld	3
Boulder	14
Las Animas	2
Wyoming State	9
Boarders	2
Total	270

EXHIBIT No. 5.

Showing ages when received.

Seven years	1
Eight years	3
Nine years	7
Ten years	30
Eleven years	22
Twelve years	36
Thirteen years	45
Fourteen years	45
Fifteen years	52
Sixteen years	25
Seventeen years	1
Twenty years	2
Twenty-two years	1
Total	270

EXHIBIT No. 6.

Showing nativity of children :

Arkansas.....	5
California.....	1
Colorado.....	62
Connecticut.....	1
Illinois.....	26
Indiana.....	10
Indian Territory.....	1
Iowa.....	8
Kansas.....	19
Kentucky.....	4
Maine.....	1
Massachusetts.....	6
Michigan.....	3
Minnesota.....	2
Mississippi.....	4
Missouri.....	25
Nebraska.....	7
New Jersey.....	4
New York.....	13
Ohio.....	9
Oregon.....	1
Pennsylvania.....	10
South Carolina.....	1
Tennessee.....	6
Texas.....	1
Utah.....	2
Virginia.....	3
Wyoming.....	1
Austria.....	1
Canada.....	3
Denmark.....	1
England.....	10
Germany.....	5
Ireland.....	1
Italy.....	2

EXHIBIT No. 6—*Concluded.*

Scotland	1
Spain	1
South America	1
Unknown	8
Total	270

EXHIBIT No. 7.

Nativity of parents :

	BOTH PARENTS NATIVE.	ONE PARENT NATIVE.
United States	110	40
Germany	7	7
England	16	5
Ireland	12	10
Nova Scotia	1	
Spain	1	1
Switzerland	1	1
Canada	5	3
Denmark	1	1
Scotland	1	2
France		3
Austria	1	1
Russia	1	
Africa		1
Wales	2	1
Norway	2	
Mexico	1	
Unknown	54	27
Italy	2	1
Total		270

EXHIBIT No. 8.

Both parents living	117
One parent living	117
Both parents dead	28
No record	8
Total	270

EXHIBIT No. 8—*Concluded.*

Parents owning real estate.....	83	
Parents owning chattels only.....	143	
Homeless.....	44	
Total.....		270
Had been under arrest before.....	94	
Had been inmates of other institutions.....	5	
Having parents divorced or separated.....	37	

EXHIBIT No. 9.

Showing number of inmates on the 15th of each month :

December, 1890.....	156
January, 1891.....	159
February, 1891.....	155
March, 1891.....	162
April, 1891.....	159
May, 1891.....	158
June, 1891.....	162
July, 1891.....	160
August, 1891.....	164
September, 1891.....	170
October, 1891.....	146
November, 1891.....	152
December, 1891.....	153
January, 1892.....	158
February, 1892.....	176
March, 1892.....	177
April, 1892.....	173
May, 1892.....	174
June, 1892.....	166
July, 1892.....	172
August, 1892.....	159
September, 1892.....	159
October, 1892.....	161
November, 1892.....	158

Average for term, 162.

EXHIBIT No. 10.

Showing cash receipts :

Board	\$2,139 79
Shoe sales	184 15
Broom sales	42 00
Live stock	197 31
Farm	64 71
Feed	154 02
Tailor shop	16 30
Sale brick	1 50
Sale old wagou	10 00
Total	\$2,809 78

EXHIBIT No. 11.

Number in school last report	145
Number received during two years	270
Whole number in school during the two years	415
Discharged to friends	162
Discharged to places	65
Time out	19
Escaped	8
Died	2
Boarders	5
Returned to authorities	1
Total number leaving the Institution	262
Number in Institution November 10, 1892	156

EXHIBIT No. 12.

Work done in tailor shop, 1891 and 1892 :

Made—Coats	309
“ Pants	439
“ Overalls	1,123
“ Caps	135
“ Shirts	1,097
“ Undershirts	412

EXHIBIT No. 12—*Concluded,*

Made—Drawers.....	361
“ Aprons.....	78
“ Sheets.....	45
“ Towels.....	51
“ Spreads.....	13
“ Citizen suits.....	23
“ Pillow slips.....	91
“ Mittens.....	38
“ Suspenders.....	21
“ Citizen shirts.....	16
“ Waiters' jackets.....	37
“ Waiters' caps.....	6
“ Night shirts.....	2
“ Napkins.....	12
“ Blankets.....	2
“ Window shades.....	26
“ Machine covers.....	5
Total number of pieces repaired.....	16,072

EXHIBIT No. 13.

Work done in shoe shop, 1891 and 1892:

Boys' shoes made, pairs.....	987
Slippers “ “.....	86
Repaired, “.....	7,185

EXHIBIT No. 14.

Showing farm products for 1892:

Hay.....	30 tons.
Asparagus.....	300 dozen.
Beans.....	1,920 gallons.
Beets.....	3,389 pounds.
Cabbage.....	7,950 heads.
Carrots.....	519 bushels.
Corn.....	1,148 dozen.
Cucumbers.....	2,450.

EXHIBIT No. 14—*Concluded.*

Currants.....	6½ gallons.
Grapes.....	960 pounds.
Melons, musk.....	2,130.
Melons, water.....	1,800.
Onions, green.....	5,283 bunches.
Onions.....	767 bushels.
Oyster plant.....	15 bushels.
Pumpkins.....	16 tons.
Radishes.....	3,107 bunches.
Raspberries.....	12½ gallons.
Spinach.....	2,880 pounds.
Squash.....	3 tons.
Strawberries.....	6,000 quarts.
Tomatoes.....	1,465 pounds.
Turnips.....	135 bushels.

EXHIBIT No. 15.

Showing fruit, etc., put up.

1891—

Grapes.....	18 gallons
Grape butter.....	4½ gallons
Grape preserves.....	.6 gallons
Jelly.....	.43 quarts
Mustard.....	.3 gallons
Pickles, cucumbers.....	6½ barrels
Pickles, fancy.....	15 gallons
Pickles, onion.....	.5 barrels
Pickles, tomato.....	.4 barrels
Sauerkraut.....	11 barrels
Tomatoes.....	.598 quarts
Tomato butter.....	.9 gallons
Watermelon preserves.....	10 gallons

1892—

Grapes.....	100 quarts
Jelly.....	50 quarts
Pickles, onion.....	.4 barrels
Pickles, tomato.....	.4 barrels

EXHIBIT No. 15—*Concluded.*

Pumpkin, dried.....	1 ton
Sauerkraut.....	5 barrels
Strawberries.....	200 quarts
Sweet pickles.....	20 gallons
Tomatoes.....	600 quarts

EXHIBIT No. 16.

List of salaries paid.

	PER YEAR.
Superintendent.....	\$1,500
First officer.....	780
Second officer.....	720
Third officer.....	660
Fourth officer.....	600
Book-keeper.....	720
Three mechanics, each.....	600
Night watchman.....	540
Matron.....	600
Five ladies in charge of departments, each.....	360
One matron of cottage.....	240

Cost per year per inmate, \$224.92.

EXHIBIT No. 17.

Aiding escape.....	1
Arson.....	1
Assault and battery.....	3
Assault.....	4
Assault to rob.....	1
Assault with intent to do bodily injury.....	1
Breach of peace.....	2
Burglary.....	10
Burglary and larceny.....	2
Carrying concealed weapons.....	1
Embezzling registered letters.....	1
Forgery.....	2
Grand larceny.....	12

EXHIBIT No. 17—*Concluded.*

Habits of vice	1
Incorrigibility	8
Interfering with railroad	2
Juvenile delinquent	1
Larceny	35
Larceny as bailee	1
Larceny and incorrigible	1
Malicious mischief	6
Minor frequenting saloons	1
Misdemeanor	1
Petit larceny	87
Petit larceny and burglary	1
Stealing	5
Stealing a registered letter	1
Vagrancy	67
Vagrancy and immoral habits	1
Vagrancy and incorrigible	1
Various offenses	1
Vicious and incorrigible	1
Vice	3
Wilfully disobedient and uncontrollable	2
Boarders	2
Total	270

Exhibit X.

Arbor Day, 1891.

- I. Circular of State Superintendent.
 - II. Suggestions for the observance of the day; selections.
 - III. Act establishing Arbor Day.
 - IV. Governor's proclamation appointing Arbor Day.
 - V. Form of report of tree planting and voting on State Flower.
-

1892.

- I. Circular of State Superintendent.
- II. Report of vote for State Flower, April, 1891.
- III. Suggestions for the observance of the day.
- IV. Articles by Colorado writers relating to Colorado trees, birds, flowers, etc.
- V. Directions for tree planting.
- VI. Act establishing Arbor Day.
- VII. Patriotic selections.
- VIII. Form of report of tree planting and voting for State Tree.
- IX. Report of vote for State Tree.

Arbor Day, April 17, 1891.

STATE OF COLORADO,
DEPARTMENT OF PUBLIC INSTRUCTION,
SUPERINTENDENT'S OFFICE.
DENVER, March 16, 1891. }

In accordance with the law, the governor of the State has already called attention by proclamation to the seventeenth day of April as Arbor Day. Emphasis is hereby still further given to the importance of properly observing the day. School officers and parents are earnestly requested to co-operate with teachers and pupils in making the occasion one of gladness and profit. As an aid to this end, a circular containing hints and suggestions is herewith issued from the Department of Public Instruction.

The purpose of Arbor Day celebration is eminently praiseworthy. The care of our forests and streams has become an affair of national concern. The intent of Arbor Day is to educate our children to a realization of this important fact. Of scarcely less import is the cultivation in youthful minds of a love of the true and the beautiful.

Colorado has especial cause to regret the lack of trees, and to deplore the reckless stripping of forests from her mountain sides. The diminishing supply of water in her streams and the dearth of wayside shelter and adornment verify this statement.

The occasion is a fitting one to instil a spirit of patriotism by associating love of country with love of nature. History and literature are rich in praise of these virtues, while our national melodies will help to enkindle enthusiasm for the Stars and Stripes, which should everywhere be unfurled in patriotic recognition of the day.

It is hoped that the day will be generally observed by the public schools of the State. Should lack of water prevent the planting of trees and shrubbery upon school grounds or along neighboring high-ways, it is suggested that appropriate literary exercises be held in all the school houses, and that, where practicable, pupils be urged to plant at their own homes.

"Ah! what would this world be to us
If the children were no more."—*Longfellow.*

"He who plants a tree loves others besides himself."
"The best verses I have produced are the trees I have planted."—*Holmes.*

"It never rains roses; where we want
To have more roses we must plant more trees."—*George Eliot.*

"Then hail the banner of the free;
The starry Flower of Liberty."—*Holmes.*

NATHAN B. COY,
State Superintendent.

SUGGESTIONS FOR THE OBSERVANCE OF ARBOR DAY,
1891.

THE STATE FLOWER.

Following the example of other States, it is proposed this year to select a State Flower for Colorado, by a vote of those who shall participate in the approaching Arbor Day exercises. Ballots for this purpose should be previously prepared, and arrangements be made to have the vote taken during the exercises. Upon the accompanying blank, teachers will promptly report to their county superintendent, who will forward to the Department of Public Instruction.

SUBJECTS FOR ESSAYS OR ORATIONS.

I. *The tree.*

- (a) Beautifies a landscape by its form and color, its grace and diversity.
- (b) Its habits—of breathing, sleeping, growing, etc.
- (c) Its enemies.
- (d) Its gifts—shelter, shade, fertility, fruit.
- (e) Its uses—fuel, material for building, manufacture and ornament, medicine, dye stuffs.

(f) Its physical effects—upon climate, water supply, agriculture, soil, healthfulness, industries, prosperity of a country.

2. *Warnings from history.*

Palestine, Sicily, Roman Campagna, St. Helena, Santa Cruz, Southern Ohio and Kentucky.

CLASS EXERCISES.

Let the members of a class, each representing some particular tree, describe how the tree grows, where it is found, what the wood or fruit is good for, etc. It might add interest if each speaker should omit the name of the tree represented, leaving the hearers to decide.

TREES IN POETRY.

Quotations may be given to show the poetical uses of trees in typifying human characteristics, as the oak, strength; the willow, sadness; the vine, dependence, etc.

SUGGESTIONS FOR PROGRAMME.

1. *Do not make the programme too long.*
2. Suit programme to age and ability of pupils.
3. Aim to give interesting variety to programme.

The following general plan is recommended, subject to the judgment and tact of the teacher.

1. Devotional exercises, reading of scriptures, (selections concerning trees, etc.,) prayer, song.
2. Reading of "Act to Establish Arbor Day," governor's proclamation, and circular by State Superintendent.
3. Songs—short, varied, appropriate.
4. Readings, recitations, declamations—brief and stirring.
5. Essays, orations, relating to trees, (their habits, uses, effects, etc.,) should be brief, original productions.
6. Remarks by visitors, very short and pointed—not too many speakers.
7. Address—short and suited to the day.

8. Vote on State Flower; see that all necessary arrangements are previously made, that there need be no delay.

AT THE TREE.

Suggestions: The tree should be previously placed in position. If it is to be dedicated to some particular person, the name of the person should be attached on wood or tin to the tree.

After a marching song on the way to the tree:

1. A brief statement concerning the person to whom the tree is dedicated.
2. When practicable, quotations from the writings of "the person honored"
3. A spadeful of earth deposited by each pupil, or such as shall be designated.
4. Recitation—"What do we Plant when we Plant the Tree?"
5. Song—"America."

ARBOR DAY ACROSTIC, FOR A CLASS OF EIGHT GIRLS.

Each girl should be dressed in white, with shoulder sash of red, white and blue, and should wear real or imitation flowers of the kind represented.

If flowers cannot be obtained each girl should wear a coronet made of card-board, covered with pink tissue paper, on which appears the name of the flower represented. The letters for the name may be cut out of gilt paper and attached with mucilage.

Each girl should be provided with one of the eight letters comprised in A-R-B-O-R D-A-Y. These letters should be from eight to ten inches long, cut from heavy card-board, and covered with ever-green.

Girl representing arbutus enters, carrying letter A; comes well down in front and recites her selection; then places letter in position on wall back of stage, for which previous preparation may have been made, and takes her place at left center. Rose then enters, recites selection, places letter R in position on wall, and takes her place next to Arbutus. Others follow in order. After the last letter has been placed in position all recite in concert.

A-RBUTUS.

I am the Arbutus.

If spring has maids of honor—
 And why should not the Spring,
 With all her dainty service,
 Have thoughts of some such thing?

If spring has maids of honor—
 Arbutus leads the train.
 A lovelier, a fairer,
 The spring would seek in vain.

R-ROSE.

I am the Rose.

If Jove would give the leafy bowers
 A queen for all their world of flowers
 The rose would be the choice of Jove,
 And blush, the queen of every grove,
 Gem, the vest of earth adorning,
 Eye of gardens, light of lawns,

Nursling of soft summer dawns:
 Love's own earliest sigh it breathes,
 Beauty's brow with lustre wreathes,
 And to young zephyr's warm caresses
 Spreads abroad its verdant tresses.

B-BUTTERCUP.

I am the Buttercup.

I'm homely and I wear the dress
 That once my mother wore.
 You may remember having seen
 A buttercup before.

They say I'm but an idle weed,
 As useless as I'm gay;
 But there was never yet a flower
 More loyal to the May.

OX-EYE DAISY.

I am the Ox-eye Daisy.

Oh, welcome, welcome, queenly May!
 The ox-eye daisy am I;
 I kept my blossom folded close
 Beneath the April sky;

But when the air grew doubly sweet
 With music and perfume,
 I knew that you had come indeed,
 And it was time to bloom.

R—HODORA

I am the Rhodora.

In May when sea-winds pierce our solitudes,
We find the fresh rhodora in the woods,
Spreading its leafless blossoms in a damp nook.
To please the desert and the sluggish brook.

The purple petals, fallen in the pool,
Make the dark water with their beauty gay ;
Here might the red bird come his plumes to cool,
And court the flower that cheapens his array.

D—AFFODIL.

I am the Daffodil.

The dainty lady daffodil
Hath donned her amber gown.
And on her fair and sunny head
Sparkles her golden crown.

Her tall green leaves, like sentinels,
Surround my lady's throne.
And graciously, in happy state,
She reigns a queen alone.

A—STER.

I am the Aster.

The autumn woods the aster knows,
The empty nest, the wind that grieves,
The sunlight breaking thro' the shade,
The squirrel chattering overhead,
The timid rabbit's lighter tread
Among the rustling leaves.

And still beside the shadowy glen
She holds the color of the skies ;
Along the purpling wayside steep
She hangs her fringes passing deep.
And meadows drowned in happy state
Are lit by starry eyes !

Y—ELLOW COWSLIP.

I am the yellow Cowslip.

Welcome, thrice welcome ! all our friends,
I have not much to bring !
I'm but the yellow cowslip,
The humblest flower of spring :

But since, before the fairest bloom,
It must be mine to die,
Oh, give to me one gentle smile,
Pray, do not pass me by.

A-R-B-O-R D-A-Y.

All.

We are the sweet flowers,
 Born of sunny showers,
 (Think, whene'er you see us, what our beauty saith):
 Utterance, mute and bright,
 Of some unknown delight.

We fill the air with pleasure by our simple breath,
 All who see us love us—
 We benefit all places :
 Unto sorrow we give smiles—and unto graces, races.

Arranged by Edward C. Delano for the "Arbor Day Manual."

ARBOR DAY.

What do we plant when we plant the tree?
 We plant the ship which will cross the sea.
 We plant the mast to carry the sails ;
 We plant the plank to withstand the gates—
 The keel, the keelson, the beam, the knee ;
 We plant the ship when we plant the tree.
 What do we plant when we plant the tree?
 We plant the houses for you and me.
 We plant the rafters, the shingles, the floors,
 We plant the studding, the lath, the doors,
 The beams and siding, all parts that be ;
 We plant the house when we plant the tree.
 What do we plant when we plant the tree?
 A thousand things that we daily see ;
 We plant the spire that out-towers the crag ;
 We plant the staff for our country's flag,
 We plant the shade, from the hot sun free ;
 We plant all these when we we plant the tree.

—Henry Abbey.

Now is the time for those who wisdom love,
 Who love to walk in virtue's flowery road,
 Along the lovely paths of spring to rove,
 And follow Nature up to Nature's God.

—Bruce.

PLANTING OF THE APPLE TREE.

Come, let us plant the apple tree !
 Cleave the tough greensward with the spade :
 Wide let its hollow bed be made ;
 There gently lay the roots, and there
 Sift the dark mold with kindly care,
 And press it o'er them tenderly,
 As round the sleeping infant's feet
 We softly fold the cradle-sheet,
 So plant we the apple tree.

What plant we in this apple tree ?
 Buds which the breath of summer days
 Shall lengthen into leafy sprays :
 Boughs where the thrush with crimson breast,
 Shall haunt, and sing, and hide her nest ;

We plant upon the sunny lea
 A shadow for the noon-tide hour,
 A shelter from the summer shower,
 When we plant the apple tree.

What plant we in this apple tree ?
 Sweets for a hundred flowery springs
 To load the May-wind's restless wings.
 When from the orchard-row he pours
 Its fragrance through our open doors ;
 A world of blossoms for the bee ;
 Flowers for the sick girl's silent room,
 For the glad infant sprigs of bloom,—
 We plant with the apple tree.

What plant we in this apple tree?
 Fruits that shall swell in sunny June.
 And redden in the August noon,
 And drop when gentle airs come by,
 That fan the blue September sky ;

While children wild with noisy glee,
 Shall scent their fragrance as they pass,
 And search for them in the tufted grass
 At the foot of the apple tree.

And when above this apple tree,
 The winter stars are quivering bright,
 And winds go howling through the night,
 Girls whose young eyes o'erflow with mirth,
 Shall peel its fruit by the cottage hearth ;

And guests in prouder homes shall see,
 Heaped with the orange and the grape,
 As fair as they in tint and shape,
 The fruit of the apple tree.

The fruitage of this apple tree:
 Winds, and our flag of stripe and star,
 Shall bear to coasts that lie afar,
 Where men shall wonder at the view,
 And ask in what fair groves they grew ;

And they who roam beyond the sea
 Shall think of childhood's careless day,
 And long hours passed in summer play
 In the shade of the apple tree.

—William Cullen Bryant.

THE CLOVER.

Some sings of the lily, and daisy, and rose,
 And the pausies and pinks that the summer-time throws
 In the green, grassy lap of the medder that lays
 Blinkin' up at the skles through the suushiny days.
 But what is the lily, and all of the rest
 Of the flowers to a man with a heart in his breast
 That was dipped brimmin' full of the honey and dew
 Of the sweet clover blossoms his babyhood knew ?

I never set eyes on a clover field now,
 Er fool round a stable, er climb in the mow,
 But my childhood comes back jest as clear and and as plain
 As the smell of the clover I'm sniffin' again ;
 And I wander away in a bare-footed dream,
 Whar I tangle my toes in the blossoms that gleam
 With the dew of the dawn of the morning of love
 Ere it wept o'er the graves that I'm weepin' above.

And so I love clover, it seems like a part
 Of the sacredest sorrows and joys of my heart ;
 And wharever it blossoms, oh, thar let me bow
 And thank the good God as I'm thankin' Him now !
 And I pray to Him still for the stren'th, when I die,
 To go out in the clover and tell it good bye,
 And lovin'ly nestle my face in its bloom
 While my soul slips away on a breth of perfume.

—James Whitcomb Riley.

THE TREE.

The tree's early leaf-buds were bursting their brown.
 "Shall I take them away?" said the frost, sweeping down.
 "No ; leave them alone
 'Till the blossoms have grown,"
 Prayed the tree, while he trembled from rootlet to crown.

The tree bore its blossoms, and all the birds sung.
 "Shall I take them away?" said the wind as he swung.
 "No ; leave them alone
 'Till the berries have grown."
 Said the tree, while his leaflets quivering hung.

The tree bore his fruit in the mid-summer glow.
 Said the child, "May I gather thy berries now?"
 "Yes ; all thou canst see ;
 Take them ; All are for thee."
 Said the tree as he bent down his laden boughs low.

—Rjornstjerne Bjornson.

WHY WE LOVE THE FLAG.

TEACHER.

Why should we love that starry flag?
 Why should we now rejoice
 To see it hang in beauty there,
 A happy Nation's choice?
 Why should the heart with rapture thrill,
 The pulse beat quick with joy,
 When we behold our country's flag?
 Come, answer now, my boy.

FIRST BOY.

I love that starry banner, sir,
 For at the Nation's birth
 'Twas chosen as the emblem of
 The fairest land on earth.
 Our patriot sires, with Washington,
 First gave it to the skies,
 And now on every sea it floats,
 In every land it flies.

A SOLDIER'S BOY.

I love that starry banner, sir,
 For I'm a soldier's son,
 And often I've heard father tell
 Of battles fought and won.
 He marched with grand old Sherman's troop,
 And Logan's fifteenth corps,
 And from Atlanta to the sea
 That flag he proudly bore.

YOUNG AMERICA.

I love that starry banner, sir,
 And I've my reasons, too,
 For surely 'tis a pretty thing,
 All red, and white, and blue:
 And let me see the boy or girl
 Who'd like to live or die
 Beneath a flag that would not give
 A fourth day of July.

—*Thomas P. Westendorf.*

SCATTER SEEDS IN SPRINGTIME.

Scatter in springtime a handful of seeds,
 And gather in summer a lapful of flowers,
 This is the song of the birds in the bowers,
 This is the song of the wind in the reeds.
 Down by the roadside and over the meads,
 Under the sunshine and under the showers,
 Scatter in springtime a handful of seeds,
 And gather in summer a lapful of flowers.

Scatter in childhood kind words and kind deeds,
 Scatter them everywhere through all the hours,
 Whether sky brightens or whether cloud lowers,
 Their blossoms shall come to thee ere summer speeds;
 Scatter in springtime a handful of seeds,
 And gather in summer a lapful of flowers.

—Selected.

RAIN AND THE FLOWERS.

To the great brown house where the flowerets live
 Came the rain with its tap, tap, tap!
 And whispered: "Violet, snowdrop, rose,
 Your pretty eyes must now unclose
 From your long wintry nap!"
 Said the rain, with its tap, tap, tap!
 From the doors they peeped with a timid grace
 Just to answer this tap, tap, tap!
 Miss Snowdrop curtsied a sweet "Good day!"
 Then all came nodding their heads so gay,
 And they said: "We've had our nap,
 Thank you, rain, for your tap, tap, tap!"

—Selected.

HOW THE LEAVES CAME DOWN.

"I'll tell you how the leaves came down,"
 The great tree to his children said;
 "You're getting sleepy, Yellow and Brown,
 Yes, very sleepy, little Red."
 "Ah!" begged each silly pouting leaf,
 "Let us a little longer stay;
 Dear Father Tree, behold our grief;
 'Tis such a very pleasant day,
 We do not want to go away."
 So just for one more merry day
 To the great tree the leaflets clung,
 Frolicked and danced, and had their way,
 Upon the autumn breezes swung,
 Whispering all their sports among.
 "Perhaps the great tree will forget,
 And let us stay until the spring,
 If we all beg, and coax, and fret,"
 But the great tree did no such thing;
 He smiled to hear their whispering.
 "Come, children all, to bed," he cried;
 And ere the leaves could urge their prayer,
 He shook his head, and far and wide,
 Fluttering and rustling everywhere,
 Down sped the leaflets through the air.

I saw them; on the ground they lay,
 Golden and red, a huddled swarm,
 Waiting till one from far away,
 White bedclothes heaped upon her arm,
 Should come to wrap them safe and warm.

The great bare tree looked down and smiled.
 "Good night, dear little leaves," he said.
 And from below each sleepy child
 Replied, "Good night," and murmured,
 "It is so nice to go to bed!"

—*Susan Coolidge.*

FLORAL EMBLEMS.

Recitation for three girls, bearing or wearing colors—red, white, blue.

ALL.

We tend the flowers of every hue,
 But love the red, the white, the blue,
 Red, white and blue.
 Their tender buds our hands unfold,
 We sprinkle them with sunbeam's gold
 And bathe them in the dew.

RED.

I love the red. It is to me
 Type of the justice, strong and free,
 Which does our land unite.
 Bloom on, sweet rose and poppy red
 Make glad each humble garden bed
 With colors warm and bright.

WHITE.

White are the blossoms of my care.
 Symbols of purity. The fair
 Pale snowdrop of the spring,
 The lily-bells that with faint chime
 Make glad the early summer-time,
 To these my love I bring.

BLUE.

My favorites are clad in blue,
 Deep-tinted, or the faintest hue
 E'er seen in summer sky.
 Emblems of truth are they. We greet
 The bluebell and the violet sweet,
 That here in beauty lie.

—*Annie L. Willis.*

FLING OUT THE FLAG.

O'er every school-house in the land
 Now let that banner wave
 It made us first a nation,
 Brought freedom to the slave.
 'Twill teach our children loyalty
 To God and country dear,
 As in the field of heavenly blue
 The shining stars appear.

—*True Blue.*

THE FLOWER OF LIBERTY.

To be rendered by a class of girls, each wearing the national colors. Number six holds the flag and waves it as *all* recite the refrain "It is the banner of the free," etc.

I.

What flower is this that greets the morn,
 Its hues from heaven so freshly born?
 With burning star and flaming band
 It kindles all the sunset land:
 O, tell us what its name may be!
 Is this the Flower of Liberty?
 It is the banner of the free,
 The starry Flower of Liberty!

II.

In savage Nature's fair abode
 Its tender seed our fathers sowed;
 The storm-winds rocked its swelling bud,
 Its opening leaves were streaked with blood,—
 Till, lo! earth's tyrants shook to see
 The full blown Flower of Liberty!
 Then hail the banner of the free,
 The starry Flower of Liberty!

III.

Behold the streaming rays unite,
 One mingling flood of braided light,—
 The red that fires the Southern rose,
 With spotless white from Northern snows,
 And, spangled o'er its azure, see
 The sister Stars of Liberty!
 Then hail the banner of the free,
 The starry Flower of Liberty!

IV.

The blades of heroes fence it round ;
 Where'er it springs is holy ground !
 From tower and dome its glories spread ;
 It waves where lonely sentries tread ;
 It makes the land as ocean free,
 And plants an empire on the sea !
 Then hail the banner of the free,
 The starry Flower of Liberty !

V.

Thy sacred leaves, fair freedom's flower,
 Shall ever float on dome and tower,
 To all their heavenly colors true,
 In blackening frost or crimson dew ;
 And God love us as we love thee,
 Thrice holy Flower of Liberty !
 Then hail the banner of the free,
 The starry Flower of Liberty !

—O. W. Holmes.

THE SEVEN AGES OF THE TREE.

They have *their* exits and *their* entrances,
 And one tree in its time plays many parts,
 Its acts being seven ages. At first the seed
 Rooting its darksome way beneath the sod ;
 And then the slender stem, with growing strength,
 Pushing above the earth its shining face ;
 And then the branchful sapling, sweetly sighing
 With winds, and rocking little birds asleep
 That softly nestle in its whispering leaves ;
 Then larger still, with fast increasing branches,
 Affording shade to beasts and weary men,
 And gathering moss upon its rugged bark ;
 Then, towering aloft, it plays its part.
 Monarch of all the woods, sending its roots
 Far down, and with its long, outspreading arms,
 Battling with furious storms. The sixth age shifts
 Into the lean and sapless skeleton ;
 Struck by the angry bolts of heaven, it stands
 Above the rising generation,
 All desolate, the strength of manhood fled
 From its shrunk shanks ; and its big, manly voice,
 Gone with the thousand leaves which made it, pipes
 And whistles in its sound. Last scene of all
 That ends this strange eventful history,
 It tott'ring falls, and sleeps in mere oblivion :
 Sans leaves, sans limbs, sans bark, sans everything.

—Dr. E. E. Higbee.

FOREST SONGS

1. THE PINE.

Old as Jove,
 Old as love,
 Who of me
 Tells the pedigree?
 Only the mountains old,
 Only the waters cold,
 Only the moon and star
 My coevals are.

—*Emerson.*

2. THE OAK.

The monarch oak, the patriarch of the trees,
 Shoots slowly up and spreads by slow degrees;
 Three centuries he grows, and then he stays
 Supreme in state, and in three more he dies.

—*Dryden.*

3. THE WILLOW.

Oh, willow, why forever weep,
 As one who mourns an endless wrong?
 What hidden woe can lie so deep?
 What utter grief can last so long?
 Mourn on forever, unconsoled,
 And keep your secret, faithful tree;
 No heart in all the world can hold
 A sweeter grace than constancy.

—*Mrs. Allen.*

4. THE CHESTNUT

Under a spreading chestnut tree,
 The village smithy stands, etc.

—*Longfellow.*

5. THE BEECH.

Thrice twenty years I have stood
 In bloomless, fruitless solitude,
 Since childhood in my nestling bower,
 First spent its sweet and sportive hour,
 And on my trunk's surviving frame
 Carved many a long-forgotten name.
 Oh, by the vows of gentle sound,—
 First breathed upon this sacred ground
 As love's own altar, honor me,
 Spare, woodman, spare the *beechen tree*.

—*Campbell.*

6. THE BIRCH.

Give me of your bark, O birch tree,
 Of your yellow bark, O birch tree,
 Growing by the rushing river,
 Tall and stately in the valley,
 I a bright canoe will build me,
 That shall float upon the river,
 Like a yellow leaf in autumn,
 Like a yellow water-lily,
 Lay aside your cloak, O birch tree—
 Lay aside your white-skin wrapper.

—*Longfellow.*

THE BROOK AND WEE ELSIE.

A brook and wee Elsie
 Were playing together,
 One frolicsome day
 Of the sunshiny weather,
 At "tag" and "bo-peep;"
 Naughty creatures were they
 For the brook and wee Elsie
 Had both run away.

One time, when they paused
 In a lovely, cool place,
 Elsie saw in the water
 Her round dimpled face;
 And "how funny!" she said,
 With a wondering look,—
 "Now how could my face
 Get into the brook?"

A half minute later,
 A gypsyng bee
 Left Elsie in tears,
 Sorry object to see,
 "Here's another queer problem,"
 The little brook cries;
 "Now, how did I ever
 Get into her eyes?"

—Carrie W. Thompson.

AN ACT TO ESTABLISH ARBOR DAY.

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

SECTION 1. The third Friday in April of each year shall be set apart and known as "Arbor Day," to be observed by the people of this State in planting of forest trees, for the benefit and adornment of public and private grounds, places and ways, and in such other efforts and undertakings as shall be in harmony with the general character of the day so established; *Provided*, That the actual planting of trees may be done on the day designated, or at such other most convenient time as may best conform to local climatic conditions, such other time to be designated, and due notice thereof given, by the several county superintendents of schools for their respective counties.

SEC. 2. The day, as above designated, shall be a holiday in all public schools of the State, and school officers and teachers are required to have the schools under their respective charge observe the day by planting of trees and other appropriate exercises.

SEC. 3. Annually, at the proper season, the governor shall issue a proclamation, calling the attention of the people to the provisions of this act, and recommending and enjoining its due observance. The Superintendent of Public Instruction and the respective county superintendents of schools shall also promote, by all proper means, the observance of the day, and the said county superintendents of schools shall make annual reports to the State Forest Commissioner of the action taken in this behalf in their respective counties.

ARBOR DAY PROCLAMATION.

STATE OF COLORADO, }
EXECUTIVE DEPARTMENT. }

In compliance with the law passed by the Seventh General Assembly, and approved March 22, A. D. eighteen hundred and eighty-nine, I, John L. Routt, Governor of the State of Colorado, hereby designate and proclaim Friday, the seventeenth day of April, A. D. 1891, to be observed as Arbor Day.

I earnestly recommend that the people of the State keep this day, in conformity with the general custom, by the planting of trees and shrubbery of all classes, adapted to our soil and climate, and in the adornment of public and private grounds, streets and highways, and by such other demonstrations as are appropriate to the general character of the occasion.

The importance of promoting forest growth and tree culture, and their preservation, should awaken the sincere interest of every resident of the State; and it is hoped that the officers and pupils of our schools will take an especial and active part in the exercises of the day.

In testimony whereof, I have hereunto set my hand and caused the great seal of the State to be affixed, this thirteenth day of March, in the year of our Lord one thousand eight hundred and ninety-one.

JOHN L. ROUTT.

By the Governor :

E. J. EATON,

Secretary of State.

WE THANK THEE.

For flowers that bloom about our feet,
 For tender grass, so fresh, so sweet;
 For song of bird, for hum of bee;
 For all things fair we hear or see,—
 Father in heaven, we thank Thee!

For blue of stream, for blue of sky;
 For pleasant shade of branches high;
 For fragrant air and cooling breeze;
 For beauty of the blooming trees,—
 Father in heaven, we thank Thee!

—Selected.

SELECTIONS.

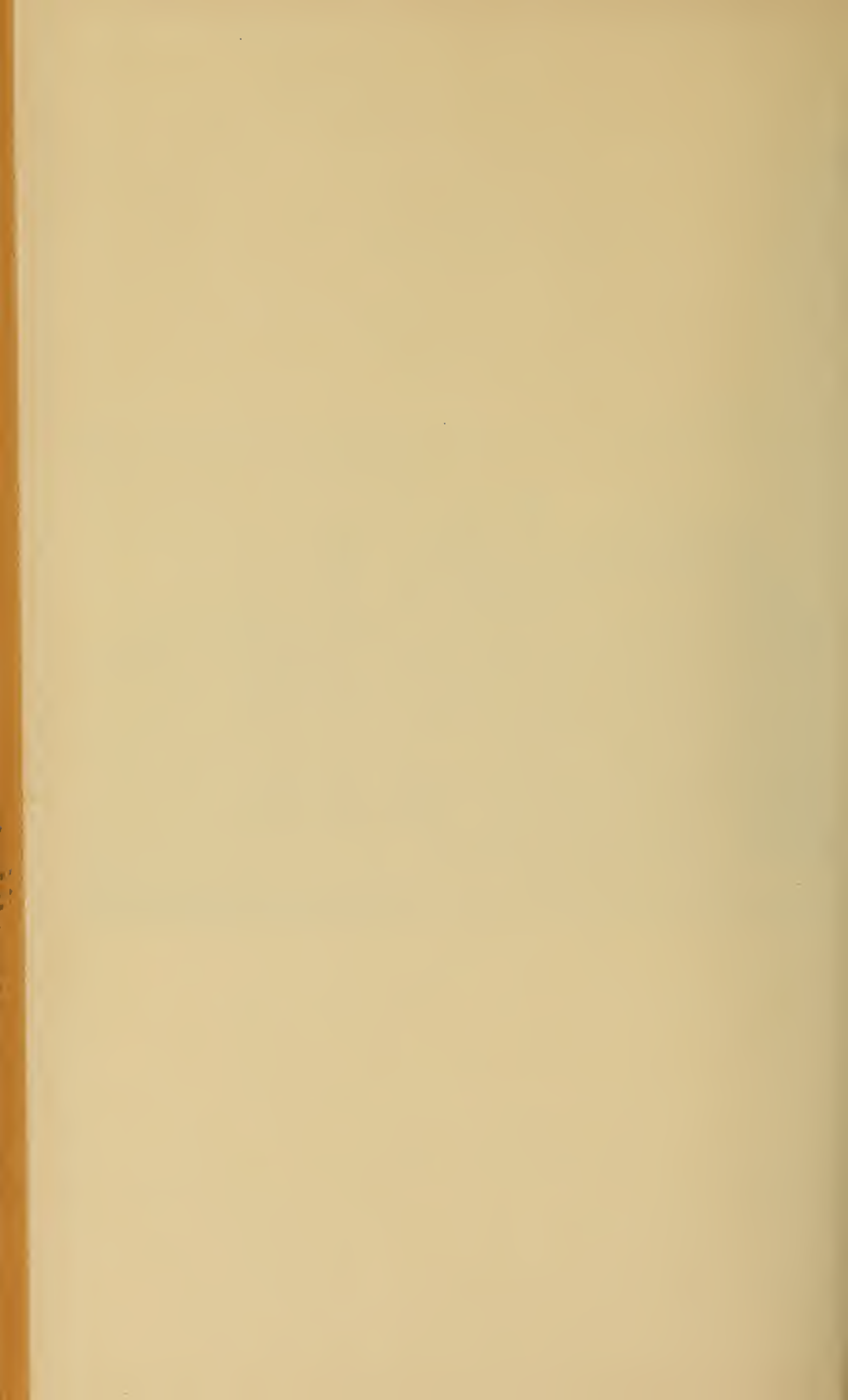
- Among the Trees, Bryant.
 An April Day, Longfellow.
 Breathing of Spring, Mrs. Hemans.
 Childrens' Arbor Day March, E. A. Holbrook.
 Dance of the Daisies, Mrs. S. M. B. Piatt.
 Dream of Summer, Whittier.
 Early Spring, Thompson.
 Forest Hymn, Bryant.
 Forest Song, W. H. Venable.
 Freedom's Flower (Golden Rod), Marian Douglas.
 In Praise of Trees, Spenser.
 Landing of the Pilgrims, Mrs. Hemans.
 Last Dream of the Old Oak Tree, Hans C. Anderson.
 Love of Nature, Wordsworth.
 Palm and the Pine, Taylor.
 Tree Burial, Bryant.
 Under the Old Elm, Lowell.
 Voice of the Grass, Sarah Roberts.

"I am midway to believe,
 A tree among my far progenitors,
 Such sympathy is mine with all the race."

—J. R. Lowell.



DENVER HIGH SCHOOL DISTRICT NO. 1



FORM OF REPORT OF TREES PLANTED AND VOTE ON "STATE FLOWER."

34-I.

To
County or City Superintendent.
 Following is the report of School District No. county, of trees planted, and vote on
 "State Flower."
 ARBOR DAY, April 17, 1891.

NAME OF TREE.	NUMBER PLANTED.	NAME OF FLOWER.	NUMBER OF VOTES RECEIVED.
.....
.....
.....
.....

Teacher.

Arbor Day, Friday, April 15, 1892.

ARBOR DAY PROCLAMATION.

STATE OF COLORADO, }
EXECUTIVE DEPARTMENT. }

As spring draws near it becomes my agreeable duty, under the law enacted by the Seventh General Assembly of Colorado, to call the attention of the people by proclamation to the approach of Arbor Day, "to be observed by the people of this State in the planting of forest trees, for the benefit and adornment of public and private grounds, places and ways, and in such other efforts and undertakings as shall be in harmony with the general character of the day so established."

I, therefore, hereby designate and proclaim Friday, the 15th day of April, A. D. 1892, as Arbor Day.

And I most heartily recommend that the people observe this day by devoting at least a portion of it to the beautifying of public highways, parks, school grounds and home surroundings.

I also especially invoke the interest of the officers, teachers and pupils of our schools, all of whom it is hoped will co-operate in making the day one of pleasant remembrance and lasting benefit.

In testimony whereof, I have hereunto set my hand and caused the great seal of the State to be affixed, at Denver, this 10th day of March, A. D. 1892, and the independence of the United States the one hundred and sixteenth.

JOHN L. ROUTT.

By the Governor :

E. J. EATON,

Secretary of State.

DEPARTMENT OF PUBLIC INSTRUCTION, }
 SUPERINTENDENT'S OFFICE, }
 DENVER, COLO., March 15, 1892. }

The return of the fourth successive Arbor Day season for Colorado invites the attention of the schools and their friends, the people.

At first of local origin, the day has attained a national dignity and importance. Inaugurated in 1872 as an economic measure by the Governor of Nebraska, it is now observed in thirty-nine states and territories, "in accordance with legislative enactment, or by special recommendation of the governor or state superintendent, or the state grange and the state horticultural and agricultural societies; and in some states, as in Connecticut, by all these combined." Regarded as "out of place" when first proposed as a "school day," it has become the most useful, popular and widely observed of all school holidays. Treated at first by hard-headed men of affairs with indifference, not to say with contempt, it soon won cordial recognition and welcome among all classes of citizens. In some localities of New York state business is suspended, the people "vying with each other in making the day pleasant and profitable."

The observance of the day in Colorado last year was general and enthusiastic. Of fifty-five counties in the State, forty-nine held commemorative exercises.

More than four thousand trees are reported to have been planted by the school children, and more than forty thousand by others—to mention many known to have been planted but not reported.

In many districts the schools were not in session. In some counties this was the case with nearly half. Such schools would do well to observe a day of their own when in session. In other districts, present abundance of trees, lack of water and other unfavorable conditions, account for no planting; but in many such schools, indoor exercises were held, and the children were led, through songs, and recitations and music, to share the love of the poets and imaginative prose writers in the delightful aspects of nature, as presented in shrubs, trees, flowers and birds.

Some schools had flag-raising and patriotic addresses and declamations.

Some rooms were tastefully decorated with "pine boughs, wild flowers and potted plants." Others made a general "clearing up of the school premises" a part of their program; while one school joyously closed the day by adjourning to the meadows and canons for wild flowers.

The day is worthy to be observed, for the spirit that prompts it is noble, generous and humane. It is kindred to the spirit that plants churches, colleges, libraries and hospitals, parks and fountains; that lays out broad avenues, removes front fences, and is now calling for better country roads. In a word, it is the spirit that turns private enterprise into public beneficence, and thus marks civilization, which Mr. Matthew Arnold terms "a humanization of man in society."

"We plant trees, we build houses, we redeem the waste, we make prospective laws, we found colleges and hospitals for remote generations."—*Ralph Waldo Emerson.*

"The savage builds no monuments, endows no hospitals, founds no libraries. He has no eye for the future in the distance. He lives for the day. He has no time for digging wells or tree-planting. There is no Arbor Day for the Indian."—*Myron W. Reed.*

Let the children in our schools, the young men and women in our colleges, seminaries and universities, with their instructors, cooperate in the proper observance of the day by planting shrubs, vines and trees that will beautify the home, adorn the public grounds, add wealth to the State, and thereby increase the comfort and happiness of our people.

NATHAN B. COY,
State Superintendent.

COLORADO STATE FLOWER.

Zest was given to Arbor Day a year ago by the vote for a State Flower. The Rocky Mountain Columbine was chosen by a large majority, and will doubtless always be the pride of the school children, for it is a beautiful flower. Twenty-two thousand three hundred sixteen votes were distributed among fifty different flowers. Of these the Columbine received 14,472, nearly 65 per cent.; the others received votes as follows:

Anemone 355, blue bell 99, buttercup 9, cactus 1,027, clematis 54, clover 8, crocus 42, daisy 136, dandelion 7, fuchsia, storm king, 14, gilia aggerata 17, golden rod 580, gentian (fringed) 38, geranium (wild rose) 12, harebell 14, honeysuckle 8, Indian pink 97, lilac 1, lily 115, lily Mariposa 1,157, lily (Easter) 27, lily (red) 10, lily of the valley 1, lily (tiger) 39, May flower 18, mentzelia 11, morning glory 21, pansy 70, pæony 3, poppy 40, pearly everlasting 9, primrose 504, rose 473, rose (white) 90, rose (wild) 843, snowball 19, sage (wild) 1, Spanish bayonet 22, star of Bethlehem 25, sunflower 102, tansy 4, tulip 7, thistle 3, violet (blue) 37, violet (yellow) 2, wind flower 30, wild sweet pea 12, yucca 969, un-named 636.

SUGGESTIONS FOR THE OBSERVANCE OF ARBOR DAY, 1892.

Much helpful matter for use in preparing programs for Arbor Day has been published during the past few years. By far the most complete single volume is the "Arbor Day Manual," edited and compiled by Charles R. Skinner, M. A., and published by Weed, Parsons & Co., New York. It is a beautiful volume of about 500 pages, and abounds in the choicest bits of information and selections on all subjects pertaining to Arbor Day; the price is \$2.50. It would be well if every school in Colorado owned a copy of this book. Less pretentious, but very helpful, is "Arbor Day Leaves," a pamphlet of about thirty pages, by N. H. Eggleston, printed and sold by the American Book Company.

For the benefit of those who may not have access to anything of the kind I have prepared the accompanying circular containing hints, with selections for individual and class exercises.

CHOOSING A STATE TREE.

Since the State Flower was chosen, much interest has been expressed in the choice of a State Tree. Among others, members of the State Horticultural Society have urged the plan, and two of them have prepared instructive papers upon the trees of the State. It will doubtless surprise many to know the wide-spread fame of some of our native trees. It is thought that quite as much interest may be created this year in the contest for a State Tree as the vote for a State Flower elicited last year. We hope it will meet with favor.

The teachers are requested to talk up our trees with the children, upon the basis of the selections given in this circular, and thus aid them to make comparisons. A State Tree, as well as a State Flower, will be an interesting contribution to Colorado's educational exhibit at Chicago; both could be used to advantage in the art display.

As in the choice of a State Flower, so for the tree, ballots should previously be prepared and arrangements made, to have the vote taken during the exercises. Separate blanks will be furnished from this office, upon which teachers may report to their county superintendent, who will compile the results and forward them to the State Superintendent for future announcement through the papers.

The original papers by Colorado writers will show the important relation of tree culture to Colorado's future development and possibilities, and will furnish material for talks to pupils during the year.

SUBJECTS FOR ESSAYS OR ORATIONS.

1. *The tree.*

- (a) Beauty, form, color, grace and diversity.
- (b) Its habits—of breathing, sleeping, growing, etc.
- (c) Its enemies.
- (d) Its gifts—shelter, shade, fertility, fruit.
- (e) Its uses—fuel, material for building, manufacture and ornament, medicine, dye stuff.
- (f) Its physical effects—upon climate, water supply, agriculture, soil, healthfulness, industries, prosperity of a country.

2. *Warnings from history.*

Palestine, Sicily, Roman Campagna, St. Helena, Santa Cruz, different parts of the United States, not omitting Colorado.

CLASS EXERCISES.

Let the members of a class, each representing some particular tree describe how the tree grows, where it is found, what the wood or fruit is good for, etc. It might add interest if each speaker should omit the name of the tree represented, leaving the hearers to decide.

TREES IN POETRY.

Quotations may be given to show the poetical uses of trees in typifying human characteristics, as the oak, strength; the willow, sadness; the vine, despondency, etc.

SUGGESTIONS FOR PROGRAMME.

- 1. Do not make the exercises too long.
- 2. Suit parts to age and ability of pupils.
- 3. Aim to give interesting variety.

The following general plan is recommended, subject to the judgment and tact of the teacher :

- 1. Devotional exercises, reading of scriptures, (selections concerning trees, etc.), prayer, song.
- 2. Reading of "Act to Establish Arbor Day," Governor's proclamation, and circular by State Superintendent, all found on first page.

3. Songs—short, varied, appropriate.
4. Readings, recitations, declamations—brief and stirring.
5. Essays, orations; relating to trees, (their habits, uses, effects, etc.), should be brief, original productions.
6. Remarks by visitors—short and pointed—not too many speakers.
7. Addresses—short and suited to the day.
8. Vote on State Tree; see that all necessary arrangements are previously made, that there be no delay.

AT THE TREE.

Suggestions: The tree should be previously placed in position. If it is to be dedicated to some particular person, the name of the person should be attached on wood or tin to the tree.

After a marching song on the way to the tree :

1. A brief statement concerning the person to whom the tree is dedicated.
2. When practicable, quotations from the writings of the person honored.
3. A spadeful of earth deposited by each pupil, or such as shall be designated.
4. Recitation—"What do we Plant when we Plant the Tree?"
5. Song—"America."

CHILDREN'S ARBOR DAY MARCH.

We are marching for the arbor,
And our hearts are free from care;
And our thoughts in tune to nature,
With the music of the air.

CHORUS.

Marching merrily, singing cheerily,
And our hearts are free from care;
Buds are springing, birds are singing,
There is music everywhere.

Flowers are smiling, bees are humming
O'er the land we're passing through;
Robin shyly greets our coming,—
Everything to nature true.

CHORUS.

Marching merrily, singing cheerily,
And our hearts are free from care.
Colors blending, tints unending:
There is beauty everywhere.

We will bless the mighty power
 Who for us the feast hath spread,
 For all life for tree and flower,
 And His heavens overhead.

CHORUS.

Marching merrily, singing cheerily,
 And our hearts are free from care;
 In each beauty learning duty,
 For his love is everywhere.

—E. A. Holbrook, Watertown, N. Y.

NOTES ON THE DISTRIBUTION OF COLORADO PLANTS.

Every observer admits the influence of environment on vegetation and, therefore, in a large state, like Colorado, where conditions of soil, climate, altitude and moisture vary considerably, many species would naturally be expected. There are, however, four quite distinct regions, not divided from each other by arbitrary lines, nor is each confined to a particular part of the State. North, south, east or west, all four are found together, but yet apart. Briefly named, they are: the prairies, the water courses, the coniferous belt, and the alpine regions. While different sections of the State may claim a few plants that are local within narrow limits, the vegetation of each of these four regions is quite generally the same throughout Colorado, and plants peculiar to each are more likely to be met with in distant countries than in any one of the other three regions.

The plains of the Great American Desert seem truly well named, when their spring covering of wild flowers has been destroyed by the hot summer sun shining for weeks through a rainless atmosphere. The blue-gray landscape takes its tone from the low, scraggy artimisia or sage brush. Clumps of bigelovia with flat-top clusters of yellow flowers are seen occasionally, and where the soil is adobe, different kinds of atriplex or "salty sage" are common. But through May and June these prairies become a paradise, a vast flower garden filled with blossoms most beautiful. Here are red, white and blue pentstemon; brilliant scarlet castilleias; yuccas with bayonet-shaped leaves and upright stems covered with pink or creamy bells; lilies that fill the air with perfume; Mexican poppies, starry mentzelias, evening primroses of great beauty and numerous species of leguminosæ and compositæ. Among the former are the many species of astragalus, a genus which is also represented on the Siberian steppes by species generally unlike ours, but as bewilderingly numerous. The compositæ claim the sunflowers and asters, besides many more not so conspicuous nor so well known.

The water courses are outlined by the deciduous trees and shrubs that find a constant supply of moisture necessary to their growth. Cottonwoods, box elders, birches, alders, willows, the cherry, plum, currant, buffalo berry, dog wood and others less common, form the only forest of the plains. Here too, as well as by the railroad track, are plants that look like strangers, seeming doubtful of continued existence in their new home. Plants of world-wide distribution also grow in this region. Perhaps the seeds have been carried by aquatic birds. It is an interesting question that may be answered only by continued observation of local floras.

In the coniferous zone, the species of trees are not many, but some, like the silver spruce and the white fir, are widely cultivated for their beauty. Up to the present time there have been found in Colorado six pines, two spruces (not including the common Douglas spruce), two firs and three cedars, fourteen in all. Under the protecting shade of these evergreens bloom the most delicate flowers, such as anemones, twin-flowers, columbines, pyrolas, and kinnikinick. All are found in coniferous forests of the northern hemisphere, and a list of the plants of the Maine woods contains many that live on our evergreen mountain slopes.

Far up among the mountain summits is the last and most interesting region. In the Alpine valleys or basins, surrounded by jagged peaks, the flowers are of the most brilliant colors and greatest abundance. Even from under the snow, the hardy plants push their buds, and the edges of snow banks are fringed with rare buttercups, crimson primulas, narcissus, flowered anemones, globe flowers and the white caltha or marsh marigold. Among the rocks live the saxifrages and harebells. Many of the very same species dwell in the distant mountains of Switzerland and Northern Europe, and in the semi-arctic belt of both hemispheres. Indeed, the Alpine or Arctic botanist would feel quite at home amid these lofty meadows, where gentians, potentillas, asters, clovers, columbines and forget-me-nots are all in bloom at once.

No one who has ever felt the grandeur of the world of peaks, the tender beauty of the flowery meadows, and the intoxication of the mountain air can resist the spell that draws him back and is the underlying principle of true patriotism.

ALICE EASTWOOD.

ACADEMY OF SCIENCES,
San Francisco, March 11, 1892.

A SUGGESTION.

The greatest ignorance concerning our wild flowers is prevalent throughout the State. Inquirers find their efforts for knowledge baffled by a difficult "flora," and there seems to be no help. Children gather great bunches of blossoms and bring them into the school-room, but, if they have curiosity, it is not satisfied, nor is any particular observation bestowed upon the bouquets.

It has occurred to me that this love for flowers, so universal among children, might be turned to their advantage in training their observing and discriminating powers; and also might be made of great use in furthering a knowledge of local flowers.

If there are any teachers who would care to start a school herbarium, or any town that would form a botanical club, I should be most glad to assist in any way. Suggestions as to the proper methods of work, determinations of unknown species, and even, when possible, help in arranging, would be enthusiastically given.

Such an enterprise could be made a matter of local pride; it would foster public spirit, and a little effort might give wonderful results.

Alice Eastwood.

960 Goss Street, Denver, Colo.

NOTE.—Miss Eastwood, although temporarily residing in California, where she is engaged in scientific work, still regards Colorado as her home. She was graduated at the Denver High School, afterwards taught there for several years, and is the donor of the Eastwood collection of flowers, now in possession of the school, a collection of her own gathering, embracing more than 3,000 species, of both European and American origin.

N. B. C.

COLORADO TREES.

Colorado is very nearly one-third mountains and two-thirds plains. The plains are almost bare, save here and there along the water courses, where groves of cottonwood, box elder and willow appear. These are well-known trees, for they grow so easily and rapidly, with little irrigation, that we see them everywhere. The cottonwood is a large, handsome tree, with fine glossy foliage, especially useful for planting along streets and roads. The box-elder is smaller and does better on lawns, where it forms a fine round-headed tree, with heavy foliage. The glory of the eastern woods, the oaks, elms, maples, walnuts and hickories, are not found in Colorado.

Nevertheless, we may turn to the everlasting hills and behold some of the grandest and most beautiful trees in the world. With one exception, they are conifers or evergreen trees.

Conifers are the pioneers of modern forests, and were the first trees, and at one time the only trees, in existence. Their simple organization shows them to be the earliest of plants on the earth. This general evergreen nature of Colorado forests is the same in all high northern and high mountainous regions. Near the land of perpetual ice, around the pole, the trees are to a great extent the same in America, Asia and Europe. Thus we find in Colorado many trees familiar in a general way to the inhabitants of Europe and Asia, but yet not exactly the same, for not a single pine, spruce or fir is here the same as in the east or the Old World.

The forests of Colorado grow on the highest ridges of North America, where they collect and store in natural reservoirs the waters of some of the principal rivers of the United States. From the eastern slope of the Continental Divide four large rivers find their source, the North Platte, the South Platte, the Arkansas and the Rio Grande. These all find their way into the Gulf of Mexico, the first three through the Missouri and the Mississippi and the last direct. From the western slopes rise also four large rivers, the Bear, the White, the Grand and the San Juan. These unite in the great Colorado river and empty into the Gulf of California. Should the forests disappear, as they surely will if we do not take care of them, all these rivers would become dry. How very important, then, are these forests, and how necessary it is to preserve them.

The Rocky Mountains are not covered entirely with trees, but embrace a wide expanse of wooded ranges and open parks. From the timber line, about eleven thousand feet in altitude, rise the bare, lofty, snow-clad peaks. In the western part of the State, where all the waters flow into the Pacific, there is more rain and snow, and therefore the forests are larger and denser. As a rule, more trees are found on the northern hillsides, where they are not so exposed to the drying effect of the sun. For this reason the thinnest forests are on the hillsides looking out over the plains.

On the mountains of Colorado are found twelve different kinds of conifers or evergreen trees, belonging to the four great families of pine, spruce, fir and cedar. Though these varieties are found mingled together and may all be seen within a few miles of each other, they are not indiscriminately mixed, but occupy distinct and peculiar stations. Some may ascend to the mountain summits, others must halt at the foot.

For instance, let us take the pines, the largest and most important family of trees in Colorado, and comprising five varieties. As we approach the mountains and begin to climb the foothills, the first tree we meet is the *yellow or bull pine*, the most valuable of all pines of

the Rocky Mountains, and the most wide-spread, beginning where hill and plain join and extending from Mexico to Canada, and westward to the Pacific. *No other pine in America covers so much ground.* It rises up the mountains to an altitude of six thousand to seven thousand feet, where it mingles with the true mountain pine. It is easily recognized by its thick red-brown bark, divided into large, flat, smooth plates, and by its wide-spreading, drooping branches, and its long, stout leaves, nearly one foot in length. It forms a large, massive tree, varying in size according to its situation, and reaching generally a height of one hundred feet, although it has been found three hundred feet tall. Its wood is usually coarse-grained and full of resin, hard and heavy, especially the heart wood, which will scarcely float on water. It is one of the hardiest of pines, and the fastest grower, and being well adapted to dry and windy situations, it is useful for wind breaks and for timber.

And as we climb higher we find the more valuable *western white pine*, which, next to the bull-pine, is the most generally distributed of pines in Colorado. It is a handsome tree of compact habit, dark foliage, straight stem and smooth bark. It grows to a height of fifty to seventy-five feet, on rocky ridges, at an altitude of six thousand to nine thousand feet. Its wood is white, soft and easily worked, and is used very extensively for finishing the inside of houses and for furniture. Its medium size and highly ornamental character make it the best pine for planting on our lawns.

Penetrating still deeper into the mountains at an elevation of eight thousand to ten thousand feet, we find the *black or lodge-pole pine*, sometimes called the tamarack. This is a very symmetrical tree of rapid growth, with slim, tapering trunk, forty to fifty feet high, and smooth, greyish-brown bark, thin and scaly. Its straight trunk was used by the Indians as poles for their lodges. The wood is coarse and tough, liable to warp and rarely cut into boards.

Still higher, at timber line, one of the last trees to dispute with the wild storms the possession of the Alpine domain, we find the *fox tail or hickory pine*; a medium-sized tree, seldom over forty feet tall, with thick trunk and reddish-grey bark. Its form varies from a pyramidal outline on sheltered slopes to a straggling bush, prostrated and almost creeping on the bleak summits of the high ridges. Its wood is of a reddish color, very hard and tough, and was used instead of hickory in the early days. From the peculiar tufted appearance of its foliage it acquired the name of fox-tail pine.

In the warm valleys of the central part of the State, and among the foot-hills of the southern portion, we find the *pinon or nut pine*, whose seeds, about the size of a pea, sweet and fine flavored, we have

all eaten and enjoyed. Its wood is very resinous, extremely slow to decay, and makes the best fire wood in the world. For this reason great quantities are used for charcoal, and if its use for this purpose be not stopped it will soon be totally destroyed. It forms a low, round-topped tree, twenty or thirty feet high, and branches from the base. It is not very handsome, but its rugged, twisted, sturdy appearance gives it a certain attractiveness. It is generally found in groves or scattered along the dry banks of canons and in stony soil on the foot-hills and mesas.

Not less valuable than the pines, and far more ornamental, are the spruces which form great masses of forests throughout the Rocky Mountains. They require more moisture than the pines, and generally grow in shady canons or on northern slopes. On the other side of the Continental Divide, in the western part of the State, where there is more rain and snow than in the eastern portion, the forests are principally of spruce. They may be easily recognized from their conical pyramidal habit, dense foliage and short, stiff leaves. There are only three kinds in Colorado, but few trees in the world are more beautiful than these.

The most common spruce here, and perhaps the most wide-spread tree in the Rocky Mountains, is the one we find on entering the hills, the *Douglas or red spruce*. It is also sometimes called the *mountain hemlock*, as it much resembles the hemlock of the east, and is the nearest relative in the Rocky Mountain region to this most important class of trees.

The Douglas spruce is a gigantic tree, the largest in Colorado, raising its tapering spiral form three hundred feet high. It is one of the grandest of the group of giants which combine to form the forests of the Rocky Mountains. In many places it grows so close that forests of it seem like great cane breaks. Its wood is reddish-yellow, heavy and strong, very valuable for timber and much used for railroad ties on account of its durability. It is exceedingly handsome as a lawn tree, rapid in growth and beautiful in form and color, with soft, cheerful, dark-green foliage and flexible branches sweeping gracefully down to the ground.

Beginning at a higher elevation than the Douglas spruce and extending to timber line is the beautiful *white or Englemann's spruce*. Under the best conditions it forms great forests of noble trees, rising one hundred feet high, slim and straight, like a ship mast. At higher altitudes it is a smaller, nearly round-topped tree, and on the highest summits it is a prostrate, almost creeping shrub. Its foliage varies

from a light-green to a steely color. Its wood is tough and strong, and quite valuable for timber. As an ornamental tree for the lawn it is most attractive, scarcely less beautiful than the Douglas spruce.

And now I have something to tell you, which may be new to many. Do you know that the most beautiful of all trees of the Rocky Mountains, and in some respects, the most beautiful conifer in the world, is the other variety of spruce found on our hills, the *Colorado or blue spruce*? Its beauty is too rare to be common and hence, it is found nowhere outside of our State.

Even here it shrinks from the gaze of men, and one must look sharp to find it. It prefers damp, shady places, from 6,000 to 9,000 feet in altitude, and under the best circumstances, will reach a height of 100 feet. It may be easily recognized from its stiff, sharp leaves, which prick your hand as you grasp them, and from its remarkable bluish appearance, which contrasts most delightfully with the sombre appearance of the rocks and trees around.

In a favorable location where it has an opportunity to fully develop its faultless beauty, it forms a symmetrical tree, compact and pyramidal, with rich sage colored foliage of a steely-blue lustre. Other trees may surpass it in grand and noble qualities, but its peculiarly bright, warm tone and generally pleasing appearance, give it a certain attractiveness which no other tree has. It is greatly prized in the east and in Europe and is sought so assiduously in other countries for ornamental purposes, that more attention should be given it here.

This should be the State tree. It is entitled to the honor for two reasons: on account of its great beauty, and because it is distinctively a Colorado tree, being found nowhere else.

Scarcely less beautiful than the Colorado spruce, is the *white fir*, found in central and southern Colorado, and extending westward to the Pacific. It is the most widely distributed of all the North American firs, and is commonly found at an altitude of 6,000 to 7,000 feet, growing 100 to 150 feet tall. Its leaves are long, curved upward and inward, of light pale green color, which gives it a magnificent silvery appearance in the bright sunlight.

Few trees combine so many of the requisites of an ornamental lawn tree.

I cannot conceive of a grander, nobler and more inspiring sight in the vegetable world, than either of the last named trees, in full maturity and development of its beauty, rising proud and erect, a spiral column of exquisite verdure, while the lights and shadows play around its graceful foliage, touching here the end of a branch with a bright silvery tint and leaving the main tree in deep shadows of rich dark green hues.

And now I am nearly through. I have shown you the most important trees of Colorado. Only three more conifers remain. The *balsam fir* is tall, slender and rather uncommon, growing on the slopes and in canons near timber line. It reaches a height of one hundred feet, and in Colorado is generally found in the forests of white spruce. It is a tall, slim tree, with tapering trunk, quite ornamental, but of no value for timber. The peculiar spicy fragrance of its leaves causes them to be much sought for pillow cushions.

The *red cedar* is the only tree that has traveled over the plains from the east, and established itself upon our mountains. It appears everywhere on this continent, and makes a very useful tree. In bottom lands here it reaches a height of nearly one hundred feet. But where it is generally found, on the dry and barren foot-hills, it is a small, slow-growing tree. Its wood is soft and light, of a fine quality, a reddish color, and lasts a remarkably long time in contact with the soil. For this reason it is used principally for fence posts and railroad ties. Its tapering and symmetrical form and bright, rich green foliage make a very attractive tree for any lawn.

The *white cedar*, or, as it is also called, the *Rocky Mountain juniper*, is a scraggy, stunted tree, thirty feet high, occupying low, dry hills in southern Colorado, chiefly in company with the nut pine. Its wood is very much the same as the red cedar.

In our part of the Rocky Mountains there is only one tree which is deciduous, or loses its leaves in winter. This is the aspen, found in groves all alone on the hillsides, amid the forests of spruce and fir. It is also called the quaking asp, because its leaves are small and round, on long stems, so that they shake with the slightest breath of air, and give to the tree a shuddering, quaking appearance, and a shivering sound as if it were trembling with fear. Any one who has climbed up the mountains has noticed this tree, with its whitish-grey bark, and light green foliage, trembling in the sunlight, or in the autumn turning to a bright yellow, contrasting beautifully with the dark green of the surrounding trees.

It is of little value for ornament or timber, yet it is of great importance to the forests and has its own peculiar sphere of usefulness.

Whenever a fierce, devastating fire has swept through the forests, ruthlessly destroying the noble trees, and leaving them like fallen giants heaped upon the ground, the aspen soon starts up, growing where the others could not; it prepares the ground for more valuable trees, by protecting and nursing them in their youth and giving place to them when they are large enough to take care of themselves. Is not this a most useful tree and worthy of all honor? We may well take to ourselves a lesson from its humble self-sacrifice.

Such are the trees that cover the mountains of Colorado and form its forests. Can you remember them all? Let me repeat them :

There are five pines : the *bull pine* of the foot-hills, the *nut pine* of the southern parts, and higher up, the *white pine*. At a still greater elevation is the *lodge-pole pine*, and at timber line, the highest of all, is the *hickory pine*.

There are three spruces : the noble and useful *Douglas spruce* and the *Englemann's spruce*, and the most beautiful spruce in the world, the State tree, the *Colorado blue spruce*.

There are two firs : the grand and magnificent *white fir* and the sweet *balsam*.

There are two cedars : the *red* and the *white* ; while only one deciduous tree is found, the *aspen*.

These are all. They are not hard to remember. But if you cannot keep them all in your mind, do *not forget the Colorado blue spruce and the white fir*. Remember, *there are no handsomer, nobler trees than these in the world ; learn to know them and to love them*.

You must not only love these two, the king and queen of the forests, but you must love all trees, for they give you life. In the words of the bible, "The tree of the field is man's life."

If we should allow our forests to be all destroyed, there would be no streams, and hence no water for our use ; we should have to leave our homes and emigrate to other countries, where the people have not been so ignorant, careless and wicked. Trees not only prepare the earth for us to live on, and keep it healthy and productive, but they point us to higher duties and greater aims. We cannot know them without recognizing the wonderful love and power of our Creator.

Thank heaven for the trees.

GEORGE H. PARSONS.

Colorado Springs, March 15, 1892.

NATIVE TREES OF COLORADO.

Colorado has the honor of being the first State to incorporate in her Constitution the duty she owes the future in the preservation of her natural forests.

As companion associations of the grand scenery of rocks and canons, the firs and spruces are the most rare and beautiful known in landscape decoration.

Picea Pungens—Colorado blue spruce, we believe, is the only tree in the United States named for a state. Moreover, it is not found in any other part of the world. Its blue foliage and stately form represent the blue skies, pure atmosphere and grand features of its Alpine nativity. If we examine the long list of evergreen trees we cannot find one that grades higher in perfection of form, beauty, color, hardiness and adaptation to various sorts and conditions of climate.

When voting for a State tree the students of our public schools should not pass by this lovely namesake of Colorado.

Abies Englemann—White spruce, in form and color, appears to be closely allied to *picea pungens*. Its natural growth is in the same variety of alluvial soil deposit found in the narrow, fertile valleys, bordering on streams that flow down from the snowy range. In ascending the mountains the Englemann spruce is first seen at an altitude of nearly 9,000 feet, intermingling with *abies grandis*, *pinus aristata* and other Alpine species. It resembles, to some extent, the blue spruce, and is often mistaken for it. The branches, however, are more pliable; leaves more numerous, short and inclining to the branches, while those of "*pungens*" stand out at right angles. It is more generally distributed along the mountain streams than *picea pungens* and grows at higher altitudes.

Abies Douglasii—A red spruce, resembles most closely the Norway spruce at its best, having that graceful downward sweep of the branches and feathering out quite down to the ground; but it is altogether more airy in form, is of a richer, darker green, and does not turn brown or fade in winter.

In the three spruces described we have a representation of our national banner, the "red, white and blue," painted in living colors.

The yellow pine and silver cedar represent our precious metals.

Not only are the loftiest mountain peaks in our country found in Colorado, but the highest timber line. At 12,000 feet on Pike's Peak the extreme limit of tree growth is reached. Here *pinus aristata* becomes almost a dwarf shrub, prostrate and clinging to the bleak, storm-swept summits of those rocky heights.*

In such localities the growth is exceedingly slow. Dr. Parry states that "a stick one inch in diameter showed about fifty annual rings, like fine pencil marks, indicating an existence of fifty years in the struggle for life above the clouds."

Three thousand feet below timber line brings us to the natural habitat of *pinus ponderosa*—heavy wooded pine. This is the yellow pine of the Rocky Mountain lumbermen, from which our most valuable lumber is obtained.

As *aristata* at timber line is the slowest grower of all evergreen trees, *pondurosa* is the fastest. Young trees, under favorable conditions, will make an annual growth in height from two to three feet. It is not only a rapid grower, but gigantic in its proportions, new shoots and buds being three times as thick as the white pine of Wisconsin.

In briefly describing the individual characteristics of a few of the most peculiar forms of the Rocky Mountain *conifers*, we hope to awaken a more general interest in our native trees.

An *arboretum* should be planted in one of the city parks, representing in groups and families (each tree labeled with its scientific and common name) all trees indigenous to the State and all others possible to be grown here.

D. S. GRIMES.

DENVER, March 14, 1892.

SOME SUGGESTIONS AS TO THE CHOICE OF A STATE TREE

DENVER, COLO., March 31, 1892.

HON. NATHAN B. COY,
State Superintendent of Public Instruction :

DEAR SIR :—In compliance with your request for a brief account of those trees of Colorado suitable for being chosen as the representative tree of this State, I have the honor to submit the following, trusting that due allowance will be made for the limited time for preparation.

In the writer's judgment the tree selected should be taken from the mountain species.

The plains of eastern Colorado present no noticeable difference from the rest of the great American desert, nor do the mesa lands of our western boundary for hundreds of thousands of square miles of the country west of the Rockies.

The essential and peculiar portion of the State is its central mountain region.

All local interests, commercial or æsthetic, cluster about the snowy dome of the continent.

Let some form be selected as characteristic of our mountain scenery, as are the flat-top pines and rigid poplar to an Italian landscape.

The tree should be a familiar one. This will exclude the tree cactus and yucca tree of our southern border, and timber line forms, which so small a percentage of our population can ever become familiar with.

It is desirable that the tree should possess marked beauty of form and coloring, lending itself readily to the various purposes of decorative art.

It should be a tree of practical value, one of hardy nature, accommodating itself to a variety of situations.

If possible, it should possess some historic or poetic quality that will arouse emotions of State patriotism. The embarrassment of riches to which we were subjected in our choice of the State flower will not be experienced in our choice of a State tree.

Our high altitude, low humidity and variable temperature deprive us of the majority of the forms characteristic of this latitude. The maples, elms, oaks, birches, beeches, hickory, aspen and walnut trees are conspicuously absent.

Excluding the poplars and the box elder, our choice is limited to one family, the pine family (*coniferae*). In the following list of species, the technical names and their several synonyms are given to prevent any possible confusion from the common loose methods of applying English names.

Sapindaceæ, box elder, or ash-leaf maple (*negundo*) aceroides—a small, but handsome tree, of graceful rounded masses of soft green foliage. It is a rapid grower, but does not attain the excessively coarse growth of the cottonwood, and it is therefore preferred for decorating lawns. It is common along the stream courses of the plains, but does not extend into the mountains. Its wood is of little value, but, like its cousin, the sugar maple, it has a sap rich in saccharine material. Its pinnately compressed leaves would make a good conventionalized form for decoration.

Salicineæ—The best known tree of the western country is the cottonwood, the most familiar species being the angled cottonwood, (*populus angulata*; *ait.*) the great shade tree of the semi-arid regions. Many associations of the early days of Colorado, before the era of transported elm or maple, cluster about the ungainly trunks and the stiff, dark, glossy, trembling foliage of this tree.

Being a very rapid grower it has been of infinite service to the west in affording shade and shelter from the wind long before the average tree would have advanced beyond the condition of flimsy broomsticks. Its wood has a limited value.

The range of the cottonwood extending over a large portion of the United States renders it somewhat ineligible for our purpose; besides have not the typical states of the great plains a better right to the characteristic trees of that region, the box elder and the cottonwood?

The quaking asp (*populus tremuloides, michx*), is an inconspicuous object as viewed beside the lordly pines and spruces, yet it possesses some features that entitle it to the gratitude of Coloradoans.

What a relief does its slender form and ashen tints of leaf and bark afford in the monotony of ponderous forms and sombre hues of the pine forests! What would the autumn landscape be but for its flames of gold springing from the dry mountain side!

It quickly covers the territory devastated by great fires and shields the ground until a growth of slowly growing cone-bearers is ready to take its place.

CONIFERÆ.

The most ancient and honorable family of cone-bearers present twelve candidates of marked qualifications—five pines, three spruces, two firs and two cedars.

First, the pines: A progressive variation in the species follows the increasing altitude, the last named forms being found only on the higher peaks and in no very great abundance.

The predominant tree of the foothills is the yellow pine, common bull pine, heavily wooded pine (*Pinus ponderosa, Doug. var. scopulorum, eng.*) This species covers a greater area than any of the pine genus; is well adapted to growing in dry, exposed situations and is able to stand the trying eastern slope of the first range, saving it from the bleak and barren aspect that it would otherwise present. Starting at an elevation of 6,000 feet, it ranges upward to 8,000 or more. This species may be distinguished by its thick, reddish scaly bark, its coarse branches and its tufts of slant leaf needles. The species does not attain its maximum growth (300 feet), rarely exceeding in this vicinity 100 feet. It is a most valuable timber tree, probably the most important source of timber of the Rocky Mountains. Its wood is clean, resinous, with a handsome grain.

The western white pine (*Pinus flexilis, James*) is the most common tree in the middle elevation. It is a tree from 50 to 75 feet high, with a diameter of a yard or more. The trunk is straight and covered with a smoothish bark; the handsome, compact form and moderate size of the species render it available for lawn decoration.

A rather abundant pine of an altitude of from 8,000 to 10,000 feet is the black pine (*pinus Murrayana*, Eng.) alias tamarack, alias lodgepole pine. The last named from the use of its straight stems for the tepee poles of the Indians.

The maximum growth obtained in Colorado, fifty feet, is increased to double that size in southern California. Its soft light wood is inferior to the two preceding species. The thin, scaly, brownish-gray bark and longer leaves distinguish it from the scrub pine, (*pinus contorta*, Doug.).

At elevations as high as 12,000 feet the fox tail or hickory pine, (*pinus Balfouriana*, var. *aristata*, Eng.) is the dominant tree. From a height of from 50 to 100 feet it dwindles with increasing altitude to a prostrate bush that in a stock one inch thick, fifty annual rings are said to have been counted.

The piñon or nut pine (*pinus edulis*, Eng.), is found in lower elevations in sheltered spots in the middle of the State, and in dry, rocky positions of southern Colorado.

The low, distorted form of the tree is not a thing of beauty, but its sturdy character enabling it to live upon the driest mesa, its familiar aromatic nuts and its slowly decaying, resinous wood, so valuable for wood and charcoal burning, render it a prominent tree.

It has been voted that the common names of the Colorado spruces are the same as those of the national colors, the red, white and blue. The *pseudotsuga Douglasii*, Carr, otherwise known as red spruce, yellow fir, red fir, mountain hemlock and Oregon pine is the great tree of the Colorado forests. Towering 300 feet high it may be said to rival the best Norway pines. The hard, strong and durable wood is especially valuable where clean timber, great durability and strength are required.

The white spruce (*Picea Englemanni*, Eng.), also known as Englemann spruce, is one of the most valuable trees in the Rocky Mountains.

It ranges from New Mexico to the British possessions and from 5,000 to 10,000 feet elevation. It attains its greatest size in Colorado, in common with the other spruces. The tree is of great value in checking the melting of snow and thus preserving a uniform flow of water in the streams. Its bark has a special value for tanning purposes.

Perhaps the most beautiful of all Colorado trees is the Colorado blue spruce ("Balsam") (*Picea pungens*, Eng.). Aside from its ordinary form, its leaves have a peculiar gray color with a steel-like bluish lustre of remarkable beauty. This tree is highly prized in the

ornamental gardens of Europe and the eastern part of the United States. Its range does not extend far outside of the Colorado mountains. It is a question whether any tree containing so many desirable qualities can be found in this State.

The white pine (*abies grandis Lindly*) is regarded as a close rival to the Colorado spruce. Description would fail to give an adequate idea of the beauties of either of these forms, much less to enable one to make a judicial choice. Either would answer for a representative State tree. The Colorado spruce has, however, a limited area, while the white pine is widely distributed.

The balsam pine, the red cedar (*juniperus*) (*Virginiani L.*) and the white cedar (*juniper occidentalis*, *Hooker var monosperma*), although important standing alone, are inconspicuous beside the king and queen of Colorado spruce and the white pine. A detailed account of them would lengthen an article already too long. Further information on these and others mentioned at greater length may be obtained by examining Coulter's Manual of Rocky Mountain Botany, Bulletin No. 2 of the Forestry Division of the Agricultural Department, and the excellent articles in the Arbor Day circular of this year. Very respectfully,

GEORGE L. CANNON, JR.

East Denver High School.

TREES AND TORRENTS.

A torrent is defined as a rushing stream of water, impetuous and unchecked by the ordinary obstacles; more often drying up after the melting of snows, or cessation of yearly rains, the latter characteristics being frequently marked in Colorado.

It is a fact, easily ascertained all along the east foothills of Colorado and Wyoming, that every gulch and canon reaching into the Rocky Mountain range carries water in its bed for the year in direct proportion to the distance its water-shed penetrates the lower spurs towards our central mountain range.

This peculiarity can be easily proved in our immediate locality, and exists in its different gradations in about the following order:

South Platte River—a perennial stream, whose storage reservoir is the South Park, known over 100 years ago as Bayou Salado by the Mexicans.

Clear Creek, or Vasquez Fork of South Platte River—whose extreme head waters are 10,500 feet above the sea, in sphagnous swamps, never dry.

Turkey Creek—another torrent heading in a spur of our main mountain range, but little over 900 feet altitude. This stream in July and August is wholly dry for about eight miles of its east end.

Mount Vernon Gulch—a tiny rivulet about six miles long, whose head is a low spur of the Bear Creek range, at an altitude of 7,500 feet above the sea. This torrent is dry in June, July, August and September, sometimes until December.

Chimney Gulch and Christman Gulch—one and a half and three miles long respectively, mere rills that run during March, April, May and June; yet, when cloud-bursts occur in July and August, for a few hours they form impetuous streams, sometimes five feet to twenty-five feet wide, then shrink down and become mere rocky dry beds.

We may here be called prolix; if so, we ask the indulgence of our readers; but, to give an object lesson its full force, and to explain to the young mind clearly what is meant by a torrent, we are necessarily obliged to try and present the definition as accurately as possible. Having shown, to the best of our ability, what constitutes a torrent in the varied conditions of their existence, we will now, as briefly as it is possible, explain the causes that influence their greater or lesser supply of water.

1. From what source is this water supply derived?
2. What are the causes of variation and diminution in the volume of water which they produce?
3. What influence does man exert in modifying the regimen of our mountain streams and their water supply?
4. How can we aid in restoring our natural safeguards that have been thoughtlessly destroyed?

1. The supply of water of our mountain torrents is derived from the melting of the yearly snows, and from the spring and summer rains. Necessarily this varies from year to year in volume.

The central range, rising in altitude from 11,500 to 14,000 feet, catches, on its western flank, the arrested evaporation of the great basin of Utah, and of the Pacific ocean, thus cutting it off from eastern Colorado and the plains of the Missouri valley, while at the same time it likewise arrests, on the eastern slopes of our mountain range, the much reduced evaporation from the Atlantic and Hudson's bay.

Consequently the lofty summits of our Rocky Mountains and the dense forests clothing in part the lower slopes, are the natural store-houses of our water supply.

By experiments based on annual precipitation on definite areas, combined with the accurate measurement of the water supply of certain streams in Colorado, it has been approximately ascertained that of the total amount of melted snow and rain on a given area, thirty-two per cent. represents the outflow of streams in that area and sixty-eight per cent., what is lost by evaporation and seepage in the ground.

2. The variation and diminution in the water supply of our mountain torrents are due :

(a) To the annual variation in precipitation of snow and rain.

(b) To the influence of varied temperature and a high seasonal average, combined with the prevalence of long periods of extreme dry or extreme moist winds.

(c) To the continuance of movements of elevation or subsidence, as now occurring in many regions of this world, of which we have the evidence in Arizona, New Mexico, Utah and Colorado.

That this movement of elevation continues in our Rocky Mountain central range, the existence of dead forests far above the present limit of timber growth is one proof ; another proof is the present existence of full grown forests at timber line, that having, when in lower altitudes, attained maturity, are now on the limit of their forest growth in the decrepitude of old age, and of which no new growth is present to perpetuate the species. An examination of many gulches, now always dry, reveals the smooth, water-worn bedrock of ancient hills that, before their present elevation as mere passing torrents, were perpetual streams.

3. The influence of man in modifying our water supply is two fold : (1) by the indiscriminate cutting down and destruction of large areas of the growth, and the ravages of fire more frequently following this destruction ; (2) in the influence that cultivation of the soil, and tree and shrub and perennial forage plants have on evaporation and on temperature, and on the hygrometric condition of the air.

4. Finally, by forest removal, by the planting of trees and shrubs, and, above all, by the preservation of our mountain forests, can we arrest the destructive power of our mountain streams.

Some two years ago I sent to our Forest Commissioner, Col. Ensign, an account of the havoc committed in Golden by a mountain torrent, seven miles long, known as Tucker's Gulch.

In 1850-67, this gulch was densely filled with pine and red fir trees, Douglas spruces and bitter cottonwoods, with a dense undergrowth of birches, willows and cherries. Soon thereafter, and by 1875, all the timber was cut down, and the torrent, aided by summer

rains, began its work on the soil of the valley ; the permanent brook dwindled down, many of its springs dried up, and by 1880 it became a mere torrent bed ; the trees gone, soon the shrubbery and undergrowth disappeared.

After any heavy rain at its head, the water, not absorbed nor retained by tree, shrub or plant growth, rushed unchecked down its stony bed, and leaving the mountains, came down as an avalanche eight feet deep through Golden right into Clear Creek. Railway track, bridge, trees, rocks weighing tons, were hurled down its channel with a ruinous, crashing bounce. The lovely tree-clad brook of 1860 was a demon of destruction ; a fiend gleefully laughing at man's impatience and wastefulness.

Such is the result of tree destruction in our mountain valleys. Can one accept the evidence of all this and not be convinced that every tree planted is a blessing, and that not only the planting but the preservation of what we have must be the duty of every one ?

The Greeks and Romans planted groves in honor of their deities ; the Dodonean grove was famed for its prophecies ; the Celtic ancestors of English, Scotch, Irish, French and Swiss of our American citizens had their sacred forests and their Druidical oak groves. In the recesses of the forest man had his first home, when he abandoned cave life. The Arbor Day is another form of tree worship. As such, who should object to its far-reaching influence on future generations in Colorado ?

E. L. BERTHOUD.

Golden, March 15, 1892.

THE FUTURE OF THE PLAINS.

The work of the pioneers of to-day upon the plains of Colorado is almost the exact opposite of that of their forefathers in the older states of the east. They toiled to cut down forests and let in the sun ; to drain swamps and relieve the soil of too much moisture. It is for us to construct ditches, to bring water to the parched land, and to plant trees for the grateful shade of their foliage and to mitigate the force of the winds.

The great forests of the east have largely disappeared. At first they were obstacles to be overcome and destroyed in order to prepare the earth for cultivation. Later they were material aids to the production of wealth, furnishing an abundant supply of lumber and fuel. Now that timber is becoming scarce, it is easy to see that it would have been wise policy to save more of the original forest trees.

We can look back and see what mistakes were made by the first settlers of the forest regions. But is there anything in those mistakes from which we, so differently situated, may learn a desirable lesson? Not directly, perhaps, for we need nothing to remind us of the value of timber, nor can we reasonably expect that the plains will soon, if ever, produce trees for fuel or lumber to any considerable extent. We believe, however, that they can be more fruitful and populous through an increased supply of water. But that can be accomplished only by zealously guarding all sources of water supply. The forest wastes must be replenished, and the forests that remain must be saved from further spoliation. Then storage reservoirs must be constructed, and the water that the hills send down must be conserved for the benefit of the tillers of the soil. All this will require time, thought and money. But the returns will amply pay all costs and expenditures.

For given favorable conditions, what may reasonably be expected of the plains of Colorado? How will they look 200 years hence? What will be the ultimate effect of our Arbor Day celebration, our forest commissions and our irrigation congresses?

It is my belief that Colorado will then support a dense population, and that the plains will be almost entirely covered with small farms and gardens, so altering the aspect of the country that it would be unrecognizable by one of the present generation, save by the unchangeable contour of the great mountain ranges. Everywhere will be beautiful trees, not in lavish abundance, but planted with a view to picturesque effects, and well cared for. Thousands of reservoirs will dot the plains with beautiful lakes. Here and there thrifty villages will boast beautiful parks and ornamental gardens. There will be no water wasted. The spring floods and the summer cloud-bursts will alike be gathered into secure reservoirs, to be spread over the land as the water is needed.

Nature has formed here a goodly land, abounding in elements of wealth for ourselves and our descendants. It is for us to dedicate it to virtue and intelligence, to endow it with free institutions and hand it over an untarnished inheritance to our posterity.

The value of land everywhere is increasing rapidly with the growth in population. The time is not far distant when there will be no waste land that can be reclaimed for agricultural uses. Then there will be no more "arid region" in Colorado, and the density of population will be commensurate with the great efforts necessary to procure water for irrigation.

We should plan and legislate, not for a sparsely settled State and a small population, but for teeming millions who shall build upon the foundations laid by the present generation.

If we plant trees and care for them, we may live to enjoy their beauty and be protected by their shade. But that is not all. If we plant the hardy varieties, they will outlive us, and we, through them, shall benefit future generations. It is possible in this way for every one of us to leave the earth a little fairer for our having lived on it.

J. D. D.

Denver, March 16, 1892.

THE FUTURE OF IRRIGATION.

Civilization began and first flourished on both hemispheres in rainless countries where irrigation made agriculture certain. Plato speaks of the gigantic irrigating "trenches" of fabled Atlantis. Irrigation, we fancy, supplied the gardens of the Hesperides. The mighty empires of Western Asia were, by its means, reared on most unpromising deserts. Irrigation festooned the hills of Syria with vines, made powerful kingdoms in Mesopotamia, and provided for the millions of Persia. It maintained vast populations in Arabia, Idumaea and Libya. If, in ancient times, a Marco Polo from Chaldea had traveled over Europe in his interesting search for strange sights, customs and life, he would perhaps have had to recount to his wondering hearers at home a no more astounding fact than that he had found whole races endeavoring to subsist on only the crops which the uncertain clouds permitted to mature.

S. O. HENRY.

I believe the time is fast coming when every acre along the base of the mountains will be successfully cultivated by means of the water from the range and the storage reservoirs on the plains catching the storm water. From those sources I believe ten million acres of land will be placed successfully under cultivation in Colorado, and the irrigation-belt will finally meet the rain-belt, and the plains from here to the eastern State line will be a garden and a paradise.

J. P. MAXWELL.

BOULDER.

The most beautiful and renowned gardens of the world have been grown under a system of irrigation, as in the famed Valley of the Nile, on the hills and plains of Palestine, on the borders of the Tigris and Euphrates, all supporting a dense population and magnificent

cities. With similar advantages of climate and soil it is possible for us to surpass them all, and we predict the time will come when the now partially barren plains of the West will be the garden spot of America, and that they, with the mountains and fields of mineral intersecting them, will sustain a population equal in numbers to the states east of the Mississippi.

J. H. HARRISON.

CANON CITY.

THE INFLUENCE OF FORESTS.

Forests act directly upon the atmosphere in several ways: By producing a change in the electrical condition, so as to prevent and dissipate hail and thunder storms; by absorbing from the air the carbonic acid and other impure gases exhaled from animals or developed by decomposition, returning pure oxygen, ready for the support of animal life; by the direct elimination of the germs of disease from both atmosphere and earth, through absorption by leaves and roots; by checking rapid evaporation, and thus equalizing the temperature of both earth and air, and by breaking up and dissipating the currents of air, no matter how fierce or violent; also they act directly upon the surface of the earth—by equalizing the distribution of the rainfall, if not really augmenting it; by retaining in the soil most of the moisture precipitated; by accumulating and protecting the snow; by filling the springs and brooks, and thus increasing the steady flow of the streams, and by preventing the terrible destruction of torrents and freshets.

GEOLOGY OF COLORADO SOIL.

The origin of the drift is from the glaciers that, at the glacial epoch, occupied every canon in our mountains. They eroded out great gulches in the granite; brought down the debris on their icy backs and landed it on the plains. When these great bodies of ice melted, great lakes and violent great rivers resulted, which carried the "glacial detritus" still further on to the plains. So it is that the glaciers, and frequently floods and rivers, passing first through the granite, and through all the varied hogbacks, or the foothills, give us our drift soil, a heterogeneous collection of every rock known in Colorado, the decomposition of which gives us drift clays and soils.

To the still waters of the great lakes following after the glacial era, we attribute the formation; and on top of this comes the modern humus and vegetable soil, and still later vegetation.

As to the agencies by which this soil has been reduced from rocks and distributed, water has been the most powerful, but the perpetual winds that generally blow from the northwest have done much also in distributing the elements of the mountain rocks over the prairies. Ants, burrowing gophers and prairie dogs, have also aided in the general soil making and distribution.

To our forestry friends I would say, that you would be glad if you could resuscitate some of the vegetables and trees that are now buried in stone in the strata beneath our prairie sod, for then you could clothe again these arid plains with the palm, sycamore, fig, laurel, magnolia, sweet gum, oak, plum, chestnut which, in the tertiary period, luxuriated here; but alas, "times have changed, and we have changed with them." It is for, you, yet, by artificial means, to restore Paradise, and bring back to us what was once a Garden of Eden.

GOLDEN.

ARTHUR LAKES.

OUR FEATHERED FRIENDS.

Few persons are aware of the great variety of birds to be found within the borders of Colorado. The impression is general that we have not our share of these winged denizens of field and wood. Quite the contrary, however, is the truth; for, of the 800 species and varieties inhabiting the continent of North America, above the Mexican boundary, no less than 300 may be found in Colorado. They dwell in all localities, from the hot alkali desert to the rocky gulches far above timber line, in the regions of perpetual snow. For convenience, they may be separated into two grand divisions, the one of water birds, the other of land birds.

Naturally, in a State far from the two oceans, and with few large lakes, the water birds are in the minority, and constitute less than one-third of the entire number.

Among these are about twenty-five varieties of ducks, several of geese (one of which is nearly white, and is known as the snow goose), one or two varieties of swans, the American white pelican, loons, grebes and gulls.

It is a surprise to many to learn that gulls are found in Colorado, so far from the ocean, yet no less than a half dozen varieties of gulls and terns may be seen about our lakes and artificial reservoirs during the season of irrigation.

Turning now to the land birds, we find prominent among these certain of the grouse or partridge family, including the white-tailed ptarmigan, or "mountain quail," a bird that inhabits the higher mountains of the west far above timber line, and seems to adapt its plumage

to the seasons, as it is of a mixed white and brown appearance during the summer months, while in winter it changes to a snowy white; the eagles, hawks and owls, of which there are in Colorado about twenty-five varieties. The golden eagle is found throughout the State, though more common in the wilder portions of the mountains. The bald or white-headed eagle appears, but is really more easterly in its habitat. This variety has the honor of being our national bird.

Perhaps the best known of the owls is the burrowing owl, which inhabits the prairie dog towns in company with the earth snake. For a long time it was believed that the three lived together in perfect harmony, but those who have studied their domestic economy think otherwise. It is even suspected that the burrowing owl does not object to a dinner of young prairie dogs, and that the rattlesnake lives upon the young of both the other inmates of the burrow.

Of jays there are several species. The long-crested jay is a conspicuous inhabitant of the mountain region, and he even visits the wooded streams upon the plains during the migrations. The Rocky Mountain jay, or "camp bird," as he is usually called, is well known to the mountaineer and miner by his cunning, thievish familiarity. His generally weird appearance and melancholy cries in the lonely mountain gulches seem to emphasize the solitude of those regions. A near relative of the jay is the magpie, whose deceit and cunning are not surpassed even by the crow. Indeed, I have frequently been told that he will perch upon the backs of domestic animals afflicted with wounds or galls and tear bits of flesh from the affected parts. All of these birds are more or less destructive of other smaller species, pillaging their nests and eggs, and often feeding upon the callow young.

Several species of blackbirds are common to the State, among which may be mentioned the familiar red-winged blackbird, the yellow-headed blackbird, the cow bird and the brewer's blackbird, the latter often found in flocks in our cities and towns at certain seasons. Closely allied to the blackbird is the bullock's oriole, which hangs its nests in the swaying tree-tops about our homes.

The meadow lark is another species belonging to the blackbird family. The western meadow lark differs from the one found in the east; is somewhat smaller and has a different song.

The finch and sparrow family include more species than any other family of birds in North America, no less than fifty kinds being found within our State.

There are a half a dozen varieties of swallows. The barn or forked-tailed swallow builds its nest in out-buildings near to human habitations. I have noticed a pair of them returning annually for ten years to the same structure which they were in the habit of entering through an open window in the loft for the purpose of building their nest upon the rafters over head. In rough weather this window was often closed, and on several occasions, upon their arrival in the spring they found it impossible to enter. At such times they would fly to and fro before the glass, evidently much disappointed until the window was opened for them, when they would take immediate possession.

There is another bird so characteristic of the mountains of the west, and so peculiar in his habits that the most unobserving person would scarcely pass him by without notice. I refer to the American dipper or water-ouzel. There is hardly a mountain stream that has not its pair of ouzels, and in the thickest of the foam and spray they are perfectly at home. Sitting upon a rock, you may see one bowing politely as you pass, when suddenly he disappears beneath the rushing waters, and you pause in wonder at his apparent suicide. Anxiously looking down the stream, where the cascades ends in a foot of quiet water, you expect to find his bruised and mangled body; but, as by magic, up he comes in the very spot where he disappeared and resumes his position on the rock, as dry as when you first saw him. The food of the ouzel consists of water insects and other minute creatures which live at the bottom of the stream.

There are many other song birds too numerous to mention here, such as wrens, warblers, chickadees, thrushes and the far-famed mocking bird; but this article would be incomplete without the mention of the bluebird and the robin.

The bluebird "bearing the sky upon her back," is one of the earliest arrivals in the spring; nothing is more beautiful than a flock of these delicate little creatures when the ground is white with snow. Three species are found in Colorado; but, to our eyes, the mountain bluebirds are the most beautiful of all. They build their nests in holes in trees and often about our dwellings, taking possession of bird-boxes, put up for that purpose.

Of our summer birds, the robin is probably the earliest to arrive in spring. Indeed, in certain localities he is known to have braved the storms of winter. The writer observed a single specimen on New Year's Day of the present year, in Denver. Many suppose our robin

to be kindred to the English "Robin Redbreast," yet this is a great mistake. Our bird is a thrush, while the English robin belongs to a very different family.

When our forefathers landed on the lonely shores of New England, our robin came about their dwellings as familiarly as he does at the present day, and his reddish chestnut breast reminded them of the little bird they had left behind them at their homes far beyond the waters; so they dubbed him "Robin," and "Robin" he is called to the present day.

A word as to the food habits of our birds and their relation to the agriculturist.

Though some species have been condemned for their hostility to fruits and other crops, there is scarcely one of these but that more than repays this damage in the destruction of noxious insects and seeds of injurious weeds. From time immemorial hawks and owls have been considered as enemies to men, and in many states bounties have been offered for their destruction. In point of fact, however, many of them are the farmers' best friends, never molesting poultry, but feeding upon insects, field-mice, gophers and other noxious vermin. Fortunately, Colorado has repealed her bounty law upon these birds.

Few persons stop to think of the extent of the wanton destruction of bird life which is going on in this country. Thousands of our song birds are annually destroyed by thoughtless boys with guns and sling-shots, and are left where they fall upon the ground, while millions are slain in behalf of fashion and are for millinery uses.

A recent writer says, "A garden without flowers, childhood without laughter, an orchard without blossoms, a sky without color, and roses without perfume, are the analogues of a country without song-birds; and the United States are going straight and swift into that desert condition."

Do not, then, wantonly destroy the life of any bird, but rather take great care to aid and foster the existence of our feathered friends, for aside from the pleasure to be derived by us from the study and observation of their habits, their real value, in a practical sense, is estimable as a thoughtful observer cannot fail to recognize.

HORACE G. SMITH, JR.

Denver, Colo., March 1, 1892.

CONCERNING OUT-DOOR BOOKS.

Chaucer and Shakespeare had eyes to see a flower, a tree, a noble vista, and they touched with poesy whatever their eyes might fall upon.

VILLAGE IMPROVEMENT.

It is barely a century since man began to open his eyes and see nature and to enjoy her with an understanding of her beauty. Even half a century ago there was scarcely a town in the United States which had anything that could fairly be called a public park. Boston Common with its frog pond was as good as the best any other municipality could show. To-day there are not only parks attached to every city in the union; there are also state parks and national parks.

Central park is not yet forty years old and already New York City has added a chain of open places throughout the annexed district, besides building the Riverside drive, one of the noblest roadways of which any metropolis may boast; and New York state has public reservations at Niagara, in the Catskills and in the Adirondacks.

Credit for these additions to the public wealth is due to the few public-spirited men who devised and urged the legislation which accomplished the fact, but their labor would have all been in vain had there not been a growth of public opinion in favor of these plans, a development of public sentiment towards the preservation of natural beauty—a sentiment which can never precede the appreciation of that beauty.—*Brander Matthews in Cosmopolitan.*

EFFECTS OF FOREST DEVASTATION.

“Nearly all the tributaries of the upper Mississippi have lost one-half of their former supply of water. Inundations in the spring are more frequent, while now in the summer the depth of many of these rivers averages hardly more inches than could be measured by feet thirty years ago. The snow-fall is irregular, and the climate is subject to abrupt changes at all seasons of the year.”

“Both ranges of the Lebanon mountains were once covered with dense forests. Then Palestine was a land flowing with milk and honey. The people enjoyed comfort and abundance during centuries. Now the forests are destroyed, the Jordan is an insignificant stream, the hills of Galilee are sterile knobs, and the few remaining cedar trees look lonely and mournfully upon an arid and desolate country.”

"Germany has made great progress in tree-planting. It was a part of the national policy of Frederick the Great, by which Germany was raised from a small power to a great one. Where once the sandy deserts would not nourish a flock of goats, vast armies have been maintained and regiments of hardy soldiers have poured forth from the fertile soil where 200 years ago the thorn and the thistle over-spread an impoverished land."

"Owing to the destruction of forests, that part of Italy that was once adorned with villas, parks, flower and fruit gardens, is now an unhealthy, uninhabitable region. The malarious gases were formerly absorbed by the leaves of the numerous trees; but now they fill the air and infect even the heart of the city."

DIRECTIONS FOR PLANTING.

Prepared for Arbor Day, 1889, by ex-Forest Commissioner Edgar T. Ensign.

WHEN TO PLANT.

The coming of spring varies so greatly in different parts of the State that no single day could be chosen that would be seasonable for all localities. The transplanting should be done after the ground is entirely clear of frost, and at about the time of the commencement of the spring rains, if such rains can be anticipated with reasonable certainty. A cloudy day, rather than a sunny one, should be selected for the work.

WHERE TO PLANT.

It is worse than useless to plant trees in a situation where they cannot be properly protected and watered, and made to thrive. I assume that in this State all trees, even the most hardy, will, after transplanting, require irrigating for a longer or a shorter period. Therefore, let that consideration influence the choice of site.

In planting adjacent to school buildings, the boundaries of the walk along the street or road are suitable places for rows of trees. Within the grounds trees should be planted in groups (disposed naturally), rather than placed singly or in formal "clumps;" and to preserve in the ground a lawn-like appearance, the planting should mainly be near the boundaries, or corners, or at the rear. Generally it is not well to plant trees in close proximity to the school buildings. Make it a point to plant so as to screen the out-buildings, or cut off any objectionable view. In determining the situation of groups or individual trees, make due allowance for the space they will occupy when grown.

CHOICE OF TREES.

It may be said at the outset that trees from well-managed nurseries are preferable to those grown in the forest, because their root system is better prepared for transplanting.

As a rule, young and small trees, when transplanted, make a more vigorous, thrifty growth than do trees of larger size and greater age. In school grounds, it is usually better to plant hardy deciduous trees than conifers. To insure success with the latter, more skillful treatment is demanded than they would be likely to receive in the instance under consideration.

Among the hardier forest trees suitable for planting in this State, especially in the plains region, are the cottonwood (broad leaved) Balm of Gilead, Russian mulberry, American white ash, black locust, honey locust, western gray willow and wild black cherry. In localities south of the Arkansas-Platte divide, the osage orange and catalpa speciosa might be tried.

The cottonwood, of which there are several varieties, is the pioneer tree of the plains. It is hardier, and has a more vigorous growth in this region than other species of which we have knowledge. The broad leaved variety is superior to the others. It is exceedingly useful for street and roadside planting, where speedy results are sought. Where irrigation is freely practiced, the hickory, butternut, black walnut, white elm, linden, box elder and other varieties of maple are likely to do well.

Several species of trees native to the State, if carefully transplanted, would be likely to thrive in altitudes as great as 9,000 to 11,000 feet. Among those worthy of trial in such situations may be named the cottonwood, Aspen ("quaking asp"), box elder, dwarf maple, alder and wild cherry.

Evergreens, when healthful and perfect, with drooping branches sweeping the ground, are beautiful objects. To successfully transplant and grow them is a work of skill; but the extra labor and difficulty in such cases often secures the most gratifying results. Though not recommended for Arbor Day planting by schools, they might be freely used under other and more favorable circumstances.

METHOD OF TRANSPLANTING.

Where schools or other organizations engage in the work, experienced tree planters should do the actual planting, heaps of earth being left for those to fill in who perform the more ceremonious parts.

Before bringing the trees on the ground, dig large holes, and procure plenty of rich, fine soil to fill in around the roots of the trees. If manure of any kind is used, do not place it in contact with the roots. In taking up the trees be careful to save with each all the roots possible, especially the fine and fibrous ones, and remove the trees at once to the place where they are to stand. Do not allow them to be long exposed to the sun or wind. If it seems necessary, shorten the side branches (never the leader), to correspond with loss of root which the trees may have sustained. Cut off smoothly the rough or broken ends of roots, spread them out at length in the hole—for good "anchorage" and further nutrition of the trees. Set the trees about the depth they naturally grow; wet the roots thoroughly and sift in around them good fine soil. Press the earth down firmly; leave no spaces; water (though not too freely) while filling in, and avoid heaping the earth around the trunks. *A close contact of the soil with the rootlets is the success in planting.* Mulch the service around the trees with leaves, straw or litter of some kind.

A well known authority has summarized the elements of success in tree planting as follows:

1. Trees suitable to soil and surrounding conditions;
2. A well developed root system, kept in living condition;
3. Wide holes and mellow soil;
4. Firm packing of soil around the roots.

AFTER CARE.

After the trees are transplanted, secure them from harm in some effective way. Those along the street or roadside should be protected by strong posts or rails, placed at such a distance outside of the trees that the latter may be beyond the reach of horses. The barbarism of hitching horses to young and growing trees should be suppressed. School children should also be taught to respect the trees, and the importance of letting them alone. Each tree planted in school grounds might be placed in charge of, and named for, some meritorious pupil; the child so honored to be held responsible for the care and growth of the tree. It is cruel and wasteful to remove a thrifty tree from its home and let it perish for want of care. Treat it as a friend; nourish and protect it, and in after years it will amply reward you with its shade and beauty. * * *

WATER SUPPLY FOR OUR CITIES - THE SCHUYLKILL.

For several years past, the engineers of the water-works department of Philadelphia have been making examinations of all possible sources of a suitable and adequate supply of water, and they have discovered how seriously the Schuylkill river, from which the city has ever drawn its supply, has been affected by the clearing of the forests from the territory of its head waters and supplying streams. Sixty-five years ago, the summer flow of the Schuylkill was estimated at 500,000,000 gallons per day.

Measurements made from time to time showed a gradual diminution until, in 1874, the minimum or summer flow was only 250,000,000 gallons per day, and this has greatly diminished since. This fact is well authenticated, and it is clearly evident that these changes have been effected by the gradual de-forestation of the country from which the head waters and supplying streams are fed.

The forests act as a sponge, absorbing and holding the waters in the loose vegetable mold or duff, and shallow swamps, to be given slowly out in the dry season. They hold the snows of winter until late in the spring, and thereby tend to check destructive floods; and with their leafy covering, they prevent the rapid evaporation which dries the open fields under the summer suns.

THE CROTON.

Only a few weeks ago New York was threatened with a water famine, notwithstanding the great tunnel that taps Croton lake forty miles away, and absorbs the available streams and springs in the whole Croton water-shed. This section of the country had experienced a long continued drought. The largely deforested regions from which the river draws its supply was unable to hold back the floods of spring and the rains of summer to any considerable extent, and what remained the evaporation of the open country largely exhausted.

Were a large and adequate proportion of this water-shed densely forested, a constant water supply for the city of New York would be assured, even through seasons of long continued drought.

Where will New York's water supply come from in the year 1900, when her population will aggregate 5,000,000 souls within a radius of thirty miles from the city hall? In less than fifty years, at her present rate of growth, New York city, with Brooklyn and the same territory, will support a population of 10,000,000. Then she will have to tap Lake Champlain.

CENTRAL NEW YORK.

Let me give you an example of the effects of cutting the forests in a rural district in central New York, drawn from my own observation and experience. In Cayuga county, streams that forty years ago kept the ponds well filled for the saw mill and the grist mill, and furnished a never-failing supply of water for the farm, are now dry in summer, with the exception of here and there a stagnant pool. The dam is decayed and washed away, the mills are gone and the once picturesque scene is changed to that of desolation. Yet with the warm rains of spring and melting snows, the streams overflow their banks, and the swift waters carry away fences, bridges and embankments. Spring opens later; the young cattle were wont to be turned into the wood-sheltered pasture about the first of April, and now they are kept shut up until the middle of May. Peach orchards that were sure to be loaded every year with luscious fruit have almost disappeared, and the crop is the exception rather than the rule. The extremes of heat and cold are greater, and droughts in summer are floods in spring time, and are more frequent and more destructive. Trace the stream to its source, and the cause of these things is apparent. The old Tamarack swamp that used to supply the boys and girls with aromatic gum, and in which the creek had its beginning, has all been cut away. The thickly wooded black ash swamps, through which the stream ran in its course to the lake, have been cleared, and their marshy areas have given place to cultivated fields and pastures.

The cutting of the forests from the head waters and banks of these streams accounts largely for the changes I have noted, and this picture I doubt not is a very familiar one in central and western New York. It is not difficult for those who know the effects of stripping the forests from small areas around the head waters of the smaller streams to understand why summer navigation in the Mississippi, the Missouri and the Ohio has become difficult, and at times impossible, where it was easy and constant a few years ago; or why the Hudson, the Mohawk and the Genessee are so much lower in summer and higher in spring than in former years. The partial deforesting of the Adirondack region has sufficiently demonstrated the fact that were this great water-shed stripped of its forest covering, the Empire state would lose prestige, and New York City her rank as the first commercial city in the new world.—*Denver News*, March 6.

The mountain eagle from his snow-locked peaks
For the wild hunter and the bison seeks
In the chang'd world below, and finds alone
Their graven semblance in the eternal stone.

—Whittier.

Columbus alleged as a reason for seeking a continent in the west, that the harmony of nature required a great tract of land in the western hemisphere to balance the known extent of land in the eastern.—*Emerson*.

When we plant a tree we are doing what we can to make our planet a more wholesome and happier dwelling place for those who come after us, if not for ourselves. As you drop the seed, as you plant the sapling, your left hand hardly knows what your right hand is doing. But Nature knows, and in due time the power that sees and works in secret will reward you openly. You have been warned against hiding your talent in a napkin; but if your talent takes the form of a maple-key or an acorn, and your napkin is a shred of the apron that covers 'the lap of the earth,' you may hide it there, unblamed; and when you render in your account you will find that your deposit has been drawing compound interest all the time.

The trees may outlive the memory of more than one of those in whose honor they were planted.

What are these maples and beeches and birches but odes and idyls and madrigals? What are these pines and firs and spruces but holy hymns, too solemn for the many hued raiment of their gay, deciduous neighbors.—*Holmes*.

AN ACT TO ESTABLISH ARBOR DAY.

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

SECTION 1. The third Friday in April of each year shall be set apart and known as "Arbor Day," to be observed by the people of this State in the planting of forest trees, for the benefit and adornment of public and private grounds, places and ways, and in such other efforts and undertakings as shall be in harmony with the general character of the day so established; *Provided*, That the actual planting of trees may be done on the day designated, or at such other most convenient time as may best conform to local climatic conditions, such other time to be designated, and due notice thereof given, by the several county superintendents of schools for their respective counties.

SEC. 2. The day, as above designated, shall be a holiday in all public schools of the State, and school officers and teachers are required to have the schools under their respective charge observe the day by planting trees and other appropriate exercises.

SEC. 3. Annually, at the proper season, the governor shall issue a proclamation, calling the attention of the people to the provisions of this act, and recommending and enjoining its due observance. The Superintendent of Public Instruction, and the respective county superintendents of schools shall also promote, by all proper means, the observance of the day; and the said county superintendents of schools shall make annual reports to the State Forest Commissioner of the action taken in this behalf in their respective counties.

Approved March 22, 1889.

SELECTIONS—PATRIOTIC.

“ Washington, the brave, the wise, the good,
 Supreme in war, in council and in peace.
 Valiant without ambition, discreet without fear, confident without presumption.
 In disaster calm, in success moderate, in all, himself.
 The hero, the patriot, the Christian.
 The father of nations, the friend of mankind.
 Who, when he had won all, renounced all, and sought, in the bosom of his family, and of nature, retirement, and in the hope of religion, immortality.”

—*Inscription at Mt. Vernon.*

On the 30th of April, 1789, the streets around old Federal Hall, in New York city, were so densely crowded that it seemed as if one might literally walk upon the heads of the people. Out upon the balcony came, with “superb dignity,” the man whose generalship, whose patience, whose self-denial had achieved and then preserved the liberties of the nation; the man who, greater than Cæsar, had held a kingly crown within his reach, and had refused it. Washington stood a moment amid the shouts of the people, then bowed and took the oath. A flag was raised upon the cupola of the hall; a discharge of artillery followed, and the assembled people filled the air with their shoutings. Thus simple was the ceremonial which announced that a nation was born.—*T. W. Higginson.*

The cost of placing the flag on the school-house will be many times repaid by the great, though silent, duty that it can perform; for it is an object of beauty, it gladdens and strengthens the hearts of those who love their country, and, lastly, it teaches a great moral to the rising generations.—*Henry D. Baker, in “Home, School and Nation.”*

Sentiment is a tremendous addition to principle. If song and story and loving familiarity with the heroes of war and peace who have helped to make the splendor of our land can be of use, then let

them be repeated in the seed-time of life, in order that they may ripen later into glorious harvest. Let the child's heart animate the man's intellect.—*Mary Elizabeth Blake.*

COLUMBUS.

The life of Columbus is an illustration constantly brought for the success which God gives to those who, having conceived of a great idea, bravely determine to carry it through. His singleness of purpose * * his determination to succeed, have been cited for four centuries, and will be cited for centuries more among the noblest illustrations which history has given of success wrought out by the courage of one man.—*E. E. Hale.*

No man craves more than Columbus to be judged with all the palliations demanded of his own age and ours. It would have been well for his memory if he had died when his master work was done.—*Winsor.*

One poor day !

Remember whose and how short it is !
It is God's day, it is Columbus's.

O, lavish day ! One day with life and heart,
Is more than time enough to find a world.

—*Lowell.*

 THE MOUNTAIN COLUMBINE.

[The State Flower, selected by Colorado School Children on Arbor Day,
April 17, 1891.]

Sweet, stately Mountain Columbine,

Thy fragrance, grace and beauty
As patriotism's emblems shine,
And teach a sacred duty.

Thy azure hue is like the skies

Above our peaks and valleys,
Our balmy air it typifies,
A joyful spirit rallies.

Thy purest white reflects the snows

Which cap our lofty mountains,
And in the sunny light it shows
Whence come our sparkling fountains.

Thy golden center speaks of wealth,

It paints our stores of metals,
Our golden grains, climatic health.
All these enclose thy petals.

Just when the glorious Fourth's at hand,
 We see thy beauty blooming,
 Like angels' smiles o'er mountain land,
 Yet modest, unassuming.

Thy majesty, our children's voice,
 Made Colorado's flower,
 We all feel proud of this, their choice,
 Aesthetic beauty's dower.

"Resolved to win," the motto is,
 Thy emblem signifieth
 When sunlight's rays thy blossom kiss,
 Our greatness prophesieth.

—*F. W. Kranke.*

May 9, 1891.

GRASS.

The rose is praised for its beaming face,
 The lily for saintly whiteness ;
 We love this bloom for its languid grace,
 And that for its airy lightness.

We say of the oak, "How grand of girth!"
 Of the willow we say, "How slender!"
 And yet to the soft grass, clothing earth,
 How slight is the praise we render.

But the grass knows well, in her secret heart,
 How we love her cool, green raiment!
 So she plays in silence her lonely part,
 And cares not at all for payment.

Each year her buttercups nod and browse,
 With sun and dew brimming over ;
 Each year she pleases the greedy cows,
 With oceans of honeyed clover.

Each year on the earth's wide breast she waves
 From spring until bleak November ;
 And then she remembers so many graves
 That no one else will remember.

And while she serves us with goodness mute,
 In return for such sweet dealings,
 We tread her carelessly underfoot,—
 Yet we never wound her feelings.

Here's a lesson that he who runs may read,—
 Though I fear but few have won it,—
 The best reward of a kindly deed
 Is the knowledge of having done it.

—*Edgar Fawcett.*

COLORADO

Thou hast thine eyrie in the lifted lands,
 Oh, Colorado, mountain-born and free;
 Unvexed by terrors of the far-off sea,
 On earth's high crest thy favored realm expands

Nature bestowed thy dower with lavish hands,
 The richest gifts within her treasury,
 Which from creation she reserved for thee,
 Thy ore-veined mountains and thy golden sands.

Far eastward, ocean-vast thy plains extend;
 Westward thy snow-crowned mountains meet the sky,
 Heavens of unclouded blue above thee bend,
 And the bright sun looks on thee lovingly
 To that God hath so wrought may great souls lend
 The fadeless lustre of achievements high.

—*J. D. Dillenback.*

Denver, Colorado.

THE INDIAN'S PROPHECY.

But I behold a fearful sign,
 To which the white man's eyes are blind,
 Before these fields were shorn and tilled,
 Full to the brim our rivers flowed,
 The melody of waters filled
 The fresh and boundless wood,
 And torrents dashed and rivulets played,
 And fountains sported in the shade,
 These grateful sounds are heard no more.
 The springs are silent in the sun,
 The rivers, by the blackened shore
 With lessening currents run,
 The realm our tribes are crushed to get
 May be a barren desert yet.

—*Bryant.*

Train up thy children in the way
 Of righteousness and feed them with the bread
 Of wholesome doctrine. Where hast thou thy mines
 But in their industry? Thy bulwarks where but in their breasts?
 Thy might but in their arms?
 Shall not their number therefore be thy wealth?
 Thy strength, thy power, thy safety and thy pride.

—*Robert Southey.*

“O Blessed Flag! Sign of our precious past,
 Triumphant present, and our future vast,
 Beyond starred blue and bars of sunset bright,
 Lead us to higher realm of equal right!
 Float on, in every allegory,
 Kin to the eagle and wind and light—
 Our hallowed, eloquent, beloved ‘Old Glory!’”

“Our battlements shall be schools, hospitals, colleges and churches; our arsenals shall be libraries; our navy shall be peaceful ships on errands of perpetual commerce; our armies shall be the teachers of youth and the ministers of religion. This is, indeed, the cheap defense of nations.” * * *

“War is known as the last reason of kings. Let it be no reason of our republic.”—*Charles Sumner.*

FROM PRESIDENT HARRISON’S ADDRESS IN DENVER.

I am glad to know that you have not been so busy in delving into the earth; you have not so much turned your minds to precious metals as to have forgotten that there is a blue above you; that there are aspirations and hopes and glories that are greater than all material things. You have not failed to make sure that the children, the blessed children of your household, that are now coming on, are made secure in the possession of a well-ordered and well-endowed common school system. What a testimony it is to the American character that, however intense the push for the things of this life, however eager the pursuit of gain, you can never assemble a community of 200 people that they do not begin to organize schools for the children. These common schools are not simply nurseries of intellectual training; they are nurseries of citizenship. It has been a most happy sight to see the same old banner, that we bore into the smoke of battle and carried over dying comrades to place it in triumph on the ramparts of the enemy, now in the hands of all the children of Colorado.

It was Emerson who set the fashion of Americanism in literature; and opened our eyes to the birds that flew in our clear skies, and the beasts that roamed our woods, and the flowers that grew along our roadsides. Before his Humble Bee buzzed abroad after Bryant’s Wild-Fowl, it was the fauna and the flora of Europe that was stiffly set up in our anthologies. Nightingales and larks troubled the dreams of American versifiers who, even when they were awake, were deaf to the

bobolink and the mocking bird. It was the Humble Bee of Emerson that first gathered the honey of *Hymettus* from the slopes of our American Parnassus.—*Brander Matthews.*

Some way the Pilgrims—I mean the Pilgrims, and not the Puritans—managed the problem well. They landed from a pitiless sea on a pitiless shore; had in front of them winter and wilderness, and wild Indians. The present day was very pressing, but they kept their grip on the future. As some one says, wore home-spun, but had their conversation in heaven. They made homes and schools, looked forward to the State and went to "meeting"—mixed up clearing poor land, and planting corn, and praying, and hymn-singing, and fighting, in about the same proportion. They lived fearless and died hopeful.—*Myron W. Reed.*

None of us can be ignorant of the ideas which constitute the sentiment underlying our national structure. We know they are a reverent belief in God, a sincere recognition of the value and power of moral principle and those qualities of heart which make a noble manhood, devotion to unreserved patriotism, love for man's equality, unquestioning trust in popular rule, the exactions of civic virtue and honesty, faith in the saving quality of universal education, protection of a free and unperverted expression of the popular will, and an insistence upon a strict accountability of public officers as servants of the people.—*Ex-President Cleveland, at Ann Arbor.*

THE BROWN THRUSH.

There's a merry brown thrush sitting up in a tree;

He's singing to me! he's singing to me!

And what does he say, little girl, little boy?

"Oh! the world's running over with joy!

Hush! look! in my tree;

I'm as happy as happy can be."

And the brown thrush keeps singing: "A nest do you see,

And five eggs hid by me in the big cherry tree?

Don't meddle, don't touch, little girl, little boy,

Or the world will lose some of its joy!

Now I'm glad! now I'm free!

And I shall always be,

If you will never bring sorrow to me."

So the merry brown thrush sings away in the tree,

To you and to me—to you and to me;

And he sings all the day, little girl, little boy;

"Oh, the world's running over with joy!"

But long it won't be—

Don't you know? don't you see?

Unless we're as good as can be."

—*Lucy Larcom.*

CHILD AND TREE.

I'm like the tiny tree
 The children plant to-day ;
 And not to blame, you see,
 For making no display.
 To grow we both have room,
 And so we patient wait,
 And some day may become
 An honor to the state.
 The tiny little tree
 Can never move a pace ;
 But, busy as a bee,
 I flit from place to place.
 Because that I am free
 To study, and to know,
 There's more required of me
 Than standing still to grow.
 I move and bring things near,
 The tree must stand and wait ;
 But each one in its sphere
 May grow both good and great.

Watertown, N. Y.

—E. A. Holbrook.

ASPEN.

Once as our Savior walked with men below,
 His path of mercy through a forest lay,
 And mark how all the drooping branches show
 What homage best a silent tree may pay.
 Only the aspen stood erect and free,
 Scorning to join the voiceless worship pure.
 But see ! He casts one look upon the tree,
 Struck to the heart, she trembles evermore.

—German Legend.

THE ROBIN AND THE BLUE-BIRD.

The robin and the blue-bird, piping loud,
 Filled all the blossoming orchards with their glee ;
 The sparrows chirped as if they still were proud
 Their race in holy writ should mentioned be ;
 And hungry crows assembled in a crowd,
 Clamored their piteous prayer incessantly,
 Knowing who hears the ravens' cry, and said,
 " Give us, O Lord, this day our daily bread."

—Longfellow.

WRITTEN FOR FLAG-RAISING EXERCISES IN PUBLIC SCHOOLS

BY J. C. MACY.

What flag is this, with crimson bars and white?
 Who flings it forth to wave in jubilant air?
 What emblem dear, that throngs should thus unite
 To sing and speak its worth in praises fair?
 He who should come with such inquiries here
 Would find his answer in each pitying face
 Amazed the throng would be should he appear
 Who ne'er till then had heard of free-born race!
 Oh, starry flag, with white and crimson bars!
 Oh, blood-bought emblem of a glorious land!
 Oh, pride of vet'rans in the smoke of wars!
 Oh, flag, caressed by dying hero's hand!
 Wave on! and to the end of time wave on,
 Untouched by other than a royal throng!
 Thy stripes and stars so dearly loved and won,
 To God, to freedom and to right belong!

Boston, Mass., May, 1890.

There is a love of country which comes uncalled for, one knows not how. It comes in with the very air, the eye, the ear, the instinct, the first beatings of the heart. The faces of brothers and sisters, and the loved father and mother, the laugh of playmates, the old willow tree and well and school house, the bees at work in the spring, the note of the robin at evening, the lullaby, the cows coming home, the singing book, the visits of neighbors, the general training—all things which make childhood happy, begin it.

And then, as the age of the passions and the age of the reason draw on, and the love of home, and the sense of security and property under the law come to life, and as the story goes round, and as the book or the newspaper relates the less favored lot of other lands, and the public and private sense of the man is forming and formed, there is a type of patriotism already. Thus they have imbibed it who stood that charge at Concord, and they who hung on the deadly retreat, and they who threw up the hasty and imperfect redoubt at Bunker Hill by night, set on it the blood-red provincial flag, and passed so calmly with Prescott and Putnam and Warren through the experiences of the first fire.

To direct this spontaneous sentiment of hearts to our great union, to raise it high, to make it broad and deep, to instruct it, to educate it, is in some things harder, and in some things easier; but it may be, it must be done. Our country has her great names, she has her food for patriotism, for childhood and for man.—*Rufus Choate*.

If true in England, doubly so is Lord Brougham's doctrine true in America; "The schoolmaster is abroad and I trust to him armed with his primer against the soldier in full uniform array."

REPORT OF TREES PLANTED AND THE VOTE ON "STATE TREE."

To.....

County Superintendent of Schools.

Dear Sir:

The following is the report of School No., in School District,
 County of....., State of Colorado, of trees planted and the vote on "State Tree.:"
 Colo., Arbor Day, April 15, 1892.

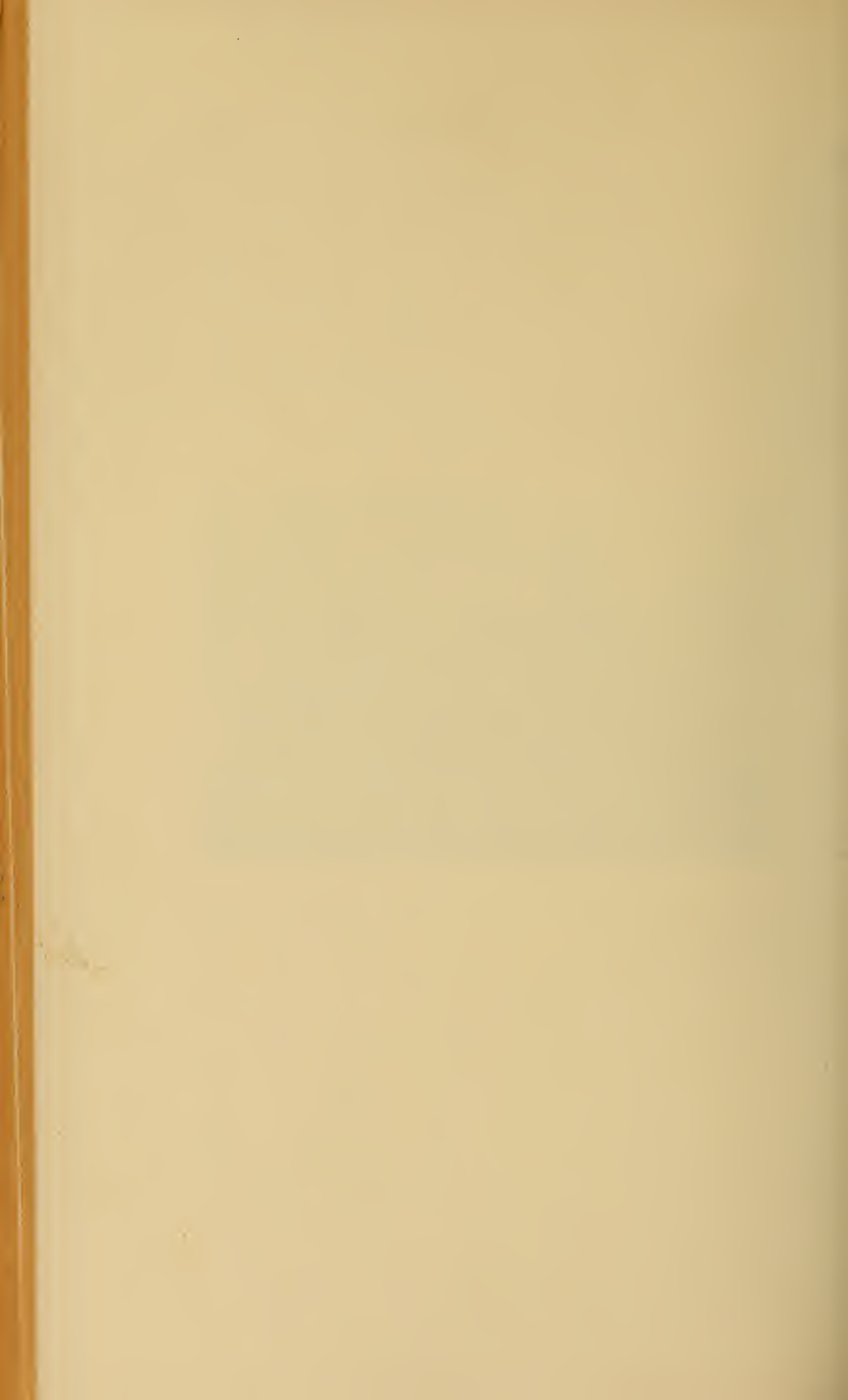
NAME OF TREE.	NUMBER PLANTED.	NAME OF TREE.	NUMBER OF VOTES RECEIVED.

Number of trees now growing on the school grounds, including those just planted,.....

Teacher.



CENTENNIAL HIGH SCHOOL, DISTRICT NO. 1, PUEBLO.



REPORT

OF

ARBOR DAY, 1892.

School No. _____, in _____
_____ School District, _____
County of _____

STATE OF COLORADO, }
COUNTY OF _____ } ss.

Filed in my office this _____ day of _____
_____, A. D. 1892.

County Superintendent of Schools.

Give outlines of how Arbor Day was observed by your school.

VOTE ON STATE TREE, ARBOR DAY, 1892.

Blue spruce.....	16,931
Fir.....	780
Pine.....	732
Spruce (other than blue).....	479
Cedar.....	104
Cottonwood.....	322
Box elder.....	187
Maple.....	150
Aspen.....	144
	<hr/>
	19,829=83%
Scattering.....	821
	<hr/>
	20,650

Among which the following trees received votes from one to forty-four: Catalpa, poplar, plum, mulberry, peach, walnut, balsam, cherry, locust, hickory, elm, apple, oak, pinon, willow, balm of Gilead, pear, ash.

Exhibit XI.

World's Columbian Exposition and National Columbian Public School Celebration.

- I. Colorado Board of World's Fair Managers.—
Names of members, officers and departments.
- II. Educational Department.—Circulars Nos. 1, 2, 3,
4, 5, 6, 7.
- III. Circular of State Superintendent relating to National Columbian Public School Celebration.—
Proclamation of the Governor of Colorado, message of the State Superintendent, official programme, proclamation of the President of the United States.
- IV. Tabular Exhibit of County Superintendent's Report of National Columbian Public School Celebration.

Colorado Board of World's Fair Managers.

ORIGIN.

The Colorado Board of World's Fair Managers was created by an act of the Colorado Eighth General Assembly, 1891.

MEMBERS.

Governor John L. Routt, Denver, Colo.
R. E. Goodell, Leadville, Colo.
Joseph H. Smith, Denver, Colo.
Mrs. E. M. Ashley, Denver, Colo.
Mrs. Robert J. Coleman, Buena Vista, Colo.
Mrs. M. D. Thatcher, Pueblo, Colo.
Mrs. William F. Patrick, Leadville, Colo.
Frederick Steinhauer, Denver, Colo.
B. S. LaGrange, Greeley, Colo.
Alexander Shaw, Denver, Colo.
Nathan B. Coy, Denver, Colo.
A. B. McKinley, Denver, Colo.
Henry B. Gillespie, Aspen, Colo.
O. C. French, Denver, Colo.

OFFICERS.

John L. Routt, president.
 A. B. McKinley, vice-president.
 Joseph A. Thatcher, treasurer.
 O. C. French, secretary.

EXECUTIVE COMMITTEE.

John L. Routt.
 A. B. McKinley.
 J. A. Thatcher.
 O. C. French.

DEPARTMENTS.

Mines, Mining and Machinery, W. S. Ward, chief, 33 Barclay Block, Denver.

Woman's, Mrs. E. M. Ashley, chief, 1460 Grant avenue, Denver.

Agriculture, first division, B. T. LaGrange, superintendent, Greeley.

Agriculture, second division, C. S. Faurot, superintendent, Boulder.

Horticulture, Dr. Alexander Shaw, superintendent, 39 Barclay Block, Denver.

Education, Nathan B. Coy, chief, 28 Barclay Block, Denver.

Historical, A. F. Willmarth, chief, 67 Barclay Block, Denver.

CIRCULAR No. I.

DEPARTMENT E.

EDUCATIONAL DEPARTMENT.

To School Officers and Teachers:

The accompanying "General Plan for Colorado's Educational Exhibit at the World's Columbian Exposition," originally prepared by the State Teachers' Association and accepted by that body, has been approved by the State Board of World's Fair Managers, and is herewith issued with suggestions and instructions under the authority of the Chief of the Educational Department.

The plan is not restrictive, nor exhaustive, but merely suggestive. Full scope is allowed for originality of device and individuality of expression in the arrangement of particular lines of exhibit. The intention is to have the whole fully and faithfully represent the educational work of the State from kindergarten to university, public and private, rural and municipal, denominational and non-sectarian, individual and associated, mixed, male and female. The opportunity is a rare one for collating the methods, appliances and results of this most important feature of Colorado's wonderful growth. Such an exhibit as can and should be made would be an object of just pride to her citizens, and of generous praise from all observers.

But the undertaking implies much detailed labor, and if successful must have the sympathy and co-operative assistance of all in any way connected with education. No institution in the State that has to do with the training of children and youth should withhold its active support, or fail of adequate representation.

The State Board of World's Fair Managers has committed to the undersigned the responsibility of the general oversight of this exhibit. As soon as practicable, they agree to place at his service a competent person as special manager. Meanwhile, the county superintendents are requested to co-operate with the Chief of the Educational Department, by calling the attention of teachers, superintendents and school directors to the accompanying circular, and urging immediate action in compliance with its suggestions.

As will be noticed, provision is made for rural schools. This is in accordance with the arrangement contemplated by the management at Chicago, that there shall be a special exhibit from rural schools. Surely Colorado's exhibit would be incomplete without a representation of its district school system.

For their services in connection with this work, county superintendents will be entitled to their usual *per diem* compensation; and for extra expenses that may be incurred in collecting, boxing and shipping exhibits, the State Board of World's Fair Managers suggests that a proportionate share of the general fund, to be appropriated by the several boards of county commissioners, be set aside for the educational exhibit.

The time that remains before exhibits must be installed at Chicago is about fourteen months, or until April 10, 1893; this, while ample, is not excessive, and should therefore be fully improved.

The higher institutions of the State, both public and private, have already signified their interest in this undertaking and promise exhibits of special merit. Some of the city schools also are engaged

in plans of a novel and impressive character. There is little doubt that local as well as State pride will prompt all to make the best possible showing.

The success of the great exposition is no longer doubtful; it is assured. National and international interest have risen to a high pitch; the splendid management has silenced criticism and now commands general admiration. Not only in magnitude will it surpass all former expositions, but in artistic design and finish as well. This means much when the Paris Exposition of 1889 is recalled.

There is no doubt that the educational exhibit will be the most extensive and valuable ever brought together. The great exposition will, however, fall far short of its highest mission if it prove not educative in a broad sense. This should be the leading thought in all preparation for it. The occasion is a grand one for awakening in the American youth a high conception of country and a large view of national greatness, by drawing attention to what America has done for mankind by her splendid example of wise, free government.

SUGGESTIONS.

1. Quality rather than quantity should be the aim.
2. Special pains should be taken by teachers, superintendents and school officers, to have all statistical records and reports accurate and complete.
3. Photographs may be very effectively used to illustrate buildings, (exterior and interior,) grounds, active exercises, apparatus, etc. The log and the sod school house should not be omitted from these pictorial representations.
4. All piece-work, consisting of mouldings, cuttings, carvings and foldings should be mounted, labeled and boxed. Natural history specimens should be pressed or mounted, labeled and boxed; each specimen named, and the box or case marked with the name, district and grade of school, and name of teacher.
5. All work must be reported for classification at this office not later than September 15, 1892; as no space will be assigned after that date.
6. Each variety of work should be accompanied by a statement showing the conditions under which it was prepared; if class work, the number in the class and the number whose work is displayed. In all work, the period of the pupil's experience should be given.

7. It is recommended that the pupils' interest be stimulated by frequent short talks on the significance of the celebration; by descriptions of the location and extent of the buildings, grounds, etc.; by items of interest concerning the character of the exhibits; and, above all, by bits of information and reference reading, which will help to give some definite idea of the world's manifold progress during 400 years—social, political, industrial, commercial, historical, educational, literary, etc. At stated times, exposition days may well be observed by literary exercises upon the life and times of Columbus, and the coming celebration. Abundant material for such talks and exercises will be found in recent books upon the subject, and in current periodicals of the year, such as *Harper's Monthly*, *The Century*, *The Cosmopolitan*, *Youth's Companion*, *Christian Union*, etc. *The Chicago Herald* prints a special exposition number on Saturday, in which is reported all matter of interest in connection therewith during the week. *The Colorado School Journal* for February contains a historical sketch of past world's fairs and educational exhibits, and will regularly hereafter have interesting information upon this subject.

INSTRUCTIONS TO COUNTY SUPERINTENDENTS.

You will please see :

1. That every teacher and school officer in your county is supplied with a copy of this circular.
2. That the provisions of it are carried out according to the best existing conditions.
3. That the names and addresses of all private schools in your county, of whatever character, whether parochial, benevolent, or reformatory, male, female or mixed, are sent to this office at the earliest possible date.
4. That the amount of table space, and of wall space, that will be demanded by the school exhibit of your county is ascertained as soon as convenient and reported to this office, in order that application may be filed at headquarters for the full amount of space that will be needed for the entire educational exhibit.
5. That a report of the progress of the work is sent to this office monthly.

For further information, address the undersigned.

NATHAN B. COV,
Chief of Educational Department.

Denver, February 1, 1892.

GENERAL PLAN FOR COLORADO'S EDUCATIONAL EXHIBIT
AT THE WORLD'S COLUMBIAN EXPOSITION.

A.—PUBLIC.

I.—Elementary.

1. Kindergarten—

Color work, form work, nature work, movements ; as walking, marches, plays, calisthenics, games, songs, sewing, working with clay, etc.

2. Primary—

(a) Language — Stories, readings, dictations, reproductions, translations of reading lessons, letters, business forms, etc.

(b) Mathematics—Number (written and illustrated solutions), form, size.

(c) Science—Collections of minerals, plants and animals. Written descriptions. Collections of geographical and historical pictures. Color work.

(d) Art—Penmanship, drawing, designing, paper-cutting and folding, modeling with clay, moulding of maps, whittling, sewing, music, etc.

3. Grammar—

(a) Language—Dictations, historic and geographic reproductions, translations, essays, letters, business forms.

(b) Mathematics—Arithmetic problems, solved in figures and by illustration. Problems in form, involving lines and angles.

(c) Science — Collections of minerals, plants, animals, fossils, agricultural products. Descriptions of simple experiments in physics and chemistry.

(d) Art—Penmanship, drawings, maps, charts, designing, modeling, moulding of maps, sewing, object-making, constructing simple apparatus, music, etc.

II.—Secondary.

1. High Schools—

- (a) Language—English composition, essays, reproductions of English classics, exercises in other languages.
- (b) Mathematics—Algebra, geometry, trigonometry, etc. Development of surfaces of solids on planes.
- (c) Science—Physics, chemistry, physical geography, zoology, botany, mineralogy, geology, physiology, biology.
- (d) Art—Drawing, painting, music, designing, constructing objects and apparatus, moulding, etc.

III.—Higher Education.

1. University—

(A) Collegiate.

- (a) Language—English, French, German, Spanish, Latin, Greek.
- (b) Mathematics—Algebra, geometry, (elementary, analytical and descriptive,) trigonometry, surveying, calculus, (differential and integral,) quaternions, determinants, mathematical astronomy, mechanics.
- (c) Science—Physics, chemistry, zoology, botany, geology, astronomy, biology.
- (d) Art—Drawing, painting, music, modeling, moulding, constructing.

(B) Professional—Law, medicine, theology, dentistry, Pharmacy, etc.

2. Normal School—

Language, mathematics, science, art, model school, pedagogy, etc.

3. Technical—

- (a) School of Mines—Mathematics, science, chemistry, metallurgy, mineralogy, etc.
- (b) Agricultural College—Language, mathematics, science, manual training, agriculture, irrigation, etc.
- (c) Industrial School—Same line of work as under elementary; also manufacture of clothing and shoes.

(d) Deaf and Blind School—

1. For the blind, work corresponding as far as possible to the usual course in graded schools.
2. For the deaf, elementary, (kindergarten, primary,) intermediate, advanced, manual.

IV.—Rural Schools.

Same line of work as primary and grammar under elementary.

B.—PRIVATE.

I.—Elementary.

- | | | |
|---|---|---|
| <ol style="list-style-type: none"> (a) Kindergarten— (b) Primary— (c) Grammar— | } | Same line of work as under public elementary. |
|---|---|---|

II.—Secondary.

- | | | |
|---|---|--|
| <ol style="list-style-type: none"> (a) High— (b) College Preparatory— | } | Same line of work as under public secondary. |
|---|---|--|

III.—Higher Education.

- (a) College—(See collegiate, under Public Higher Education.)
- (b) University—
 1. Collegiate (see collegiate, under Public Higher Education.)
 2. Technical, including mines, agricultural, industrial, manual, commercial, oratory and dramatic art, music, fine arts, electric engineering, civil engineering, etc.
 3. Professional, including law, medicine, theology, etc.

IV.—Charity.

1. Day nurseries, orphan schools, House of Good Shepherd, etc.

C.—MISCELLANEOUS.

I.—History.

1. Development of system.
2. Progress of schools.
3. Educational sentiment.

4. Achievement of schools.
5. Growth of teachers and profession.
6. School books and publications of educational works by Colorado authors; school journals, etc.
7. Catalogues of school libraries, with statement showing origin and maintenance; also catalogues of reference libraries for grammar and high school.

II.—Statistics.

1. Present and comparative attendance.
2. Expenditure.
3. Appliances.
4. School reports.
5. Legislation and laws.
6. School officers.
7. Discipline.
8. Buildings.
9. Heating and ventilation.
10. Examinations.
11. Promotions.
12. Licenses to teach, etc.

III.—Courses of Study.

1. Elementary—
 - (a) Kindergarten.
 - (b) Primary.
 - (c) Grammar.
2. Secondary—High school and college preparatory.
3. Higher—
 - (a) College.
 - (b) University (collegiate and professional).
4. Normal.
5. Technical—Mines, agriculture, industrial, mute and blind, commercial, etc.
6. Charity—Day nurseries, orphan schools, House of Good Shepherd.

IV.—Physical Development.

1. Calisthenics.
2. Gymnastics
3. Military drill.
4. Games—

Including lawn tennis, croquet, alley ball, base ball, foot ball, tug of war, racing, etc.

D.—PREPARATION OF EXHIBIT.

I.—Form of Work.

1. Individual.
2. Class.
3. School.

II.—Means of Displaying.

1. Written descriptions.
2. Pictures.
3. Drawings.
4. Photographs.
5. Constructions.
6. Real things, etc.

III.—Form of Paper.

1. Paper of same grade should also be uniform in size.
2. Paper should be such only as can be bound by regular book-binders.

CIRCULAR NO. 2

DEPARTMENT E.

EDUCATIONAL DEPARTMENT.

PHOTOGRAPHIC DISPLAY OF EDUCATIONAL WORK.

DENVER, October 10, 1892.

To County and City Superintendents, and all engaged in preparing contributions to Colorado's Educational Exhibit for the Columbian Exposition:

Photographs constitute an effective and economical means of graphic display, and will be extensively used at Chicago to represent

educational work in its various phases. Particularly valuable will they be for exhibiting school architecture, viz.: elevations; exteriors and interiors; floor plans with size and shape of rooms, and lighting arrangement; basement rooms, with heating, ventilation, sanitation, etc.

A strong desire is felt to obtain photographs of every school house in the State, two or three of each view. Anticipating possible failure to fully realize this, the suggestion is made that buildings be selected for the interest attached to them on account of age, peculiar material (adobe, sod, log, etc.), or excellence of plan. Thus may be vividly traced the evolution and improvement of school architecture and furniture in our State. The beginning of such a series would be, naturally, the first school house in Colorado, erected in Boulder county in 1862, under the direction of "Uncle" David Nichols, the present populist candidate for Lieutenant-Governor. This school house, though now destroyed, is preserved in "negative," and will be reproduced in miniature from material of the original

(Buildings may also be otherwise shown; for example, by means of models, the several stories made removable by sash weights and pulleys; or by perspective drawings, either copied from the designs of architects or made directly from the buildings themselves. The models, if of material, as wood or plaster, should not exceed four feet in the longest dimensions.)

Photographs may show pupils engaged in the various exercises of study, recitations, etc., viz.:

Kindergartens—The occupations and games, forms made from gifts (building gifts, tablets and sticks), work on charts, etc.

Primary schools—Exercises in observation, drawing, manual training, gymnastics, together with daily work of classes on slates and blackboards, map work, etc.

Grammar schools—Exercises showing methods pursued, especially in blackboard, slate, map and manual work, including models to illustrate courses of instruction in manual training, with accompanying statements; instantaneous views of classes at work. The finished productions of pupils in manual training should be real, not pictured.

High schools—Blackboard exercises, laboratory work, gymnastic and military drill, drawing exercises (with specimen of work), school choruses, etc.

These suggestions are for ungraded as well as graded, private as well as public, schools.

Photographs may still further show the *means* of study, including apparatus, appliances and devices (original and other), school and college museums, cabinets and libraries.

Photographs may represent the personal organization of educational institutions, including superintendents, teachers, pupils, directors, trustees, regents, etc.

Photographs may be for wall or table display. If for table display, they should be in book form; if for wall display, they should be sent to Denver unmounted, and should be of sizes to arrange on cardboards 22x28 inches. No photograph should be smaller than $4\frac{1}{2} \times 6\frac{1}{2}$ (cabinet size). As a rule, the most suitable size for all purposes is 8x10. Photographs of buildings should be uniformly 8x10. Exception may be made of a particularly fine building, to constitute the center of a group, or for separate mounting. Such should not exceed 18x22 inches in size. Groups should be arranged for artistic effect.

All photographs should be neatly and plainly labeled, so as to show origin and what they represent. Photographs of buildings should give name, location, date of construction, number of rooms, floor dimensions, material, cost, name of architect or builder, and, when possible, names of directors at time of erection. Buildings of special merit should be accompanied by architect's plans.

Colorado can make an excellent showing of school architecture. Such an exhibit would graphically portray her wonderful progress, material as well as educational.

It is proposed to have a wall display of an historical series, representing the first school house, 1862, typical school houses of 1876 (the year of statehood), and completing the series with the best of those now standing, 1892.

The county and city superintendents, and the heads of special and private institutions, must be looked to for these collections. It is urgently requested that all possible aid be rendered these officers by directors and trustees, that the collections may be satisfactory and creditable.

The work should begin immediately, while the weather is favorable, and before the trees have lost all their foliage. Care should be taken to get a good perspective of buildings, which cannot be done if the instrument is too near the object.

It is believed that photographers will find a good sale for pictures of buildings taken on October 21, during the celebration of Columbian Day. Pupils and visitors are likely to be eager customers.

Trusting that these suggestions will meet with prompt and hearty response, I remain,

Very truly,

NATHAN B. COY,
Chief, Educational Department.

CIRCULAR NO. 3.

DEPARTMENT E.

EDUCATIONAL DEPARTMENT.

DENVER, October 10, 1892.

DEAR SIR—Your attention is respectfully called to the enclosed circular relating to "Photographic Display of Educational Work" at the World's Columbian Exposition, reprinted from the *Colorado School Journal* of October, 1892.

Please forward to the undersigned at the earliest possible date answers to the following questions:

Can your county furnish for Colorado's Educational Exhibit at the Chicago World's Fair exterior and interior views, at least two each.

1. Of an adobe school house?
2. Of a sod school house?
3. Of a log school house?

Of how many other school houses will your county furnish views with descriptions according to circular, stating size of each view?

Replies should be received not later than November 1, 1892.

Very truly,

NATHAN B. COY,
Chief, Educational Department.

EDUCATIONAL DEPARTMENT.

EXHIBIT OF ART EDUCATION.

That the State Exhibit in the Department of Art Education may have an appearance of unity, and that the work shown may be arranged to the best advantage, the following suggestions are made regarding preparation:

EXHIBIT I.

A series of mounted drawings, taken from regular class work, showing the entire course of instruction.

These mounted drawings to be arranged :

First—By subject.

Second—By grade.

Thus, for example, in the subjects of design and color:

This exhibit is to occupy wall space.

The mounts to measure 22 x 28 inches.

As many drawings on each mount as convenient without crowding.

These mounted drawings must be framed (1½ inch hard wood frames, natural finish, is suggested).

If possible, arrange the drawings on the mounts so that when in place on the wall the long edges will be vertical. Wherever this suggestion is impracticable, have as few mounts as possible placed with the short edges vertical.

If constructed objects in clay, paper or other material are to accompany the display, they must be exhibited in show cases under the drawings.

EXHIBIT II.

Bound volumes of drawings to show :

First — Courses of instruction.

Second — Single grade work, by subject or time.

Third — Sheets of drawings, representing the application of the study of drawing to the other class subjects.

Each leaf of these volumes must measure 22x28 inches, to be bound on the long edge. Give about twenty-five leaves to each volume. Each leaf to be of a first-class quality of cardboard, as thin and as tough as possible; in color a neutral tint, somewhat darker than the paper on which the drawings are made. The covers of these volumes should be heavy and black in color. Lettering in gilt to be on one outside of each volume, giving:

First—The county, city or town and district.

Second—The name of school or institution.

Third—The school year or grade.

Fourth—The subject of contents.

If possible, mount drawings on each side of each leaf.

Each volume should contain work on one subject only.

In the exhibit these volumes are to occupy space on tables.

EXHIBIT III.

It may be thought advisable to display completed drawing books. If so, the books must correspond in binding, lettering, etc., with the larger volumes in Exhibit II.

These volumes of bound drawing books should not measure more than two inches in thickness.

EXHIBIT IV.

Photographs of classes at work and interiors of class rooms.

MANUAL TRAINING EXHIBIT.

First—Systematically arrange a display to show clearly the entire course of instruction. If possible, let this display be represented by pupils' work only. Have constructed objects fastened to oblong show boards; these boards to measure 44x56 inches, or 22x28 inches. Drawings, or blue prints to be framed; size of frames, 22x28 inside measurements. This display to occupy wall space.

Second—An exhibit of individual class work in one or more subjects.

Third—Photographs of classes at work and class room interiors.

The foregoing suggestions have been prepared by Mr. Frank H. Collins, Director of Drawing in the Denver Schools, District No. 1, and ex-President of the Art Department of the National Educational Association. They are applicable not only to public school exhibits, but also to those of private and special educational institutions. Additional information may be had by addressing Mr. Collins at room 610 McPhee block, 17th and Glenarm streets. Samples of the prescribed paper and cardboard, with prices, may be obtained from him. All contributions to the Art Department of Colorado's Educational Exhibit for the World's Fair should be reported to Mr. Collins, if possible, on or before December 1, 1892.

NATHAN B. COY,
Chief, Educational Department.

Denver, November 1, 1892.

CIRCULAR NO. 5.

DEPARTMENT E.

EDUCATIONAL DEPARTMENT.

Descriptive statement accompanying photographs of school houses and other educational buildings.

Location: { Township No. Range No.
 { ¼ of ¼ of Section No.
 or
 County of City or town of
 District No. School
 (Name.)

Material,

Number of rooms,

Cost, \$

Date of erection,

Architect,

Altitude,

Chief industry of district,

Signature

CIRCULAR NO. 6.

DEPARTMENT E.

EDUCATIONAL DEPARTMENT.

COLORADO EDUCATIONAL EXHIBIT.

Name, Age, School,

..... County, City or town, District No.

Grade or year in school, Subject, Date, 189..

Remarks:

To School Officers, Teachers and the Executive Heads of Educational Institutions:

A general plan of Colorado's Educational Exhibit for the World's Columbian Exposition was addressed to the school officers and teachers of the State in February, 1892. Subsequently special circulars were issued relating to photographs and drawings. These circulars were supplemented by individual letters, mimeograph circular letters, interviews and addresses. A good general idea of the nature of the undertaking is supposed to have been thus formed by those interested in contributing to the exhibit. The present circular aims to furnish certain final instructions respecting arrangement, mode of display, forwarding, etc. It will also be found to contain a repetition in substance, if not in form, of some of the contents of former circulars.

SCOPE AND ARRANGEMENT.

Colorado's Educational Exhibit should present clearly and concisely the various facilities for mental training afforded within the State, from kindergartens to universities and special schools, including institutions supported at private as well as at public expense. Naturally, the common schools should form the centre of such an exhibit. Private schools should have "a place alongside their corresponding grades of public schools;" kindergarten work "near primary work, but not confused with it;" and "along with high-school work will come all forms of secondary instruction intermediate between the grammar school and the college, except such as may be grouped by themselves, as specialties." Then would "follow normal schools, colleges, technical schools, universities with their professional schools, and professional schools detached." (S. H. Peabody.)

The display should at once attract and impress. To this end the arrangement should be systematic, and the mode of display graphic, with a view to taxing the observing powers to the least possible degree. Chief Peabody's plan of organization, "by *states* in parallel subdivisions extending in one direction, and by *grades* in corresponding subdivisions extending in the opposite direction," is admirable for economy of investigating force. Conformably to this plan, the space assigned to Colorado's Educational Exhibit will be occupied by consecutive departments somewhat as follows:

1. Organization and administration.
2. The common schools (graded and ungraded, with representative exhibits by groups corresponding to the classification of school districts). Private schools and academies.

3. The State Normal School.
4. Colleges.
5. Technical schools.
6. Universities. Detached professional schools.

Each of the departments enumerated will form a section composed of alcoves or compartments, corresponding in number to the divisions of the exhibit in any department. The partitions bounding the sections and alcoves will afford space for wall exhibit. At the base of the partitions, all around the alcoves, will run counters for bound volumes, portfolios, show cases, etc. Underneath the counters will be placed chests of drawers for the storage of relays, thus economizing space and affording a wider range of exhibit, by keeping certain lines of work on exhibition only a portion of the time. Work not on exhibition will be accessible in the drawers to any one who may wish to inspect it. In the center of each alcove there will be space for a table, wing frame, swivel case or glass case for special exhibits.

I. *Organization and Administration.*

State.

Department of Public Instruction. Superintendent. Administrative Boards (education, examination, land commissioners); constitution, duties and reports of each. School laws. State course of study for ungraded schools. Examinations. State diplomas. Normal institutes. Teachers' associations. State reading circle. District classification. University extension. Blanks, etc.

County.

Superintendent. Commissioners. District organization (boards, electors). Quarterly examinations. Examination questions. Teachers' certificates. Teachers' associations. County and district libraries. Blanks, etc.

City and Town.

Supervision. Boards (constitution, duties, reports). Courses of study. Manuals of directions for teachers. Circulars of advice. Examination questions. Medals. Diplomas and school documents. Libraries. Blanks, etc.

Means of Exhibit.

Maps (showing location of educational institutions). *Graphic charts* (showing organization, duties, rules and regulations of administrative boards; statistics of enrollment, attendance, etc.). *Models.*

Drawings and photographs (of school apparatus and architecture).
Bound volumes (printed and manuscript, containing reports and brief histories of city and town systems and private institutions).

2. *The Common Schools.*

This department will constitute the main feature of the State Educational Exhibit. According to the general scheme adopted by the Directory at Chicago, the State will be the smallest unit of representation. "It is not possible that every city or county can have a distinct representation." Each will be a part of the collective exhibit of the State. It is the intention, however, that "whatever is shown shall be credited to its proper source." In view of this restriction, and for economy of space, as well as of time in preparation, the following grouping of the common schools seems commendable. The arrangement is based on the classification of school districts, according to school population (first-class, 1,000 or more; second-class, 350-1,000; third-class, 1-350), with subdivisions under each classification. Groups will be designated by number and letter, thus: Group I. A, group II. C, etc. The grouping has the additional advantage of placing competition as nearly as practicable upon an equal footing.

I.—A (5,000 OR MORE).

COUNTY.	DISTRICT NO.
Arapahoe	1
Arapahoe	2
Arapahoe	17

I.—B (2,000-5,000).

COUNTY.	DISTRICT NO.
El Paso	11
Lake	2
Pueblo	1
Pueblo	20

I.—C (1,000-2,000).

COUNTY.	DISTRICT NO.
Boulder	3
Las Animas	1
Pitkin	1

II.—A. (500-1,000.)

COUNTY.	DISTRICT NO.
Arapahoe	5
"	21
Boulder	17
Chaffee	7
Clear Creek	3
"	5
Conejos	6
El Paso	1
Fremont	1
Gilpin	1
Jefferson	1
La Plata	9
Larimer	5
Mesa	1
Montrose	1
Otero	11
Weld	6

II.—B. (350-500.)

COUNTY.	DISTRICT NO.
Arapahoe	6
"	7
Chaffee	9
Conejos	4
Fremont	15
Gunnison	1
Huerfano	4
Larimer	2
Ouray	1

III.—A. (100-350.)

COUNTY.	DISTRICT NO.
Arapahoe	4
"	13
"	18
"	22
"	44
Boulder	15
"	29
"	47
"	52
Custer	9
"	13
Conejos	2
"	3
"	7
"	8
"	13
"	14
Costilla	1

III.—A. (100-350.)

COUNTY.	DISTRICT NO.
El Paso.....	14
“.....	56
Fremont.....	2
“.....	8
“.....	21
“.....	24
Garfield.....	1
“.....	10
Gilpin.....	2
“.....	3
“.....	5
Gunnison.....	8
Hinsdale.....	1
“.....	3
Huerfano.....	8
“.....	9
“.....	10
“.....	12
Las Animas.....	4
“.....	6
“.....	7
“.....	16
“.....	21
“.....	29
“.....	30
“.....	42
Logan.....	12
Mesa.....	2
Montezuma.....	6
Morgan.....	3
Otero.....	4
Ouray.....	6
“.....	11

III.—A. (100-350.)

COUNTY.	DISTRICT NO.
Park	4
"	9
Phillips	39
Costilla	2
"	4
"	6
"	13
"	17
Delta	1
Dolores	1
Douglas	11
Eagle	6
El Paso	5
"	13
Huerfano	19
"	20
"	27
Jefferson	2
"	8
"	22
Lake	1
"	6
La Plata	1
Larimer	13
Las Animas	3
Rio Grande	2
Saguache	3
"	6
San Juan	1
San Miguel	1
Summit	1
Washington	1

III.—A. (100-350.)

COUNTY.	DISTRICT NO.
Weld	15
"	16
"	27

III.—B. (1-100), includnig 1,235 districts.

Total No. Districts, 1,357.

It is desirable to have a representative exhibit from each group. This can be easily secured if every school will contribute its best product in one or more subjects. No school is to be restricted in the amount of its contribution. Quality will be the standard of choice. It is possible for the same school to contribute the greater portion of the exhibit of a single group. But it would be far better to have the exhibit represent the work of several schools. A group consisting of several schools can obtain a complete representative exhibit with very little effort, if each school will furnish but a single element of work.

Ungraded (rural) schools will be embraced in third-class districts. From these a representative exhibit, based on the State course of study, is desired.

County and city superintendents and principals of schools must be looked to for the successful execution of the plan. It is hoped that they will unite, both by special circulars and direct personal effort, to instruct, counsel and encourage their teachers in the undertaking.

SCHOOL GRADES.

In the preparation of the public school exhibit, the following departments, according to grades or pupils' experience in school, should be distinguished.

1. The kindergarten, pupils 3 to 5 years of age.
2. Primary schools, pupils 6 to 9 years of age (or first four years regular school work).
3. Grammar and intermediate schools, 10 to 13 years of age (or second four years regular school work).
4. High schools and academies, or preparatory schools, 14 to 17 years of age (or third four years regular school work).

MATTER OF EXHIBIT.

What to exhibit cannot be definitely prescribed. Only general directions are practicable. Truly, the exhibit as a whole should indicate what the schools and institutions of learning in our State are doing, and in what way. To this end, it should consist of representative work in the various departments of study. Every grade and kind of school should, therefore, make some contribution. Exactly what the contribution shall be from any particular school or system of schools, no attempt will be made to specify.

By way of suggestion, the following outline of studies, taken largely from the Rhode Island circular, is presented as a basis of what may be exhibited.

STUDIES, OF WHICH THE PRODUCTS MAY BE EXHIBITED.

1. *The Kindergarten.*

Charts showing the consecutive exercises of the course. Meritorious specimens of the work of pupils, with the gifts in clay, drawing, tablets, sticks, sewing, weaving, paper-folding, paper-cutting, etc., to be hung upon the wall, bound in portfolios, or placed in show-cases. Materials and devices. Photographs of occupations and games.

2. *English, including Spelling, Penmanship, Grammar, Rhetoric and Composition.*

Reading—Methods, the standard authors, choice selections. Dictation exercises. Picture stories. Copies, abstracts, descriptions. Definitions. Parsing and analysis. Translations and paraphrases. Reproductions. Narrative letters. Business forms. Exercises of the imagination. Essays.

3. *Natural Science.*

Botany—Charts, drawings, analyses. Flowering plants. Mounted specimens. Woods, dry fruits, seeds, etc.

Zoology—Stuffed specimens and pictures of animals. Birds, nests, eggs, insects. Shells, etc.

Physiology—Descriptions, diagrams and drawings. Definitions. Essays upon hygiene.

Physical Geography and Geology—Charts, drawings, diagrams and maps. Observations, descriptions, essays. Graphic representations of the variations of temperature, the distribution of moisture, vegetation and animals. Relief maps in clay, putty, salt, etc.

Geography—Maps and models. Written summaries and descriptions. Drawings from memory of the forms of land and water.

Physics—Descriptions of experiments. Drawings of apparatus. Working models made by pupils. Definitions and laws. Essays.

Chemistry—Charts and tables. Principles and definitions. Solutions of problems. Descriptions of experiments.

Mineralogy—Specimens of common minerals, metals and ores, rocks and soils. Catalogues of minerals. Analyses. Apparatus. Essays.

Astronomy—Observations, drawings, essays.

4. *Mathematics.*

Arithmetic and Algebra—Test statements of definitions, principles and processes. Solutions, diagrams, and graphic illustrations. Drill exercises. Development of rules by reasoning. Original methods.

Bookkeeping—Original transactions. Accurate results. All common business forms. Ruling and writing done by pupils.

Geometry—Same suggestions as for arithmetic. Original problems and demonstrations, unruled paper, figures in colored ink. Drawing of solids. Problems showing the application of geometry to the arts.

5. *Drawing, Including Form and Color.*

Freehand copies, original designs, drawings from objects, mechanical, constructive, decorative and pictorial drawing. Charts of drawings for the wall and drawing books bound in volumes. Work in clay, paper and sticks. Constructed objects of paper, cloth and wood. In freehand drawings, painting and crayon work an interesting display may be made of Colorado scenery. (See special circular relating to Exhibit of Art Education.)

6. *Manual Training.*

Pieces of the work of pupils, in wood and iron, coated with shellac and fastened to boards, suitably framed, 22x28 inches, and painted, to be hung on walls or placed on counters. Larger single specimens for counter or table.

Sewing may be exhibited in books or shallow showcases on walls or counters. Photographs of classes at work cutting and fitting and of girls wearing gowns of their own making.

Cooking—Photographs of classes at work in school kitchens and of spreads cooked by pupils.

7. *Physical Culture.*

Gymnastics—Military drill. Music. Elocution. Methods of teaching. Photographs. Essays.

8. *History and Civics.*

Lists of topics—analyses, abstracts of supplementary works, examination papers, discussions, essays. Charts, progressive maps, historical relics. Constitutional history. Local history. Features and incidents of Colorado's early history may be incorporated; as the explorations of Fremont, Baker, Long, etc.; the Pike's Peak gold and the Leadville silver discoveries; Mexican settlements, Indian affairs; the Pueblos and cliff houses of southern Colorado; collection of minerals, arrow heads, pottery and other ancient relics; origin and development of the irrigation system, etc., etc. Biographical sketches. Photographs of objects, places and men.

9. *Literature.*

Word-study—Rhetorical illustrations. Analysis and discussion of masterpieces. Reviews and lists of books. Criticism. Paraphrases and reproductions from memory, selected for originality, choice language and logical arrangement. Characterization of the noted personages of fiction. Essays in outline and finished.

10. *Psychology, including Logic, Ethics and Esthetics.*

Definitions—principles, synopses. Applications. Relations to physiology and other studies. The minds of children. Lines of the current advancement of mental science. Essays.

11. *Foreign Languages.*

Latin, Greek, French and German—Translations studied and at sight. Composition. English derivation. Maps illustrating geographical and historical allusions. Essays upon classical subjects.

HIGHER INSTITUTIONS OF LEARNING.

“So far as practicable, to the higher institutions of learning (colleges, universities, technical and professional schools), will be extended the largest liberty in arranging each its own matter of exhibit. By graphic methods may be shown the origin, development and progress of an institution; dimensions, cost and value of buildings and grounds; endowment and capacity; courses of study, requirements for admission and graduation and degrees conferred; attendance from foundation by classes, sexes and departments; alumni, number, and, if possible, distinction in life; views of buildings, without and within; illustra-

tions of equipment, and of all novel and beautiful features, natural or artificial; new methods of investigation and of instruction; original apparatus and processes; portraits of founders, professors, teachers and of such alumni as have achieved distinction; in short, a full history of the institution." * * * "These exhibits will vary greatly, both with the character of the institutions themselves, and with the genius and skill of those who prepare them." So far as practicable, the higher institutions will follow the suggestions and outlines of studies made for the lower schools.

MODE OF EXHIBIT.

The success of an educational exhibit, must depend largely on the *manner* of presentation. To be effective, it must make extensive use of graphic modes of expression; in a word, it must *picture*. Originality has here a fine field for practice. The individuality of the teacher can be put to its severest test in devising original methods of illustration, so as to avoid the inevitable tendency to sameness. Exhibits may be for wall or wing frame display; for table or counter, shelf or bracket display.

Wall Display.

Mounted work, such as maps, charts, photographs, drawings, etc.

Wing Frame.

Mounted work of limited dimensions, not larger than 22x28 inches, inside measurement; may include, besides what was mentioned under wall display, a limited amount of choice manuscript.

Counter or Table Display.

Charts, bound volumes (printed and manuscript), portfolios, etc; mineral, botanical and zoological cabinets, models, etc.

Shelf or Bracket Display.

Selected specimens of models, apparatus, etc.

Charts.

For graphic exhibit of statistics of all sorts; organization (State, county, city, town, individual); school programmes, courses of study, plans of lessons by teachers; topical methods of teaching and study, illustrative of history, literature, geology, chemistry, physics, geography, etc.

Portfolios.

For enclosing completed drawings and drawing books; plans of lessons by teachers, with questions and devices and methods; kindergarten work, etc.

Bound Volumes.

(a) Manuscript.—Including written exercises of pupils in all studies. Essays. Map drawings, sheets of drawings.

(b) Printed.—Reports. Courses of study. Manuals. Catalogues (of libraries and educational institutions). School laws. Books by teachers and graduates. Pamphlets by teachers, with papers on current topics, etc., etc.

SPECIAL EXHIBIT.

Besides representative work, special work in any of the subjects indicated may be prepared by a single pupil, by a whole class, or by a number of pupils selected from the class. It should be prepared without the aid of the teacher, yet under his direction, and in accordance with the plans and rules prescribed for other work, except that the work is not required to be done at one sitting. It should be the pupil's own work and be accompanied by a definite statement of the conditions under which it was produced, including full amount of time bestowed.

SPECIAL COLLECTIVE EXHIBITS.

Each of the following classes of institutions will make a collective exhibit at the World's Fair, and space for them is not included in the State exhibit :

Roman Catholic Schools and Colleges. Kindergartens. Manual Training Schools, not operated as a part of a public school system. Schools of Technology and Art. Schools for the blind, the deaf and the feeble-minded.

EXHIBIT OF TEACHERS.

Teachers may be represented directly in the educational exhibit by charts and bound volumes of programmes of daily lessons, topical analyses, syllabuses, plans of lessons, diagrams, devices, methods of instruction, home-made apparatus, etc. Such a volume might be prepared by the schools of a city, town or district, with the photograph of the teachers in a group on the first page and an introduction written by the superintendent. Paper of the prescribed size should

be used. Another production of interest and value might be a volume of essays upon pedagogical themes relating to the work of a department, written by representative teachers. Text books by Colorado teachers and professors should be displayed in their proper departments.

PREPARATION OF THE EXHIBIT, RULES AND REGULATIONS.

Extracts from the circular relating to "The Educational Exhibit," by Chief Peabody, of the Department of Liberal Arts.

"The general regulations of the Exposition, as well as the special rules of the Department of Liberal Arts, must be observed."

"The assignment of space will be determined by the character of the exhibit, and not in proportion to area, population or school attendance."

"Every item of work presented as the product of the pupils should be absolutely genuine. The interference of a teacher, even to the correction of an obvious mistake, the retouching of a shade in a drawing, the fitting by a shaving of a joint of wood-work, the dotting of an 'i' or the crossing of a 't,' should be deemed an inexcusable fault; and any work so 'improved' should be rigorously rejected. Each item should be forwarded exactly as the pupil left it. No special instruction, practice or drill, should be given to any pupil, class or school, preparatory to work which is intended for the Exposition. The actual fruits of the regular school system should be presented without being worked up for this special purpose."

"It will happen that in a given city one school will win the honor of sending forward the representative class in one subject, another in another, and so on. It will be possible that every community which is really excelling in some particular may have the honor of being represented in something in the final selection."

SPECIAL DIRECTIONS.

I. The work to be done in the various lines of exhibit, preparations of questions to be answered, collecting, sifting and arranging written work, is left with the teacher, the principal, the superintendent, or the school committee of the locality (city, town or district) from which it is sent, or by the co-operation of all these. Separate original work of all kinds will be accepted, provided it be meritorious and genuinely original. Such work may give variety and educational value to the exhibit, by showing the results of the school work in the development of power in the pupils.

2. All written work must be done in ink, preferably upon one side of the sheet: the under side (the unruled side) of the sheet, however, may be used for maps, diagrams, etc., so that, when bound, illustrations will appear upon the left-hand pages, text and description upon the right.

3. Each question to be answered, or topic to be discussed, should be written by the pupils just before the answer.

4. Every paper exhibited should bear the name, age and grade or school year of the pupil; date of preparation, time (in minutes) of preparation; designation of school and city, or district and county.

5. Teachers are advised to let the whole class write upon each exercise, but only to send forward to the principal, superintendent, executive head or local committee, a few of the best papers.

6. The regular written work presented should be done in school, within a limited time and without special preparation, thus confining the draft upon teachers' and pupils' time, as far as possible, to regular recitation periods.

7. Every exhibit of work offered should be accompanied by a preface, written by the teacher, upon the paper prescribed for the class, stating the method of preparation, and the teacher's aim in the exercise sent, as follows: "The accompanying work has been prepared strictly in accordance with the rules and regulations, general as well as special, prescribed for the Colorado Educational Exhibit."

8. The original draft of written work may be made on slates or paper. From this the paper for the exhibit shall be prepared. The first copy only shall be accepted. A second trial shall not be permitted. Neither the original draft nor the completed copy shall be criticised or corrected by the teacher or any other person. Both the original draft and the completed paper must be prepared at the same sitting.

9. Written work may be presented in bound volumes, or on cardboard, for the wall or standard of wing frames. Each great school might offer one substantially bound volume on some one subject, or on several subjects, with a frontispiece of the building, the teachers and pupils in a group, and with an introduction written by the principal, to describe the conditions under which the matter was prepared. For the wall exhibit, the work will be pasted upon heavy strawboard 22x28 inches, the longer side to be the vertical side, care being taken to make an harmonious display. The paper should be adapted to the kinds of work, either for drawing or writing, and to the size of the board. Six-ply, court-grey, mounting board is recommended because of its neutral color, and the good effect with which work in any color, tint or shade can be mounted upon it.

10. For the exhibit of rural schools, the teachers will make up the exhibit by selecting from the work, in each subject on which the pupils are examined, fifty per cent. of the best papers, not to exceed five. These should be sent to the county superintendent, who will select two of the best representative exhibits from the schools of his county, which he will forward (together with such special work contributed as he may deem meritorious), not to exceed two pieces of each kind. The general correctness in subject matter, form and legibility should determine the selection by the teacher. The grade teachers in the city and village schools will proceed in like manner with the teachers of the rural schools, in the selection of materials prepared by their pupils. The principal or superintendent will select enough of the material furnished from the several grades or departments to fairly represent the work of the entire school, or system of schools, and forward it together with special work as per directions.

11. For the sake of appearance, and to facilitate binding and mouting, the several kinds of paper used in exhibit work should be as nearly uniform in size and quality as may be practicable. The following sizes are well adapted for the several purposes named:

For all Written Work—Letter size ($8\frac{1}{2}\times 11$).

For Chart Work—Board or paper (22×28).

For Mount—Heavy card board, 22×28 inches; six-ply, court gray suggested.

12. Part of the paper should be ruled, for writing; part unruled, for drawing; that for pencil should be good, but not of too smooth a surface.

Photographs may be of large size, to be displayed on walls or wing frames; or small, so as to be included in albums, or arranged on cards for binding or for wall display. Those intended for the State Historical Series must be forwarded unmounted and flat, between paste-boards, accompanied by full descriptions on separate sheets. Otherwise they cannot be used. Other photographs may be similarly sent, unmounted. Exceptionally fine views, however, may be taken larger, if preferred, and sent in frames, ready to hang. Valuable pictures thus framed will be carefully preserved and returned, if desired, to the exhibitor. (See special circular relating to "Photographic Display.")

13. All written work should have a margin of one and one-half inches at the left and top, and one-half inch at the right and bottom. The writing should begin and end with the vertical ruled lines, except at the beginning and close of a paragraph.

14. Papers must be sent in flat, not rolled or folded; either bound in volumes, or pasted upon cardboard, or in packages, or envelopes. Papers sent in unbound will be bound at this office. Alcoholic glue should be used for pasting.

For binding, black is recommended, with gilt lettering.

15. Boxes for minerals, insects, etc., should be of one of the following sizes: 12x12, 12x18, 12x24 inches, with glass covers, and partitions.

16. It is not intended that the foregoing directions shall exclude work already prepared, or under way, which may not conform exactly to the requirements. Such work, however, should be at once reported to the undersigned for approval.

17. All work should aim "to show the *results* of the educational forces at work in the school from which it comes."

FORWARDING OF EXHIBITS

It is desirable that the individual, or committee, having authority or responsibility for the exhibit of any school, system of schools, or institute of learning, should report at once, to the undersigned, progress to date; stating to what department contribution will be made; from what grades; kind, variety and quality of work, etc. Much work has already been reported in bulk. As soon as possible it should be reported in detail. The greater part of what is to be exhibited should be reported by January 1, 1893; and all by January 10, 1893. A large portion of the exhibit should find its way to Denver by the latter date; the greater portion, by February 1; and the entire portion, by February 15; as it seems necessary to have the whole ready for shipment to Chicago by March 1, 1893. It is possible that there may be some special pieces of work, the consignment of which, in Denver, can be deferred until about the time for shipment east. Such work should be referred to the undersigned for advice.

The entire expense of freight and installment will be met by the State. It will be understood, unless special request to the contrary is made, that everything exhibited will become the property of the State of Colorado.

All materials, packages, etc., intended for exhibit, should be carefully boxed and plainly labeled, with the name of the county, city or district, school or institution.

Private schools may send their exhibits through the county superintendents or directly to the undersigned.

CONCLUSION.

This circular was intended for an earlier date, but the issue of it has been unavoidably delayed. Its mission, however, is not intro-

ductory, but supplementary; not to prompt a beginning so much as to help on the completion of work supposed to be already planned and well under way. While the time that remains is short, and should be diligently improved, it is believed that, under the guidance of intelligent and interested teachers, superintendents and other educational leaders, an attractive, representative and successful exhibit can be made; one that will be a pride and pleasure to every Coloradan who shall visit the great Exposition—"the world's greatest congress of teachers and greatest clearing-house of schools." The reputation and welfare of the State demand that every effort to that end be enlisted. It is due the occasion; it is due the great interests herein represented. No doubt can be entertained of the far-reaching and enduring benefits that will flow to the schools from the impetus given by intelligent efforts along the proposed lines of exhibit. The active co-operation of the friends of education in all parts of the State should henceforth be hearty and enthusiastic. From now on there should be no holding back.

Additional suggestions and directions will be published, if deemed necessary; but it is believed that all further needful information can be given by personal communication, or, where possible, by personal visitation. Correspondence is invited.

Additional copies of this circular may be had on application. Valuable assistance has been received in the preparation of it from similar circulars of other states, particularly those of Massachusetts, Rhode Island and Kansas. Yours cordially,

NATHAN B. COY,

Chief, Educational Department.

Denver, December 1, 1892.

CIRCULAR NO. 7.

DEPARTMENT E.

EDUCATIONAL DEPARTMENT.

*To those preparing work for Colorado's Educational Exhibit at the
Columbian Exposition:*

The official announcement has recently come from Chicago of the allotment of 1,600 square feet of floor space, in the gallery of the main building, for Colorado's Educational Exhibit.

Considering our school population and the State's age, the allotment is a generous recognition of Colorado's rank in education. The space assigned represents nearly 2 per cent. of the entire space set apart for the educational exhibits of all the states, exclusive of Catholic institutions.

It is hoped that this announcement will lead all those schools and institutions which have begun or planned contributions to push the work vigorously to speedy completion. It is requested that where it

has not already been done, information should be at once forwarded to the undersigned, stating just what will be contributed, the form in which it will be presented (whether chart, map or book form, etc.), what kind of space it will occupy (whether wall, table or shelf), and the area of such space. Where such particulars have been given, but plans have since been changed, those changes should be reported. For this purpose, accompanying this circular will be forwarded, to such as have already submitted application for space, a copy of the same. This information should be received not later than January 15.

Exhibits may be forwarded to Denver at any time. Delivery in Denver should not be later than February 10, unless by special arrangement with the undersigned.

It is now planned to have a display in Denver, the second week in February, of different lines of exhibit before shipment to Chicago; and a special desire has been expressed that as much as possible of the Educational Exhibit be shown at that time.

When ready for shipment please notify undersigned, and receive shipping tag specially prepared for the purpose. The entire expense of transportation and installment at Chicago will be met by the State.

Unless special request to the contrary is made, everything exhibited will become the property of the State of Colorado.

Papers must be sent in flat, not rolled or folded; either bound in volumes, or pasted upon cardboard, or in packages or envelopes. Alcoholic glue is recommended for pasting.

For binding, black is recommended, with gilt lettering.

Boxes for minerals, insects, etc., should be of one of the following sizes: 12x12, 12x18, 12x24 inches, with glass covers, and partitions.

All materials, packages, etc., intended for exhibit, should be carefully boxed and plainly labeled, with the name of the county, city or district, and school or institution.

Rural schools should report through the county superintendents; city schools through city superintendents. Private schools and educational institutions may report directly to the undersigned.

The announcement is here made of the transfer of the photographic work to Mr. Freeman, representing the Foreman Photographic Co., of Denver. Satisfactory work is guaranteed, under similar conditions to those made with the former photographer. Photographs for the State historical display should be unmounted, which means *not* pasted on cardboard, but merely the albumen paper rolled on a pencil or similarly shaped stick, to be afterwards grouped on cardboard.

NATHAN B. COY,
Chief, Educational Department.

Denver, January 5, 1893.

National Columbian Public School Celebration.

PROCLAMATION BY THE GOVERNOR.

STATE OF COLORADO,
EXECUTIVE DEPARTMENT. }
DENVER, COLO., Sept. 16, 1892. }

The attention of the people of the State of Colorado is called to the four hundredth anniversary of the discovery of America, which is to be celebrated in Chicago on Friday, October 21, 1892, by imposing ceremonies in connection with the dedication of the World's Columbian Exposition buildings.

At the instance of a committee representing the public schools of the United States, the President, in accordance with the joint resolution of the Senate and House of Representatives, has proclaimed the day a general holiday, and has recommended that the public schools of the land be everywhere the center of that celebration ;

Now therefore, I, John L. Routt, Governor of the State of Colorado, in accordance with the said resolution and proclamation, do recommend and request that the people of our State observe October 21, 1892, as a general holiday, and that there be held in all the schools of the State exercises that will fittingly impress upon the youthful minds America's real progress, and the conditions of her future greatness.

In testimony whereof, I have hereunto set my hand, and caused the great seal of the State to be affixed, this sixteenth day of September, in the year of our Lord one thousand eight hundred ninety-two.

By the Governor:

E. J. EATON,

Secretary of State.

JOHN L. ROUTT.

MESSAGE OF THE STATE SUPERINTENDENT.

STATE OF COLORADO,
DEPARTMENT OF PUBLIC INSTRUCTION. }

To the Teachers, Pupils, Officers and Patrons of the Public Schools of Colorado:

GREETING:—The approaching four hundredth anniversary of the discovery of America by Columbus, to be observed in connection with the Dedication of the World's Columbian Exposition Buildings at Chicago, is an event of no ordinary meaning. Unparalleled thus far in the world's history, it cannot be repeated for at least a century to come. Its significance should therefore be thoroughly considered.

The prominence given to the public schools in this national celebration attests the universal recognition given to free education in the development of America's prosperity and progress. Appreciation of this recognition should find expression in a hearty reciprocation on the part of the schools. Superintendents, teachers, school boards and pupils should gladly respond to the recommendations and requests of the President and Governor in their respective proclamations, by co-operating to make the day memorable for joyful and impressive patriotic demonstration.

The day is to be a holiday in no ordinary sense, but for a special, exalted purpose, which every true American will not only conscientiously respect, but proudly glory in. No school in Colorado should fail to observe it. In some localities it may seem best that several schools should gather at a central point for a joint celebration. When a school is not regularly in session (at this time of the year) provision should be made to have the pupils of such school participate in the exercises to be held in a neighboring district where the school is in session.

Every school house in Colorado should fly the stars and stripes on this memorable day. An Act of the Eighth General Assembly, approved March 26, 1891, authorizes school directors to purchase and display United States flags upon school buildings. Not only every school, but societies, corporations, and every American home that can, should display the national emblem on this occasion. For suggestions as to obtaining flags at the lowest prices, correspondence is invited by Chairman Francis Bellamy, *Youth's Companion*, Boston, Mass. It would be well if there could be two flags at the place of celebration; one to raise and salute without, the other to unfurl and salute within, the school room.

Subjoined is the "Official Programme" (in outline) prepared by the National Executive Committee, with a view to giving unity to the

school celebrations throughout the states. It is simple and plain ; easily within the capacity of the humblest school in America. If nothing be added beyond a few speeches, and some familiar national songs, the ceremonies will be impressive and worthy of the occasion. The programme may however be varied according to the facilities, taste and ingenuity afforded by particular localities.

A pleasing prelude to the official programme, where practicable, as in cities and towns, would be a jubilee of ringing of bells, (church, municipal and school), with artillery salute, and martial music accompaniment ; this to continue during the ceremony of raising and saluting the flag. It would awaken enthusiasm and attract the people to the place of celebration. Special pains should be taken to inform the people in the rural districts of the time and place of holding the exercises, in order that there may be a full and prompt attendance.

A successful celebration implies no little forethought and preparation. To this end a committee of arrangements should be at once formed to direct and push the movement in each locality. The leading member of such committee will usually be the local school superintendent or principal ; and his most helpful assistant will be the Department Commander of the G. A. R., when accessible. Through general orders issued by Commander-in-Chief Palmer, the G. A. R. organizations are "everywhere linking themselves to the schools" for this grand celebration. To use the words of Chairman Bellamy, "they are scheduled to be the special patrons of the celebration in every locality. Get them once started on the subject and they will make it go everywhere." Their assistance will be valuable in securing flags and in directing the ceremony of raising and saluting the flags, for which special drill will be desirable, if not essential. Similar assistance will, doubtless, be cheerfully given by the P. O. S. of A., whose interest in the public schools of America is hearty and genuine. The co-operation of all local, civic and military organizations should be sought.

The complete "Official Programme outfit," consisting of the programme itself, a supplement containing the address and ode, and the circular, "How to observe Columbus Day," will be forwarded to county superintendents in sufficient numbers to supply every school in the State with a copy.

The official badge, a fac-simile of which appears on the first page of this circular, may be had by addressing "The United States Public Service Company, 260 Clark street, Chicago." It will serve as a pleasing souvenir of the occasion.

Photographs of exercises and scenes, particularly of those pertaining to the flag, processions, etc., will make an interesting feature of Colorado's Educational Exhibit for the Chicago World's Fair.

In the addresses of citizens, facts of local historical interest may profitably be dwelt upon:

It is suggested that every child in the public schools become familiar with the words of our national song, "America."

It will be well for teachers to explain to pupils the reason for the change from October 12 to October 21, through the substitution in 1582 of the Gregorian for the Julian calendar.

"Our fathers in their wisdom knew that the foundations of liberty, fraternity and equality must be universal enlightenment. The free school, therefore, was conceived the corner-stone of the Republic, and on this anniversary it stands forth as the noblest expression of the principle of enlightenment which Columbus grasped by faith."

To County Superintendents:

You are requested to assist in the National Columbian Public School Celebration by distributing to the teachers under your charge this and all other circulars of the kind intended for their benefit. Their interest should be aroused, and efforts put forth by them to persuade patrons of the schools and all other persons to turn aside for the time from their customary labors, and unite in a general and worthy observance of this grand national holiday. Let their influence and yours be exerted to secure the suspension of business, the closing of places of public amusement and the laying aside of all games and sports during that part of the day devoted to the formal celebration. Much can be done through your wise direction and suggestion.

The local press will be found a willing and most valuable agency for awakening public interest in the enterprise.

It is the intention to forward, later, blanks for reporting to the State Department the exercises of each school. It is hoped that not a district will fail to be represented in these reports.

Assured in advance of your cordial support and co-operation,
sincerely yours,

NATHAN B. COV,
State Superintendent.

Denver, September 16, 1892.

OFFICIAL PROGRAMME.

1. Reading of the President's proclamation, by the master of ceremonies.
2. Raising the flag, by the veterans.
3. Salute to the flag, by the pupils.
4. Acknowledgment of God. Prayer or Scripture.
5. Song of Columbus Day, by pupils and audience.
6. The address, "The Meaning of the Four Centuries."
7. The ode, "Columbia's Banner."

Here should follow whatever additional exercises, patriotic recitations, historic representations, or chorals may be desired.

8. Addresses by citizens, national songs, etc.

PROCLAMATION OF THE PRESIDENT OF THE UNITED STATES.

Whereas, by a joint resolution, approved June 29, 1892, it was resolved by the Senate and House of Representatives of the United States of America, in Congress assembled :

That the President of the United States be authorized and directed to issue a proclamation recommending to the people the observance in all their localities of the 400th anniversary of the discovery of America, on October 21, 1892, by public demonstrations, and by suitable exercises in their schools and other places of assembly;

Now therefore, I, Benjamin Harrison, President of the United States of America, in pursuance of the aforesaid joint resolution, do hereby appoint Friday, October 21, 1892, the 400th anniversary of the discovery of America by Columbus, as a general holiday for the people of the United States. On that day let the people, so far as possible, cease from toil and devote themselves to such exercises as may best express honor to the discoverer, and their appreciation of the great achievements of the four completed centuries of American life

Columbus stood in his age as the pioneer of progress and enlightenment. The system of universal education is in our age the most prominent and salutary feature of the spirit of enlightenment, and it is peculiarly appropriate that the schools be made by the people the

center of the day's demonstration. Let the national flag float over every schoolhouse in the country, and the exercises be such as will impress upon our youth the patriotic duties of American citizenship. In the churches and in the other places of assembly of the people, let there be expressions of gratitude to Divine Providence for the devout faith of the discoverer, and for the divine care and guidance which has directed our history and so abundantly blessed our people.

BENJAMIN HARRISON.

By the President :

JOHN W. FOSTER,
Secretary of State.

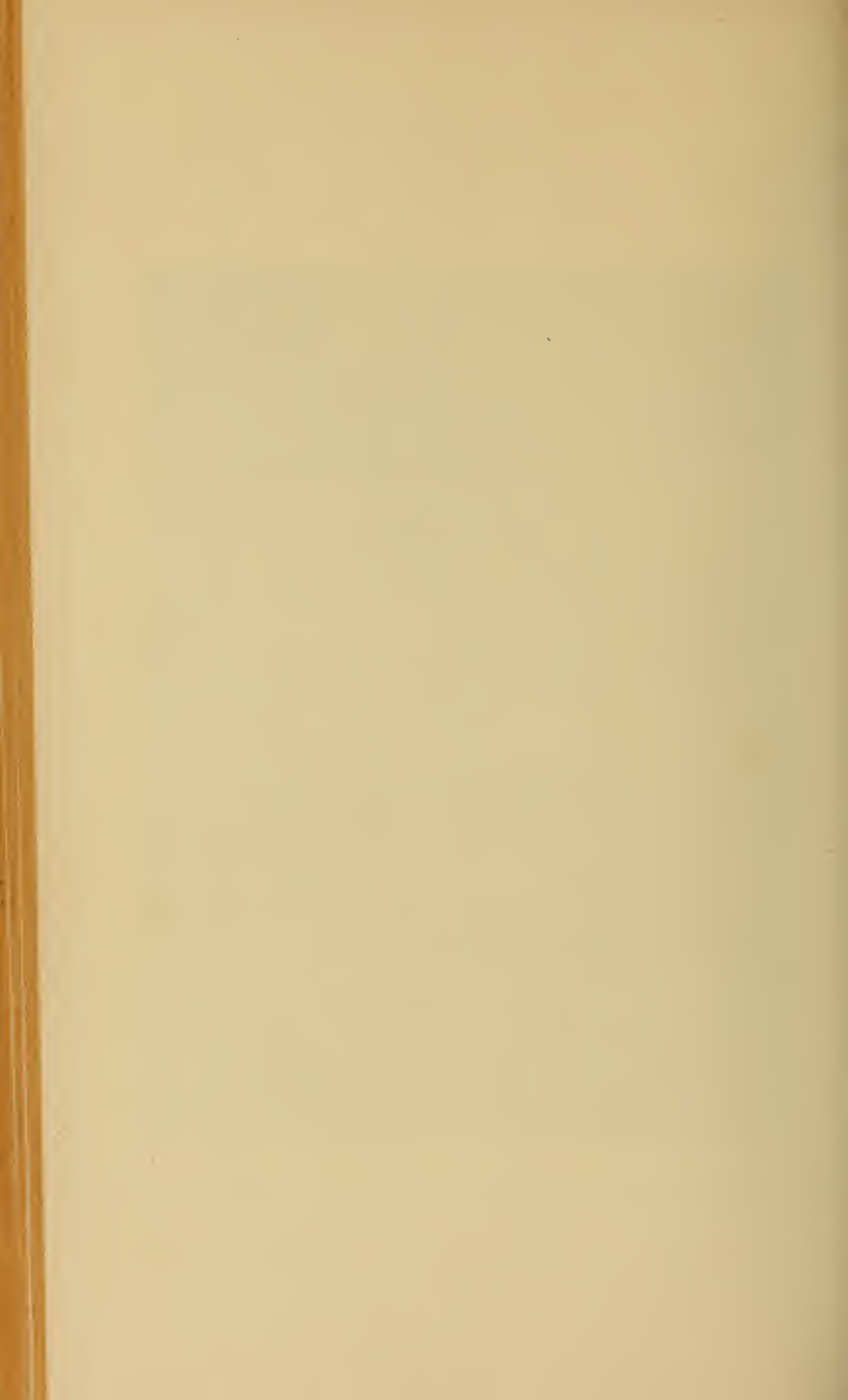
COUNTY SUPERINTENDENTS' REPORT OF NATIONAL COLUMBIAN PUBLIC
SCHOOL CELEBRATION.

COUNTIES.	TOTAL NUMBER OF SCHOOLS IN COUNTY.	NUMBER OF SCHOOLS IN SESSION DURING THE WEEK ENDING OCTOBER 21, 1892.	NUMBER OF SCHOOLS THAT CELEBRATED COLUMBIAN DAY.	NUMBER OF SCHOOLS THAT CARRIED OUT NATIONAL PROGRAMME.	NUMBER OF PUPILS ENROLLED IN THE SCHOOLS OF THE COUNTY.	NUMBER OF PUPILS IN ATTENDANCE IN OCTOBER 21, 1892.	NUMBER OF SCHOOL DIRECTORS IN ATTENDANCE.	NUMBER OF OTHER VISITORS.
Arapahoe	404	370	357	354	17,072	15,488	34	6,719
Archuleta	6	5	3	2	131	61	4	56
Baca	31	11	5	5	422	50	2	68
Bent	---	---	---	---	---	---	---	---
Boulder	54	51	24	20	2,221	2,030	37	1,402
Chaffee	27	18	8	7	1,200	1,011	11	1,053
Cheyenne	7	4	1	1	58	40	1	50
Clear Creek	13	10	8	8	1,103	1,053	10	450
Conejos	---	---	---	---	---	---	---	---
Costilla	---	---	---	---	---	---	---	---
Custer	23	6	6	6	920	250	12	300
Delta	19	17	15	15	454	365	15	175



AGELAND HIGH SCHOOL DENVER, COLORADO

DENVER HIGH SCHOOL, DISTRICT NO. 47.



Dolores	2	2	2	163	161	1	114
Douglas	28	18	16	378	355	27	200
Eagle							
Elbert	22	18	3	400	321	5	148
El Paso	71	53	45	3,530	3,168	25	1,500
Fremont	26	23	20	1,523	1,447	18	1,025
Garfield							
Gilpin	11	4	3	697	664	8	295
Grand							
Gunnison	27	11	5	752	480	*	*
Hinsdale	4	*	2	293	250	4	95
Huerfano							
Jefferson	43	35	30	1,650	1,500	75	1,200
Kiowa	21	16	8	178	57	7	45
Kit Carson	42	34	28	500	300	11	400
Lake							
La Plata	25	17	14	700	655	7	508
Larimer	61	*	32	1,892	1,460	*	1,444
Las Animas	56	28	13	1,900	1,810	20	2,034
Lincoln	10	8	5	120	52	2	60
Logan							
Mesa	20	16	14	813	381	21	502

Exhibit XII.

State Teachers Association, 1891.

SEVENTEENTH ANNUAL SESSION, DENVER, DECEMBER 29, 30, 31.

- I. Officers. Programme.
 - II. Minutes and Report.
-

1892.

EIGHTEENTH ANNUAL SESSION, DENVER, DECEMBER 28, 29, 30.

- I. Officers. Programme.
- II. Outline of Transactions.
- III. Addresses, Lectures, Papers and Discussions.
- IV. List of Members as Reported by the Treasurer
December, 1892.

Colorado State Teachers' Association.

SEVENTEENTH ANNUAL SESSION.

OFFICERS GENERAL ASSOCIATION.

President, W. E. Knapp, Denver.

Secretary, Mrs. Flora E. Haffy, Del Norte.

Treasurer, Hon. Jos. C. Shattuck, Denver.

Executive Committee, S. T. Hamilton, Fort Collins; I. M. DeLong, Boulder; J. H. Van Sickle, Denver.

COLLEGE AND HIGH SCHOOL SECTION.

President, A. B. Copeland, Greeley.

Executive Committee, H. A. Howe, Denver; G. B. Turnbull, Colorado Springs; C. M. Kingsley, Boulder.

PROGRAMME.

TUESDAY, DECEMBER 29—AFTERNOON.

Prayer.

Music.

1. Address, by the President of the Association, W. E. Knapp, Principal Franklin School, Denver.

2. Paper, "The Present Status of Spelling," W. F. Bybee, Assistant Superintendent, Greeley.

Discussion led by L. P. Norvell, Principal Washington School, Denver.

3. Paper, "A Graded Course of Instruction for Normal Institutes," Edgar L. Hewett, Principal, Florence.

Discussion led by D. S. Harris, Superintendent, Kit Carson County.

EVENING—DECEMBER 29.

Music.

1. Address, by C. W. Bardeen, Editor *School Bulletin*, Syracuse, N. Y.

Report of Columbian Exposition Committee on Educational Exhibit.

Music.

Announcement of Committees.

Social.

WEDNESDAY, DECEMBER 30—MORNING—COLLEGE AND HIGH SCHOOL SECTION.

1. President's Address, by A. B. Copeland, Superintendent of Schools, Greeley.

2. "University Extension," by Wm. F. Slocum, Jr., President Colorado College, Colorado Springs.

3. "Science in the High School," by Chas. S. Palmer, Professor of Chemistry, State University, Boulder.

Recess of ten minutes.

Report of Committee on Uniform High School Courses.

Discussion of preceding report.

AFTERNOON—DECEMBER 30.

Music.

1. Paper, "Should the Quarterly Examination Include More Subjects than the Candidate is Expected to Teach?" Mrs. L. M. Smith, Principal, Berthoud.

Discussion led by W. H. Hoff, Principal, Crested Butte.

2. Address, "The Function of the Public School," Z. X. Snyder, Ph. D., President State Normal School, Greeley.

3. Paper, "The Utility of Drawing in the Public Schools," Frank H. Collins, Supervisor of Drawing, District No. 1, Denver.

The discussion led by Mrs. C. B. Timberlake, Holyoke; Mrs. S. Maxson Cobb, Boulder.

No provision has been made for Wednesday evening.

THURSDAY, DECEMBER 31—MORNING.

Music.

1. Paper, "Civics in the Public Schools," D. R. Hatch, Superintendent State Industrial School, Golden.

Discussion led by Superintendent P. M. Condit, Delta County.

Report of Nominating Committee.

2. Paper, "The Public School Library," J. C. Dana, Librarian, Public Library, Denver.

3. Paper, "Does Experience Show that Kindergarten Pupils have any Material Advantage When They Reach the Higher Grades?" C. V. Parker, Superintendent, Fort Collins.

Discussion led by Mrs. John H. Denison, Montclair; Miss Carrie Leach, Arapahoe Country.

AFTERNOON—DECEMBER 31.

Music.

1. Paper, "The School and the Home."

(a) Responsibility of the Teacher to the Home, Miss Lillian Pike, University Park.

(b) Responsibility of Parents to the School, Judge W. C. Kingsley, Denver.

Reports of Committees.

Miscellaneous Business.

2. Paper, "Can we Shorten and Enrich the Course of Study in our Public Schools?" G. B. Turnbull, Principal High School, Colorado Springs.

Discussion led by J. M. Dickey, Principal Garfield School, Colorado Springs.

3. Paper, "Is the System of Special Teaching in Vogue in Colleges and High Schools also Applicable to Grammar and Primary Schools?" G. L. Harding, Superintendent, Longmont.

Discussion led by Principal T. O. Baker, Durango.

MINUTES AND REPORT.

The Association met in the assembly room of the High School building, District No. 1, Denver, Colorado, Tuesday, December 29, at 2 p. m. The meeting was called to order by the president, W. E. Knapp, principal of Franklin school, West Denver. About 500 persons were present at the first session.

The regular secretary being absent, J. P. Jackson, superintendent of El Paso county, was appointed secretary, pro tem, and continued to act through the session.

The president then referred in feeling terms to the death of Professor Webb, of Boulder, during the last year, and to the death of Professor E. L. Byington, who has been in attendance at the Association for many years, and who now lies cold in death in this city.

He stated that the funeral services would take place at 2 p. m., on Wednesday, and recommended that the Association take appropriate action in regard to the matter.

The Rev. Frank T. Bayley, of the Park Avenue Congregational church, Denver, then offered prayer.

Pupils from North Denver Schools sang a song in an artistic manner with which the audience was well pleased.

President Knapp then delivered his address, which was full of encouragement and thoughtful reflections to the teachers of the State.

He complimented the teachers upon the auspicious opening of the 17th annual session of the Association.

The speaker rehearsed briefly the history of the Association from its inception; sixteen years ago yesterday the Association was organized. The speaker paid a glowing tribute to ex-President Hale, of the State University, who was the leader of education in the State and who had been a teacher at \$14 a month, State Superintendent, president of University, and through all the ranks of the profession. He was the Moses of our education. A humorous reference to Hon. Joseph C. Shattuck as the man who has annually taken in the shekels for the Association, brought out the smiles of the good-natured audience.

Among the originators of the Association were such men as H. M. Hale, Joseph C. Shattuck, Aaron Gove, J. H. Baker and David Boyd, who are all still with us.

Every recommendation of the first annual meeting of the Association was adopted by the constitutional convention of Colorado, and throughout all the years the Association has done much to shape legislation and to crystalize our system of education.

As evidence of the increasing tendency to recognize the profession of teaching was cited the fact that the 300th anniversary of the birth of Comenius is to be celebrated both in Germany and in this country.

As evidence of progress in this State was cited our State Normal School and the auspicious outlook of other State educational institutions.

The speaker then took the Rev. Dean Hart to task for his article in criticism upon our system of public schools. He thanked the press and more especially the *Denver Times* and *Rocky Mountain News*, for the manner in which they answered these criticisms and championed the public schools. The kindergarten received favorable mention as one of the progressive questions of the day.

He emphasized character as more than all else in education. The speaker closed with a round of eloquence in reference to the future success of the Association and the bright outlook for education in the Centennial State, which was greeted with a burst of applause from the audience.

On motion of Superintendent A. B. Copeland, of Greeley, the Association passed the following resolution :

"That out of respect to the memory of Professor E. L. Byington, the Association adjourn on Wednesday afternoon till 3 o'clock, to give opportunity to attend the funeral services, and that a committee of five be appointed by the chair to draft resolutions of respect."

The chair appointed as such committee Superintendent A. B. Copeland, of Greeley; Principal A. C. Courtney, Denver; Miss Emily Heywood, North Denver High School; Superintendent W. V. Casey, Boulder county; Mrs. E. K. La Barthe, principal Tiller school, Colorado Springs.

W. F. Bybee, assistant superintendent, Greeley, read a paper on the present status of spelling.

The writer had carried on an extensive correspondence to find the present status throughout the country.

Most Colorado schools teach spelling as a separate branch, from the fourth to the eighth grades, inclusive. In other states, the

answers vary from none to the full eight years' course of the common school. Nearly all Colorado superintendents think both oral and written methods should be used.

As to the cause of defective spelling, the answers vary from "lack of time given the subject" to "poor teachers."

The speaker followed with a discussion of phonetic spelling, and evinced thorough preparation and a broad view of the subject.

The discussion was opened by Principal L. P. Norvell, of Washington school, Denver. He emphasized the point that every lesson should be an exercise in spelling.

Superintendent Baker, of Durango, followed in a short speech.

Principal R. H. Beggs, of Denver, thinks too much stress is put upon spelling, more than it is worth, and that it should not be considered a crime to misspell a word. He stated that when a boy he learned long lists of words, some of which he has never had occasion to use in a life time of forty years.

Superintendent Copeland, of Greeley, considers it a difficult subject to teach, but would insist upon pupils making good spelling a habit. He defended the importance of good spelling as a matter of culture.

Mr. Van De Mann, of Denver, would spell the difficult words pertaining to each subject taught, as in arithmetic, geography, etc. It is easy for some to spell, hard for others. Put stress upon the hard subject. Believes in oral and written methods both, and in keeping up the standard on spelling.

Mr. Gordon took the bold position that the ability to spell is of no essential aid to a man in any calling except that of teacher, and that it cultivates no essential faculty of the mind.

Mrs. E. K. La Barthe, principal Tiller school, Colorado Springs, defended good spelling.

Principal Hermans, West Denver High School, claims there is a culture in spelling. A proof reader's power of observation is sharply developed. A good speller should know when he does not know how to spell a word and should refer to the dictionary.

Mrs. C. B. Timberlake, of Holyoke, made some very witty remarks illustrating the value of good spelling, that brought down the house. She believes in good spelling and thinks it cultivates the faculties of memory and observation.⁶

Principal L. B. Grafton, of Manitou, said one class needs oral spelling to cultivate the ear, the other class writing to cultivate the eye.

On motion of Superintendent Eddingfield, of Aspen, the discussion on this subject was closed. The discussion of the subject was spirited and interesting throughout.

A recess of five minutes was then taken.

After calling to order again President Knapp announced the death of Principal George Suckling, of Georgetown, during the past year.

Principal Edgar L. Hewett, of Florence, read a thoughtful and ably prepared paper on the subject, "A Graded Course of Instruction for Normal Institutes." The following is the summary of his conclusions on the subject :

1. Establish a State System of Normal Graded Institutes auxiliary to the State Normal School.
2. Let a four years' course of instruction be prepared by a committee which shall be composed of the State Superintendent of Public Instruction, the president of the State Normal School, two members of the State Association of County Superintendents, and two members of the State Teachers' Association.
3. Let the course of instruction bear upon the work which should be done in the public schools below the High School ; the first three years to be academic and professional, the fourth entirely professional ; each grade being supplemented by a course of required reading. At each annual session, let the work for the succeeding year be specifically outlined and the teachers be required to prepare it by home study during the year.
4. For the purpose of securing uniformity of work and continuous improvements as to plans and methods, require all persons who instruct in the Institutes to convene for two weeks annually, prior to the opening of the Institute sessions, in a State Training School. Let said Training School be held under the authority and direction of the State Superintendent of Public Instruction. Let the State Board of Education appoint, annually, a corps of distinguished educators (of which the president of the State Normal School shall be principal), to instruct in said Training School. Let these educators, together with the State Superintendent, be empowered to license Institute conductors and instructors. Let the expense of holding said Training School be paid by annual fee of \$5 from each person in attendance.
5. Hold annual sessions of the Institute in every county capable of supporting one. Let all other counties be combined into districts by the State Superintendent.
6. Let the Institute expenses be paid out of an Institute fund, constituted as at present, with the addition of an examination fee of \$1

paid by every applicant for a certificate, and an additional allowance of \$100 from the State to each Institute.

7. Let the supervision of the Institute, the arrangement of the time and place of meeting, the control of the Institute fund, the appointment of conductors and instructors, remain with the county superintendents.

8. Let graduates of the Normal Institutes be granted Normal diplomas, which shall entitle them to first grade certificates in any county in the State, and to pass without examination on the branches covered by said diplomas if they apply for State certificates. Let these diplomas be furnished by the State, and signed by the State Superintendent of Public Instruction and the conductor of the Institute.

Superintendent D. S. Harris, of Kit Carson county, led in the discussion. In a short and crisp speech, he emphasized the plan of a graded course. Owing to the lateness of the hour, further discussion of this subject was not continued.

The Association then adjourned till 7:45 P. M.

EVENING SESSION OF FIRST DAY

The evening session opened with instrumental music by the Juanita Mandolin Club. The music was so entertaining that the club was encored and treated the audience to another selection.

Professor Knapp, in a neat little speech, full of complimentary terms to the speaker, introduced Mr. C. W. Bardeen, of Syracuse, editor New York *School Bulletin*, who delivered the address of the evening on subject: "Fitness of Teachers." The address was quite entertaining. The following is but a fragmentary outline of it:

One whose moral character has been called into question should be forever relegated from the profession of teachers.

Sentimental teachers not wanted.

Let the liar severely alone.

Under-bidders should not be encouraged.

Teachers should not strive for perquisites, and should remain in one place long enough to see the results of their work.

The teacher who pays cash stands on a firmer basis.

Gentleness is one of the qualities of a teacher and good manners should be cultivated.

The teacher should study his pupil. This is a test of professional work.

Next to good manners is good health. A teacher should not be excluded for homeliness of features.

Cultivate social qualities and leave the school when you shut the door behind you.

The speaker proceeded with a somewhat humorous discussion of the question of the old maid in the school, and decides she is not wanted in the school room. But by the term he does not mean simply old in years or dried up in features, but those cranky in mind with dried up affections and intellect.

The teacher is for the school, not the school for the teacher.

Humor is a good quality and teachers should appreciate the comicalities of the school room and school boys. Among other illustrations of the humorous he cited the case of the boy who on returning home late in the evening explained to his mother that his teacher encored him on his geography recitation.

Honestness was emphasized as an element of success.

The song then given by the female quartette was so pleasing to the audience that the ladies were encored a second time and sang three different songs.

On motion the resolution to adjourn to-morrow afternoon was reconsidered, as it was learned that simply sending a committee to attend the funeral would be more satisfactory to the friends of the deceased.

On motion the following committee was appointed by the chairman to attend the funeral of Professor Byington :

Superintendent A. B. Copeland, Greeley; Principal A. C. Courtney, Denver; Professor I. C. Dennett, State University; Mrs. E. K. La Barthe, Colorado Springs; Professor Ira M. DeLong, State University; Superintendent S. T. Hamilton, Larimer County; Superintendent P. M. Condit, Colorado City; President Wm. F. Slocum, Colorado College; Mrs. M. A. Smith, Aspen; Superintendent W. T. Eddingfield, Aspen; Miss Frankie Nichols, Boulder; Miss E. J. Norton, Colorado Springs; W. E. Knapp, Denver.

Adjourned till Wednesday, 9 a. m.

The forenoon session on Wednesday was in charge of College and High School Section, and the minutes were kept by the secretary of that section.

During a part of the time of same meeting the county superintendents of the State held a special session of their association in an adjoining room.

WEDNESDAY AFTERNOON, DECEMBER 30, 1891.

The general Association was continued on Wednesday at 2 p. m. with President Knapp in the chair. The president announced committees as follows:

ON RESOLUTIONS.

Superintendent A. B. Copeland, Greeley; Superintendent L. C. Greenlee, West Denver; Principal L. B. Grafton, Manitou; Miss M. S. Sabin, Denver; Miss Fonetta Flausberg, Colorado Springs.

SCHOOL LAW.

Superintendent A. D. Shepard, Arapahoe county; President Z. X. Snyder, Normal School; N. B. Coy, State superintendent; J. P. Jackson, superintendent elect, El Paso county; President James H. Baker, State University.

FINANCE.

Superintendent W. T. Eddingfield, Aspen; Miss Emma E. Maxwell, Miss Alice Chase, Principal G. W. Wyatt, West Denver; Principal W. W. Remington, Boulder.

COLUMBIAN EXPOSITION.

Superintendent Aaron Gove, Denver; President William F. Slocum, Jr., Colorado Springs.

ADVISORY BOARD ON EXPOSITION.

Professor I. M. De Long, Boulder; Superintendent Eddingfield, Aspen; Superintendent E. C. Stephens, Trinidad.

NOMINATIONS.

Superintendent C. V. Parker, Fort Collins; Superintendent J. S. Eagleton, Jefferson county; Mrs. Frona Houghan, principal Gilpin School, Denver; Miss Isabel Holloway, High School, Aspen; Superintendent P. M. Condit, Delta county; Superintendent D. S. Harris, Kit Carson county; Superintendent J. S. McClung, North Pueblo; Mrs. C. B. Timberlake, Holyoke; Superintendent T. O. Baker, Durango; Superintendent J. A. Condit, Chaffee county; Miss Lillian Pike, Summit county; Principal D. E. Stephenson, Fairplay; Principal G. W. Reed, Del Norte.

The regular programme was deferred for a short time, and exercises of a memorial nature occupied the hour.

Miss Winnie Phillips, of Denver, accompanied by Miss Helen Given, on the piano, sang a beautiful solo.

Superintendent P. W. Search, of Pueblo, Superintendent J. P. Jackson, of Colorado City, ex-State Superintendent Shattuck and State Superintendent Coy paid tributes to the memory of E. L. Byington, who was five years superintendent of Colorado Springs schools, one year of Boulder and one year of Fort Collins schools, and an active member of the Association during these years.

Superintendent W. V. Casey, of Boulder county, paid tribute to Professor Webb, of Boulder, and to Professor Byington, having been in school work under supervision of both gentlemen.

Superintendent Copeland called a meeting of the City Superintendents' Round Table in room No. 1, immediately upon the close of this session.

A well-prepared paper was read by Mrs. L. M. Smith, principal of Berthoud, on the subject, "Should the Quarterly Examinations Include More Subjects Than the Candidate is Expected to Teach?" She argued in a forcible manner that a teacher should have breadth and culture, and held that our present system does not require too much. If her knowledge of subjects is limited the teacher will be mechanical.

A song was then rendered by pupils from Boulevard school of North Denver, to the delight of the audience.

Principal W. H. Hoff, of Crested Butte, then opened the discussion upon the paper. He diverted somewhat from the question and created somewhat of a sensation by scoring the methods of examining boards in general, and criticised our county superintendents in special terms. He demanded that the county superintendency be taken from politics and the officer elected at the annual school election in May; on his merits as a teacher, not that of a politician; stated that a teacher does not pass upon the qualifications of a lawyer and thinks lawyers and doctors not suitable persons to pass upon qualifications of the teacher; thinks county superintendents should possess a first grade certificate and have had three years' experience in the school room.

Superintendent A. D. Shepard followed, advocating the present law in regard to the subjects for examination. He then gave samples of answers given by teachers in the examinations, which provoked much laughter on the part of the audience.

Superintendent Greenlee, of West Denver, would not make education the only test. But a teacher must have the necessary education.

Superintendent N. B. Coy thought a teacher who could not pass questions suitable for pupils in seventh and eighth grades in our public schools should not be labeled a teacher.

Principal L. B. Grafton, of Manitou, said three things should be considered in a teacher: education, hard common sense and ability to teach.

Superintendent Baker, of Durango, Superintendent P. M. Condit, of Colorado City, and Principal Wyatt, of Fairmont School, Denver, also took part in the above discussion, which was a lively one, and had to be closed by a motion for lack of time.

The following telegram was received: "One thousand Nebraska teachers in session send greetings to their Colorado co-laborers"

On motion the president was instructed to answer, and returned the compliment 600 strong.

On motion of Superintendent Baker, of Durango, Professor Sherwood was invited to give a piano recital this evening at 8 o'clock.

On motion Dr. Snyder's address was postponed till the evening session.

Superintendent S. T. Hamilton, of Larimer county, on behalf of the Executive Committee, proposed the following amendments to the constitution. They were adopted by a three-fourths majority, there being but two opposing votes:

ARTICLE III. The officers of this Association shall consist of a president, a vice-president, secretary, an assistant secretary, a treasurer, and an executive committee of three elective members, the president and secretary being *ex officio* members of the committee.

The president, vice-president and treasurer shall be elected for one year.

The secretary shall be elected for three years, and shall receive fifteen dollars (\$15.00) per annum, said sum to be paid on approval of the minutes.

The assistant secretary shall be appointed annually by the president of the Association prior to the opening of the session. It shall be his duty to report discussions.

At the regular election in 1891 there shall be elected one member of the executive committee for three years, one member for two years, and one member for one year, and annually thereafter there shall be elected for three years a person to fill the vacancy occurring.

AMENDMENT TO THE BY-LAWS.

Resolved, That the Nominating Committee be one from each Institute district represented in the Association.

On motion, a committee of three was appointed to revise the constitution and by-laws of the Association, with a view to their adop-

tion at the regular session held in 1892, with instruction to publish their report in the July number of the *Colorado School Journal*.

The chairman appointed as such committee, Professor Ira M. De Long, Boulder; County Superintendent S. T. Hamilton, Fort Collins; Hon. Joseph C. Shattuck, Denver.

Frank H. Collins, supervisor of drawing, District No. 1, Denver, was absent from the city, but J. C. Dana, of Denver, read the paper prepared by Mr. Collins on "The Utility of Drawing in the Public Schools." It was a thoughtful, well prepared paper. The writer was strongly of the opinion that art should be given a place in the public schools, and thought the chief attention should be given in the grades below the high school.

Mrs. C. B. Timberlake, of Holyoke, and Mrs. S. Maxon Cobb, of Boulder, were the leaders in the discussion. The latter was very enthusiastic for drawing. When she came here she was surprised to see our State so far advanced in most lines of education, and as much surprised to find it so backward in the line of drawing. She deplored its absence from the Boulder course of study and from the State Normal School, stating, however, that President Snyder, of the Normal, had assured her that it should soon be taught there, if he had to teach it himself.

Professor Carter, supervisor of drawing in West and North Denver, followed in the discussion with an interesting speech, as did also Professor Reed, instructor of drawing in Wolfe Hall.

Owing to the lateness of the hour, the discussion was closed, and the Association adjourned till 8 p. m.

EVENING—WEDNESDAY, DECEMBER 30.

The meeting was called to order at 8:15 P. M. A large audience was present.

A vote of thanks from Mrs. E. L. Byington, for respect shown her deceased husband, was read by the president.

Professor Wm. Sherwood, of Chicago, then entertained the audience with a piano recital for an hour, playing a number of pieces from the great composers. His playing was magnificent. At the close, a unanimous vote of thanks was tendered him by a rising vote of the audience.

Superintendent N. B. Coy gave a report on the Columbian Exposition. President Snyder, of the Normal School, also spoke of the

exposition. They spoke in glowing terms of the educational exhibit they hope to have from Colorado, and presented the plan of making it somewhat in detail, and advocated a classified exhibit.

Dr. Snyder was then introduced for an address, and delivered one of the best, if not the best speech of the whole session, on "The Functions of the Public School." President Snyder, being a new-comer, complimented the Association on the number of teachers present and the interest manifested. He spoke of the meaning of the term to educate. It means more than development. Three things are necessary to education—actualization, development and transformation. The curriculum must be such as to bring these about. Educators differ. Herbert Spencer says science does it. Sir William Hamilton says philosophy is the thing, and so on. Specialists may get so deep as to ignore sides of development an individual should have. The nature of a child is such that nearly all subjects may be taught it. Its soul is touched by nature. There is not a science a little child does not study in its simple phase. One function of the school is to teach the child oral and written speech. He thinks the oral is often neglected.

The three spheres of education are the family, the school and society. The school should reach down into the family, up into society. The kindergarten is the system that reaches down into the family. The speaker then dwelt somewhat upon the kindergarten system and showed himself a staunch advocate of it. God has ordained that a human soul be quickened through the true, the good and the beautiful.

Form is the unit concept of sculpture, color, of painting, and sound, of music. They begin in the kindergarten. We should lift the child up, transform him into humanity, teach him to blend with society, to actualize himself. The speaker was warmly applauded at the close of his address.

On motion of Prof. DeLong, the Committee on Columbian Exposition were instructed to print their report and circulate it over the State.

On further motion the incoming chairman of the Association is authorized to add to the committee as many persons as he sees fit, to aid in the work.

On motion adjourned till Thursday, 9 A. M.

THURSDAY, DECEMBER 31.

The Association was called to order at 9:30 A. M., President Knapp in the chair.

An excellent paper on "Civics in the Public Schools," was read by D. R. Hatch, superintendent State Industrial School, Golden. The study should begin early in the course, said the speaker. Every pupil should commit the whole of the constitution and should learn something of parliamentary law. Considers Fisk's one of the best books on civil government, thinks Thorpe's good and Nordhoff's not far behind. Recommends the Old South Leaflets by D. C. Heath & Co.

Spoke of dangers from the influx of our foreign element unless they are educated in the affairs of our government. Public schools must promote patriotism and ability to grapple with the affairs of state.

P. M. Condit, of Delta, superintendent-elect of Colorado City schools, led in the discussion. He endorsed the paper read. Took the Committee on High School Course to task for omitting this important subject from the courses. Deplored the ignorance of our citizens on governmental questions. Presented a book of newspaper clippings arranged by a high school pupil of Salida and showed that this had proved a great aid in arousing interest and knowledge of government.

Then followed a running discussion on the subject, often several being on their feet at once, trying to get the floor. It proved one of the liveliest discussions of the session. Principal Stephenson, of Fairplay, followed in some well chosen sentences emphasizing the importance of the subject.

Mr. Young said the primary object should be to teach patriotism. Municipal government should be studied. Teach to respect the flag.

Superintendent Woody, of Salida, said if there is one thing that is neglected it is civics. If one thing is needed it is civics. Spoke of newspaper clippings. Conducted an election for speaker in his school.

Principal R. H. Beggs thinks too much attention may be given the subject. Studying the Constitution does not always make you right.

Superintendent Copeland thinks literary societies of great benefit in this line.

Professor I. C. Dennett, of Boulder, does not believe that patriotism can be taught by direct means.

Superintendent J. P. Jackson, of Colorado City, spoke warmly in favor of the study of government, beginning in lower grades with oral lessons, combining with history in grammar grades, and would continue with Macy's "Our Government," or some other good text book, in the high school. Would begin with school district and city government and extend knowledge on up to state and general government.

Claimed for the subject a culture value equal with history and geography, and also a disciplinary value, as it caused thought and reasoning on governmental questions.

Superintendent Eddingfield, of Aspen, said the teacher's heart should be in the work. Spoke warmly of patriotism. Would teach it in connection with history.

Captain Boyd, of Greeley, argued for broader patriotism.

Ladies were called for, and Mrs. Timberlake, of Holyoke, responded to the call. She thought it appropriate for the ladies to take an interest, as "the hand that rocks the cradle rules the world."

Principal Elder, Longfellow School, Denver, opposed teaching patriotism. If right to teach it here it is right to teach it in Russia. Would you like to teach submission to the Czar's will? He would have broader patriotism than that of one's own state or country simply.

Superintendent Thomas, of Greeley, thinks too much attention cannot be given this subject. On motion the discussion was closed.

A motion to set aside a Colorado day for teaching patriotism was laid on the table.

The committee on nominations then reported as follows:

For president, Hon. N. B. Coy, of Denver.

Vice-president, J. P. Jackson, of El Paso county.

Secretary, Mrs. Frona Houghan, principal Gilpin School, Denver.

Treasurer, Hon. Joseph C. Shattuck, Denver.

Executive committee—Superintendent J. S. M. McClung, North Pueblo, for three years; Superintendent J. H. Van Sickle, North Denver, for two years; Superintendent W. C. Thomas, Greeley, for one year.

By unanimous vote the president was instructed to cast the entire ballot of the Association for the names and offices reported. It was so done and the result declared in accord with the report.

J. C. Dana, librarian Public Library, Denver, read a good paper on "The Public School Library." He urged the advantage to the school of a library. Said get books such as will be read, not for ornament. Thinks the tendency is for one to overestimate his vocation, and the teacher is no exception. If schools did all, we might transform African Hottentots into intelligent American citizens by placing county superintendent and little red school houses in the jungles of Africa.

Books are essential tools and a library should be in every school.

Superintendent Gove, who had not been in attendance, owing to slight indisposition of health, arose to speak and was greeted with applause. He considered Mr. Dana the best authority in the State on the subject presented. Likes criticism from the outside. No one assumes to go into a medical convention and criticise the doctors, but anyone can criticise the teachers. One misfortune of our schools is dissipation and lack of concentration.

The public schools are asked to do too much. Sewing, cooking, typewriting, etc., are useful, but the schools cannot do all.

Principal Reed, of Del Norte, thinks no man can be a good citizen who does not read good books. He has been surprised that so few people read good books.

Superintendent C. V. Parker, of Fort Collins, then read a carefully prepared paper on the question, "Does Experience Show that Kindergarten Pupils Have Any Material Advantage When They Reach the Higher Grades?"

The paper stated that Fort Collins had an experience of ten or twelve years in kindergarten schools, it being a part of the public school system. He thought they had better habits of obedience, and more readily recognized the rights of others. The facility with which those pupils acquired the ability to read and write was noticed.

Thought work of next grade lessened about one-third. They have keener perception, observation and expression throughout the higher grades, and take broader views of subjects.

Circulars were addressed over the country to county superintendents. Ninety-four per cent. of those answering, who had tried it, endorsed it. The strongest reasons for it lie along the moral line. The speaker thinks the transition from the home to the school is too abrupt. The kindergarten furnishes an intervening link. Favors its adoption, as soon as finances admit, into city schools for children of five, if not at four years of age, and favors a change of school laws so as to permit it.

Professor Carter endorsed the paper.

Mrs. Van Wagner thinks the kindergarten has not had a fair chance because the higher system is not adapted to receive it. The methods are in contrast.

Principal Courtney, Denver, spoke in favor.

Miss Thompson, of Denver, said there were too many children to one teacher in our schools to enable her to do individual work. Twenty minutes a day for individual work would advance primary pupils six times faster.

Mr. Remington, of Boulder, thought there was no need of further discussion, as all were on the same side.

J. P. Jackson, of El Paso county, did not wish to put himself on record as against the system, but suggested the expense as a practicable obstacle to be considered in making it a part of our public school system, stating that our primary is much the fullest grade at present, and that if pupils are taken at four or five years of age the school machinery must be largely increased in buildings, teachers and apparatus.

Mrs. Senator N. P. Hill suggested to cut the years off the last of the school age rather than at the beginning.

Mrs. Wickham thinks it cheaper to add additional expense to the schools rather than to the expense of maintaining paupers and criminals.

Hon. Joseph C. Shattuck was pleased with the paper and thought kindergartens could no longer be regarded simply as a convenient means for ridding mothers of the care of their children. Referred to the objection raised of the expense. Said we could not then have overcrowded rooms and it would add greatly to the expense. But said the American people will have just such schools as they believe in and as soon as you convince the taxpayers they ought to have kindergartens engrafted upon our system they will have them regardless of expense.

Captain Boyd, of Greeley, and Superintendent Harris, of Burlington, spoke favorably.

Miss Witter, on the contrary, said that twelve years' experience in the High School led her to say that kindergarten children often lag and are the poorest when they reach the high school. Perhaps, because overcrowded in early years, she suggested

Miss Hayward, of North Denver High School, drew the conclusion that if a child bright in lower grades fails in the upper, it might be a fault of the teacher or methods in the upper grades.

Principal Courtney thought the hardest work at present is done in the first year. He urged teachers to study natural development and the methods of the kindergarten. He said teachers used all sorts of nonsense under the head of busy work, because they do not understand what children read.

Mrs. Worden, of Denver, with twelve years of experience, thinks her children did better in higher work.

President Knapp suggests that kindergarten work might aid in keeping pupils in school for a longer time. Kindergarten methods

are not at fault, but our system may not be in accordance with the laws of nature. The finance is a point, but what has been done can be done.

Superintendent Parker said if a high school is needed we do not hesitate to build it.

Miss Lillian Pike said we must have better primary teachers. Raw high school girls cannot do this work.

Mrs. Worden, principal of kindergarten training schools, Denver, said a number of these girls are taking instruction in the training school.

Superintendent Van Sickle said financial and legal questions impede the way at present, but the time will come when kindergartens will be engrafted on our system.

Professor Carter offered a resolution favoring kindergarten schools. On motion it was referred to the Committee on Resolutions with favorable recommendations by those present.

A large number of Denver ladies outside the profession who are interested in the subject were present and took part in the discussion which was prolonged till 1:05 p. m. A large number stayed to hear the discussion till that hour.

The Association then adjourned till 2 p. m.

AFTERNOON SESSION.

The meeting was called to order at 2:10 p. m. by the president.

Miss Lillian Pike, teacher of elocution in Denver University, read a paper on "Responsibility of the Teacher to the Home."

It was a good paper. The writer said false pessimists assault our schools and we must meet them. We are responsible for the characters turned out of our schools. A school should give character to those living about it.

Teacher should interest herself in the homes. Hard to do this in the city. Be social, but do not come to the school room with eyes heavy from loss of sleep over balls, theaters and such like.

Better salaries will secure better teachers.

Judge W. C. Kingsley, of Denver, then read a fine paper on "Responsibility of Parents to the School." He made a vigorous argument in defense of our public schools and said we would hold to them until something better is shown.

Urged parents to visit schools oftener, thus manifesting their interest and encouraging teacher and pupils. Spoke of our experience and how proud we were when father or mother visited our school.

Miss Martha Pease, of Denver, opened up the discussion of the paper.

Superintendent Eddingfield said true teachers often are not appreciated in a community and are not put on a social equality.

Mr. Van De Mann thinks the teacher is usually measured for just about what she is worth. Thinks the teacher is appreciated and can make her influence felt

Hon. Joseph C. Shattuck then arose and thanked the Association for the honor conferred by electing him treasurer for the fifteenth year, but owing to business relations it would be inconvenient for him to attend to the duties and he felt impelled to decline further continuance in the office.

On motion his declination was accepted with a unanimous expression of regret upon the part of the Association.

The committee recommended Principal W. E. Knapp, of the Franklin school, to fill the vacancy.

On motion the secretary was instructed to cast the entire ballot for Mr. Knapp for treasurer, which was immediately done.

Owing to the modesty of the chairman, the secretary declared Mr. Knapp elected to the office of treasurer for the ensuing year.

Superintendent A. D. Shepard, of Arapahoe, chairman of the Committee on School law, reported the result of the past year's work. The chief legislation secured was section 64 of the school law and the changes in the district normal institute law. The legislature appropriated \$1,300 in aid of such institutes. The chief point of comfort was in the fact that no legislation was passed detrimental to the schools. The committees of the Legislature accepted all the suggestions of this committee.

The Committee on Finance did not read a detailed report nor has such been handed the secretary.

Superintendent Copeland, as chairman of the Committee on Resolutions, reported the following, which were unanimously adopted as a whole, as was also the report of the same person of the resolutions on deceased members, which follow:

To the State Teachers' Association of Colorado:

Your Committee on Resolutions respectfully submits the following report:

Resolved. That we tender the thanks of this Association to the board of directors of school district No. 1, of Arapahoe county, for the use of this hall and of other rooms in this building at this session: to the various railroad companies of

the State that have given us reduced rates in attending this meeting, to the newspapers of this city for their ample reports of the proceedings; to Professor Sherwood for his piano recital; to the Lotus Club and the Juanita Mandolin Club, of this city, and the class of school children for the fine music which they have furnished us.

Resolved, That it is the opinion of this Association that the Executive Committee should secure a hotel where the majority of teachers can stop, and thus secure the much needed but now neglected social intercourse.

Resolved, That this Association endorses the kindergarten as a part of the public school system.

Resolved, That this Association should have a standing committee on necrology.

Resolved, That this Association hereby expresses its high appreciation of the professional spirit and the self denial of those teachers of the State who have traveled long distances at great expense to attend this meeting, and we commend their course to all live educators of the State.

Resolved, That this Association desires to express its gratitude to Hon. J. C. Shattuck who has so long and faithfully served us as treasurer, and we regret that he feels obliged at this time to decline further service.

This Association desires to make some special recognition of the recent action of the State Board of Regents relative to the State University. In the retirement of Hon. H. M. Hale we recognize that the founder of this Association, one who for twenty-four years out of his forty years of professional life has been continuously connected with the interests of education in the territory and State of Colorado, and who has been a prominent factor in every advance step in school work, is to leave the field of active duty. We believe that from his quiet home, he will continue ever to be ready to assist the cause with his counsel and advice, and trust that his years may continue to be happy in the complete confidence that Colorado is indebted to him for more than can be paid.

In the elevation of Mr. J. H. Baker to the vacant chair, we congratulate the Board of Regents upon the choice of an able scholar, and an enthusiastic promoter of higher education. The association of Mr. Baker with this organization dates from its first meeting, from no annual session of which he has been absent.

We give assurances to President Baker and the management of the University that the teachers of the State will continue to hold the Institution in high esteem and do what they can to contribute to its growth and prosperity.

A. B. COPELAND,

L. C. GREENLEE,

L. B. GRAFTON,

MARY E. SABIN,

Committee.

To the Colorado State Teachers' Association:

Your committee, appointed to draft suitable resolutions relative to members of this Association who have died since our last meeting, respectfully submit the following:

Resolved, That in the death of W. B. Suckling, of Georgetown, N. B. Webb, of Boulder, and E. L. Byington, of Denver, this Association has sustained a serious loss, for in them we recognized pure, noble men and enthusiastic educators who have devoted their lives to the cause of education.

Resolved, That we express to their families our profound sympathy in their affliction, and that the secretary of this Association be instructed to present to them copies of these resolutions.

A. B. COPELAND,
A. C. COURTNEY,
EMILY A. HAYWARD,
MRS. E. K. LABARTHE,
Committee.

Superintendent Eddingfield, chairman Committee on Teacher's Reading Circle, made the following report, which was adopted by the Association.

The committee recommends as follows :

1. That we at once proceed to establish a reading circle for the teachers of Colorado.

2. That the first year's course consist of (a) Pestalozzi, Leonard and Gertrude, translated and abridged by Eva Channing, and published by D. C. Heath & Co., Boston ; time, three months.

(b) Page's Theory and Practice of Teaching, by American Book Co., to follow for next six months.

(c) Montgomery's History of England, to be read during the year in connection with the above.

We further recommend that an outline of the work for each month be presented monthly to the teachers through the *Colorado School Journal* or some other available source.

3. The officers shall be as follows :

(1) A manager, whose duties shall be organization and general management of local circles, the preparations of outlines of work, correspondence, etc.

(2) Secretary and treasurer, whose duty shall be :

(a) To keep records and all necessary dates.

(b) To take charge of all moneys collected, and to disburse the same on order of the manager.

(3) Advisory Board, consisting of three members chosen by the State Teachers' Association, one for one year, one for two years and one for three years, and one for each year thereafter, whose term shall be three years. Their duties shall be the adoption of a course of study for the year following the election of each new member.

Respectfully submitted.

W. T. EDDINGFIELD,
IRA M. DE LONG,
MISS MARTHA PEASE,
Committee.

On motion Superintendent Eddingfield, of Aspen, was elected manager of the reading circle for the coming year, with instructions to appoint a suitable person for secretary and treasurer.

The president appointed as advisory committee on reading circle, J. P. Jackson, of El Paso county, chairman; Hon. Nathan B. Coy, Denver; Professor James H. Hays, Normal School.

On motion of P. M. Condit, of Colorado City, the Association unanimously recommended the Hon. Fred Dick, ex-Superintendent of Public Instruction, as a suitable person for superintendent and general manager of the Colorado State Educational Exhibit at the Columbian Exhibition, to be held in Chicago in 1893, and urged his appointment to such position by those invested with appointing powers.

Treasurer Joseph C. Shattuck reported as follows :

Balance on hand, 1890.....	\$180 50
Received for sales of histories.....	1 00
Received on membership fees last year.....	183 00
Paid out on bills allowed.....	252 35
Balance on hand at beginning of this session.....	112 15

Two hundred and fifty-four have paid the membership fee this year, which is the largest number in the history of the Association.

The expenses of this year are not yet all paid and cannot be reported.

The treasurer reported the following as having paid the annual fee for fifteen years, thus placing them on the list as life members : H. M. Hale, Aaron Gove, David Boyd, J. H. Baker, Miss Nannie O. Smith, Joseph C. Shattuck and Isaac C. Dennett.

On motion the executive committee is instructed to purchase a gavel for use of the president for next year.

Principal Remington, of Boulder, moved that the place of meeting hereafter be fixed each year by the executive committee, repealing the motion fixing the place as Denver. The motion was laid on the table.

On motion the executive committee are instructed to appoint just before the opening of the next session a committee on reception and another on enrolling members.

On motion Mr. C. W. Bardeen, of Syracuse, N. Y., and Professor William Sherwood, of Chicago, were elected honorary members of this Association. The vote was unanimous and the secretary was instructed to communicate the same to the gentlemen concerned.

On motion the executive committee is authorized, and instructed so to do if found feasible, to publish in full the proceedings of this Association, with all the papers read.

The incoming secretary was instructed to prepare the proceedings of the committee and to include the list of membership, with the names arranged alphabetically.

On motion, it was decided to devote one-half day's session of next year to the consideration of a graded course of instruction for normal institutes.

Principal Smiley, of East Denver High School, suggested that at next session a portion of time be set apart as a business session. It seemed to meet with general approval of those present.

It was also suggested that not more than two papers be assigned for any one session, that more time can be given to general discussion.

Principal G. B. Turnbull, of the High School, Colorado Springs, then read an able paper on the question, "Can we Shorten and Enrich the Course of Study in our Public Schools?" He stated that so many studies had been added to the course that the studies which were supposed to be practical are crowded out. Much time is wasted in wading through higher arithmetics, higher geographies and higher studies of all sorts, whereas the time could be spent to much better advantage on other subjects.

Principal J. M. Dickey, Garfield School, Colorado Springs, owing to the lateness of the hour, had gone to take his train, hence did not follow in the discussion, as per programme.

Superintendent G. L. Harding, of Longmont, then followed with a valuable paper on the question, "Is the Special Teaching in Vogue in Colleges and Universities also Applicable to Grammar and Primary Schools?"

The speaker gave a general view of the subject and summed up with the statement that he would not favor its adoption except in a modified form.

Superintendent T. O. Baker, of Durango, followed in the discussion in a brief speech, but did not endorse the plan.

Professor Turnbull's paper was briefly discussed by Miss Hayward and Mr. Collins, of Denver, and by Principal W. H. Hoff, of Crested Butte.

President Knapp, member of Executive Committee for Colorado, spoke briefly of the N. E. A., which meets at Saratoga, N. Y., next July, and urged a large attendance from Colorado.

President W. E. Knapp then thanked the Association in feeling terms for the manner in which they had sustained him in his position as chairman of the meeting. He appointed Superintendents Edding-

field and Van Sickle as a committee to conduct Hon. N. B. Coy, president-elect, to the platform, and in a neat speech introduced him to the audience. Superintendent Coy thanked the Association for the honor conferred.

On motion of Mr. Van De Mann, a vote of thanks was tendered Professor Knapp, for the able and courteous manner in which he had presided.

On motion the Association adjourned till next year, the hour being 5:30 p. m.

Thus ended the largest in attendance and one of the most successful sessions within the history of the Association. The papers were all of high order and but few failed to respond to their names as printed on the programme. The discussions were more general and freer than usual. The suggestions of the committee, that the leaders in discussions speak without manuscripts proved their wisdom. From five to six hundred teachers were in attendance and were well pleased with the meeting.

J. P. JACKSON,
Secretary.

Colorado State Teachers' Association.

EIGHTEENTH ANNUAL SESSION.

OFFICERS GENERAL ASSOCIATION.

President, Hon. Nathan B. Coy, Denver.

Secretary, Mrs. Frona R. Houghan, Denver.

Treasurer, Warren E. Knapp, Denver.

Executive Committee, W. C. Thomas, Greeley; J. H. Van Sickle, Denver; J. S. McClung, Pueblo.

PROGRAMME.

WEDNESDAY, DECEMBER 28, 1:45 P. M.

Prayer, Rev. Myron Reed.

Music, Lyceum Mandolin Club.

Address by the president of the Association, Hon. Nathan B. Coy.

Recitation—"The Swan Song"—*Brooks*—Miss Julia Riche.

Introduction of State Superintendent-elect, Hon. J. F. Murray.

Paper—"Shall the District be Required to Furnish Free Text Books?" O. S. Moles, Canon City.

Discussion—P. K. Pattison, Colorado Springs; Ira M. DeLong, Boulder.

Report of the Committee on Revision of the Constitution.

7:45 P. M.

Song—Chorus club of sixty members, High School, district No. 2, Denver.

Announcement of committees.

Tenor solo—"On Venice Waters"—*Otto Roeder*—W. T. Nixon.

Lecture—"To-morrow and the Day After," Chancellor W. F. McDowell, University Park.

THURSDAY, DECEMBER 29, 9 A. M.

Business meeting.

9:30 A. M.

Sectional meeting. See end of programme.

1:45 P. M.

Song—"Rustic Dance"—*Macy*—Misses Pegg, Balcom, Lown and Bennett, Fort Collins High School.

Paper—"Authority in the Use of the English Language," Charles I. Hays, Denver.

Discussion—M. Isabel Holloway, Aspen; Miss Celia A. Salisbury, Denver.

Recitation—Selected—*Mattie Josephine Atkins*.

Song—Semi-chorus of young ladies, High School, district No. 2, Denver.

Paper—"How to Overcome Indifference in School Work," Mrs. R. G. Leake, Florence.

Discussion—George W. Wyatt, Denver; S. T. Hamilton, Fort Collins.

7:45 P. M.

Entertainment—"Talking with the Pencil," Charles M. Carter, Denver, assisted by Miss Adele Lower, pianist.

The Euterpe Quartette will sing at the opening and at intermission.

FRIDAY, DECEMBER 30, 9 A. M.

Business meeting.

9:30 A. M.

Piano Solo—Luther's Hymn—*Meyerbeer*—Oscar Mayo.

Paper—"Non-Professional Criticism, or Ourselves as Others See Us," T. O. Baker, Durango.

Discussion—Mrs. Ellen Wallace Collins, Georgetown; E. T. Fisher, Grand Junction.

Recitation—"When the Cows Come Home," Miss Lillian Pike.

Paper—"Uniformity," Aaron Gove, Denver.

Discussion—E. F. Hermans, Denver; James H. Hays, Greeley.

1:45 P. M.

Violin Solo—Mr. Frederick W. Smith.

Recitation—Miss Mae E. Neal.

Address—"Power," President James H. Baker, Boulder.

Reports of Committees.

Miscellaneous business.

COLLEGE AND HIGH SCHOOL SECTION.

President, P. W. Search, Pueblo.

Secretary, Miss M. Morris, Greeley.

Executive Committee, Ira M. DeLong, Boulder; W. T. Eddingfield, Aspen; E. F. Hermans, Denver.

THURSDAY, DECEMBER 29, 9:30 A. M.

Song—"The Bloom is on the Rye," Misses Pegg, Balcom, Lown and Bennett, Fort Collins High School.

President's Address—"The Old and the New in Education."

"What Shall we do at the Columbian Exposition?" E. C. Stevens, Trinidad.

"The Colorado High School Course:"

(a) As the Colleges see it, H. A. Howe, University Park.

(b) As the High Schools see it, W. W. Remington, Boulder.

MINUTES AND REPORT.

DECEMBER 28, 1.45 P. M.

Music, Sartoris Quintette Club.

President's address, Hon. Nathan B. Coy.

Recitation,—“The Swan Song,” Miss Julia Riche, Denver.

A telegram of fraternal greetings from the Nebraska State Teachers' Association, to which the President of the Association was instructed to send an appropriate response.

Address of Welcome, His Honor, Mayor Platt Rogers, Denver.

Introduction of State Superintendent-elect Hon. J. F. Murray, Colorado Springs.

The remainder of the afternoon was devoted to reminiscences of educational pioneering in Colorado. Impromptu addresses were delivered by Hon. W. J. Curtice, first (Territorial) Superintendent Public Instruction; Hon. William Gilpin, first Territorial Governor; Hon. David H. Nichols, Lieutenant Governor-elect, who assisted in building the first public school house; Mr. A. R. Brown, who was the leader in building the first public school house, and was its first teacher.

A letter of regret was received from Captain E. L. Berthoud, of Golden, prominently connected with early education in the territory.

Invitation from the Denver Art League to members of the Association and their friends to visit the exhibition of Moran paintings.

W. E. Knapp, treasurer of the Association, urged that all railroad certificates be deposited with him at the earliest hour possible, that arrangements for return trips at reduced rates might be perfected.

7:45 P. M.

Song—“The Belfry Tower”—Chorus Club of sixty members, High School, District No. 2, Denver.

Tenor solo—“On Venice Waters,” W. T. Nixon.

Lecture—“To-Morrow and the Day After,” Chancellor W. F. McDowell, University Park.

Report of the Committee on Revision of the Constitution—Ira M. De Long, Boulder, chairman.

The report was read section by section, and after having been adopted, with some amendments, the executive committee was authorized to print at least a thousand copies in pamphlet form.

DECEMBER 29, 9 A. M.

Business.

COLLEGE AND HIGH SCHOOL SECTION.

OFFICERS.

President, P. W. Search, Pueblo.

Secretary, Miss M. Morris, Greeley.

Executive Committee, Ira M. De Long, Boulder; W. T. Eddingfield, Aspen; E. F. Hermans, Denver.

In the absence of the secretary, Mrs. Annie E. Abram, Brighton, was elected secretary, *pro tem*.

Song—"The Bloom is on the Rye," the Misses Pegg, Balcom, Lown and Bennet, Fort Collins High School.

President's Address—"The Old and the New in Education."

"What Shall We Do at the Columbian Exposition?" C. E. Stevens, Trinidad.

Discussion :

C. A. Woody, Salida; A. B. Copeland, Greeley; Aaron Gove, Denver; Z. X. Snyder, Greeley.

"The Colorado High School Course."

(a) "As the Colleges See It," H. A. Howe, University Park, Denver.

(b) "As the High Schools See It," W. W. Remington, Boulder.

Discussion:

James H. Baker, Boulder; W. F. Slocum, Colorado Springs; P. M. Condit, Colorado City; P. W. Search, Pueblo; Ira M. De Long, Boulder; Aaron Gove, Denver.

Election of officers (High School Section) for the ensuing year.

President, W. F. McDowell, University Park.

Secretary, Mary D. Reed, Greeley.

Representatives to Council, Eugene C. Stevens, Trinidad; William F. Slocum, Colorado Springs.

By motion the Committee on State High School Course of Study was continued for another year. It consists of the presidents of the State University, Denver University, Colorado College, the Superintendent of the Pueblo schools and the principals of the High Schools of East Denver, Colorado Springs, Aspen, Boulder, Georgetown and Trinidad.

DECEMBER 29, 1:45 P. M.

Announcement of committees.

Nominations :

From the General Association, J. S. Eagleton, Golden; P. K. Patison, Colorado Springs; C. A. Woody, Salida; Mary A. Glisan, Greeley.

From the City Superintendent's Section, A. B. Copeland, Greeley; P. M. Condit, Colorado City.

From the High School Section, T. O. Baker, Durango; John Gardner, Boulder.

Finance: C. M. Kingsley, Boulder; D. Ward, Pueblo; C. A. Bradley, Denver; A. J. Fynn, Alamosa; J. Dilts, Gypsum.

Necrology: E. C. Stevens, Trinidad; J. R. Brackett, Boulder; A. C. Courtney, Denver.

Resolutions: J. H. Hays, Greeley; Mrs. E. W. Collins, Georgetown; E. F. Hermans, Denver; W. M. Kollock, La Junta; E. T. Fisher, Grand Junction.

A motion was made by Aaron Gove and seconded, "That the Ninth General Assembly be petitioned to legalize the establishing of the Kindergarten throughout the State," was referred to the Committee on Resolutions.

The president called the attention of the Association to some specimen work for the World's Fair exhibit, by the pupils of the Haskell Institute for Indians, at Lawrence, Kansas.

Reading of telegrams: From Cheyenne: "The teachers of Wyoming send greetings to their co-laborers of Colorado.—A. A. Johnson, president; J. O. Churchill, secretary." From Topeka: "Accept greetings. We hope to meet you at the World's Fair.—J. E. Klock, president Kansas State Teachers' Association."

On motion, the president was instructed to send appropriate responses.

Song, "Rustic Dance," the Misses Pegg, Balcom, Long, Bennett, Fort Collins High School.

Encore, "The Bloom is on the Rye."

"Authority in the use of the English Language," Charles I. Hayes, Denver.

Discussion:

Miss Celia A. Salisbury, Denver.

Recitation, "The Battle of Gettysburg," Mattie Josephine Atkins, Denver.

Song, "Annie Laurie," semi-chorus of young ladies, High School, District No. 2, Denver.

"How to Overcome Indifference in School Work," Mrs. R. G. Leake, Florence.

Discussion:

George W. Wyatt, Denver.

S. T. Hamilton, Fort Collins.

"State Teachers' Reading Circle," W. T. Eddingfield, Aspen.

EVENING SESSION, 7:45.

Piano solo, Miss Adele Lower.

Entertainment—"Talking with the Pencil," Charles W. Carter, Denver, assisted by Miss Adele Lower, pianist.

Intermission.

Song, with encore, the Euterpe Quartette.

FRIDAY, DECEMBER 30, 9:30 A. M.

Report of Committee on Nominations: A. B. Copeland, Greeley, chairman; president, W. C. Thomas, Greeley; vice-presidents, the chairmen of the various sections, the county superintendents, State Superintendent Coy, City Superintendent Eugene C. Stevens, of Trinidad; kindergarten section, Dr. Z. X. Snyder, Normal School; high school section, Chancellor McDowell; director for three years, G. B. Turnbull, Colorado Springs; auditor for three years, Horace M. Hale, Denver; for two years, Dean J. C. Shattuck, Denver; for one year, E.

T. Fisher, Grand Junction. The secretary, Mrs. F. R. Houghan, and the treasurer, W. E. Knapp, both of Denver, hold over, also Directors J. S. McClung, Pueblo, and J. H. Van Sickle, Denver.

On presentation of an application, signed by twenty educators actively engaged in the work, authority was given for the organization of a kindergarten section.

Officers of kindergarten section:

President, Z. X. Snyder, Greeley.

Secretary, Miss Helen A. Dewey, Colorado Springs.

Nominators: C. V. Parker, Fort Collins; Miss Laura Tefft, Greeley.

Superintendent Gove and President Snyder were instructed to communicate the purpose of the organization to the Colorado State Kindergarten Association, and the desirability of merging the two organizations into one.

Piano solo, "Luther's Hymn," Oscar Mayo.

"Non-Professional Criticism or Ourselves as Others See Us," T. O. Baker, Durango.

Discussion:

Mrs. Ellen Wallace Collins, Georgetown, and E. T. Fisher, Grand Junction; G. W. Wyatt, Denver; T. O. Baker, Durango.

At this point, Mr. Gove, of Denver, asked the privilege of introducing a subject not on the programme.

"There is a matter I would like to mention. It is generally understood that there is to be a World's Fair at Chicago throughout the next summer, and most of us have had an invitation to correspond with the managers of various hotels of that place and secure accommodations. Now you and I have no means of ascertaining the responsibility of those who offer entertainment. I am very glad to call your attention to this matter and to say that the offer from Mr. Lane is in every way reliable. He makes this proposition: That by correspondence with him, or with parties here who represent him, they will provide you with entertainment varying in price from \$1.50 per day in private houses, and from \$2.00 to \$3.00 in boarding houses and hotels. Every teacher desiring to avail himself of this offer, will join the National Association and pay the fee. This will be turned over to the treasurer of the National Association, and in return he will receive a copy of the National Directory. Those wishing to avail themselves of this opportunity, will remit the fee to J. M. Greenwood, of Kansas City, or pay it over to R. H. Beggs, Denver, who will make the arrangement for you."

David Boyd, of Greeley:—

"I would like to know if joining the National Association will secure these rates for one's self and family."

R. H. Beggs:—

"I think it will include all your family."

Recitation—"When the Cows Come Home," Miss Lillian Pike, Denver.

"Shall the District Furnish Free Text-books?" O. S. Moles, Canon City.

This paper was crowded out of the place assigned to it for the opening session by the pioneer exercises, and on motion was inserted at this time.

Discussion:

P. K. Pattison, Colorado Springs.

Ira W. De Long, Boulder.

"Uniformity," Aaron Gove, Denver.

Discussion:

E. F. Hermans, Denver.

J. H. Hays, Greeley.

E. C. Stevens, Trinidad.

P. W. Search, Pueblo.

DECEMBER 30, 1:45 P. M.

Session was called to order by Vice-President Jackson.

Violin Solo, Frederick W. Smith, Denver.

Recitation, Miss Mae E. Neal.

"Power," President James H. Baker, Boulder.

Reports of Committees.

Necrology. Memorial address on Dr. J. C. Dennett, late professor of Latin, University of Colorado, by the chairman, E. C. Stevens, Trinidad.

Resolutions of regret and condolence were adopted by a rising vote.

On motion, the secretary was directed to forward a copy of the resolutions to the orphan son.

Report of the Committee on Resolutions, chairman, J. H. Hays, Greeley.

Resolved, First. That this Association respectfully hereby petition the General Assembly of the State to make such provisions in the statutes as shall enable any school district in the State to legally provide, if it so desires, for the education of children under six years of age, to the end that any community may be enabled in its option, to establish and maintain kindergarten culture for little children.

The president of the Association is requested to transmit an official copy of this petition to the proper officers of the General Assembly.

Resolved, Second. That we most earnestly demand that the executive committee of the World's Fair provide for the erection of a building for the educational exhibit at Chicago.

That we recognize the preparation of work for exhibition at the World's Fair as an educational factor, and that we pledge our most cordial support in the work of preparing and presenting a display of the school work of Colorado.

Resolved, Third. That temperance instruction in our public schools, as now given in pursuance of the laws of the State, meets with our approval.

That we endorse every proper effort to warn our youth of the dangers connected with the use of narcotics and alcoholic stimulants; and in order that all teachers in the State may have a better understanding of our law upon temperance instruction, we recommend that at our next annual meeting a place be allotted on the programme for the due consideration of this vital subject.

Resolved, Fourth. That the thanks of this Association are due to all railroads and hotels that have granted reduced rates to the members; to the press for its generous reports of the proceedings; to the Board of Education of District No. 1, Denver, for the use of the High School Building; to the quartette of Fort Collins High School; to the Euterpe quartette of Denver; to the Chorus Club of Denver High School, District No. 2, for music furnished, and to all others who have assisted in making the meetings of this Association both pleasant and profitable.

Signed,

J. H. HAYS,

Chairman of Committee on Resolutions.

All the resolutions were adopted.

Committee on finance made its report which was adopted.

Report of the Committee on Finance, treasurer, W. E. Knapp, Denver:

Balance on hand January 1, 1891	\$112 15	
Received from members December, 1891	258 00	
		\$370 15
Bills audited December, 1891	\$258 30	
Certificate of deposit, Union Bank, Greeley	111 85	
		\$370 15

The report was adopted.

On motion, President Coy was empowered to represent the Association at the World's Fair Educational Exhibit and to appoint a committee to assist him.

On motion, the directors of the Association were empowered to incorporate according to the new constitution.

Treasurer W. E. Knapp's term of office having expired, he was re-elected for the ensuing year.

A motion was carried that the present manager of the State Teachers' Reading Circle, W. T. Eddingfield, be continued in office another year; also that J. P. Jackson be retained as a member of the advisory board. It was moved and carried that the advisory board of the Reading Circle be empowered to select a course of reading for 1893.

It was moved and carried that the treasurer be authorized to prepare a list of the members of the Association and publish the same.

Authority was given that the Memorial Address on Professor Dennett be printed, and that a copy be sent to the son.

The Committee on School Law, through its chairman, A. D. Shepard, Denver, reported that everything possible would be done with the Ninth General Assembly to further the interests of the schools. Report adopted and committee continued.

State Superintendent Coy resigned from Committee on School Law, and on motion State Superintendent-elect Murray was put in his place. The committee as thus modified consists of A. D. Shepard, Denver; Z. X. Snyder, Greeley; Aaron Gove, Denver; J. H. Baker, Boulder; J. F. Murray, Denver.

P. W. Search moved that an Educational Council be organized in connection with the State Teachers' Association, and that the directors be empowered to arrange all details of the organization. Carried.

On motion the directors of the Association were instructed to fix, as early as possible, the time of the next meeting, so that teachers might secure special rates.

President Coy, in a short address, thanked the Association for the support given him during his administration, and introduced his successor, the President-elect W. C. Thomas, of Greeley, who briefly expressed thanks for the honor conferred on him.

A unanimous vote of thanks was tendered State Superintendent Coy for his efficient services to the schools of the State and to the Association.

ADDRESSES, LECTURES, PAPERS AND DISCUSSIONS.

December 28, 1845 p. m.

"EDUCATIONAL PIONEERING IN COLORADO."

The President:—

LADIES AND GENTLEMEN, MEMBERS OF THE STATE TEACHERS' ASSOCIATION AND FRIENDS OF EDUCATION:—It was hoped that the Mayor of the city would be here to welcome this body; also the Governor of the State, who is a conspicuous historical figure, having been the last Territorial Governor, first State Governor and now again serving in the same capacity. Pressing duties incidental to their offices, especially at this time of year, prevent their presence at the opening of our exercises.

It is an unusual feature, however, to have with us several who were connected with educational pioneering in this State, and to have the promise of a few words from them during the afternoon. Meanwhile, I will deliver what I have written for this occasion:

The president's address: "An Educational Looking Backward," Hon. Nathan B. Coy, Denver.

In the name of the organized educational body now assembled in Eighteenth Annual Convention, I bid you welcome. In the name of this beautiful city of far-famed hospitality, the pride and, by participation, the property of all true Coloradans, I bid you welcome. You have come from near and far; from mountain side and rolling plain; from rain and rainless belt; from the centers of grazing, mining, agriculture and manufactures; from the region of the adobe and the sod, as well as the palatial brick and stone school-house; from experiences severe and mild, of hopefulness and depression. I bid you welcome, all, to the representative educational body of this Rocky Mountain region. A truly democratic organization is it, comprising in its membership not only those engaged in the public school work of the State, but all educational laborers.

Your presence is an earnest of a common interest in an object of great concern to every self-governing community. The presence of some of you is especially significant, coming, as you do, from afar, at no small expense, discomfort and risk from the season's inclemency. Worthily as you give, may you receive; mingled with the more serious deliberations of these meetings, may you find pleasure and profit in stimulating social intercourse and the city's abundant facilities for amusement.

The occasion, the season, naturally invite retrospection, a looking backward. From the President of the United States to the corner grocer, it is a common practice at this time of year to take account of stock—to measure up the past in order that the present may be better known and the future more safely forecast. The temptation to thus look back in our work is more than usually strong to-day, by reason of the extraordinary progress to be observed along all educational lines; also by reason of the commemorative period through which as a nation we are passing, and the world-wide interest that is gradually centering in the beautiful park on the verge of the great inland lake. Thus looking backward, we may be enabled to determine our present position educationally; whether it be one of eminence or depression; whether it has been reached by an upward or a downward slope.

One may sweep the whole historical past of Colorado without a far-stretching glance. It is less than four-score and ten years since this tract of the great American desert first felt conscious contact with modern civilized life, through the government exploring party sent out under the direction of General Zebulon Pike. It is scarcely a generation, as measured by modern estimate, since the dawn of what may properly be called the historical era marked by the advent of Green Russell and his party of Georgians. The lad born as late as when the region known as "Arapahoe county, Kansas," was organized into the Territory of Colorado might have cast his first presidential ballot at the Garfield-Hancock election—not before. In years as a State, Colorado is midway in her teens—figuratively, in the sweet girl-period of her life.

Our public school system may be said to have had its remote origin in a comprehensive school law embraced in the acts passed by the first Legislative Assembly of the Territory, held at Denver in 1861. That law, similar in its provisions to the one then in force in the State of Illinois, provided for the appointment by the governor, during that session, of a "Territorial Superintendent of Common Schools," who was to qualify December 1, 1861, and hold office until his successor was duly appointed and qualified. He was to receive an annual salary of \$500. The text-book spectre was abroad in that early day, for, as the account has it, the duties of the Territorial Superintendent "were minutely prescribed," and similar to those now imposed on the State Superintendent of Public Instruction, "with the additional duty of recommending to the several school districts a uniform series of text-books to be used in the schools thereof."

By virtue of the provisions of the new law, it devolved upon Governor Gilpin to appoint the first Territorial Superintendent of Schools and he selected for the important position, Mr. W. J. Curtice. The

choice would seem to have been a most excellent one, judging by the lucid words of sense and wisdom contained in Mr. Curtice's introduction to the school law, published for the use of school officers. Some extracts are worthy to be repeated here, both to show the man's lofty conception of his position, and at the same time his clear view of the difficulties of the situation. Referring to the school law and its inefficiency, except as supported by public sentiment, he wrote: "The First Legislative Assembly of Colorado, entrusted with the important and varied duties of establishing law and government for our Territory, were not unmindful of its educational interests, and enacted the school law herewith published. That it should be free from imperfections, could not reasonably be expected. The school laws of many of our older states, passed after mature deliberation, and amended as experience dictated from year to year, are still far from perfect. Time and experience, while bringing to light the faults of the present law, will also suggest many improvements, better adapting it to the peculiar requirements of popular education in our new Territory. It now remains for the people and their duly chosen school officers to imitate the commendable zeal of the Legislative Assembly in behalf of education, by carrying into effect the school law and inaugurating a public school system in every county in the Territory. In discharging this duty we shall not only remove a great barrier—want of schools—to the rapid settlement of the country, but shall be developing an educational system among us for the future, of greater value than the gold of our mountains and a better safeguard to society than the elective franchise or standing armies."

In his instructions to county superintendents, for whose biennial election, as now, the first school law provided, he wrote: "In entering upon the discharge of your duties you may find, owing to the absorbing character of the pursuits of many of our people and the intense application with which every business is followed, that comparatively slight regard will be paid to the interests of education in many localities, and the same might be said of any other interest unconvertible immediately into money. You may not meet with that ready co-operation of the mass of the community in your work that would be desirable; yet, while such a state of things may induce a disposition to withhold time and labor, you will, on the other hand, find no people more ready to contribute the one thing most needful, material aid, in establishing schools in their midst. While our people are more awake to their individual interests than elsewhere, no people can be found more alive to the importance of good schools; none who will contribute more liberally to sustain them. Bearing these facts in mind, as well as the vast importance of the work in which you are

engaged, referring to the law for your guide and authority, be zealous and active in the discharge of your duties and you will be successful."

Again, to the people generally, he addresses these strong words, pregnant with the spirit of the founders of our government: "The lesson first taught by our early statesmen, and successfully enforced by the good and wise who have succeeded them, is substantially this: 'That in proportion as every nation has been enlightened and educated, so has been its prosperity. When the heads and the hearts of men are generally cultivated and improved virtue and wisdom must reign and vice and ignorance must cease to prevail. Virtue and wisdom are the parents of private and public happiness; vice and ignorance of private and public misery. This lesson, having been taught by the wise and good since the foundation of our government, and having been carried into practice in the establishment of schools for the education of the children of the mass of the people in a majority of our states, has produced results in the extension of prosperity, intelligence and happiness exceeding the hopes of the most sanguine and of anything before seen in the history of the world.'"

The outlook was discouraging, and Mr. Curtice realized it; but, nevertheless, he addressed himself nobly to his duties. As a matter of course, little was accomplished directly. The impulses of the people were good, "but the essential elements of a school system—children—were wanting." School districts of the size of states contained less than a score of school population. It is doubtful if within the boundaries of the entire Territory enough school children could have been found to form one first-class district of to-day. The adult population, unlike the pioneers and immigrants of other new regions, Ohio, Illinois, Michigan, and even Kansas, were not home seekers but fortune-hunters, who had left behind them wives and children to search for the golden fleece, which when found, they would bring back and enjoy at their old homes. At the time of the organization of the Territory, a census taken showed a population of 25,000, less than 4,500 of whom were women.

Those were the days of foundation-laying in our public school system; discouraging days indeed they were to the master-builder, but he builded better than he knew. Resigning his office at the end of two years, Mr. Curtice's work was taken up during the next four years by four different persons in succession, none of whom left any records of his official doings. It is not surprising that, meanwhile, the office of Superintendent of Schools, as a distinct office, was abolished, and the Territorial Treasurer became by law *ex-officio* Superintendent of Public Instruction, with the same salary as before, \$500. By the same

law the compensation for county superintendents was fixed at \$5 00 per day for actual services, instead of being dependent, as formerly, upon the judgment of county commissioners.

At the second session of the Territorial Legislature, begun at Colorado City, July 7, 1862, and adjourned to Denver, July 11, it was sought to supplement the ordinary school revenue by enacting "that hereafter whenever any new mineral lode of either gold-bearing quartz, silver, or other valuable metal shall be discovered in this Territory, one claim of 100 feet in length of such lode shall be set apart and held in perpetuity for the use and benefit of schools in this Territory, subject to the control of the Legislative Assembly." Much was expected for the school fund from this source; but, erroneously, for not a cent of the thousands of claims so located ever contributed a dollar to the fund.

At the Fifth Session of the Legislature, January, 1866, begun at Golden and adjourned to Denver, a law was passed making it "a misdemeanor to 'jump' mineral claims that had been set apart for schools, or for failing to relinquish such claims as had previously been pre-empted; also, providing for the sale and leasing of school lands and the investment of the proceeds in United States bonds. The same law provided for giving to the colored people a *pro rata* share of the school fund for the maintenance of separate schools"

"The first semblance of a school report" in existence was for the year 1867, rendered to the Legislature by Columbus Nichols, Territorial Treasurer and *ex-officio* Superintendent of Public Instruction. The report represented the work really of his deputy, Mr. E. L. Berthoud, the first, after Superintendent Curtice, to attempt to introduce any degree of vigor into the management of the public school system. In spite of the fact that report blanks had been sent to all the county superintendents, with full instructions as to filling out school statistics and returning, but two counties, Pueblo and Clear Creek, replied. Of several counties, it could not be learned who was, or had been, county superintendent; or whether any responsible organization had been effected.

But little improvement was shown in the report rendered two years later. More county superintendents were heard from; but their reports consisted of complaints of a singularly monotonous character—to the effect that reliable statistics could not be obtained on account of the remissness and indifference of district secretaries of school districts. A number of valuable recommendations are found in this report—one that in place of apportioning the county school tax according to the number of persons therein of school age, (which then was 5 to 21 years), by which the same proportions of

money were given to districts in which no schools were held, as to those which maintained schools throughout the entire year, it was suggested that the law be amended so as to make the number of pupils attending schools in the district for the previous year the basis for the apportionment. It was also recommended that steps be taken for the formation of district libraries, and some plan devised to compel the secretaries of the district boards to make their reports to the county superintendents more promptly; and some penalty prescribed when the county superintendents fail to report to the Territorial superintendent within the time required by law. It still further recommended that, on account of the large increase of children in the Territory, the "office of school superintendent be made a separate and distinct office, with a sufficient salary to enable him to give it his undivided attention."

The energetic efforts of Captain Berthoud, "to bring order out of chaos," seem to have resulted in little more than the revelation of a direful state of things. This continued until 1870. The burden of the songs of nearly all school officers was much the same—"Lack of interest."—"My predecessor in office has left no record."—"I hope to get matters into such a state as to render an account next year."—"School matters are in a very bad condition, the county commissioners having for the past two years neglected to levy a school tax, so that we have had no money," etc. etc. The successors of those so reporting would write to the same effect. Embezzlement of school funds by both county and district officers was common.

We have thus far traced the development of a Territorial system of schools maintained in accordance with legislative enactment. The results, so far as any systematic organization was concerned, were insignificant. To know what was actually doing, it is necessary to consult the record of isolated localities. From fragmentary documents a few crumbs of information have been gathered, relating to the school work in the counties. Arapahoe county. Omer O. Kent, superintendent, reports in 1869: Receipts from the treasurer of the county, \$1,052.20; expenditures, \$7,824.07; balance on hand, \$3,228.13. The report shows that the schools were being conducted in three rented buildings; the number of teachers employed, six; school population of the county between five and eighteen years, 1,139; teachers employed in the county, sixteen in public schools, and nearly as many more in seminaries and private schools. It would be interesting to compare these items with the same items for the year 1892, in Arapahoe county. Mr. O. J. Goldrick kept a small private school in the summer of 1859, probably the first school of any kind conducted in the State. To those present who ever saw Mr. Goldrick, the mention of his name will recall a striking individuality. Famous for his

exquisite attire, it is related of him that he halted his "bull team" just outside of Denver, after having crossed the plains, and dressed himself out in his best Sunday clothes, including a silk hat, before entering the city.

The first *public school* in the county was opened December 1, 1862, by Abner R. Brown, assisted by Miss Addie Simonton. The place was a two-story frame building in West Denver, then known as old Legislative Hall, one-half of the lower story of which is now standing as No. 1013 Larimer street. During the latter part of the same month the second public school of the county was opened in East Denver (District No. 1) by Mr. Lamb, assisted by Miss Indiana Sopris.

The first public school of Arapahoe county was built in 1871, on Arapahoe street, between Seventeenth and Eighteenth streets. It was discontinued for school purposes only a few years ago, and is now known as the Arapahoe Mercantile Block. The first school house built in the Territory was erected in the fall of 1860, in Boulder county. It was a one-story frame building, and was used also for town and church purposes. Its first teacher, Mr. A. R. Brown, the same who opened afterwards the first school in Arapahoe county, and his associate in the construction of the building, Lieutenant-Governor-elect David H. Nichols, are in your presence and will be heard from later.

The county superintendent of Clear Creek county in 1869, and afterwards Colorado's first Secretary of State, reports the building of a first-class school house at a cost of \$2,300.

The first school in El Paso county was opened at Colorado City.

The first school, a private school, of Jefferson county, was taught at Golden City in the winter of 1860 by M. J. Daugherty, with an attendance of eighteen pupils. The first public school was opened in the same district in 1863 and taught by Miss Belle Dixon.

In 1863 a one-story brick school house was built, which was used also by the Governor as an office. It was burned and another was built on the site.

Louis F. Valiton, superintendent of schools in Park county, reported, 1867, that he had just been appointed to fill the vacancy occasioned by the resignation of H. A. W. Tabor.

The first school taught in Gilpin county was a private school, opened in the fall of 1862 and taught by Miss Ellen F. Kindell in her father's house. A public school was soon after opened, and Miss Kindell gave up her school to assist Mr. Thomas Campbell in its management.

In this county there were built in 1870 the first permanent school houses in Colorado; the one, a granite house in Central City, at a cost of \$20,000; the other, a frame, at Black Hawk, at a cost of \$15,000.

We have thus sketched briefly the pioneer period of education in Colorado, a period extending over about a decade of years. For the most part it is a dismal picture, relieved here and there by flashes of promise and hope.

With the year 1870 may be said to have begun the modern educational period. From this year dates the beginning of the State's permanent growth and prosperity. The advent of the railroad, the success of the smelting works at Black Hawk, the favorable results of irrigation, all contributed to a quickened development. The effect upon the school system was marvelous. Denver, Greeley, Golden, Colorado Springs and Georgetown soon erected substantial and commodious school buildings, even finer than those of Central City and Black Hawk. In 1870 provision was made for the establishment of a State School of Mines to be located at Golden City. The same act provided for the appointment by the governor, by and with the consent of the Legislative Assembly, of a suitable person to the office of Superintendent of Public Instruction, for a period of two years, at a salary of \$1,000 per year.

The first incumbent of this new office at the hands of Governor E. M. McCook, was Wilbur C. Lothrop, to-day a prominent citizen of Denver. Superintendent Lothrop's first report, covering the years 1870-1, was published December 20, 1871. Mr. Lothrop was re-appointed to the office by Governor Elbert in 1872 and continued until July, 1873, when he resigned and Horace M. Hale was appointed to the vacancy. Mr. Hale was reappointed in 1874 by Governor Elbert, and was continued in office through Governor Routt's administration, until November, 1876, when he was succeeded by Joseph C. Shattuck, who had been elected under the provisions of the State Constitution. Mr. Shattuck was elected to a second term in 1878, but was succeeded in 1880 by Leonidas S. Cornell, who, giving way to Mr. Shattuck in 1882, was returned for two years.

Succeeding to Mr. Cornell was Fred Dick, who, after one term of service, was followed by Nathan B. Coy. In January, 1893, Mr. Coy will give way to the Superintendent-elect, Hon. J. F. Murray.

In 1875, during the administration of Horace M. Hale, the State Teachers' Association, now celebrating its Eighteenth Annual Convention, was organized. It is interesting to read just here the notice under which the meeting to organize was called by its father (so to speak) and first president.

OFFICE SUPERINTENDENT PUBLIC INSTRUCTION. }
DENVER, COLO., November 25, 1875. }

On the 28th day of December, *proximo*, the superintendents, teachers and friends of public schools, will meet in convention at the High School, Denver, and remain in session three days. Questions involving the welfare of our school system will be discussed and such measures adopted as will tend to perfect the same. Especially will the necessity of a thorough revision of our school law be considered, etc. A State Teachers' Association will be organized and a portion of the time be devoted to Institute work.

All are urgently invited to be present and to use their influence to induce others, both male and female, to attend. The meeting will be an important one, and, doubtless, one of profit to those attending. We hope that every county will be largely and ably represented.

H. M. HALE,
Superintendent Public Instruction.

The call brought together about one hundred fifty teachers and friends of education at the High School building on Arapahoe street. Eighteen cities and towns besides Denver were represented in the membership enrollment. Among them were names of many who are still in the service. Several persons of prominence in the profession joined in the exercises of the first evening. Of this number were Judge Belford, then of Central, who lectured, and Mr. W. E. Pabor, then of Greeley, who recited an original poem. The convention opened with the singing of the L. M. Doxology, followed by prayer and the singing of "America." The last act at the close of the third day was the singing of "Auld Lang Syne." The lady who presided at the piano is still on duty at the same school in Denver.

Much valuable work looking to the future welfare of the school system of the State was done by this convention. The moulding influence of President Hale and Secretary Gove are plainly manifest in the results. Questions of vital moment were discussed, the results of which were formulated in resolutions which embodied the sense of the assembly and served as a guide for the State constitutional convention and the First State Legislature in their action upon school questions, every recommendation of the State convention having been adopted by these bodies. The resolutions involved a re-casting of the school law upon a broader basis, suited to the rapid expansion of the system which the near future promised. It was the sense of the association that the school fund should be sacredly preserved intact, the interest on the same only to be expended; that the sale of such lands as might be given to the State for educational purposes should be postponed, to the end that the proceeds in time might be sufficient to maintain public schools without taxation; that the Constitution should make it the duty of the Legislature to provide for the establishment and maintenance of a uniform system of schools, including elementary, normal, preparatory

and university departments, such schools to be free to all residents of the State; that provision should be made for the establishment of the offices of State and county superintendent; for the establishment of school libraries; for the care and education of the blind, mute and feeble-minded; for the establishment of a reform school; that the English language should be the medium of all instruction; that sectarianism should be excluded from the schools.

An attempt, made in the Constitutional Convention, to give the Territorial superintendent power to remove county superintendents for cause failed of adoption, "lest the Territorial superintendent should thereby possess too much power." A petition was presented by one of the counties, providing for the impeachment of various officers, including county superintendents, for causes stated. An attempt to secure provision for a uniform system of text books was successfully opposed as dangerous, on the ground that it would invite bribery from publishers and engraft a system which had proved a failure in other states. In place, was adopted the present very satisfactory system of district option.

In the Institute meetings, the beauties of good books, and the desirability of commodious, well-ventilated school buildings, were eloquently advocated. Thus was forecast in thought the admirable success of Colorado in the latter particular. It was stated by the Territorial superintendent that there were 20,000 school children in the Territory, but that during the past year only one-half that number had entered a school room, and only one-half of them had attended school 116 days in the year. One school district was known to have 300 resident school children, only fifty of whom had attended school the preceding year.

I have dwelt thus minutely upon the deliberations of this first general convention in the interests of education to show the material that composed it, its spirit and purpose, and its valuable work in laying broad and substantial the foundations of our present school system. The successful subsequent development is due largely to the clear-sighted and discreet counsel that then prevailed.

And now, as a result of thirty years of organized effort what may be said of our system of public instruction? If not faultless, is it not at least creditable? Measured by percentages of increase, a common standard of estimating state and even national growth, does it not "size up" fairly well? Comparing 1871, the year of the first extended report of any consequence, with 1877, when the first report under state administration was made, there was an increase in important particulars, such as school population, enrollment, number of districts, number of buildings, value of school property, etc., of 100 to 500 per cent.; compar-

ing 1871 with 1892, the last year's record, we find for the same items an increase of 800 to 2,100 per cent. The growth thus shown has been healthful and symmetrical, not one-sided nor distorted. From elementary schools to university the development has been gradual and therefore stable. With the roots of the system firmly planted in deep soil, the wonderful expansion that is now going on at the top may be looked at with favor, free from apprehension. Higher education is, after all, the blossom and top fruit of a true system of intellectual training, and the lower departments are invariably enriched by its fruitage. To check this natural expansion at the top, for fear of diminished nourishment at the roots, is likely to result in impoverishment of the whole.

"By their fruits ye shall know them." By this standard our system commends itself. The graduates of our public schools have been admitted to the foremost institutions of the land, and after completing full courses of study have returned crowned with honor and distinction. One high school alone of this State has been represented by its graduates, during its short history of less than twenty years, at thirty-nine higher institutions of learning, outside those of our own State, including the leading universities and colleges, among them, Cambridge, England; the leading law schools, medical schools, schools of theology and technology, schools of oratory, music, design, etc.

The quality of the work done in our schools may be measured by the records of the graduates in positions of responsibility, distinction and trust, filled by them within and without the State; in business, the professions and the trades. A trustee of the State School of Mines hesitated, lately, to tell me the amounts of salary which some of its recent graduates were receiving, because of the disparaging contrast with the compensation of the instructors who had prepared them for their work.

Our public school system has been complimented by the recognition paid its officers and teachers in national educational assemblies. Two members of this Association have been crowned with the highest honors in the gift of the greatest representative body of American teachers, while upon others have fallen distinctions second only in importance as the heads of departments in the same body. The oldest university of America has within the last two years called to an important department another of Colorado's teachers and scholars.

I am aware of making a favorable presentation of my subject—that is my purpose. Perfection, however, is not claimed for our school system; doubtless serious defects are obvious to passing observers; features, that by some are deemed essential to a representative system of schools, seem lacking. Those features will be supplied in due time. A state growing rapidly, as this State has done since its

organization, finds it difficult to keep pace with the times in all particulars. This city waited long for necessary improvements which have but recently begun to be provided. A suffering public has waited, how long and how patiently, for pavements, proper police supervision, sanitary regulations, and other pressing necessities. The progress of our schools, we think, will compare favorably with that of other state departments. If some things much needed are still wanting, there is consolation in the reflection that the school system is not disfigured by abnormal excrescences resulting from undue haste. If we have not fully kept step with the advance column in every educational detail, neither have we been forced into awkward, ignominious retreat from a position prematurely taken. No harm is done by the watchful critic's eye, that an interested public casts upon the school. The self complacency of the average teacher and director is thereby rescued from mischievous results.

What has been termed one of the profession's besetting sins, infallibility, is offset by the unwillingness of the intelligent outsider to acknowledge that infallibility. Paralysis would result to our school system if the stimulus of external criticism were withdrawn. The things to be deplored are, on the one hand, fulsome, indiscriminate praise; and on the other, wanton, ill-informed censure. Much of the exaltation of our schools, like that of our country, is sentimental gush, meaningless and ephemeral. Just appreciation of merits and defects is helpful and desirable. The schools are doing an important work, but it is not claimed by any rational observer that they are imparting all the influences that educate, nor can they ever do so. The school, as an institution of modern life, is one of many factors that aid the development of the individual in capacity and character. As it does not impart all the determining influences, there should not be imputed to it entire responsibility for the outcome. That responsibility must be shared by the home, the church, the street, the stage, the exchange, and above all by the press, that fountain that daily "sends forth from the same place sweet water and bitter." The wonderful record of Nancy Hanks is attributable to the combined influences of many agencies, including the breeder, the trainer, the veterinary surgeon, the shoer, the harness-maker, the road-maker, the carriage-maker, and above all the horse lover.

"Educational processes are beneath all the processes of life." In view of the fact that the average school life is but three years, is it not highly important that all the processes of development should be pure and wholesome, that all the influences may work harmoniously together toward the best results. A knowledge of the character of the predominating influences that mold child-life depends upon an

acquaintance more intimate than most parents have with their children, to say nothing of the teacher or any other person more distantly related.

The finest manuscript report submitted at this biennial season to the Governor of our State by any department was that of the warden of the penitentiary. The work was that of a convict under three years' sentence for forgery. To some, this man would doubtless furnish a fresh illustration of the tendency to immoral training of our public schools. A more just explanation of the man's failing might be found in the methods that prevail largely in business, the ruinous effects of which are seen in the gambling that is made respectable at our stock exchanges.

The school is not, nor can it ever become, a moral grist mill or character factory. It is merely one of the opportunities—an important one, certainly—which is afforded the individual for self-development. What its privileges will do for him will depend largely on how he uses them. A man may even make for himself his own opportunities, without the aid of either common schools or publicly appointed masters—at least, with very little of such aid. Else, how should Watt, the janitor inventor; the sailor astronomer, Bowditch; the blacksmith linguist, Burritt; Hugh Miller, the stone-cutter geologist, and scores of others be known to fame? The arrogance that once plumed itself on the possession of a college or a university degree is not in these days to be tolerated. Too many men and women so distinguished are doing ordinary things to-day; too many without such distinction are doing extraordinary things. No amount of polishing will give to soapstone the finish of granite, nor to coal the diamond's luster.

Here, then, is the proper measurement of the school's power; not percentages of statistical increase, nor knowledge of any particular subject, profession or craft; but the ability to impart the sense of personal responsibility for growth through choice and application.

It is with all training, as was recently expressed of elocutionary training: "The final touches of excellence cannot be imparted. Refinement of tone is the measure of the speaker's refinement. Lack of culture may be revealed by inflection, quality of tone, or degree of force. No rules, or skill in imitation, will supply the finish of a well-trained mind."

The President:—

I see that His Honor, the Mayor, has paid us the compliment of being present at this meeting; and fearing lest his pressing duties may prevent his tarrying long with us, I will now call upon him for

words of welcome, which I am sure he will take pleasure in extending. One so well and favorably known scarcely needs an introduction to a Colorado audience. It may, however, be fitting to present him as a satisfactory specimen of public school training.

Address: Hon. Platt Rogers.

LADIES AND GENTLEMEN:—Mr. Coy sent for me to come here I presume, as the patrol wagon is often called from the City Hall, to secure peace to the city. I want to remind you that we are all law-abiding people, and that we permit no transgressions of the ordinances.

I have seen men meet upon the street after an absence of years, who exhibited as hearty and kindly a greeting in a few moments, as though they had given days to the occupation, and I can only say with regard to myself and this body of educators, that though the greeting is brief, it is, nevertheless, hearty and sincere.

It is somewhat superfluous to say in this city that we are proud of our schools, because I believe, with the advance that has been made in education throughout the country, if not throughout the world, that we are where we ought to be with respect to educational advantages, and that we should no longer be proud of that which follows as a matter of course. We must look forward to something better and when that has been secured, we may then have fresh occasion to be proud.

I see before me what I learn is a counterpart of the first school house erected in this State. I saw the original, and it was scarcely larger than the model (laughter), and I think nothing evinces the progress that has been made, nothing could show in proportion the growth and the strength of the public school system of this State more than to place in juxtaposition the original school house of Boulder and the magnificent building in which we now stand. I think they mark the extremes of educational development, and I am glad that in this city, over which I have had the honor for several months to preside, there has been called together this body of earnest and devoted men and women who are giving themselves up to what I believe to be one of the highest occupations of mankind. I know of nothing that can so elevate one's belief in himself and in his people, as participating in teaching the young people of this State and of this country; because what you make is indeed the very foundation of civil administration; it is indeed the very foundation of social order; it is at the root of all progress of which we as a country are proud; and as you instil into the young minds the education which you have received with the added advantage of time and experience, we may reasonably hope that, with the passage of time in this State, we will develop a public school system that has no superior in the country. And the presence of the

men and women I see before me has an assurance of earnestness in the work, which will guarantee the accomplishment of this result; and I am proud as the representative of this city, to welcome you within her limits, and to say that it is her desire and her wish, as the representative city of the State, that what you do shall be done with reference to that which is most important in the development of the young minds in this great and growing community.

The President:—

To most people, the recent election in this State is a fast-fading remembrance; to others, a fast-approaching reality. Among the latter few is he who will be my successor in office, the State superintendent-elect, Hon. J. F. Murray, whom it is my privilege now to present to this body.

Address: Hon. J. F. Murray.

FELLOW TEACHERS:—It was my purpose to address you for half an hour on various subjects pertaining to education. But Superintendent Coy gave us such a grand review of the school work since its inception in this State, and the young lady who has just left the stand entertained you so beautifully, and a number of others are to follow, that I beg you to excuse me from delivering the few remarks that I had intended to deliver this afternoon. But I desire to say to the teachers of the State of Colorado that yesterday the county superintendents, in convention assembled, deemed it advisable to remodel, to a certain extent, the various school blanks in use by our department; and, as your official head for the coming term of two years, I desire that every teacher and worker shall earnestly endeavor to better their department of the educational departments of the State; and, to that end, I ask that each teacher present look over the various blanks in their school rooms and report to the various county superintendents such amendments as, in their opinion, would be beneficial. By so doing, you readily can see the idea that you, and each of you, have a part in this work; then, through your county superintendents, to report your amendment to the committee, who, in conjunction with myself, will formulate blanks and present them to the next meeting of the county superintendents.

There is one vital question, however, which I hope I may be pardoned for dwelling upon for one moment, and that is—if it is possible, and I deem that it is—the work of the teacher should be made more of a life work; and, if that is expected to be done, we must remunerate the teachers sufficiently to induce them to stay in the

school room. The first means toward that end will be to get our State school fund, which is a large one, out of what I deem a very inferior position; get it into a fund where it will be bringing in a proper return for the investment.

I have not a word to say against any of my predecessors in getting the school fund in the condition that it is, but in my opinion we can greatly enhance our school interests by taking vigorous hold of this matter to get such enactments by the incoming Legislature as will get that fund out of its present position. Over a half million dollars, if I am correctly informed, in—I might say—worthless State warrants. It is true that we hope to be able in the future—and, I presume, we might say we can be able in the future—to get some Legislature to rectify the existing error, and make those warrants good. The interest on that fund, as I understand it from the last *School Journal*, is something like \$170,000. There are \$670,000 of idle money which justly belongs to the school department; but a trifle over \$300,000 invested at three and one-half per cent.

If you or I want to borrow \$1 or \$100 or \$1,000 or \$100,000 we have got to pay considerable more than three and one-half per cent, and why we, as individuals, should pay more than the banks or banking corporations should pay is to me a mystery.

Now, do not consider that I am going to inaugurate any great or stupendous reform. The school work is in a good condition; but several points I do intend to press upon the ideas of my co-laborers and, if possible, have them rectified through the Legislature.

The question of kindergartens is one of great importance to the school interests of this State; and I desire to say right here that I am heartily in accord with the movement; but at the same time, my friends, let us move carefully; let us not invest \$100,000 or \$200,000 of the school fund, only to find that the entire matter is illegal.

I believe that towards the close of the meeting this morning some valuable moves were made. I believe that the movement to memorialize or petition, as you please, the Legislature in this matter is a good one; and I believe that the matter can, if properly handled, be worked to a successful issue this coming winter.

I did desire to speak to some extent about the various public school institutions of the State; but the hours draw on, and you will pardon me if I only say this: If we expect to keep the various public schools in this State up to their present efficient standard, it must be done through liberal appropriations from the incoming Legislature; and to get them, it will be necessary for every educator in the State to be active in getting these appropriations. Let us not get into any

bickerings or fussings over which institution shall have the most; but let us as leaders in the movement get together and see which institution should have the larger appropriation, and then let us work in harmony.

I believe that owing to the lateness of the hour, I will simply say this: I come into office after one of the best and most active and thorough educators that the State has had, our present Superintendent, Mr. Coy. (Applause.) He has made a most efficient leader in the movement; he has stirred up the cause to a good and effective purpose, until to-day it is a grand movement in a grand State, and I will need the assistance of every educator in the State to keep the schools in their present position, and I ask that you be not backward in offering any suggestions that you may think might be to the advancement of the cause of education.

Thanking you for your attention, I will close by saying: God speed our advancement in the cause of education in this State.

The President:—

I now present to you the first to hold office under the title of Superintendent of Common Schools within the Territory of Colorado, appointed by ex-Governor Gilpin, Hon. W. J. Curtice.

Address: Hon. W. J. Curtice.

FELLOW TEACHERS, LADIES AND GENTLEMEN:—I did not come here prepared to make a speech or to undertake to enlighten this very intelligent congregation of teachers. But as my name has been alluded to,—and in too high and complimentary a manner,—I wish to place myself right before this audience. For, in calling you fellow teachers, I am reminded, and forcibly, by the presentation of this model upon the stand, of long years ago when I used to preside over thirty or forty little urchins in a similarly constructed building in the State of New York. One year, perhaps, the building would be painted red and the next year it would be of the natural wood color.

It is well, perhaps, in view of the present and all its happy surroundings,—the light that comes pouring in upon us from so many sources, not only light, but wealth and means to do and accomplish,—it is, perhaps, well that we should refer to the past occasionally, the early past, and see from what beginning, from how small an acorn this mighty oak has grown. With that view, it is well, perhaps, that I should stand before you, and that I should be placed in contrast with the able gentlemen who have been my successors in the office of

State superintendent. The past and the present, I say, are placed in very striking contrast. I know that the present will grow, for it speaks directly not only to the eye, but in the voice, through the report of your proceedings in the press, with no uncertain sound, that shows that the educational interests of Colorado are upon as high a plane as those of any other State of this Union.

Representing, as I do, the past, I propose to speak very briefly in connection with those who were associated with me in the early days of Colorado. Your speaker, or president of your Association, has left but very little to be said; he has referred to the first Legislature of Colorado passing a law copied from the school laws of the state of Illinois—that great state—and applying it to our little community of twenty-five thousand people scattered over thousands of miles of territory; but he has not referred to the part the venerable gentleman, Ex-Governor Gilpin, took in inaugurating this system. The matter was brought before the judges, I am credibly informed. Practical members of the Legislature ridiculed the idea of putting on a garment that covered the great state of Illinois. But our Governor said, "We will make a beginning." There were other members of the Legislature that said, "We will have a law and the best law." Yet they were objects of ridicule. The pressing question in 1861 was, Is there anything in Colorado worth staying for? We had found some placer mines; there had been lode mines discovered, but they would be worked out in a short time, and we would go back. It took years to demonstrate the fact that wheat and corn could be raised in Colorado, and took a great deal longer to demonstrate the fact that fruit could be grown, as we are now satisfied; the whole thing was an experiment.

And that is not all; in 1861, the year that inaugurated the war to preserve this union of states, the Colorado mining camps were called upon for volunteers, and out of this twenty-five thousand people, three regiments were raised to defend the flag of our country, and to protect ourselves against the Indians that the Governor had said were surrounding us on every hand.

You will not wonder then that we did not inaugurate a thorough-going system of common schools when there were so precious few children to be taught.

Bearing these things in mind, I have one other practical matter and I will close:

It has been stated that this second legislature of Colorado set apart 100 feet of each mining claim. We had no revenue, and one-sixteenth of every claim was set apart for schools. In the state of Illinois two sections of the public lands were set apart for the school

fund in that country where the land was valuable ; it had been set apart many years for a school revenue, and we, in looking over this vast prairie country, said to ourselves, if the public schools in the states of Illinois and Iowa are entitled to two sections, it ought to be ten times as much in Colorado where the conditions are so different; and a resolution was introduced into our legislature to petition the General Government for six instead of two sections of land.

Another resolution was introduced to donate to the interests of schools every sixteenth township of the State. I recommended those resolutions at that time, and I believe they should have been urged upon Congress, because we are as well entitled to it as those other states have been entitled to two sections.

Thanking you for your attention.

The President:—

It is difficult to realize that, in a State which has reached the broad development of Colorado, the founders of our system of public instruction should still be with us

It was a happy discovery of mine recently to find residing in Denver the man who taught the first public school in the State, and who, assisted by another who is present to-day, constructed the first school-house ; to find also that the first Territorial superintendent of common schools was also in our midst.

I felt, upon this discovery, that we must have them all here on this occasion, and that we must include with them the first Territorial governor. They are all here, and I should have been glad to include the last Territorial governor, but his excellency, Governor Routt, was unable to attend this afternoon. I trust that he will be able to meet at some of our subsequent sessions.

Ex-Governor Gilpin requests to be excused from saying anything, but I shall ask him to allow me to present him to you. (Applause.)

Address : Ex-Governor Wm. Gilpin.

FELLOW CITIZENS AND LADIES :—The most wonderful sentiments actuate me, in seeing before me this vast crowd of educated, civilized and intelligent people, whom I have seen conquer the Rocky Mountains and bestow upon the world a new and more plenteous start in love and high civilization.

I have just returned from a most fatiguing journey of nearly across the continent, and I am so hoarse and suffering so much from the snow storms which accompanied me, that you must have the kindness to forgive me for not speaking at length.

A long and agreeable association, now for half a century, as a citizen among the people of Colorado, has confirmed my highest and most ambitious hopes and wishes. In the first examination of these mountains and these plains and two and one-half millions of Indians, I did not think that I should live to see so much accomplished by the intelligent and brave people that I had left behind me in the states. They have turned out vastly beyond my expectations; and you are now around me, where, on the 4th of July, 1843, at the mouth of Cherry Creek, I made a solitary address to an audience of seven, in the midst of two and one-half millions of Indians that possessed the whole world from the boundary of western Missouri across the Pacific to China. I determined to satisfy myself that this was not that vast scheme of uninhabitable domain, but that the people would break through these false and unhappy impressions that had been made upon them. I found it far surpassing all other countries of the world, and all other continents. The people that have come forth have already surpassed in science, in energy and in the splendor of their intelligence and literature, the foundation of this system of schools, infinite, universal and compulsory, by devoting themselves to elevating mankind, to enriching mankind and inviting them on to success. This continent is favorable and might contain the population of the world, should they desire to come here.

This continent is concave in its structure; its mountains trend from north to south, its rivers run from north to south. It was first discovered by the first immigrants. No enemy opposed their advance, except the Indians whose cycle was decaying and running out.

These people have had the opportunity and have conquered in the use of it all that we have behind us in the history of mankind. This I glory in; this I came to see accomplished, and this I find wherever I turn and wherever I go, fully exemplified and established and to stay and to last forever.

Well, we inherited all the literature of our ancestors; we inherited it without the period of ignorance through which they passed thousands of years to what they now possess. Our start was fair and we went forward without check and with infinite rapidity.

In the charming literature which we bring with us from the old world, and which is as much ours here now as it is theirs, for they are our people and we are theirs, one of the sweet poets of our own language gives us the happy composition on the progress of poesy, music, dancing and literature and high polish, which were brought over with us upon this propitiously formed continent. In that charming poem which he dedicates to the progress and learning of all civilization, and to all that is polishing and up-lifting, he represents the

goddess of poesy traveling from nation to nation as they grow to more elevated civilization and higher tastes. Having traversed Asia and traversed Europe, she has found herself here in the shadow of the North American Andes, the last of the continents of the globe, for inspiration. And allow me to say that this lady, this goddess, is here with us; let us call her name America and quote the last few lines of this beautiful poem:

"Her track, where e'er the Goddess roves,
Glory pursue, and generous shame,
The unconquerable mind, and freedom's holy flame."

The President:—

I know of no one for whom we, as teachers of the present day, should feel greater respect and reverence than for the pioneer school-master of Colorado. I am, therefore, glad to introduce to you one of the two gentlemen who helped construct this school house, and the principal one who was interested in the conduct of what went on within it.

An inspection of the interior is really necessary to appreciate the building. The desks are arranged along the wall, so that the pupils' backs are toward the teacher. There are a number of breakages in the plaster. The stove-pipe winds in a circuitous route, and there are numerous spit balls on the ceiling.

I take pleasure in presenting Mr. A. R. Brown, the first public school-master of Colorado.

Remarks: Mr. Abner R. Brown.

MR. CHAIRMAN:—In the directions by the Missionary Society in the State of New York, the instructions were never to go for the collection of any missionary fund until you found what time the gentleman had dinner. Go first and find his dinner hour; then leave a note to him that you would call an hour after. I am not 63 years of age to know that it is not possible to interest a congregation of this kind, and especially of teachers, having myself for fifteen years been connected with teachers' institutes in the east and this country, to undertake to interest them, after having already spent two hours. I would therefore suggest to you that I be excused at this time, and that you attend to the regular business of the convention, and let me speak to you some other time, if you wish.

The President:—

I do not believe that this Association will consent to excuse Mr. Brown with any other understanding than that it is a mere postponement.

We cannot, however, take up the regular work of the convention without first becoming acquainted with the lieutenant-governor-elect, Mr. Nichols, of Boulder, who was Mr. Brown's running mate in the early days of education.

Address: Hon. D. H. Nichols.

LADIES AND GENTLEMEN, MR. PRESIDENT:—I will not worry you to-night, at this time, with any extended remarks, but I have got some things I want to say—a few things—and I cannot be here at some future date, as this gentleman has said, for a man in the penitentiary cannot get out just when he wants to. (Mr. Nichols is State penitentiary commissioner.)

I was interested in the construction of this school-house, of which your mayor (I am sorry he has left) spoke so disparagingly, to the effect that it was about the size of the model; and I want to say to him that, when the heart struggles, the sacrifices that were endured by fathers and mothers, brothers and sisters and friends, for the erection of that building, are recalled, it was a proud moment, and it seemed much better to us than this cabin that we are gathered in here now. It represented the privations, it represented the last dollar that a man had in his possession; and, in many instances, it represented tokens of love and friendship, the recitation of which would be highly interesting to even a tired congregation like this. Not a single dollar of money amongst us when we commenced work; not one single, solitary man who had over a week's provisions; flour at the current price of \$21.00 a sack, and we 600 miles from the base of supplies. If hunger did not stare us in the face! if it did not require pluck and energy! If it had not been for our courageous friend, Mr. Brown, we would not have had our school-house, and our daughters and sons would never have had a start in an educational direction in that school-house that our mayor points to with so much distrust.

From that building has sprung education which has spread broadcast over this State, and now the big school buildings of Boulder do not represent the devout interest in the cause of education that was manifested in the erection of the miserable little hencoop that stands before you here.

The gentleman asks if there was anything worth staying for. We had discovered a few mines—but if he had stated that we were so poor we could not get back, he would have gotten down to the truth

of the matter. There was not one in five hundred who came to Colorado that expected to make a home here; we knew nothing of what we were coming to; we did not know the resources of Colorado; we had no idea of the possibilities of this great State, realized in the present day; we had no idea of the proud monuments that would be erected, and that we should see, in walking the streets of Denver, such fine school buildings, only thirty years away.

These things were not considered possible. At that time if any man had told you of riding across the plains from here to the Missouri river on a train, you would either have wanted to whip him because he was "playing you," or else you would have pitied him as a tenderfoot.

The matters that disturbed us in the education of this country at that time were different from those of to-day; the whole routine has been changed from that time. I am thankful to-day that Colorado stands in the proud way she does as an educational State; I am glad of the humble part I was permitted to play; but much was taken from the credit of that grey-headed old man who sits there and placed to my account; it belongs to him; it does not belong to me. He was the man who formulated the plans; he was the man who took off his coat. I did the talking and the gassing just as I am now doing; but he is the one that got down to business. He said, "Here, fathers and mothers, you must make this sacrifice for the benefit of your children in the time to come;" and I am proud to say that he erected that monument in the hearts of boys and girls at that time. Give me the grateful remembrance that lives in the hearts of these children, rather than the highest monument that ever decorated this planet of ours.

Only one word in regard to the school lands: There has been a great deal of blow about them and a great deal of political questioning, and I have been censured. Now I want to say right here, that in the construction of the State ditch, and the effort that we have used to reclaim 12,840 acres of school land, which, at the commencement of the construction of that ditch could not be sold for ten cents, but when we get the water on it every acre will be worth \$40.00, we have done a good thing. I say we are only doing that which is for the benefit of humanity and the cause for which you to-day are gathered here and in the interests of our State, both educationally and financially.

Gentlemen and ladies, I thank you very kindly for listening to my harangue; I thank you very kindly for the opportunity given me, and I want to say I thank you furthermore for the efforts you are making in the cause of education, not only from an ordinary standpoint, but from the standpoint of higher education.

God speed you on your ways.

Upon the conclusion of Governor Nichols speech, a motion prevailed that Mr. Brown be not excused from speaking, whereupon Mr. Brown addressed the Association as follows:

MR. CHAIRMAN AND GENTLEMEN:—Since you insist upon it and brother Nichols has waked you up a little, I do not think any of you will leave for a few moments. I presume it is necessary under some circumstances for some portions of you to leave—cannot remain any longer, but it is a little humiliating for a person who has anything to say, to have a dozen or fifteen or twenty get up every time a speech closes and leave. They did not leave after brother Nichols spoke.

Mr. Nichols:—

They thought it couldn't get any worse.

My wife has a sister (that has nothing to do with this matter). Must I be confined to the subject, Mr. Chairman?

Mr. Coy:—

No, speak as you wish to.

My wife has a sister, who, in the early sixties, was married out here to a man who had recently come from St. Paul. When his brother there heard that he had married "a native" of Colorado, he and his family felt covered with disgrace. My sister and her husband made a visit to the family in St. Paul, who were agreeably surprised to find that the Colorado sister-in-law was like other folks and not a red skin.

Mr. Brown characterized the men who came here in the early days as intelligent and appreciative of educational opportunities. They had little money, but possessed high ambitions for social and intellectual growth. They did the best they could under the circumstances.

Mr. Brown had been given the credit of having taught the first school in Colorado. May 7, 1859, the first school house in what now constitutes Colorado was opened in Denver by Mr. O. J. Goldrick, with the assistance of Miss Miller.

On the same day Miss Indiana Sopris, some of whose family are still living here, also opened a school in Denver. Both were private schools.

In the spring of 1859, previous to Mr. Brown's arrival in Boulder, a private school was opened by a lady.

In June of the same year, Mr. Brown opened a school in the same town, which was attended by ten or twelve subscription pupils at two dollars a month. The school was kept in a room that a man partitioned

off in his house—with a dirt floor and a shake roof and shingles. The rain didn't come in, but the wind and dust did. The desks were of slabs and the seats were four-legged benches

Pointing to the model before him, Mr. Brown said: "As for that school house ever having had the kind of seats represented in the model, I never knew it. I helped haul the logs out of which the lumber was cut for it, and I did the carpenter work. J. W. Partridge, now residing in Denver, helped me."

The first school term lasted three months. The school room was overrun with children. The people were getting ready to build a larger school house when they became discouraged and concluded to move camp. This reduced the school attendance to ten or twelve. After a month longer the school was given up for lack of children.

The people thought a good deal of that school house; for they themselves had cut the logs and hauled them to mill; some had contributed nails, others lime, still others work or the board of workmen. After giving up the school in Boulder, Mr. Brown went to Denver and opened a private school near the Tremont House on Larimer street. Mr. O. J. Goldrick had been elected Superintendent of Schools, and Captain Scudder, Fred. J. Stanton and James H. Notewire were the Board of Education. The school opened with 160 pupils the first day. The room, 30x150 feet, was in the old legislative hall, a portion of which is now standing. It was at that time a two-story building; but the top story has since been taken down to keep it from falling. The lower portion which remains has the original doors all cut up and pencil marked by the boys. There were not half enough seats for the pupils who attended on the opening day. Half a dozen carpenters were at once set to work to make seats. The third day there were over two hundred pupils, and the overflow was sent up stairs. Another teacher was employed. With the carpenter work going on, not much teaching could be done the first week. Besides there was considerable of the wild Indian to be taken out of the boys and girls. One day a couple of girls were found "fighting like tigers" in the middle of the street. They actually tore the hair out of each other's head. "But we subdued that school without the use of the rod," said Mr. Brown. "I was pounded all my school life simply for mischief, nothing mean; but during the fifteen years I taught school I never lifted the rod to any child nor allowed any other teacher in my school to do so, and the children walked right on the mark," he added.

This school was continued up to 1864, and during the last term there occurred the only mean thing I experienced during the time. Brother Nichols came into my school one day when I had a new set of teeth and got up and told the children not to be afraid of Mr. Brown

for he had a new set of teeth and couldn't bite. This school closed because the board got out of money. Mr. Brown then opened a private school, which was well patronized, but the increasing difficulty of collecting tuition compelled its closing after three months. Some of the patrons of that school are among the millionaires of Denver. Mr. Brown closed his reminiscence by expressing regret that he had been so personal in much of his talk. "I am past the time for continuing in the school room," said he, "but as one grown gray headed I say to rule by love is always better than to rule by fear. It has been one of the faults of my life to speak too long. I trust I have not taken up too much of your time."

Mr. Nichols:—

If you will pardon me, I spoke of the sacrifices made in the construction of this building. I meant at that time to tell you, that at our third school meeting, when it was supposed that there was not a dollar in the whole place, one man came down from Gold Hill and went down into his pocket and got an old leather bag, something like mine; it looked as if an elephant had trod on it. He got into the corner of that bag, after hearing our plans, and took out a little wad rolled up in tissue paper; the tears rolling down his cheeks, he said, "When I left Iowa, my little girl, nine years old, put these two gold dollars into my pocket-book and said, 'My papa, use that where it will do the most good.'" He said, "Friends, I have found the place." May God bless the money and the donor.

The following reprint appeared in the *Rocky Mountain News* of December 29, 1892:

THIRTY YEARS AGO.

(From the *Rocky Mountain News*, December 23, 1862.)

We had the pleasure of spending a few hours last week in the public schools in the west side of town, and in company with the board of education, Messrs. Noteware, Stanton and Scudder. To say that these schools, conducted by A. R. Brown, Esq., and Miss Simonton, are superior in appearance, order, mode and general system, to the average of public schools in the western States, is not fully complimentary. The fact is, the entire number who visited them on Friday last agreed, and were enthusiastic in their belief, that these schools appeared to be far ahead of the many old established and more privileged schools in the cities of the northwest. Mr. Brown, the principal preceptor, is a good teacher, manager and disciplinarian. Miss Simonton, the intelligent, discreet and pleasing lady teacher, shows a tact and attention which deserve and will command the ultimate appreciation of all who may patronize her school. Call around there, parents, some afternoon, and see how admirably your little ones are being tutored and attended to.

7:45 P. M.

Lecture: "To-Morrow and the Day After," Chancellor W. F. McDowell, University Park.

(This lecture, not having been written out, can be reported only in skeleton.)

Day before yesterday a little fellow and his sister were playing together in their father's house. Yesterday they were in the schools together, trying to master the intricacies of grammar and arithmetic. To-day they graduated from the public schools. Day after to-morrow they will be fully occupied with life's duties. What can we do for them to-morrow to fit them for the next day? The answer is: Keep them at their studies in college or special school. But what is the advantage of a college education?

1. It prolongs the period of preparation. The principal question is not how late but how well prepared we come to life's duties. "Ephraim is a cake not turned." An unprepared man is a cake only half baked.

2. It enlarges the horizon. Said Victor Hugo: "No perspective, no ambition."

3. It enables one to secure the right spirit. It develops high moral principles and cultivates right social ideals. It gives the opportunity to obtain a true and noble philosophy of life.

4. It develops the power to deal with large affairs. The faculties will be either an army or a mob. Education trains them to be an army under control. The duties of day after to-morrow in every department will require the highest kind of training. All the world will be a wonderland. It will require a very rapid pace simply to stay where you are.

5. The higher education is needed in order to learn what to read and how to read it.

6. It gives a better chance for success in life. Men cannot be compared with one another. A liberal education adds ten years to the productive power of a man's life. He can do at thirty-five what he would not be able to do until forty-five without such education.

7. But even if it added nothing to a man's money-making power it would be worth all it costs and more. It brings abundance of life. It makes a man independent of conditions.

8. The parents of to-day must give their children a better chance than they have had. The world will require more of them. They will deserve the better opportunity. The best gift to the world is a nobly educated man or woman.

COLLEGE AND HIGH SCHOOL SECTION.

DECEMBER 29, 9 A. M.

President's address, "The Old and the New in Education," P. W. Search, Pueblo.

The history of education presents for our study and contemplation the inception, growth and progress of educational movements. From the days of Socrates, and before, the busy brains and lives of the world's educators have been contributing suggestions to the general plan, and wise are they who study education in the light of the teachings of the past. The schools of to-day are not the development of any one age, but the outgrowth and uplift of the world's best life and impulse. As they have not stagnated at any one past time, no more should they crystalize in the present; for that which is crystalized is dead, while the schools should be ever formative and growing.

The purpose of this paper is not to bring disparagement upon the older plans in education, for it might be difficult to determine just what is *old* and what is *new*. The present age is consecrated to the development of a newer and a better education; but the fundamental elements of its very spirit and purpose were born in master minds and given expression in immortal lives long centuries ago. Three hundred years since Comenius gave to the world the beautiful maxim of "the learning by the doing." He it was that we call "the father of the intuitive method." "Children need examples and things which they can see, and not abstract rules." He taught, "The child shall learn only what is to be useful to him in this life, or in the other." It was Locke who advocated that all studies should be "attractive studies" and that there should be no "learning by heart." Rousseau, a hundred years ago, said, "I have no love for explanations and talk. Things! things! I shall never tire of saying that we ascribe too much importance to words. With our babbling education we make only babblers." It was Pestalozzi that taught "The individuality of the child is sacred," and that gave us the inspiration for the objective work and manual training of to-day. Of Froebel, the immortal founder of the immortal Kindergarten, what shall we say? He has given us a new childhood; a childhood that carries with it a paradise into the schoolroom and that builds a new world where everything of the university is brought to the door of the primary school.

In the light of such beginnings who shall say that this is the *new* education? It is rather *the* education, and stands opposed merely to

that which is false, to that which is abstract, and to that which is dead. The fact is, there is much in the so-called old education that is new, and in the new education that is old. But in the nomenclature of schools there is a new education, which characteristic wording pre-supposes there is an older edition still in the market. Many good schools belong to the older form; schools that are notable for their noble teachers and for the illustrious men they have given to the world. But concerning these schools several things might be said : 1. The famous teachers who therein did so much might have done more by utilization of more natural methods. 2. Schools can never be judged by the product of illustrious individuals, for the world has seen many such who have known but little schooling and that of an inferior kind. 3. Results in the school-room are not easily and not often equitably measured. 4. Exceptional schools are too frequently the outgrowth of conditions that do not obtain in every community.

Characterization of schools of the older form may be made as follows: Schools of absolute, rather than working order; of words, words, words; definitions, definitions, definitions; abstraction, abstraction, abstraction; schools where the text book takes the place of the growing world, where the pupil gains all his information at second hand, where cramming and gormandizing take the place of investigation, appropriation and assimilation; schools where all is *must* and little of spontaneity; of examinations for the teacher's benefit, of ranking, of per cents, and other false rewards and incentives; of imitation, but no originality; schools that are for the masses and not for the individuals; schools of high pressure, nervous tension and temporary results; of one-sided development, of precocity; schools that touch one side only of the trinity of man and lack in the essentials of symmetrical development; schools that make the book-worm and the first-honor-man; schools that are not in contact with the essential elements of practical life and consequently do not adequately prepare for its issues.

It is surprising how many of the devotees of schools of this class cling to their fossilized and fossilizing methods. They call themselves conservatives, forgetting that the most conservative man in the world is the dead man himself. We hear much of the Instauratic Magna of Bacon, but there is much still of the old Aristotelian method in the world of to-day.

But the past ten or twenty years have seen a great movement begun in the educational field. The seeds planted by early reformers have blossomed forth into productive life. To-day there stands before us a newer and a better education, glorious in its fundamental principles and remarkable for the popular favor with which it is being received.

The new education is an outgrowth of the experience of the past. Retaining the excellences of the older form of schools, it hesitates not to boldly enter the field of progressive experiment. Not crystallized in form, it may make mistakes; but it is full of inspiration and power to those it blesses.

The new education calls for the better teacher, the teacher free from ruts, of original and individual methods, of broad scholarship, and full of the milk of human kindness.

It cares for order, but not of the absolute and rigid kind. It deals in no per cents, rankings, nor individual honors; but makes the entire work of the school room bright, attractive, glorious, and through the live interest therein engendered secures its order for working purposes. The child is led to see the beauty of law, and his own life in harmony with its relations produces order of the most desirable kind.

The new education teaches that "activity is the law of childhood," that all growth comes by activity and that in the school room nothing is to be so dreaded as passivity.

The new education presents to the student the ever-present and ever-growing world as the basis of study. The A-B-Cs of many departments of study, the technicalities, the abstractions, are banished from the school room work; while in their stead appear things, processes, growth, life. The text-book with its many pages, its mechanical assignment of work and its iron-clad legislation is not allowed to arise like a great black pall between the inquiring mind and the world of beauty. Relegating the accomplishments of reading and kindred branches to their proper places, there is presented to the child mind the great Mother Nature, to be studied through the natural sciences; geometry precedes the composition, resolution and the science of numbers; history becomes life through its visible records; music, beauty, harmony, creation and life appeal to the soul in noble, uplifting thoughts; while language, drawing, writing and technical mathematics follow in the rear as expressions of that which should legitimately precede.

Again, the new education lifts its cry against over-gradation and uniformity. There is no mechanical scale by which mind can be measured, and, even if two minds could be graded alike, it is the height of folly to suppose they will continue of the same development and power. There is an advantage in gradation, but it is not of the mechanical kind. Gradation should be for convenience and not for mechanical excellence. The measured tread of schools by steps, one year long, is abnormal. There should be opportunity for promotion

at every step of the way. Even an Ingersoll has said the public schools and colleges are places "where pebbles are polished, but where diamonds are dimmed." This should not be the case, and is indicative of the machine and not of the high mission of the better school. Every school system should be planned for the individual, with a flexibility that will meet his every want in mass education. Uniformity is also an evil to be dreaded and avoided. Many a zealous superintendent stands in the way of the progress of his schools by a detailed and exact assignment of work that crushes all originality and individuality.

There should be unity in a plan of work, but never uniformity. Parallel schools should never be required to work on simultaneous or uniform work, and pupils should have opportunity for individual progress. Even the programme should be a live, growing thing, flexible in its parts and changing as work demands.

The new education requires that all work shall be planned for the pupil; that the instructor shall be banished from the class room, and there be substituted the enthusiastic teacher and inspiring co-worker. There shall be examinations for the pupils' benefit, but never for the teacher's enlightenment. The old-time recitation, which pre-supposes that the student must be dead an hour, and that many times a day, while the enthroned time-keeper and task-master is checking up the class against dishonesty in previous preparation, shall be considered a relic of barbarism.

The consensus of opinion among modern educators is that the recitation of old time practice must go, and that the class hour shall be one of continuous and uninterrupted activity and advancement.

The new education asks for the utilization of the working plan and of natural method; for the division of the day into longer periods, and that the students shall then be gathered into working rooms, under competent leadership, *to work and to accomplish*; that this shall be true in science, mathematics, language, history, literature, music and the industrial sciences; and that in such working periods all work shall be done, no technical preparation being required outside of such working hours. Furthermore, that any subject not capable of adaptation to such plan is not a true study, and should have but an inferior place in the curricula of progressive schools.

The new education demands that education shall be all-sided, symmetrical and harmonious. It should comprehend the entire physical, intellectual and ethical natures. A sound body is the capable workshop of a sound mind. Good health, good nature, and normal thoughts are boon companions, and expensive indeed is the education obtained at the sacrifice of any one of the three.

Every school should have its physical gymnasium; not for the making of athletics, but for the guaranty to every student of the grace and glory of robust health as the basis of all intellectual and moral improvement. Also the intellectual education is not symmetrical without high attention given to the development of inventive genius and creative faculty. For this purpose, utilization should be made of toolwork and hand training; not as things in themselves, but that the great mind within us, which acts entirely through instrumentalities, may become cultured, executive, creative, by means of the active brain, the skilled hand and the flashing nerve. The telegraph operator who sits at his instrument without connecting wire will never become great at such irresponsible work; but add the vitalized wire, and the flashing intelligence makes active and powerful the man who sends the message and who also receives. So it is that the kindergarten, the manual department and technical school play so important a part in the work of the new education.

Again, the new education asks that school work should be in touch with practical life. It does not sympathize with the so-called utilitarianism idea, but nevertheless, claims that the product of schools and of colleges should be the capable citizen. If school work is intended to be a preparation for the active duties of the life that is to follow, then why the self-evident fact that the graduate is too often not adapted for immediate participation in the duties of active life and must needs pass through a transition experience before he finds employment and usefulness? No; school work should prepare for active life, not by trade education, but by presenting the elements that underlie all success and that lead directly to its accomplishment.

The new education claims that Herbert Spencer was right when he said, "All education should be for the generation of power." What is the book-worm who continues to absorb and never gives out? What is the first honor man whose sun sets on commencement night? What is the man who knows everything, but does nothing? The man of education should pre-eminently be a man of action. Not merely to learn, but to think and to act, must be the key-note of the student's purpose. Not what he has been trained to do, but what he can do, will determine his success in life. The world needs men of thought, men of power, men of action; yea, rather men with the three elements combined in one. Such a class of men and women should be the product of every school, and the world, with its living demands and progressive action, will be satisfied with nothing less.

With such a characterization of types it would be manifestly unfair to attempt to classify individual schools accordingly. Probably there is no school where all the evils depicted obtain, and, on

the other hand, there are few where all the excellences may be found, although glorious attempt is being made in many schools along such lines of thought. The great success of the new education lies in the fact that it demands the better teacher; that it relegates to the background the helps that should preferably be present, but not as hindrances; that it presents broader opportunity and a richer realm for the development of the growing mind; and that, in its essentials, it finds description in that immortal definition of a college, of which the elements are, "a log," "Mark Hopkins," "James Garfield."

Paper, "What Shall We Do at the Columbian Exposition?" E. C. Stevens, Trinidad.

The consideration of this topic took the form entirely of an informal discussion, which Mr. Stevens led by drawing attention to the extreme difficulty of exhibiting the true spirit of the school without the presence of its personal elements; urged that whatever was shown should be in all respects truly representative.

C. A. Woody, Salida:—

"We have worked in general history, civil government, algebra, and in fact, most of the High School branches. All the work is arranged in school and formulated on a piece of foolscap paper. I can illustrate it in this way. In American literature, at the beginning of this school year, our class appointed a committee whose duty it is to gather from the papers extracts from authors' lives; our pupils took these and formulated them into a galaxy. After this, they wrote biographies of these authors' lives. I have some of this work here and show it as the work of our pupils in this branch. We average the work in literature once in three months, and during that time have studied twenty-five authors. In civil government we have a class of forty and work in a similar manner. We take up the issues of the day and thoroughly discuss them. We teach this subject without any text book. We take a newspaper published in Washington city and the class keep choice clippings from this and other papers, and in addition to gathering these items, they write out their own opinions of measures and events."

A. B. Copeland, Greeley:—

"May I ask a question? It is this: Shall the educational exhibit be for the school master or for the people? It seems to me that one very important topic is the want of time for preparing a suitable educational exhibit. I know that in our district we have felt all along

that time was the element most lacking. I can think what I would like to do, but unless we neglect our work, we can't prepare such exhibit as we would like. And I have been in a great deal of doubt as to what would be acceptable. The last circular, No. 6, is more definite than any other that has been furnished us. How do other educators of the State feel about this matter? Shall our exhibit illustrate the methods of doing this work—work that shall represent the development of broad ideas? I would like to hear from Superintendent Gove."

Aaron Gove, Denver:—

"No man of our Association can rise to talk without some diffidence, because of a sense of ignorance on this subject. A man cannot express his opinion in five minutes. The history of educational exhibits commenced fifteen years ago at the county fair, and prizes were offered. The finest exhibit of this kind I ever saw was at New Orleans. But a question was asked: Shall the exhibit be for the school master or the public? That is a good question to consider. When I want to know something of the importance of a method of doing work I must be present at the school where such work is done. At these fairs only the best specimens are on exhibition. The orchard man sends one barrel of apples selected with the greatest care. They represent not what he can and does raise, but what he could raise. The best cabbages are placed on the top of the pile. I think the exhibit shows to some extent the character of the man. The work shown ought to be the actual and true work done. One has said that the Roman Catholic Church has requested about ten times as much space as they can get, and I predict that you will find the most beautiful educational exhibit in this country coming from the schools of the Roman Catholic Church, and people will come home with the feeling that the Catholic Schools are equal to any. The work will be beautiful, of course. We must understand this when the exhibit is made,—all the cabbages grown on the farm are not exactly like the sample exhibited. I will say in this district, Nos. 3 and 2, the exhibits sent to the Columbian exhibition, work of the pupils in drawing, together with pictures and photographs of exterior and interior views, will be fair representations of the truth. After all, ladies and gentlemen, the real thing is right here: some of the people who examine our special exhibits will be moving to Pueblo. They will ask, 'What are your educational advantages?' They will examine the educational exhibits of Pueblo, and thus try to satisfy themselves as to whether they can make Pueblo their future home.

Papers, "The High School Course."

(a) "As the Colleges See It," H. A. Howe, University Park.

I hold in my hand a copy of the report of the Committee on College Preparatory Courses of Study, for Colorado, which was presented to the State Teachers' Association, on December 30, 1891.

The report was adopted last year, and the courses of study set forth in it were recommended to the high schools of the State. These courses have now been before the high schools and the colleges for a year. The task of telling what the latter think of them has been assigned to the present speaker. He feels sure that he has the sympathy, or rather the pity of the audience from the start. For every one knows that a college professor is a crank. He imagines his own department, like Barnum's show, "the greatest thing on earth." If he be a French master, he would like to keep limbering up your tongue by successive repetitions of "Dido dineir, dit-in, dun dos de dodu dendon," until you come to wonder whether the dodo is extinct, after all.

The biologist would be pleased to teach his scholars every school-day throughout the course, lecture to them on Saturday nights, and cultivate the bacteria in their own shoes on Sundays. An astronomer would work them nineteen hours a day until they died, and then would figure out eclipses on their tombstones.

Such is the nature of these college professors; but they are not wholly without excuse; they really have to be cranks, in order to keep the wheels of their departments moving.

Premising these facts about the nature of college professors, we see that criticisms of these courses are to be expected from them. The writer has asked for criticisms from college faculties in the State, and has obtained the following.

One professor thinks that students in the scientific course should have the option between French and German, as in the Latin scientific course. The committee, at a recent meeting, amended the scientific course, so that, instead of Latin and German, it now reads Latin, German, or French.

Two mathematical professors say that the scientific course is lighter than the Latin scientific course, because the former has one year less of foreign languages and only half a year more of mathematics. They suggest that, in the scientific course, solid geometry, advanced algebra and trigonometry be inserted instead of plane trigonometry or solid geometry.

The reply to this is that there is extra English in the scientific course, which tends to even up the inequality mentioned. Furthermore, it is questionable whether it is wise to put in so much more mathematics than is required for admission to scientific courses of the best eastern colleges.

Another teacher of mathematics is an ardent advocate of the addition of trigonometry to the classical course. He could consume the remainder of the time allotted to this paper in giving reasons why this should be done. He may seek consolation in the reflection that he is fifty years or so in advance of his times, at least until some one proves that he is 100 years or more behind the times.

A professor of science recommends Roscoe's elementary lessons in chemistry, and states that the reference books recommended are absurdly advanced for beginners. He also thinks that Thornton's physiography is not sufficiently elementary.

A language professor would like to have examination in unseen passages introduced, but doubts whether it can be done.

This is the entire grist of collegiate objections. Perhaps some of the college teachers present to-day will give expression to further ones.

While it is true that each college professor has his own peculiar views, the college faculties, as a whole, are well satisfied with them. The committee which prepared the courses was largely composed of college men: The situation may be illustrated by a story of a Boston international social science convention, which was discussing all sorts of topics, from the effect of baked beans on the cerebellum up to the "thingness of the here," and the "whichness of the what." In one committee there were a Brazilian, an Icelander and a Prohibitionist. When they were discussing the merits of mince pie as an article of diet the Brazilian gave it as his opinion that too many calories of heat were developed by its consumption to make it a good dish in equatorial regions. The Icelander thought that too much chemical energy was used up in digesting it. The Prohibitionist declared that the mince pie usually provided at restaurants and hotels contained a good deal of alcoholic ferment, and must be accounted a dire enemy of the human race. He would not grant a license to any restaurant which proposed to offer mince pie to its customers. They all agreed that mince pie was, to borrow Shakespeare's phrase, "the stuff that dreams are made of." A jolly good fellow invited them to take dinner with him at the hotel. For dessert he directed the waiter to bring in mince pie. The Brazilian and the Icelander exchanged significant glances, and the Prohibitionist heaved a sigh at the perversity of mankind. Then they all fell to, and pretty soon they actually asked for more.

Such is the attitude of the colleges of the State to these courses of study. To prove this I would call your attention to the resolutions on the back of the circular. The State University has incorporated these courses into its curriculum, as may be seen by examination of

the catalogue recently issued. President Baker, when asked for a criticism of the courses, found his emotions too great for expression in the English language, and sent back word: "Noli tangere"—that is, "Don't touch them."

The attitude of Colorado College may be judged by their resolution.

The University of Denver was compelled to refuse its assent to the courses of study first proposed, because they were not of a sufficiently high grade, but its chancellor last year publicly asked the privilege of making the motion by which the present courses of study were endorsed. The institution accepts them for college preparation.

From this evidence, we see that collegiate institutions especially interested in this matter are heartily in favor of the uniform courses. Let us inquire into the reasons for this.

In the first place, these courses set a high standard. Coloradans are not satisfied with anything less than the best they can get. The whole State is on a high plane. The contemplation of these mountains gives us a genuine uplift. The splendid school system of Denver has set a standard for the other schools of the State. The colleges, as well as the public schools, must be up to the grade of first-class eastern institutions. If such institutions as Yale, Princeton, Amherst and Columbia demand a certain amount of Cæsar, Cicero and Virgil for entrance, Colorado colleges must do the same. Were the colleges to lower their standards, the public school men of the State, indeed all intelligent citizens interested in education, would point the finger of scorn at them, and advise them to give up the names of college and university. While Colorado colleges cannot offer the manifold advantages of their old and wealthy eastern sisters, they must, in whatever ground they attempt to cover, do as thorough and substantial work as is done in the east.

It is utterly useless to ask the colleges to lower their standards. They cannot do it, and retain their self-respect. They will not do it. They will, in the future, be true to their own history, and strive to uphold the educational honor of Colorado.

A second reason why the colleges hail this movement among the high schools with delight is, that it is an important step toward uniformity. The colleges find it difficult to inspire the heterogeneous elements sent to them from the lower schools with a true college spirit, a zeal for learning. These pupils, coming to college, find themselves classed as irregular or special students. They are compelled to pick up one study here and another there, without regard to the educational fitness of things. Certain studies which they desire, and ought to

take, are found to conflict, because they recite at the same hour. These students are continuously hampered and vexed because they have to travel around on the branch roads so long before they can get on the main line. They find that the great through trains, carrying the regular students do not stop at the way-stations where they wish to get aboard. Very many of them become discouraged after a while and give up the struggle.

Now absolute uniformity of high school courses may not be attainable, in the minds of some it is not desirable. But we can obtain so close an approach to uniformity that the problem of the easy passage of a youth from high school to college will be satisfactorily solved.

In order to reach this goal a standard is needed; such a standard is furnished by the course of study adopted last year by this Association. It is not expected that many high schools in the State will find themselves able to adopt all these courses within a short time. But the weaker schools can build up one course at a time. The tastes of the community may be such that the scientific course can be developed first, then the Latin-scientific course will follow in due season. As the community grows in wealth and intelligence, it will be possible to establish the classical course also. Whatever is done should be done thoroughly, and according to the well considered plans laid down in the report of the committee.

Furthermore, the plan of uniform courses strikes a well-aimed blow at the notion that young people who have passed through a high school have finished their education. To be sure, there are a good many scholars who cannot go any further than this, much as they may desire it. But probably two-thirds or three-fourths of the high school graduates in this State could go to college if they wished. *Some* of the young ladies feel a decided sense of relief when school days are over, for they think that they are beginning to get gray. Many of the young men are burning to plunge into business. The almighty dollar blazes before their eyes like the full moon on a dark sky.

Now that there is to be a closer bond between the colleges and the high school, the pupils in the latter will have a greater realization of the fact that graduation from a secondary school is simply the passing of a mile-stone on the educational road.

The high school at Grand Junction has taken a distinctive forward step in this matter. In its latest catalogue schedules are given to show students just what studies should be pursued in case they wish to prepare for Colorado colleges, the University of Michigan or Wellesley College.

We may also expect a general improvement and waking up among the teachers. The high school men will work with renewed vigor under the stimulus of college ideals. They will be able to make their scholars feel that their work must be done with thoroughness, for much of it will be tested by the college men, and the reputation of the school will be made or marred by the tests. Some of the old fogies who hold down chairs in colleges will find the chairs slipping from under them if they do not wake up and give their best energies to the bright young men and blithesome young women who come to them in increasing numbers from the high schools.

But I fear that you are getting weary. Perhaps the subject does not interest you. It may be that you know as much about it as the speaker. We consider, therefore, only one more point in conclusion.

As a result of the discussions over these courses of study, there has come to be a much better understanding between the college teachers and those in the high and grammar schools. The relations between them have become cordial. This entire section of the State Teachers' Association seemed to be regarded, at the time of its formation, as an interloper. The case was somewhat like that of the man and his wife who had become satisfied that they could not agree, so the man said to her, "I guess we had better divide the house; you may take one side and I will take the other." "All right," she replied promptly, "You can have the outside and I will take the inside."

It was in the year 1886; the meeting was at Colorado Springs. While the General Association was in session, the section was sent over to the county jail to hold its first meeting. No, it was not exactly the county jail, but it was an exceedingly dirty court-room, from which many a prisoner had doubtless gone to the jail with a genuine sense of relief. The long flight of steps leading up to the room was carpeted with bushels of saw-dust, in expectation of expectoration. We waded through it. There was no fire in the room nor was there a janitor in sight. It was discovered that some of the college men knew how to build a fire. Soon it roared up the chimney. Half a dozen brave ladies ventured in and took seats in the rear of the room. In this way the college and high school section came into existence.

Since that time the section has been cordially welcomed each year by the Association. The college teachers have been made to feel at home. They are here for service; they ask to be used. They are willing to do anything in their power to advance the general cause of elementary and secondary education in this State. Some of the wide-awake schools have already perceived this, and taken advantage of it. They have sent for some of the professors to come and lecture before

them upon their specialties. The professors are eager to do this sort of work. They delight to keep in touch with young people. Some of them would wither away and be blown off some windy day, were it not for the rejuvenating influences which come from their daily contact with those who are young. In the college catalogues, University Extension Courses are offered. It is advertised that a certain one of the professors can lecture one night a week throughout the year, and then have a couple of untouched lectures left, to ornament his coffin. The catalogue does not make the announcement in those words, but one may easily reckon up what nine courses, of six lectures each, will come to.

Putting all suspicion of fun-making aside, the speaker would like to reiterate the statement that anything which the college professors can do to assist the High Schools in the development and maintenance of higher educational ideals, they are eager to do. This very day, members of the faculties of two of the colleges of this State are in the city of Chicago, in attendance upon committees which are wrestling with the problem of securing uniformity in the High School courses, and in the requirements for admission to college, throughout the country. Two of the faculty of another of our colleges are at the same time trying to help matters along in two of the western States.

The colleges of Colorado, then, welcome this movement toward uniformity, and stretch forth the helping hand to any and all secondary schools which desire to take part in it.

(b) "As the High Schools See It." W. W. Remington, Boulder.

Unfortunately for this report, Mr. Remington's manuscript was lost, and only the meager newspaper outline below can be given :

"I take it that the purpose of the committee in assigning this topic was to have presented here a concensus of opinion as it exists in the State at this time upon the practical working of the courses adopted by the State Teachers' Association at its last meeting.

QUESTIONS AND ANSWERS.

"To obtain the necessary data from which to formulate this report, I sent the following set of questions to the village and city schools of the State :

"(1) Are any of the preparatory courses adopted by the State Teachers' Association in 1891 now in force in the school? What courses? How many years of each course? How many pupils in these courses? Please give total enrollment in high school. How have the courses been arranged ?

"(2) Are the courses too broad? In what respect?

"(3) What should they include more than they do now?

"(4) Please state any good reasons for maintaining a parallel course other than those adopted by the State Teachers' Association.

"(5) What is urged against the adoption of these courses?"

After detailing the replies he received and their multiplicity of suggestions and complaints, Mr. Remington went on to say: "Now, out of this chaos we have not become too much confused. We can draw these conclusions, namely: That there is an excellent opportunity for some creative hand to bring order out of chaos by arranging an English course to meet the wants of the smaller schools and of the pupils in all schools who will not go to college; that too often, in arranging the science work, there seems to be no thought at all of training in the scientific method or of the natural order of arrangement of the branches of science taught; that there is need, if anything like uniformity be a good thing and desirable, of some central influence to work upon this matter of unification year after year and all through the year; that in view of the fact that the colleges of the country are now working to secure uniformity in preparatory courses, it may be well to avoid tampering in any way with the Colorado high school course preparatory to State University until it may be seen what the movement in the broader field may bring forth; that a conference be had as between the powers that be in the State preparatory schools and the principals of those schools maintaining courses of less than four years, with this end in view, that the arrangement of courses be made such that pupils coming from schools maintaining partial courses can, without loss, be regularly classified at Boulder as in the year in advance of the one they may have completed at home.

Discussion.

President Baker, Boulder:—

Mr. Chairman, the history of what is being done by the national movement I shall be very glad to give. I am heartily in favor of the attempts that have been made in the cities and State to formulate a High School course. I believe that much good has already been accomplished. I have been interested in the same problem and am all the more ready to speak of what is being done, for I am, in a measure, responsible for the movement as it is in its present phase. Some two years ago the report on national uniformity in this matter was given before the National Council of Education. That body voted that the labors be continued, and got together the leading representatives of education to discuss the reports of the committees. Such a meeting was held at Saratoga last summer and such appoint-

ment of committees was made through the Council of Education. Each report was adopted. A committee of ten was appointed with power to act and with power to appoint sub-committees. That committee met at New York two months ago and was in session three or four days, making 100 men representing every section of this country. For instance, the subject of Greek; ten leading instructors in Greek were appointed as committee on that subject; so also, with Physics, Latin, etc. These sub-committees are holding meetings during this week, and will report the results of their conference to the public. We believe when these reports come, they should have some influence. Many questions have been discussed, as, for instance, "What preparation applies to the period of secondary instruction?" "What preparation should be begun?" "What should be the methods?" etc. The word, "uniformity," is rather a scare-crow, and I may say that President Eliot, of Harvard, who is now president of one of these committees of ten, is very much opposed to "uniformity." I will say, however, that it is not the intention to specify exactly what shall be or constitute a given course of study, but if the high schools shall have confidence enough in the work to do the work all along the lines indicated, it will materially help matters. I do believe that the consensus of opinion of the best instructors in these various subjects should have some weight, and it does seem that this should lift the standard of work throughout the country.

President Slocum, Colorado Springs:—

We realize that in arranging a uniform course of study it is a matter of development. What has been said, I think, represents very largely the feeling of all the committee. We must determine to hold the standard just as high as we can. We must keep in touch with the colleges and recognize the conditions. I believe that I should ask that students shall be admitted to the freshman class even though they have not taken Greek. So far as we are concerned, at Colorado College, we have admitted five students who intend to go on and take a full classical course. We didn't like to do so, but we made special arrangements so that they might take Greek, and at the end of their course they will have taken as much Greek as any other students.

P. M. Condit, Colorado City:—

We realize the good that has come from this work already, yet from time to time I have been impressed by this fact. The committee are very largely thinking of preparation for college. They have not thought of a course of study that might be considered elective. A high school course does include elective studies. I know that there are many schools in this State that can be helped if the committee will arrange a State course with reference to preparation

for life. We want to give our pupils that incentive. A small per cent. of the pupils are entering colleges, therefore I would suggest a course that may be considered elective. I suggest that there should be some flexibility, and in taking this view of the matter, I think I am voicing the sentiment of many principals and superintendents. I have feared that in arranging this course, the committee had in view only a preparation for college. It seems to me that a course can be arranged with reference to this greater per cent. who do not enter college.

P. W. Search, Pueblo:—

I hope the impression will not exist that the course is necessarily a preparation for college simply. The course will not preclude any work that may be characteristic of certain communities. The work is not uniform for all classes of schools.

Ira M. DeLong, Boulder:—

Mr. President, I move you that this committee as it already exists be continued for another year.

Aaron Gove, Denver:—

I second this motion because I believe that we are in one of the most important matters. Twenty-five hundred dollars have been given to the committee for payment of their expenses. The committee has already done much, and there is yet much to be done. You and I have to listen to the product of these reports when we meet next summer—the product of 110 of the best men, I think, west of the Atlantic.

The motion was carried.

1:45 P. M.

Paper: "Authority in the Use of the English Language," C. F. Hays, Denver.

In the paper to be read before you, the writer desires in the outset to disclaim any lack of respect for any of the great men and women who have done so much for the advancement of the English language. "Their works do live after them and we have entered into their labors." Their lines have gone out to the very ends of the earth, and in season and out of season they have labored not as eye-servants, but with fidelity to truth as they discerned it. And hence to these workers, these our brethren, "ever reaping something new, that which they have done but earnest of the things that they shall do," be honor and praise without stint and without measure.

One of the best writers in the English language, one whose works are widely known, makes use of the following: "The marble of the arch looks very white and fresh, as being exposed to the winds and salt sea vapors, that by continual fretting it preserves itself from that mouldy color which others of the same kind have contracted." While the above is not stated in the best possible manner, it can be understood, and hence answers the purpose of language, *i. e.*, the expression of thought.

A well-known American author (Richard Grant White), who has written two books for the expressed purpose of helping to keep the English language pure, and to encourage the use of right words, criticises the above paragraph in the following manner: "Such confusion mars the charm of Addison's writings not so rarely as some of those would have us believe that they gave their days and nights to the study of them would seem to think."

Of the two sentences cited, which is the plainer? Which expresses the intended thought in a way that is the easier to comprehend? When submitted to a number of teachers the decision was unanimously in favor of the first, and the probability is that, had there been a thousand similar expressions, the resulting choice would have been the same. If the verdict thus rendered fairly represents the average intelligence it is safe to assert that, since the object of language is to express thought, the best language is that which expresses thought in the clearest and easiest manner.

The average man does not consider his words nor weigh his sentences by any so-called standard authority. Just so long as his ideas are understood he is content. If his attention be directed to the authority of dictionary or critic he may, if he be of an enquiring mind, ask is there any competent authority in the use of the English language.

The expressions of people are particularly criticised in spelling, pronunciation and proper use of words, or rhetoric. One year ago the teachers attending this Association were enlightened regarding the importance of spelling. The number who took part in the discussion was of itself sufficient evidence of the importance of this branch of education.

To the average person a poor speller is synonymous with an indifferent scholar. That this view is not wholly correct is plain to all observing teachers.

That all should spell uniformly is not to be questioned; the advantage is too apparent for discussion. That there is any logical method for determining the way in which words should be spelled is

very doubtful. The nearest approach to the proper choice and arrangement of letters is to take the original word as it appears in the oldest manuscripts and by analogy determine what changes should be made.

Is n't this fair? you ask. Certainly fair, because, in the main, the analogies are correct. But while fair, it does not constitute a correct standard, because this method admits of probable errors, owing to the defect of human reasoning. As we know, there are accepted authorities who do not agree in this matter of spelling. Why not? Because of their different ways of reasoning as to the analogy existing between sounds as represented by letters.

What can one do to ascertain what *is* right? If it were pronunciation, the old rule of when in Rome do as Romans do, would be applicable; but here the *written* word is considered. This should be a combination of letters representing to the eye as nearly as possible the word, and by a fair construction of the methods used by lexicographers, it ought to be a definite arrangement, and not a choice of two methods. When a foreign word is introduced into the English language, at what stage is it sufficiently anglicized to receive English spelling? Must it first get the sanction of the best writers? If so, who are the best writers, and how many does it require to form a lexicographic quorum?

But, upon further investigation, it is found that our seeming authority shrinks to smaller dimensions. Instead of the lexicographers going back to earliest records, and basing their system of comparisons and analogies upon the oldest manuscripts, what have they done?

Skeat, in his "Principles of English Etymology," makes the following statement:

"While manuscripts of the Anglo-Saxon, from the eighth to the twelfth century, were in existence, the Anglo-Saxon of the dictionaries is based upon the twelfth century manuscripts and not upon the earlier, simply because the later were more accessible and received more attention from scholars of this date."

Hence it is that, in orthography, we have a building erected with painstaking care, except the foundation. This was laid upon the drift, instead of upon bed-rock.

In the matter of pronunciation, the task of deciding what is absolutely correct is still more difficult. There is such a diversity of opinion among eminent men in this department, it is no wonder that most persons take refuge behind Webster, Worcester or the Century.

Dr. Whitney, of Yale, gives a long list of words in the *New York Tribune* of November 25, 1890, in which the given pronunciation is taken from six of the leading dictionaries of the English language. Here, beginning with the word *access'ory*, which has the sanction of two authorities and *ac'cessory* of four, and thence, running through all the letters of the alphabet, the list closes with the noun *woorsted*. By three authorities you may call it woosted; two say you may name it woorsted and one woorsted

Words were generally spoken before they were written, and the written word is a mere conventional arrangement of letters, which at best but imperfectly represents the sound, which is the real word; the thing of life that bears in itself the impress of power. How important, then, that this word be *filly* spoken. If it be hedged about with the walls of erudition, loaded down with the affectation of Miss Prim, encumbered with the bombast of Mr. Rotund, or clipped with the shears of the self-satisfied critic, it will fail in its true mission.

To acquire proper pronunciation is a difficult, if not a hopeless task.

"In order to attain the earlier forms of pronunciation the start must be made from the modern and actual pronunciation, and in spite of all that can be done, in spite of slow and patient induction and a careful weighing of facts, our conclusions will at the best be *imperfect* and approximate, and in the larger number of cases one must be content with merely approximations" (A. H. Sayce). When all the accepted authorities will recognize one sound and only one for a single word it will then be time for the laity to bow in submission.

Should you ask your grocer for a pound of *tay* he would probably think you were from Ireland or taking up with some new fad, but Pope so called it and the earlier pronunciation is doubtless nearer correct than the present one. The word *meerscham*, by what authority is it so pronounced? If it be anglicized why retain the useless *c* in the second syllable? If it is still German why call it anything but *mærscham*?

We speak of the *gladiolus* of the garden, but we have to say *gladioli* in the plural. Reasoning by analogy why not say *croci* of the florist and *chori* of the church? If *gladioli* is shorter and sounds better than *gladioluses*, then *chori* has the same advantages over *choruses*.

While the makers of dictionaries have done nothing amiss beyond the mistakes of authors in general, yet it does appear that there may be improvement along this line.

Thus let Dr. Gould of the Anglo-Saxon, and Dr. Speake of the Anglo-French, and Dr. Brandt of the Middle English, and Dr. Peter-

son of the Aryan branch, and all the doctors of philology begin anew. Call x plain x , y common y , z everyday z , and thus continue until the whole is so complete and simple that one may stand at ease before such an audience as the present one and utter the word "pronunciation" as "pro-nun-she-a-tion." and not feel abashed openly or timid inwardly.

There is a class of critics who delight to tear sentences apart piecemeal, put them together and, adjusting glasses—not their own but borrowed—try to show where some word has been incorrectly used, or where a different one would have been better. Where is there a prominent writer who has escaped these pedants?

The writers made use of such words that the thoughts were clearly expressed and readily understood; but these critics have tried to show, no, they have even proven that some other construction would have been better, because this and that, and therefore and hence an error.

The microscope does not reveal more secrets of the fungi than do these critics of the wonderful inflexibility of our mother tongue.

The purpose of language is to express thought, ideas; not to hide them nor mystify them, but to render them intelligible. Can there be any beauty in an effort which is so strained that it requires hard work to express the thought that is already known to us in simpler terms? "When talking in a foreign language, one is quite certain to supply deficiencies in words with numerous gestures. The more readily our thoughts are understood, the less need there is in dwelling upon the sounds which express them; hence, with the progress of education whereby the perceptive faculties are quickened, our words are contracted." Thus the phrases, he doesn't, she can't, they wouldn't, form current and correct expressions, and to the unprejudiced mind, are more euphonious than the affected, he does not, she can not, they would not.

English is so cosmopolitan that words from almost every known tongue soon become current and part of the language.

Slang expressions are abhorrent to the fastidious, but if they are expressive and serve an useful purpose, they are retained; if too coarse or cumbersome, they run their course and are played out. A few years ago "played out" was looked upon as slang, but now, since Mr. A. H. Sayce, page XVI, preface to the second edition, introduction to Science of English Language, gives it his recognition, it will be accepted as perfectly proper by many persons.

To my mind, the use of this phrase by such an eminent authority does not affect its real value in the least. If good in the beginning, it would still be good, without being stamped in the mint of learned specialists. In a recent article, published in one of the most widely

read papers of the United States, a writer says that an educated person may spell or use a word in any manner that pleases him. Undoubtedly that is true, but, in so doing, he will not please anybody else. Considering the matter seriously, why has an *educated* person this privilege? You would at once resent such a monopoly. If one be refused this privilege, why not two, three, any number?

The necessity for new words will cause new words to appear and this necessity need not be absolute, only relative.

Every technical word is made plain by words already understood or easier to comprehend, hence this necessity is only relative. There may be a half dozen words to express a particular idea, but if a newly coined word or even a so-called slang word is shorter and will convey the meaning in as clear a manner, there is the same necessity for its adoption that there is for such words as barometer, telegram and chromosphere, for all these could be expressed by English words.

As long as the English is a growing language it will secure new words and become more and more of a conglomerate.

That is well. It is not seclusion nor exclusion; it is life and freedom which make language powerful; not coldness nor affectation, but warmth and candor.

In Tennyson's "Maud," didn't he have in mind and make her a figure to represent those people whose language is "Icily regular, splendidly null, dead perfection, no more."

Let an orator deliver a speech full of fire and pathos. It is one thing when heard and entirely different when read. What makes the great difference?

It is the refining and polishing that kills it.

Flanked by dictionaries, with Crabbe's synonyms on the other side, with a book of "Don'ts" in front, while around sit those *wise men*; is it any wonder that the timid seek refuge in silence?

Criticism of the expressed thought can do no harm, it is rather productive of good than evil, and is always to be encouraged. But of stinging rebukes and gruff censures regarding the form of words used, and the manner in which they are combined, there is a vast surplus.

How utterly useless is the tracing of a word backward until lost in the chaos of the past in order to determine if there be any authority for its use.

Authority? What makes authority? It is use and use by the *people*. Let us recognize this truth that the will of the people is supreme and custom alone can and does make authority. While this

fact is apparent to all scholars it is not generally recognized, and therein lies the difficulty of not acting with more freedom in the use of language in all its varied forms.

This heritage of language for the people, of the people and by the people is ours for acceptance in all its fulness. There is no danger of inundation, and there should be no Chinese wall erected, nor quarantine proclaimed, for the common sense of most will act as guard, and, if need be, executioner. Let there be discipline in the ranks, and loyalty in the camp, but when the sentinels are posted let there be some other password than shibboleth.

Discussion.

Celia A. Salisbury, Denver:—

It was a little difficult for me to determine just what the paper meant by "authority" in English. In the first part, I think, it stated that we should go back to everything old and find the right of it; in the last part, that each person can talk as he pleases and no one has any right to say anything about it. I suppose a gentleman could go upon the streets in the costume of George IV. or in a Chinese costume, or any costume that is strange, but it would not be national to do so; indeed, it would be hardly loyal. If we are to have anything national ourselves, we must conform, more or less, to certain rules and expressions. The majority of the people should not be the rulers, but the majority of the educated people who have spent their time in trying to ascertain what is right. If we, as Americans, ask for the pronunciation of a word, we have a right to expect as absolute an answer as to the question, "What is the difference in longitude between Denver and New York City?"

In these times, the secondary schools are almost decided to spend more time on the study of English, and it seems hardly fair that the teachers should set up a false standard or follow no standard at all. The teachers of other branches have no more right to do away with the authorities in English than the teachers of English have authority to say to the teachers of science, "The sun does move, after all." We have good authority, not absolute authority. I have often heard people say: "I am not going to use your new-fangled pronunciation. I was brought up on Walker." Very many of the words as they are now pronounced were so pronounced one hundred years ago. So, since we have had this authority for one hundred years, I don't know why we should complain of it now. Some people have a set of words and phrases which they like, and a great many to which they have a great antipathy. Some people know the pronunciation of certain words, and when they hear them mispronounced it annoys them; yet they themselves make errors, as in "alternate" and "finance."

So we all have our ways and our authorities. I have always been taught not to place the adverb between the two parts of the infinitive, but I have good authority that says this has been done more or less for 100 years. Hill, of Harvard College, says, "Never put the adverb between the two parts of the infinitive;" and this same authority says, concerning rules: "A boy can be taught in half an hour nearly all the phrases and rules necessary to know in grammar." Among them he gives a few irregular plurals, shall and will, I and me, and right here I would like to emphasize "It is her" and "Give it to Mary and I." And then to couple singulars with singulars, and plurals with plurals; and use no double negatives; and "Try and remember what you are to do"—these are incorrect. Again, some have an antipathy to certain words. Hill would substitute "artistic" for realistic; everything is artistic that is realistic. As to newspapers, all are supposed to have a standard; yet we read: "A very unique party was held—"

Authority is not absolute, but, for pronunciation, Walker's Dictionary gives us a foundation. I think we should know some authority, and then choose.

Paper: "How to Overcome Indifference in School Work," Mrs. R. G. Leake, Florence.

This paper was not prepared for the veterans, but in the hope of helping some of the recruits among the privates.

In searching for the remedy of this indifference in school work we find there are several elements that combine to cause the disease, namely: The parents, superintendent, principal and teacher.

Each or all have, in part, at least, been unfaithful, for any one might have done much to overcome the indifference of the others.

Many times the indifferent child comes from the indifferent home. The parents lack active interest because they know so little of the working of the modern school, and because so many other duties consume their time.

But they are an important factor of our complete success. We need their cordial support and co-operation.

More than one teacher has failed because the sympathy of the patrons in the community was not with the school, even when the teaching was superior; but the teacher made no effort to win the esteem of the parents.

Induce them to visit the school by asking them to come; by sending out invitations to an especially prepared programme, consisting of a review of some branch of the regular class work, and enlivened by a few well-selected songs and recitations. Meet them with a hearty welcome, and when, in addition to this, they see how earnestly the work is being done for the advancement of their children, the foundation for a hearty support has been laid. If other means fail, and it is necessary to "beard the lion in his den," let us make the advance and call on them in their homes, talk to them of the work of their children, explain our plans; but let us not fail to use all the means to win the parent if the child is wanting in interest.

Monthly or term reports of the standing and rank of the pupils appeal to many of the patrons.

Then too, the public mind must be aroused to a sense of the proper general methods of teaching. The more ignorant the people of a community, the more are they inclined to condemn the teacher who uses advanced methods, and the more he needs their approbation. The people in general, the taxpayers, patrons, directors, are not reached by educational journals; therefore, our daily or weekly papers should be utilized to accomplish an educational awakening, so necessary to success.

An educational column, edited by the representative teachers of a county, would do much to stimulate interest and overcome prejudice. This might consist of local school news, essays by the pupils, extracts from educational journals, etc. In a community where vocal music has just been introduced, a well written article explaining its value to the child might prevent some parent from sending such a remonstrance as this: "Teacher, I wont git Sammy a singin book. I dont want him to sing. I want him ter read an rite an sifur."

The ordinary public, the people whose unwillingness hinders us, do not understand the value of drawing, music, kindergarten. They must be enlightened. It is needless to expect the most profitable schools where public opinion has not been aroused to do every thing possible to advance them. We must have an influence that upholds public interest, and then parents, pupils and teachers will consider their duties to one another, to the school and to themselves.

The county superintendent has a most vital relation to the indifference in school work. He judges of the qualification of teachers, and thus determines what influence shall prevail in the school room. He directly controls the force which must shape the lives of the children. Not only can he prevent the incompetent person from entering the profession, but should his first judgment need correction, he has the power to remedy the error.

Therefore it is highly desirable that this important factor be qualified for his office. The law should demand that he at least, hold a first grade certificate and be a teacher of several years' experience.

A short time ago any man of requisite republican influence might press to the goal, now, in many counties, it requires one of populist ideas.

At the election in 1891, in one of our leading counties, a man was nominated for county superintendent of schools to soothe his wounded feelings, because he had been promised the nomination of recorder and the political bosses had not been able to manipulate affairs to their liking. Luckily the man refused to make the race, an experienced teacher, by chance, filled his place on the ticket and was elected.

Surely in this day in Colorado there is not a county in which there is not at least one man to meet the conditions that should be required. If so, doubtless some one could be found who would move in just to be elected. If not, then our State Constitution might be so interpreted that women are eligible to the office. But by all means, let us have men that can and will judge the competence of applicants for certificates.

As long as we look to politics alone to select superintendents, more or less local pressure will be brought to bear and unqualified persons will go forth bearing licenses which to most school boards are sufficient evidence that they are prepared to teach. Few realize what damage is done by thus allowing incompetent men and women to take charge of schools.

In one place, where the directors require a first-class license before teachers are permanently employed, the superintendent granted such a certificate on a general average of sixty-seven per cent. The lady had taught over ten years, had influence, and was at the time an object of sympathy on account of family trouble. But these circumstances did not keep her from teaching her pupils that "me" is the object of "told" in the sentence, "Mary told me."

Another teacher, a man with a life certificate from an eastern state, was given a first-grade license when his examination papers were far below the standard. He taught the pupils that the square root of $\sqrt{\frac{2}{3}}$ cannot be extracted; that, in the sentence "See the girl riding a white horse," "girl" is the subject, "riding" is the predicate, and "horse" is the object. He spelled smoking "smoaking," copy "copp," sure "shure," every "evry," and so on *ad infinitum*. Were his pupils indifferent? Yes. Whose fault was it? His? No, the county superintendent's.

In both of these cases there were well qualified applicants for the positions, and the situation depended on his granting unjust licenses. The salary in each case was \$750 per year.

In graded schools, much depends upon the principal. Few, indeed, are teachers that cannot become fairly earnest, faithful, efficient workers under the kindly, wise, persevering influence of a worthy principal.

In every school there are teachers that have some points of excellence, that show superiority in awakening interest, in securing attention or in the presentation of a particular subject. Rarely, indeed, is there a teacher who does not present something meritorious, deserving of recognition.

To note these excellences and spread them among the other teachers, to assist in embracing the good in the quarantine of the bad, is one of the principal's most fertile sources of promoting a general enthusiasm in his school. He is to the teacher, what the teacher is to school.

Normal Schools, Teachers' Institutes, do much for us, but neither of these can enter the province of the principal. His teachers' meetings may be made a continual source of inspiration, and his visits, instead of being an annoying interference, may be looked forward to with the hope that some timely suggestion may give the teacher's thought a wiser direction, or awaken a deeper interest in pupils.

With what joy and pride does the little six-year-old prepare for his first day in school. It is the goal for which he has been longing for weary weeks. Day by day he has stood watching his older playmates pass in merry groups, and he has turned away feeling that his hour would never come. But now he is to enter the mysterious portal. There at the door should stand the teacher, with a smiling welcome, to fulfill his hopes by her kindly care.

Fortunate indeed is the child on whom this new life shall never pall.

The primary school should furnish an easy and natural transition from the free, unrestricted life at home or the kindergarten to the more advanced work of the intermediate and grammar grades. Next to home, it should be the pleasantest place in the world; with the right kind of a teacher it will be. Before school days, the child's greatest delight is in acquiring knowledge. His senses are on the alert; he is ever active, asking questions, searching for something new. It is the teacher's privilege to see that learning is still made pleasurable, that the keen interest felt in scientific investigations of ante-school days is continued as the training for life assumes a new

form Too often, however, the chilling atmosphere of the many "must nots" that meet and surround the child lead him into such a dazed and discouraged condition that he learns to hate the name of school, and to seize any excuse for remaining away, even to work or to entertain his baby sister.

Whatever the spirit of the teacher, it finds a ready reflection in the hearts and faces of the pupils. The true spirit of the kindergarten is the ideal spirit of every primary school. The songs, busy work and all class exercises as well, need lack nothing of educational value because conducted in an attractive, inspiring manner. Light and warmth favor growth.

Let not the teacher walk to the school as if it were to the funeral of a dear friend, rather let him imitate the man who said of his mother-in-law's funeral, that he enjoyed it very much.

In any grade the cold, unfeeling force-pump teacher inspires no one with a lofty desire to learn, nor stimulates to noble achievements, but smothers in the pupil the consciousness of ability to improve.

The teacher must come before his class with a preparation as wide as his duties. It should not only include a general prior training for the teacher's profession, but in addition, a daily preparation for every exercise. This means a thorough and fresh knowledge of the subject of the lesson, not a dim outline. Each essential fact must stand out in bold relief, and each principle clear and distinct.

Says White in his Pedagogy: "The faithful daily preparation for class exercise will increase the teacher's personal influence, heighten the interest and efforts of the pupils, lighten the burden of their government, keep the teacher's mind fresh and vigorous and promote his bodily health.

"It is believed that where there is one teacher in failing health on account of daily preparation for teaching, there are ten failing for want of it. Worry is the cause of more pale faces among teachers than work, and the preparation for wise, skillful teaching is a good recipe for worry."

Of the making of text books there is no end, and few, very few of them are fit to use day after day, nor page after page. There is that to supplement and this to omit, and the teacher must be very familiar with the subject, otherwise he cannot give the necessary instruction for tomorrow's work, and from his indifferent tone the pupils will catch none of that inspiration which might have moved them to approach their task with alacrity.

When the lesson requires the pupil to study a text book a most important duty is the assignment of the lesson. The knowing of

what to do is no small part of doing it, and much of the aimless study and consequent indifference is due to the fact that the end to be accomplished has not been clearly set before the pupils' minds.

The frequent assignment of lessons beyond the children's ability to master also breaks down the spirit of study. Therefore, the teacher should know what the lesson contains, the amount of mental effort it requires, the condition of the pupils' minds and the time which they may be able to give to its preparation.

In beginning a new subject or taking charge of new pupils an ounce of prevention is worth a pound of cure, and the lesson should be so short that the child can and will master it; then, by and by, as the capacity of the class is understood and a habit of perfect recitation has been established, gradually lengthen the task.

The recitation is that about which centre all the activities of school life, giving it success or stamping it with failure. The teacher must be ready to make it clear and interesting by illustrations with crayon, metaphor or incident.

Methods of conducting it must of necessity differ largely in individuals, and in the different subjects; but there should be a pleasing variety, not following the same method day after day. Let there be the topical recitation, the short, quick question and answer, the drawing accompanying description. This latter method is much relished by pupils when sufficiently used to make them apt, and is a way of quickly gauging their knowledge, while holding the attention of the class and permanently fixing the idea.

The abuse of drill in our graded schools, requiring the bright pupils to go over and over what they have mastered for the benefit of the dull pupils, frequently causes them to lose interest and fall into careless and indolent habits.

Much of the indifference of later years is caused by poor methods of teaching reading. The clear perception of thought is the basis of all mental activity, and the neglect of this is shown in the expressionless reading so often noticeable in our schools. It begins in the primary room and proves a clog to the intelligent study of all subsequent branches. Reading is allowed to be a mere calling of empty words and barren sentences. It is more of a physical than a mental act. Such exercises make a child inattentive, weak and more stupid than before, and from this hindrance in his path he grows indifferent and by and by he turns from the enchanting pages of history and biography, stumbling and uninformed. Not the form of the words, but their null meaning and force is an obstruction, and good reasoning and clear thinking are impossible.

This blending of the word with the thought, of the sign with the thing signified, must begin in the first grade and must never be lost sight of.

Some zealous teachers, not recognizing the cause of the evil, allow pupils to memorize lessons. The children repeat definitions and look so intelligent one is tempted to believe the words have conveyed a thought. A little later, in a written exercise is produced: "The subjunctive mode denotes a superstition, a doubt, a condition." "A consignment is the transfer of the property of a bankruptcy to certain persons called consignees." Where memory has the proper place in our schools, and pupils are taught to observe, to think and to do, instead of to memorize and repeat, we complain less of the lack of interest in our pupils.

Another stumbling block consists of attempting to bring down the higher and more difficult studies of riper years, within the grasp of the infant mind, by using unmeaning terms which it can not understand. We teach primary pupils, "A sentence is an expression of thought," and the nature and kinds of sentences. There are more fruitful themes for our primary pupils than nice classifications and technical definitions. What not to teach is often as difficult a question as how to teach.

Another hindrance to our success in interesting pupils is the failure to make our teaching practical. When the book is learned the work is accomplished, the goal is reached. No applications are made. Squeers' method was not so bad after all. When the boy learns "horse," let him go and do it. Squeers had him curry the horse. There are teachers who have taught physiology for many years, and have never dissected an eye or a heart with their pupils; or, it may be, have not themselves seen a crystalline lens.

In conclusion, let the teacher see to it that he himself is a scholar, not only in that which he is required to teach, but in all the philosophy that underlies correct practice in his profession. Then if he meets his school daily with interest in his own heart and light in his own face, his school will be a bright spot in the life of each of his pupils, loved by the ones there, longed for by the ones away.

MRS. R. G. LEAKE.

Discussion.

Geo. W. Wyatt, Denver:—

The paper to which we have just listened has touched upon the qualifications that should be expected of the county superintendent and school men, and one part did contain something of the qualifica-

tion of teachers, and of the duties of parents and patrons of the school. Some of the forms of indifference are, a want of difference, a don't care state or condition in which people so often find themselves; a lack of interest. Now how can we interest our pupils in the school work? This is a question that every teacher is trying to solve. Some other forms of indifference are, indifference in preparation; in recitation; in regard to written work. How can we get our pupils to prepare their written work properly? How secure their attention during recitation?

First—Pupils must be properly classified. How much depends upon this. They must be given something which requires work and something they are capable of doing. We don't take interest in that which we do not understand or are not capable of understanding, and neither does the pupil. The work becomes an old story to the pupil who has little to do, and in the preparation hour he is very apt to be indifferent. I realize how difficult it is to classify a school properly, but some classification must be done in order to interest the pupils in their work.

Second—Teachers must be able to assign lessons. Much depends upon this. Each lesson should be preparatory for the succeeding lesson.

Third—The assignment of lessons. I take it that no teacher can intelligently assign a lesson without some thought of what she shall assign. Of course I can say "Take the next lesson," but we must realize that our book makers make the same mistakes that we make, and that we must supplement the work with material outside of the text book. We should not assign too long lessons. From a physical standpoint, if more food is taken into the stomach than it can handle or the system needs, indigestion is the result and it weakens instead of building up the system. I take it that a similar state follows in the mental system when it is overloaded with too much food. We must have proper food taken in proper quantities and at proper times. We cannot be too careful in this respect.

S. T. Hamilton, Fort Collins:—

It has been truly said that superintendents are responsible for a great deal of the indifference in school work. I shall not attempt to vindicate myself before the Association. Indifference is a state in which there is little or no moral or physical power. In school I think it is a growth induced by improper methods and incentives. I do not believe that any pupil is naturally indifferent, therefore I say that it is a growth. And in order to overcome indifference, we must not only remove the cause, but also the growth that has formed around the

pupil. Some of these improper influences may be due to heredity, and to overcome them, we must study our pupils. I think sometimes if we would study our pupils more and our text book less, there would be less indifference and better results. I mean by improper incentives and influences, the offering of prizes, for example. It seems to me if the teacher offers a prize, the majority of the school must become indifferent to their work. It is not a proper incentive. Let each pupil know what he is in your school for, and what it means to be a pupil in your school. Create such a sentiment as will cause indifference to disappear. You must in some way remove the indifference that may surround the pupil at his home, perhaps, and cause him to see the difference. It is true, perhaps, that there are pupils who would be in better condition had they never attempted to gain an education in school. I have in mind pupils that would better have never had the influence of these improper incentives. I have looked into the home life of these pupils and have found its influence poor indeed. Indifference in a school is often brought about by lack of knowledge on the part of the teacher. We should give them a base from which to reason, and they should know that if they knew all that the text book contains they would not be educated. Show that you know not only the subject matter but also the subject. Draw upon your own ample resources. Show them that study means something, and they will soon be anxious to stand where you stand.

I visited a teacher a few days ago, who said: "I feel that I am rather weak in my school; yet I study every year and every day. I have gone over my text books faithfully, yet I find myself weak. What shall I do?" I said, perhaps you think you are studying when you are not, and, perhaps, if you lay aside your text books for awhile and take up something else you will be stronger.

Assigning lessons is one of the most important parts of our school work. Consider well what is in the text and what you must bring up in connection with it. The first thing to consider is the pupils' mastery of the text; the next, whether they are able to do more work. Be sure the lesson is well recited. A poor recitation will discourage the pupils and they will thus become indifferent. They will recite, feel and talk with indifference.

I do not know that I have followed out everything connected with this subject; but, as a person whose business it is to advise with teachers, I would have them follow along a line of work that I have recommended. Then we should know whether we get results. A text book pupil will give a text book answer. There is not a class in the lowest grade that does not know that they can take a text book

and answer according to the book. You cannot expect advancement among your pupils when this is the case. Look to this, and see that there are results to each recitation, and you have done well.

STATE TEACHERS' READING CIRCLE.

W. T. EDDINGFIELD, MANAGER.

I am anxious that the work shall go on as begun. The committee reported a course of reading to the State much the same as in other states, in order that the teachers should have an established course of reading. There is no provision in our State law for anything of this kind; there is no fund set aside for this purpose. All that is done must be done gratuitously. It is as much a part of the State Association as any other section. It has very largely been placed in the hands of the county superintendents. We made arrangements with the American Book Company to furnish us with outlines and circulars free of charge by agreeing upon the two books adopted for the first year's reading, namely: Hale's *Lights of Two Centuries* and Page's *Theory and Practice*. The same company also furnished the outlines and books at reduced rates. I have given what time I could to this work, and greatly desire its success. I corresponded with all the county superintendents and with some of the teachers with reference to the work, and I will say that the county superintendents have taken hold of the matter with great earnestness. One writes that all except three teachers in his county have joined the circle. We now have four hundred thirty-three (433) members enrolled. Taking the county superintendents' estimates, there are perhaps five hundred (500) that will do the reading for the coming year. I understand that there are some difficulties in the way. It is said that the city teachers, as a rule, do not take hold of the Reading Circle work. It is claimed that in the cities there are professional libraries upon which the teachers may draw; but I do not think they will receive as much benefit as they would were they to pursue a systematic course of reading, so I would be exceedingly gratified, if the teachers of Denver, Pueblo and other cities would organize a circle. In Aspen we have a flourishing circle and spend two hours each week in considering these lessons, and I think no teacher will find any book more desirable and helpful than Hale's *Lights of Two Centuries*. It contains fifty biographies ranging over literature, art and science; and, while you may claim that it is not necessary to read this book, I doubt if any who read it are acquainted with the lives of one-fourth the people mentioned therein. I know many consider Page old-fashioned and out of date,

but you can bring this out in your discussions and supplement it with other works. I wish modern writers used as plain language as Mr. Page used when he wrote that book. Now I hope you will encourage your county superintendents and enable us to extend this good work.

7.45 P. M.

Art entertainment, "Talking With the Pencil," Charles M. Carter, Denver.

The exercises of the evening were opened by an exquisite piano solo by Miss Adele Lower. State Superintendent Coy then introduced Professor Charles M. Carter, who presented one of his interesting and amusing art entertainments.

He spoke for a few moments on the technical phase of the elementary steps of art. He began gravely to draw spheres and ovoids. With a few strokes he showed an old-fashioned stone jug, when suddenly, presto! a Chinaman's head, oblique-eyed and pig-tailed, grinned down upon the audience. He spoke of the sentiment of lines. The well known three faces, imbued with expression by the magical four lines representing the eyes, nose and mouth, were placed upon the board. The last, with the upward turning corners of the mouth, represented the faces the lecturer saw before him. In speaking of drooping lines the artist spoke of the mournful sentiment that seemed to imbue them.

He rapidly sketched a pine tree, and called attention to the fact that its drooping branches seemed to speak of bleak winds and barren heights, not of light, warmth or cheer. The same sentiment is conveyed by the branches of the weeping willow. He then placed the solid cube and sphere upon the board and showed how the architect combines these all prevailing forms in his designs. The philosophy of shading and high lights was then touched upon. Perspective was next discussed and illustrated by a mountainous landscape with the hills, the railroad, the telegraph poles, the country road and the flock of birds all receding in the distance. Some funny features, introduced somewhere in each picture, prevented a moment's dullness to even the most ignorant of the art.

At this point there was an intermission in the lecture and the Euterpe quartette sang the "Norwegian Wedding March." They met with an ovation, a perfect storm of applause recalling them twice. Their first response was "The Green Grass Grew All 'Round," and the second "Suwanee River," which touched, as it always does, a responsive chord in the audience.

Professor Carter gave a short review of the introduction of drawing into the schools of Denver, from its start four years ago, to the present time, when the fine apartments devoted especially to drawing are being fitted up in the new West Side High School.

Attention was called to the excellent facilities of the East Side, and to the liberal manner in which the North Side had provided for art study in the schools.

Colorado Springs was alluded to as the first city in the State to attempt systematic work under a director of drawing. Stress was laid upon the cordial manner in which the subject has been received by the public and supported by the school boards.

He referred to the growth of the interest in art in the United States, especially since the Centennial Exposition, and said that he believed art would receive a tremendous impetus from the Columbian Exposition.

He finished with instructions to teachers as to how to make rapid and correct drawings of the thousand simple objects which delight children when placed upon the board. While he was engaged with his more elaborate illustrations, Miss Lower entertained the audience with instrumental solos. The meeting adjourned until 9 next morning, when a business meeting takes place, the regular programme beginning at 9:30.

DECEMBER 30, 9:30 A. M

Paper, "Non-Professional Criticism; or, Ourselves as Others See Us," T. O. Baker, Durango.

"What power do we teachers possess in order to draw out so much comment? What are our relations to the world? How do other people see us, anyway? Who give to the world the doctors, lawyers, preachers, business men and statesmen? We do. What recompense do we receive? A small salary and the free will offering of the suggestions and criticisms of the loving community. Why do we receive so much gratuitous advice? Why, apparently, do all feel free to comment on the teacher's every action and word? Is it because the people are so deeply interested in our success and welfare? Is it anybody's business what the teacher does out of the school room? All the young ladies of the community in which she lives attend balls and parties from three to five nights in the week. Cannot our teacher Susan Good do the same? In manner, figure, face and womanly grace, she has not her equal in all the place. Must Susan deny herself? Why? For many reasons. A teacher cannot dance all night and enter the school room next day all sunshine. The day drags

drowsily and drearily along and 4 o'clock brings relief to the pupils and teacher. The children relate to the home folks how the teacher did not see Tom Sheol stick Bill Means with a pin, and Nellie Smart draw on her slate caricatures of every girl and boy in the room, and of the teacher too, and Susan never saw her once. How could she? Her eyes at no time during the day were over half an hour high, and all she was able to see was a panorama of the previous night's pleasures. Before her passed the lights, the sights, the flushed faces of the dancers, the flowers and delicious refreshments. She could continually hear the strains of sweet music. Through her mind flitted a loving remembrance of a still more loving farewell. Some word or sentence in the reading lesson recalled, in spite of her self control, some event of the night before. Strive as well as she could, she felt and knew that the recitations were a farce, and worst of all, she was painfully conscious that the children knew the day's doings were out of the natural order. She mentally resolved never to attend a party again if she must teach the next day. Her own conscience criticised her. It is soon talked among the good mothers that Susan is a trifle too giddy for the responsible position she occupies. She is admired by all, yet they feel that the education and training of their children must not be slighted. Some mother makes known her mind about the matter to a neighbor, and how soon it spreads. The children lose confidence and the teacher's work in that school is ended. So much for criticism evoked by the teacher who was not prudent out of school.

Teaching is not a pastime; it is a business and one requiring all the mental and physical force that can be commanded. The gay life of society beaux and belles is denied the teacher. An occasional party or ball may invite no criticism; but teaching and parties when harnessed together make a bad team. "Dear me," sigh the teachers, "if we are to have no enjoyment, why did we ever become teachers?" Well, why did we?

The above is an extreme case to illustrate how teachers by their outside life may invite criticism of their work in the school.

The ladies say: "Pshaw, he is a man. I'd like to have a word or two at the men teachers." You may. If I write this paper for any one purpose more than another, it is to provoke discussion among the majority here assembled, and the ladies have the majority.

All that has been said of Susan can be said of John Wise. He must not invite criticism by conduct out of school not in keeping with his position. The man's influence is greater than the woman's. The boys and young men of the community look up to him as a model, and usually believe what he does to be proper. It is my opinion that

we are measured more by what we do outside the school room than by what we do inside. Many teachers have lost their positions simply because Patron "A" or "B" did not take a fancy to them as men and women rather than as teachers.

People often estimate a teacher's success as a teacher by his success as a citizen. To know sufficiently to criticise a teacher's work or worth requires personal investigation by a fair-minded critic. Personal investigation is of no value unless made by some person competent to distinguish good teaching from poor. To be criticised by one who is competent is beneficial, but we must object when Mr. or Mrs. "Ignorant-of-methods" comes in and condemns our work. About ninety per cent. of our people believe they know how to manage a school. About twenty-five per cent. have kept school a term or two and flatter themselves that had they continued in the work they would have made a howling success. It is hard to convince them that the methods of to-day are different from those of ten or twenty years ago. We are not bothered with critics so much in the west. The farther east you go the more trials the teacher has.

In an eastern city a lady teacher had a sister die. On the school board was a tomb-stone man, who went to the lady and said: "If you can favor me, I'll do all I can for you." It is coming to a pretty pass when teachers must die to hold their situations. I am told by teachers from the east that they are watched and criticised by all. They are obliged to come west to escape bondage.

Let us formulate a "Whereas and Therefore," and pass it by a unanimous vote.

WHEREAS, Pedagogy is, in our belief, as much a profession as medicine and law; and,

WHEREAS, It is necessary to protect ourselves from the too free and uncalled-for criticism of those incompetent to judge; therefore, be it

Resolved, That we consider non-professional criticism of our work in the school room to be unjust, and that it should receive no more consideration than would be given us should we criticise the lawyer's manner of conducting his client's case in court, or a doctor's treatment of a patient

One way to avoid being the subject of a conversation in which we do not receive flattering words is to strive in the school room so as to merit the name of a school-master. Let us, by conference with educators, by reading books on teaching, by the taking and reading of school journals, commend ourselves, not alone to our co-laborers, but to those with whom we have to come in contact. We will then be

able to put to flight our "friends with advice" in a three-minutes talk, by showing them that we know vastly more about teaching than they ever dreamed of.

Not long since I had a conversation with a gentleman on the train. He informed me that he had taught school ten years before he went into business. His family reside here in Denver. The matter of transferring pupils from one district to another came up. I remarked that by the consent of both boards the money belonging to one district could be apportioned to another. He answered that the consent of both boards need not be obtained as Mr. Gove transferred his pupils from one school to another in Denver when buildings were crowded. He also spoke of the fine High School building in Denver. I desired to know of which one he was speaking, and with a pitying look he informed me: "There is but one High School in Denver." He also informed me that he kept his family in Denver in order to have them educated. He said they had an ignoramus in charge of the schools in their town. "Why," he said, "the children advance more in a year in Denver than in two or three in my town." I asked him how many teachers they employed and how many pupils attended. I found they had three teachers for a hundred children, divided into nine grades. I know nothing of the teachers or their ability, but, fellow teachers, do you consider his criticism as just? Do you wonder that the children advance no faster? Should a teacher be blamed if she fail to advance three grades as rapidly as another teacher can one?

Not many months ago one of our citizens met me as I was on my way to one of the school buildings. He seemed surprised to see me in that part of the city and asked if it was a holiday. After being informed that I was on my way to visit the schools near by he was astonished and wished to know if that school was under my supervision. It is surprising that so few know anything about the general government of our schools.

When invited by the executive committee to prepare this paper I was informed that the subject had been suggested by the recent articles by Dr. Rice in the *Forum*. The secretary failed to state whether or not I was to discuss these articles.

Dr. Rice cannot be called a non-professional critic of school work. In fact, I believe he would prefer to be recognized as an expert. He has made public school systems of this and the old country a study for several years. Unless he is an expert his articles in the *Forum* are hardly entitled to the recognition from school men and those interested in school work that they are expected to receive.

What good is to be derived from his going about from city to city investigating and condemning the school systems? An every day tramp, who is a parasite upon the people by day and who at night folds about his wasted frame the drapery of a fence corner and lies down to dream of the hard-heartedness of the world, can deface and ruin the finest building in this beautiful city. It would require an expert architect to reconstruct it. Would the doctor inform a patient that his circulation and digestive apparatus and nervous system were in a dangerous condition, and then refuse to write him a prescription?

In the October *Forum* he says: "In studying the conditions of the schools I relied upon one thing only, namely: Personal observation of the instructions as carried out in the class rooms." He also states that from January 7 to June 25 he saw upwards of 1,200 teachers at work. For six months, or 120 school days, he visited schools. This makes an average of ten rooms each day. Counting five hours as the average time for one day, he could have remained as much as thirty minutes in a room. Think of averaging thirty minutes in a room for the purpose of studying the methods used in city schools. He also informs us that he visited thirty-six cities and twenty institutions for the training of teachers. If he desired to obtain any knowledge at all of these training schools one day in each institution would be the shortest time he could allow himself. This leaves him 100 days for his 1,200 teachers. We will suppose that he traveled at night and on Saturdays; that he was never tardy morning or afternoon, and arranged his visits so that no time was lost going from room to room or building to building; that his conferences with superintendents and school boards were held out of school hours, and the doctor has a little over twenty minutes as the average time he devoted to each teacher. In the thirty-six cities he visited, there must be employed at least 25,000 teachers; therefore, he saw nearly five per cent. of the teachers at work. The doctor's flying trip is equaled only by Nellie Bly's famous one around the world.

Quoting again from his article, we have the following: "Before beginning the description of particular schools, a brief general survey of the American school system will be in place. The characteristic feature of our school system may perhaps be best defined by the single word, 'chaos.'" "Chaos!" Our American school system defined by the single word, "chaos," and we have been writing and talking all these years about something that is even undefinable. We have boasted to our English cousins, and to our foreign friends we have sung its praises, and have used our power in influencing those of foreign lands to come to America to enjoy freedom and secure the benefits of our wonderful system of public schools. Surely the doctor did not mean it! Yet he could hardly write the following unless he did.

He says, "consequently unless 'chaos' be preferable to law and order, there is no foundation for the opinion held by so many, that our public schools are the best in the world." It appears to me that the doctor is prejudiced and made his visits in order to more fully convince himself that something is radically wrong with America's system of education. He either hunted for the poorest teachers or was singularly unfortunate in getting into the rooms occupied by not the best teachers; for in Baltimore, Buffalo, Cincinnati and St. Louis, he failed to commend the work of a single teacher. In Indianapolis he was more fortunate, or the teaching there is more in accordance with his ideas of how teachers should conduct recitations.

Of course we could hardly expect to find much system in Cincinnati or St. Louis after two such men as Dr. White and United States Commissioner Harris have had any thing to do with the arranging of matters. The doctor should go to them and in as pleasant tones as possible, inform them that he has discovered that 'many of the city schools are in a very chaotic condition; in fact the whole American system is in a jumble, and it would be about the proper caper if two such old fossils as they would just step aside and give men who have never been actively engaged in school matters a chance to bring order out of chaos. He should not fail to state to them that he has become acquainted with the unfortunate condition of affairs from visiting for twenty minutes each, about four and one-half per cent. of the teachers employed in thirty-six of the cities of the United States. He should also state that he, for reasons of his own, did not visit the cities of that small territory lying west of the Mississippi river.

Let us consider the gentleman's particular analysis of the Baltimore schools. Entering a room he finds an advanced first grade (the M. D. says it was really a second grade) before a blackboard covered with an endless variety of problems in addition. His manner of criticism here is more in the form of ridicule than otherwise. No doubt he would not have conducted the recitation as did the teacher. He fails to inform us how she should have been teaching, or that such teaching is barren of good results. Nor does he enlighten us as to how many of the 1,200 Baltimore teachers taught as did this one. We are safe in saying that he found none doing worse.

Of the same room he says: "When the exercise in arithmetic was finished the children had some reading. It was as mechanical as the arithmetic and amounted simply to calling off words. There were no pauses at commas or periods, and not even an inflection. The first opened with a ludicrously mechanical introduction, thus: 'Page 56, Lesson XVIII, The dog and the rat.'"

Do you believe that all the teachers of Baltimore teach reading and give no attention to pauses, inflection, etc.? Do you believe he wants us to think so? Hear the following and decide: "In one class I found that the children did use inflections when reading. They religiously raised their voices two tones at commas and dropped them four tones at periods."

We know poor teachers get into our schools, but it is not just to condemn all because a few incompetent ones are found. Can we believe that the doctor would, if he were teaching, punish a whole school for the misdemeanors of one or two?

In his criticism of the methods employed in the Buffalo and Cincinnati schools, he becomes musical. Here again the criticism partakes of ridicule. By ridiculous criticism he makes the work of the teacher appear ridiculous.

Now, if one who has made the mental and physical development of children a special study, and has taken a special course in psychology and pedagogy, and visited the schools of various European countries, can do so great injustice to our American school system, as I believe he has, what can we expect from non-professional critics?

Dr. Rice, in his criticism of Baltimore, Buffalo, Cincinnati and St. Louis, makes a part equal to the whole. If he had spent one hundred days visiting the schools of, say, two or three cities, we then could place more reliance upon his statements.

This is of far more importance than we may believe. Too many good men and women lose their positions every year by the too free criticism of those who know absolutely nothing about school work. Too often teachers are criticised by those who have a personal dislike for them. If non-professional criticism be tolerated, I doubt if many remain teachers long. Dr. Rice has sown discord. What shall the harvest be? If the majority of people in cities read and believe his articles, will they carefully investigate or will they clamor for a change?

The doctor may, by his articles, raise up an army of critics. Already we have an article in the *Denver Times* of December 1, written by a gentleman of our own State. I do not know if it was prompted by his articles in the *Forum* or not. The gentleman christens his article "Art in Education." For want of time I cannot review it, and so refer you to the *Times* of that date.

He attacks everything in the school line from the kindergarten to the high school, and as side issues brings in the school boards and our State Teachers' Association. Let me quote what he says in regard to the latter: "Interesting as were the deliberations of that body in

many particulars, there was not a word said about the method of teaching or about any reform. There was not a word from anyone about any educational improvement in teaching. There were discussions about making courses of study uniform, about educational philosophies of various degrees and kinds, but the whole meeting was, in reality, barren of result of educational value. And why? Simply because no one has had the determination or thought to say a few words of truth concerning the lackadaisical manner in which school affairs are usually conducted. The school system is getting to be like a ship without a rudder, at the mercy of wind and wave."

Fellow teachers, we may have a Dr. Rice among us watching our deliberations.

There is much that Dr. Rice says in his articles in the *Forum* that I heartily agree with. I quote two sentences:

1. "I discovered that the schools had advanced directly in proportion to what had been done by the superintendents toward raising the standard of the teachers in their charge."

2. "There is nothing which so hampers the work of the superintendent as a school system riddled by incompetent teachers."

In closing this paper permit me to say: That all teachers employed in our public schools are competent, we deny; that our school system is chaotic, we deny; that we are not entitled to the same considerations as are accorded to men and women in other professions, we deny most emphatically; and, finally, that our public schools are retrograding in place of becoming more efficient each year, we must deny. The following little poem is so applicable to my subject that I must ask your indulgence while I read it:

"I've done discussing schoolmarms, their punishments and such,
And all their ways and doings don't fret me very much,
For I'd a true experience a year or two ago;
I learned a few things, gentlemen, that I was glad to know.

"Our little lad came home from school, his eyes all wet with tears;
It took us half the noon-time to quiet down his fears;
He said that she had whipped him—that she was cross and old—
She never did a single thing but sit, and fuss, and scold.

"The little one was innocent; I started for the school
To tell her who and what I was, and lay her down a rule.
The afternoon was very hot, and my temper hotter still,
And it had reached a boiling point when I had climbed the hill.

"I had my speech all ready; I started for the door;
I guess she saw me coming, for she was there before,
And met me all a-smiling, with a welcome in her eyes.
I was the one to tremble, I found to my surprise.

"The light was on her forehead, the light was on her hair,
The light was all around her, like a glory everywhere,
Her eyes were like blue meadow flowers we loved when we were small,
Her gown the self same color, and she wasn't very tall

"I couldn't say a single word, my mouth was parched and dry;
I nodded her 'Good afternoon,' and slowly passed her by.
'Come in and rest;' the sweetest voice that I had ever heard,
The mingling of a baby's laugh and the singing of a bird.

"That night, 'twixt eight and nine o'clock, I let the shingle fall,
And since that time, we've never had a single fuss at all.
So when you speak of schoolmarm's as being cross and old,
She rises up before me, all shining blue and gold."

Discussion :

Mrs. E. W. Collins, Georgetown:—

The subject admits of more than one interpretation. Sterne says: "When a proposition may be taken in two senses, 'tis a law of disputation that the respondent may reply to which of the two he pleases, or finds most convenient."

Acting somewhat upon this decision, I have chosen another interpretation than that of Mr. Baker.

"Non-Professional Criticism, Inspection and Supervision versus Professional."

The schools of Colorado are to be periodically visited according to school law.

Why is this demand made? They are to be inspected with the view of ascertaining the kind and the amount of work done therein; of advising with the teachers respecting the ways and means of improving them.

You all agree that the inspector should know the subjects taught. Is this all? No. He should know how the subjects are to be taught. He should be a scholar, in every sense of the word. He should be able to conduct his inspection by the light of the present day. The inspector, supervisor or superintendent, as you may please to call him, can be of great service in equalizing the amount of work done by the different teachers, and by timely and kindly suggestions, bringing this and that one up to the standard. He can introduce, where most needed, modern methods of teaching subjects. In fact, he should be able to direct understandingly every department under his care, and, if necessary, to conduct a recitation in such a manner as to inspire the teacher in charge to greater effort on her part.

A man or woman, empowered with the control of educational affairs, should be fitted to make out a programme, examine and promote pupils, examine, criticise and direct teachers, and to be thus fitted he or she must know the aim, the agents and the means of education, and be familiar with "the doctrines of educational values."

Do we expect every attorney to be able to draw a tooth, every grocer to shoe a horse, every doctor to draw up a will that will pass all courts? No. Neither do we expect the average man to know the "how" of the schoolroom until he has made the matter a study.

It is very hard for the community to accept the superiority of experts.

The average practical man considers himself, not only master of his own business, but often a better judge of professional matters than the man who has spent his life in acquiring technical knowledge.

I think the notion that non-professionals can profitably "tinker" programmes, examine, council and direct teachers, and examine pupils, is a survival of the belief that anybody can teach what he knows, whether he knows how to teach it or not.

The more seriously, the more conscientiously, a man tries to do his life work as it ought to be done, and to obtain a thorough command of the principles involved in that work, the deeper grows his respect for professional study and training, and the less willing he becomes to interpose his advice and suggestions on matters foreign to his own profession.

Points answered:

"*First*—Teachers invite criticism by their conduct in social life."

Agreed that some *few* do, but ought the mass to suffer for the indiscretions of the few? Because one Solon is gifted with the extraordinary sense of embellishment, ought all Solons to be classed as falsifiers?

"*Second*—Teachers should not attend balls, etc."

I do not agree to that. A teacher must have time for recreation and pleasure, let it be balls, theatre, cards, music or literature, whatever you please and whatever she herself recognizes as right by her own conscience; and any school system which overlooks this point and insists upon the greatest amount of drudgery from the teacher is a most miserable system and not at all in accord with the best educational thought of the day. In the recreations I have mentioned the tax upon the mind is not as harmful as poring over examination papers, set after set, into the wee small hours of the night, and then retiring to sleep, to dream the few remaining hours of percentages, averages—averages and percentages—till dawn.

"*Third*—Teaching *ought* to be recognized as a profession."

I go a step farther and claim that *it is* so recognized.

"*Fourth*—A lack of knowledge among the patrons of the school as to what a teacher is doing and what she ought to do is one of the causes of criticism."

I agree, but the matter of dealing with uneducated, unappreciative parents is and always will be an unsolved problem. We should avoid the notion that it is our duty to reorganize the universe.

E. T. Fisher, Grand Junction:—

"When I was invited to make a few remarks on this subject, I thought I had a few points I would like to present to the Association; but I do not feel now as I did at that time. The paper referred to Dr. Rice's article, and right here I would like to recommend it to those who have not read it. I believe that it is an article that will do good. I don't mean to say that I endorse everything in that paper, but I do endorse a great part of it. It is full of good thoughts and will wake teachers up, and cause them to think along the lines of their work. I do not exactly agree with Mr. Baker in his comparison drawn between the lawyer and the teacher. I think there is a difference. If I should want to employ a lawyer to transact some business for me, I would not be so very particular whether he now and then got drunk, providing I thought he was the best lawyer, although I think we should place a premium upon good citizenship. But with the teacher, the parent, patron and employer have a right to demand that he has a good character, as well as that he is a good citizen; and in employing him this should be looked to from the very first, and seen to that he has a good moral character. I shall not speak of the things which the teacher may or may not do; it would be difficult to draw the line. I would divide the classes of critics into two: first, the chronic fault-finders. To such people we should pay little attention. The second class is the critic who is honest; these do us good. A few weeks ago I went to several persons and asked what was their especial criticism upon the public school system. One said: You do not give enough time to the study of mathematics. I can see use for mathematics in every vocation of life. I think more attention should be given to the subject. Another said: You ought to teach chemistry in the schools. A knowledge of this subject would be of vast benefit to the boys and girls. Another wished more attention paid to the teaching of morals and manners. And so each had a different topic to which he wished more attention given. The man who wished more attention given to chemistry was an assayer, and the other two were specialists or cranks. But we must admit that criticism is a good thing; it causes us to pursue new lines of work and spurs us to better results. It makes the pupil's education

so much more complete. We may permit these criticisms on the outside, but they must not be allowed to enter the school room. The work of that place should be left to the teacher."

Geo. Wyatt:—

Since reference has been made to superintendents and principals I am reminded of the course pursued by one who is recognized as one of the best in the United States. Before his boys are permitted to leave the school, he has a talk with them and invites them to offer any criticism upon the work and conduct of the school. He also frequently visits the universities and sees whether any of his graduates are there. Now, if I have been raised on a farm, and my father is a good farmer, I don't see why I might not be able to offer some suggestions to the old farmer that would be of benefit to him, and I do not see why we should not welcome criticism. Unfriendly criticism certainly is of benefit to us. I remember the story of the painter who painted a picture of a farm scene, where there were a number of pigs drinking from a trough. The picture was placed on exhibition and the painter sat behind the curtain, pencil in hand, noting down the criticisms made upon the painting. A couple of farmer's boys stopped before it and one of them said it was not natural, for no one ever saw pigs eat without having their feet in the trough, and every one of the eleven were standing uniformly, with their feet on the ground. The artist took the picture and worked it over, and the result was a masterpiece. So I think we may derive great benefit from professional criticism if we are inclined to consider it and try to improve.

Mr. Baker:—

I want to say that if we have critics as competent to criticise our work as the farmer's boys were to criticise the painting, we will never make any objections.

Paper, "Shall the District be Required to Furnish Free Text Books," O. S. Moles, Canon City.

There is no question, perhaps, of school economy which has engrossed the attention of school officers and educators during the past ten years as that relating to the supply of text books. Several states recognizing the fact that the private purchase of books at the prices often charged by publishers and dealers has wrought undue hardships and has been a hindrance to universal education, especially among the poor, have tried the plan of state publication of series of books for use in the states publishing them.

The plan as carried out in California, Indiana and elsewhere has not been what the promoters had hoped for. The cost has been greater than that for books published by private publishers, the quality has been poorer, and has lacked the spontaneity of the fresher series.

The very uniformity leads to mental poverty, so that many districts in those states forfeited their portion of the state funds by adopting other books rather than to continue the use of the authorized ones. State Superintendent Hoitt, of California, says: "I was heartily in favor of our present plan of state publication but it has not proved what I had hoped for. I would not advise other states to adopt the plan." Superintendent Sweet, of San Francisco, writes me that the system has not been satisfactory. Had the books been all that could be desired, the result would not have been satisfactory as the fact of the *cost* of any series of books is a barrier to the education of many children.

A desire to have all the children within their boundaries enjoy the full privileges of the schools led a number of prominent cities to adopt the free text book system. The plan is by no means one of recent date. Philadelphia has used it for fifty-seven years; New York, for fifty years; Boston and Omaha, for eight years; and others for longer or shorter periods of time. States have taken hold of it, and Maine, New Hampshire, Massachusetts, Delaware, Michigan, Wisconsin and Nebraska, require boards of education to furnish free books, while Vermont, Connecticut, Pennsylvania, Maryland and Colorado, authorize it. Superintendent Brooks, of Philadelphia, to whom I am indebted for this information, writes me, "In all of these states free text books have been found satisfactory, and the plan is growing in favor."

When this question was assigned me by the executive committee, I prepared series of questions and mailed them to the county superintendents and city superintendents of Colorado; also questions addressed to superintendents in Nebraska, Iowa, Boston, Philadelphia, San Francisco and elsewhere. The answers have been as diverse as human nature, and yet, upon the main question as to whether districts should furnish free text books, every superintendent but one, from the Atlantic to the Pacific, reporting that he had given free texts a trial, answered "Yes," while the majority of the others favored it.

While free to say I am a firm believer in the intrinsic value of free text books to our schools, which in many ways far outweigh the objections that can be produced against them, I have, nevertheless,

endeavored to obtain the facts concerning the system and the opinions of the leading educators pro and con. I have tabulated these with care, and shall give you in full the result of my investigations.

In the discussion of this question, I shall not follow the line of thought indicated by the questions submitted to the various superintendents of Colorado and elsewhere, but shall deal with the advantages and disadvantages of the system as they appear to its friends and opponents, with the issues growing therefrom, and the practical application to the question under discussion.

The first advantage of the system that might be cited is its *economy*. While it is to be regretted that neither county nor city superintendents of Colorado can give as satisfactory data as could be wished, what can be given by them is highly gratifying. Superintendent Search, of Pueblo, says: "The cost of first purchase for our district was \$3,000, but formerly must have cost \$5,000, and the books will probably average three years of use." Superintendent Fleming, of Logan county, says: "The average cost per pupil, in the twenty districts of this county using free text books, is seventy-five cents." A number of superintendents report the first cost of the books to the districts of their counties, at fifty per cent. of the price paid to dealers. This is an important matter, especially to districts financially embarrassed. Reliable information concerning the comparative cost is very full and accurate from other parts of the United States. Superintendent Brooks, of Philadelphia, writes that the cost in his schools is:

Primary grades, first and second years, girls, fifty cents; boys, sixty cents.

Secondary grades, third and fourth years, girls, eighty-six cents; boys, ninety cents.

Grammar grades, fifth to eighth years, girls, \$2.06; boys, \$2.10.

This includes sewing materials and all other appliances; the cost for many years has ranged from eighty cents to \$1.00 per pupil.

The average cost of supplying the pupils of the Boston schools with text books, drawing materials and stationery for seven years was 79 cents per pupil.

Superintendent Fitzpatrick, of Omaha, says that the 15,000 children of that city are furnished with all school requisites at an annual expense of \$6,250, or less than 40 cents per pupil.

The average cost per pupil for the state of West Virginia, excluding the city of Wheeling, was 22 cents per pupil.

The comparative saving and the time books can be used is a matter of surprise. Superintendent Miller, of Fremont, Neb., says: "The comparative cost of free text books, etc., is not more than one-fifth or one-fourth of that of private ownership."

Professor H. M. Bell, of Highland Park Normal College, Des Moines, Iowa, formerly of the Kellogg, Iowa, schools, writes: "The average cost to the pupils of the Kellogg schools was, for the first eight years under the free text book system, 23 cents per pupil, and under the private ownership system \$1.80 per pupil; for the last four years 60 cents and \$7.91¹/₄, respectively, or a total of \$1.84 against \$14.40; and \$2.40 for the last four years, against \$31.65, the cost under the free system, being less than 10 per cent. of that of private ownership."

In answer to the question, How long will books last in the primary, grammar and high school grades? Superintendent Seaver, of Boston, writes: "Books last about three years in the primary schools; from four to six in the grammar schools, and six to ten in the high schools. Some high school books last even longer than that."

Professor Bell writes of the Kellogg, Iowa, schools: "Primary, four years; grammar, seven years, and high school, ten years."

Superintendent Fitzpatrick, of Omaha, writes: "Primary, one and one-half years; grammar, two and one-half, and high school, three years."

Superintendent Miller, of Fremont, Nebraska, writes: "Primary, three years; grammar, five years, and high school, seven years."

Other examples might be cited, but these will suffice.

The second advantage is, there is no delay in school work. Superintendent Seaver, of Boston, and other superintendents say that the work can be assigned at the opening of school on Monday and lessons recited all around the second day. Every teacher of experience understands the meaning of lengthy delays in furnishing the required school requisites by parents.

The third advantage is *no excuse for non-supply*.

The fourth advantage is *forty per cent. of the population is transient and unable to meet the expenses of new supplies of books*. This removes from such a needless burden. This is especially true of rural and mining districts. I heard the pastor of a large and flourishing church in Leadville tell his congregation that the membership of that church changed on an average once in eleven months. A change of residence means a change of books at considerable expense. In my own experience in the schools of Canon City it has never happened

within the past three years that pupils entering school in grades, from the fourth up, have ever come supplied with a full line of books from another district. In the great majority of cases they do not have a single book that can be used.

The fifth advantage is *increased attendance*. Superintendent Search, of Pueblo, says: "Four hundred pupils were enrolled the first week of this year more than the same week of last year, probably two-thirds due to the change in the plan of supply." Other cities report an increase of seven per cent. or more.

The sixth advantage is *closer classification of work*. This is mentioned by many county superintendents, who say that the use of a number of series of books in the same school makes it well nigh impossible to do satisfactory work in classification.

The seventh advantage that might be mentioned is that *it admits of a greater range of work in all departments*.

The eighth advantage is *more careful use of books*. This seems to be the almost universal verdict of superintendents everywhere.

The ninth advantage is there is *no class distinction, and it is the advancement of our public school idea*. Superintendent Jackson, of El Paso county, says: "It makes our schools free in the full sense of the term, and puts the poor man's child on equal footing with the rich man's, without requiring him to confess his poverty."

Colorado's higher institutions of learning are leading in this matter and are as near free as they can well be. Doctor Dennett said to the writer less than a year ago, "The question, whether we should charge the ordinary fee for diplomas was discussed, but it was finally decided to make no charge, that the State University might be free in the fullest sense."

The tenth advantage is, *promotions or demotions may be made without unnecessary expense or vexatious delay*.

The eleventh advantage is, *it protects the pupil from the penuriousness of parent or guardian*. This needs no elaboration.

Lastly, to use the language of Superintendent Brooks, of Philadelphia, *it permits the purchase of the latest and best books at no additional expense, and tends to constant improvement*. This is an age of improvement. In no line of human activity is this more noticeable than in school books and appliances. Books considered models of excellence when first published are soon supplanted by others, embodying new ideas and improvements. This cannot be other than beneficial. The pupil should receive the benefit of these improvements,

and especially is it true when this can be accomplished without unnecessary expense to the parent. This is not possible under the private ownership system.

But let us examine the disadvantages cited by various superintendents. Superintendent Murphy, of Bent county, says: "The moral weight attached to a gift in a manner lowers the idea of self-dependence." Superintendent Lay, of San Miguel county, who favors free text books, says: "There may be a lessening feeling of responsibility." Superintendent Gove, of Denver, says: "I think nothing should be supplied free to a pupil which he can reasonably supply for himself, but that paternalism may be extended in a school district to the supply of shoes and stockings, when necessary; that free text books are desirable in such communities as are made up of poor, ignorant and helpless people, and that uniformity of any sort is in contradiction of nature's teaching. God never made two things alike, nor do any of his laws encourage the nursing of uniformity." Superintendent Fisher, of Mesa county, who favors the plan, says: "Pupils need books at home;" and Superintendent Greenlee, of Denver, adds, "For future reference." Superintendent Timberlake, of Phillips county, also in favor of the system, says: "Lack of pride in ownership." The only disadvantage Superintendent Baker, of Durango, sees is "The trouble to the principal and teachers would be too great." "There is a common feeling of responsibility when we have a common expense. Some pay no tax, and if they are required to purchase the needed requisites it is an indirect tax," says Superintendent Greenlee, of Denver. President Snyder objects to free text books on account of the contraction of contagious diseases. Superintendent Fleming, Logan county, says: "No. My experience is that when the districts are first supplied, it is probably well enough, but soon some books are destroyed, and then the teacher appeals to the parents for new books, who in turn expect the school board to furnish them; detrimental to the whole school."

The Colorado statistics may be summed up as follows:

Out of twenty-one county superintendents who report free text books used in their counties nineteen favor the system and only two offer any objection; while, on the other hand, of the four county superintendents reporting free text books not used in their counties, three favor the system and one opposes it. Seven city superintendents of the State favor the system and five oppose it. Seventeen county and city superintendents of the State say they see no disadvantages in the system. This does not include a number who favor the system, but see disadvantages in it. Outside of the State such superintendents as Brooks, of Philadelphia, Seaver, of Boston, and

Sweet, of San Francisco, champion the system. This is true of forty state superintendents, while two oppose it. The superintendents of Nebraska stand a unit in favor of it.

If free text books should be used in our schools, should they be brought about by requiring boards of education to supply them? Should our school law be so amended as to require boards of education to furnish free text books?

Ten county and six city superintendents favor such amendment and seven county and five city superintendents do not favor it. Superintendent Jackson, of El Paso county, favors such a change, "because the law would go into effect at once and would benefit all alike, whereas now it is inoperative unless some one agitates the matter and gets out enough votes to carry it." Superintendent Hamilton, of Larimer county, says: "It is not wise to do by legislation what can be done as well by reason and evidently more satisfactory to the people." State Superintendent Goudy, of Nebraska, writes: "The law making district ownership obligatory is to be preferred to leaving it optional, as was the case under our former law."

Superintendent Seaver, of Boston, and Sweet, of San Francisco, concur in this opinion. The fact that the question of the adoption of the system has been submitted to a comparatively small number of districts indicates the apathy concerning it. Superintendent Tague, of Washington county, expresses this forcibly in the following language: "The education of the children of every state and nation is of national importance. Our public institutions, our form of government, our society, our homes, are all touched and moulded by the character of the men and women our schools turn out, and questions of such vital importance should not be left to individuals any more than sanitary precautions should be left to uncertain conditions.

"Should the text books furnished by a district be of their own selection or should they be the same as those used throughout that county or state? Nine superintendents favor local selection; ten superintendents favor county uniformity; seven superintendents favor state uniformity."

Time will not permit my giving extracts from opinions upon this. The comparative advantages of the system in the city and rural districts might cause some feeling of jealousy, but if we seek the golden mean, we will find that the advantages of the one are counterbalanced by those of the other.

This is a broad subject and worthy of the most careful consideration of every friend of education. The sooner we meet the issue the better for our schools and our people. If in the preceding pages, I

have given some new thoughts upon this vital question, some food for reflection, or an incentive to act, I shall feel abundantly rewarded for my labor.

Discussion.

P. K. Pattison, Colorado Springs:—

"I agree with the position taken by Mr. Moles; therefore, in discussing this question, perhaps it will be less wearisome if the discussion be more argumentative than was the paper. Therefore, this is the proposition I submit to you: If it can be proven that it is better to supply free text books on the ground of economic principles, and the efficiency of the schools be thereby increased; if this can be proven to any people of sound judgment, then the proposition is an economic proposition. This is the simple question to be decided by the people; the question as to whether the purchase shall be made by the pupil from the dealer, or on the other hand by the school board from the publisher. I have read some reports upon this question of relative expense, and one authority says: 'Private ownership of text books is the most wasteful of all the methods that have been tried for the purchase and control of books.' Another: 'If all the states of the United States should adopt free text books, there would be an annual saving of \$10,000,000. Better terms can be secured by school boards than by the pupils to the amount of thirty-three and one-third per cent.' Again, school books owned by the district last one-third longer, and save another million. The annual expense caused by the removal of families from one district or county to another, and new books thereby purchased, is greater than the annual income of \$330,000,000 invested at five per cent.

"Then the efficiency of the public school would be increased in many ways, because vexatious delays would be removed if uniformity of text books be once established; there would be an increased attendance; there would be better and more books, and therefore a broader course of study established. There would be no division of pupils into classes upon the basis of inability to purchase necessary text books. All this follows as a natural consequence. Certain it is if free text books were adopted and this plan carried out, the first day would find each pupil supplied with necessary text books. Not a teacher would hesitate to regrade pupils because of a fear that this would necessitate the purchase of new books. All delays would be overcome from the start. There would be the advantages of better classification and better instruction. Some teachers have as many different classes and text books as there are pupils in the school. There may not be such in Colorado, but there are many elsewhere. Teachers should take some step that will find legislative enactment upon this question; an

enactment that will say that the districts shall furnish these text books. Many times books remain too long in use, because of a feeling that a change may create unfavorable public criticism. But we all know that a change is sometimes necessary, and these books should be well selected. If there be any Truthful James present who can answer how this work of broadening our horizon can be done except by the proposed plan, the speaker would be glad to have said Truthful James rise."

Ira M. De Long, Boulder.

I am inclined to believe that Mr. Pattison and myself learned our speeches out of the same encyclopedia. I had as my first point, that the ownership of the text books by the district would add to the organization of the school; and as a sub-point under that head, first, there would be books on hand the first day; classes would be organized the first day. As it now is, a number of the pupils in the country districts fail to come supplied the first day. I know it is said that it is an easy matter to have the dealer order a supply, but I think I have met with difficulty there. Dealers refuse to supply books until they are ordered, and I know occasionally we have difficulty even then, for dealers are afraid to order them beforehand. Second, it would also assist in the grading of the school. How often is it the case, when you call your class up the first day, for one to have White's, another Ray's and another Robinson's arithmetic? That difficulty would be avoided if the district owned a uniform set of text books; then your pupils would be studying the same lesson in the same books and on the same day. Then it would help you in changing pupils from one grade to another. Suppose you have placed a pupil in a certain class and you find, after a while, that you are mistaken in his ability; yet the pupil has bought his books and you find he does not belong in that class. It is a very difficult matter to put him in another grade, for that would necessitate his buying another set. New classes could be much more easily organized if the books were already there.

Then as to moving families. The parties who are least able to buy books from year to year for their children, are the parties who have most of them to buy, owing to the fact that they are moving from county to county, or from district to district. Here is a family that has bought three books; before a year passes that family has moved into a new district, and is required to purchase an entirely new set, because of non-uniformity. It is a point of considerable importance. We wish to educate the children of these families, yet we place a permanent bar in the way, by compelling them to buy new books, and it takes all their surplus cash, and the books that were used in the other district are laid away in the garret. It would be a great thing if this immense burden were removed.

I have here another point which has not been fully presented. It is this, that often times books are changed hastily among the districts. I can remember a few years ago what an effort was made among different firms to induce changes to be made, and some extraordinary terms were offered. All this would be avoided if the district owned the text books. The relative prices of books have already been mentioned. Think what a saving from twenty-five to thirty-three per cent. ! I know it is claimed that the books will not last so long as through private ownership, but I appeal to every one of you if it is not true in your own personal experience that if you have soiled a borrowed book, you have not said, "Well, now, I am so sorry about that; I wouldn't care so much if it was my own." That native respect that exists in you exists also in the child. Mr. Pattison has told you of the immense amount of money that can be saved. You can see the force of that argument when you think of the books laid away in the garret. I can see them—books used, perhaps, only three to nine months, a permanent loss of property and money. If these books could stay in the schoolroom and pass to one class and another, there would be a saving of hundreds of thousands of dollars annually. I can see how they would be valuable as reference books.

Moved, That we are strongly in favor of free text books, but that we are not in favor of a change of the present law at this time. Referred to the Committee on Resolutions.

Paper: "Uniformity," Aaron Gove, Denver.

"A manifest growing tendency towards uniformity in the conduct of educational forces," said he, "is worthy of consideration. The schoolmaster, seconded effectively by the press, is a factor in the movement. A school well systemized in all its parts, uniform and regular in opening and closing, in the time allotted for each recitation, with the grading of classes carefully and definitely made, uniform in text for the assignment of tasks, uniform rewards and punishments for uniform accomplishments, when once under way, moves along like a well trained army. It is not only comfortable for the commander, but it presents a beautiful and imposing front. The spectator views its harmonious motion and admires the general effect. A few observers do ask from time to time, while noticing the grand review, something about the individuals that make up the parts of this grand pageant. It is true, it must be true, that the effort in conducting such an establishment is reduced to the minimum, and the general effect is one of excellence and comfortable direction.

"Variations from the regular movement are productive of friction and annoyance. The management is vexed or at least worried by endeavors to get out of line by individuals, either pushing to the front in the intensity of desire or from natural ability, or lagging behind from inability or disinclination. It is not surprising then, that the watchword of uniformity rings forth so loudly from him who seeks, as a result of his work, to present a mass of young people uniformly bright, scholarly and disciplined. Consider with me the cost of the result.

"Nature presents to us no model of uniformity; man alone seeks it, and so far in history, has succeeded only with inanimate things. Stones can be squared and carved uniformly; logs and timbers can be cut and sawed into uniform pieces; textile fabrics can, by the aid of machinery, be duplicated indefinitely. With wood and stones and metals this power ceases. The farmer tries in vain to breed uniform grades of stock. The student of natural history has never found two specimens, even of the same variety, identical. No two oak, or elm, or maple trees grow exactly alike, neither are they clad with uniform leaves. Uniformity is unknown in the cloud form above us, in the faces of the horses or dogs about us, and among our human friends. Of the millions of earth's peoples, from the beginning of time, no two have been or are alike.

UNIFORMITY IN GENERAL TRAINING.

"This absence of uniformity becomes more marked when one considers the immaterial, the intellectual attributes of mankind. In view of these statements, may not one enquire as to the degree of uniformity proper to strive for in the education and training of boys and girls? Some measure of uniformity in general training must be conceded. So long as a group of individuals be taught in company, a general likeness in training is inevitable, and so it follows in school work that generalization is a necessity. The extent of the generalizing is a proper theme for contemplation. Laws must be, as long as communities are. The best government has the fewest formal laws. Every intelligent community ought to be permitted to make all laws for the regulation of its own affairs, except those that concern or are related to other neighboring communities.

"Uniformity in text books for the state has been, in the minds of some, a desirable measure. A few western states (no old eastern state has attempted it) have or are trying the experiment. It is already pronounced an experiment. The reasons that lead a state to adopt uniform text books in its schools apply to two or more adjacent states, from which it follows that one uniform set of

text books should be used in all the schools of the country. It would cost less money and the effect would be along the line of uniformity. The truth is that often many neigh'oring communities can well unite in uniform text books. Who can judge so well of the quality of the instruments they wish to use, as the parties themselves who are to use them?

UNIFORMITY AND THE LAW.

"The law of Colorado permits uniformity just so far as the people acting through the school board desire. Frequently one or more contiguous counties, people with like families, with like antecedents and engaged in similar industries, choose to unite on a uniform text book list. Who shall say that the differences of interests, the customs of people, the home life, the early training, the altitude of the home, or widely separated lines of effort in life do not constitute reasons for each district to be permitted to select the books used in the schools where only its interests lie. The difference of the coloring of the domestic life of the seafaring man on the coast and that of the merchant in an interior is no greater than that between the ranchman of Kit Carson county and the miner of Gilpin county. The higher interests of the pupil will be best served by permitting the family in each case to have a voice in the conduct of the school.

"Error frequently travels fast and sometimes gains a foothold so secure as to make the substitution of truth difficult and discouraging. Especially is this true with regard to cost of school text books.

"I have asked Mr. A. W. Elder, principal of Longfellow school, one of the largest schools in the State, and containing the eight grades representing eight years of the pupils' school life, from six to fourteen years of age, to write the required books for each year in his school with the cost of each. The summary, including all accessories, such as sponges, drawing material, etc., amounts to \$18.70, or \$2.34 a year.

THE ACTUAL SCHOOL EXPENSES.

Complete necessary expenses for the equipment of pupils for each of the first eight years in school district No. 1, Denver, Arapahoe county, Colorado:

"First year—New National First Reader, 25 cents; slate and sponge, 20 cents. Total, 45 cents.

"Second year—New National Second Reader, 45 cents; lead pencil, 5 cents; P., D. & S., No. 2, Writing Book, 10 cents; three spelling blanks at 5 cents, 15 cents; Normal Music Reader, No. 1. Total, \$1.10.

“Third year—New National Third Reader, 65 cents; P., D. & S. No. 2, Writing Book, 10 cents; Stoddard's Intellectual Arithmetic, 35 cents; White's New Elementary Arithmetic, 65 cents; drawing tablet, pencil and eraser, 25 cents; three spelling blanks at 5 cents, 15 cents; Eclectic Primary Geography, 50 cents. Total, \$2.85.

“Fourth year—New National Fourth Reader, 90 cents; three spelling blanks at 5 cents, 15 cents; P., D. & S., No. 3, Writing Book, 10 cents; drawing tablet, pencil and eraser, 25 cents; Music Reader, No. 2, 65 cents. Total, \$2.05.

“Fifth year—New National Fourth reader (see fourth year); three spelling blanks at 5 cents, 15 cents; P., D. & S. Writing Book, No. 4, 10 cents; New Complete Geography, \$1.50; Maxwell's Grammar, 50 cents; drawing tablet, pencil and eraser, 25 cents. Total, \$2.50.

“Sixth year—New National Fifth Reader, \$1.15; two spelling blanks, 20 cents; P., D. & S., No. 6, Writing Book, 10 cents; White's Complete Arithmetic, 80 cents; Stoddard's Intermediate Arithmetic (see fourth year); Maxwell's Grammar (see fifth year); Music Reader, No. 2 (see fourth year); New Complete Geography (see fifth year); drawing tablet, pencil and paper, 25 cents. Total, \$2.50.

“Seventh year—New National Fifth Reader (see sixth year); two spelling blanks, 20 cents; P., D. & S., No. 6, Writing Book, 10 cents; Hatch's Civil Government, 75 cents; Martin's Physiology, 95 cents; Green's Grammar, 95 cents; Normal Music Reader, No. 3, 65 cents; White's New Complete Arithmetic (see sixth year); Stoddard's Intermediate Arithmetic (see fourth year); New Complete Geography (see fifth year); drawing instruments, pencil, tablet and eraser, 65 cents. Total, \$4.25.

“Eighth year—Spelling blanks, 20 cents; drawing tablet, pencil and eraser, 25 cents; P., D. & S., No. 6, Writing Book, 10 cents; Anderson's Popular History of the United States, \$1.25; White's Complete Arithmetic (see seventh year); Stoddard's Intermediate Arithmetic (see seventh year); Third Music Reader (see seventh year); Green's English Grammar (see seventh year). Total, \$1.80.

THE TOTAL AMOUNT REQUIRED.

Total expense required for students, \$17.50; Witter's Revised New First Reader, 35 cents; fifth, sixth, seventh and eighth years, Joyne's Otto's Introductory Lessons, 85 cents; total excepting pens, pencils and paper, \$18.70.

“Because children manage to persuade or coax the parent to a greater expenditure in given cases does not increase the absolute requirements. Young people will emphasize a pretext for the pur-

pose of buying a new book. Parents are often misled as to requirements in this line. Uniformity in text books, however, does not concern teachers so much as uniformity in the management of the school and in the training of the children. The schools are assaulted and pictured by those not well informed because of this uniformity; they pretend to understand that every child is uniformly shaped to the same measure; a round one and a triangular one, and a lean one and a fat one, all hewed down, swelled out or squeezed in so that each fits nicely the same niche. While we know that this is untrue, there is and always must be a basis for the caricature of the critic.

TOO MUCH UNIFORMITY.

"Some of us are pedantic enough to insist quite too much on uniformity. It is safe to affirm that no two pupils can properly receive precisely similar rewards for precisely similar results; that no two pupils can justly be assigned identical punishment for identical offenses. That no single pupil can be taught, in the highest sense, exactly as any other pupil. The best school will never be until the average number belonging does not exceed twelve and the teacher has passed through many years of preparatory professional study. The best school to-day is one where fifteen little children are training in a true kindergarten with a real, philosophical, trained and altogether lovely mother for a teacher.

"But I am picturing the millennium. I shall have accomplished some purpose, if I shall have persuaded some one to cast away all unnecessary formality in the school room, and to treat with the pupils as individuals. I have tried to do it in my own teaching life only with measurable success, as some of the pupils still living and present here will tell. Teachers in rural districts with small enrollment can do it. City teachers with large enrollments cannot do it. All can approximate the desideratum.

"Shun uniformity. Look not for it, work not for it. Strive not to display it in public examinations, and when you find a school or a class uniform in excellent attainment, look back along the trail and see many stragglers fallen out of ranks, or dropped from the class in the name of uniformity, where they may remain, their ambition dampened, their pride broken, their resolution gone and school ever after to them a stranger. They leave and go to work, then grow up, but not intelligent citizens, their worth sacrificed to uniformity.

Discussion.

E. F. Hermans, Denver:—

When I was informed several weeks ago that I was to deliver an extemporaneous speech on the subject of "Uniformity," I was

somewhat nonplused. It is such a large subject. I may be able, before I have finished, to see my way clear. Uniformity, but what? The speaker has given me some intimation as to what uniformity he thinks it best to discuss. There is one draw-back to my following Mr. Gove, for he always marches in the van of school affairs; and so it should be quite natural that he and I should agree, and, therefore, he has not furnished me any opportunity to make things lively. I hardly agree with all Mr. Gove said in reference to uniformity. That is one way of getting even with Mr. Gove for stealing my thunder. But I can explain to the audience what he means. He means that uniformity is objectionable when it is sought after. Uniformity of text books; methods of teaching—that uniformity is not objectionable when it naturally occurs. It is the parent, the teacher and the school doing the very best things. I am in favor of uniformity in some things—the dress of a policeman, for instance. It is very necessary that I should be able to tell him when I see him (laughter). But I should not favor a similar uniformity in the dress of ladies. Just think; the same dress for the long and the short, the thick and the thin, the blonde and the brunette. I think the ladies would be deprived of many pleasant occupations, and the charm would be taken out of their lives—and also out of our lives (laughter). I should favor uniformity of salary—between Mr. Gove and myself. On the other hand, I should object to uniformity of dress between Mr. Gove and myself, unless I was taken as a standard (laughter). In some things I believe in uniformity; in opening and closing school, for instance, and in changing classes and books, because punctuality is something that ought to be taught, and that ought to be taught as something very seldom illustrated in this convention. I believe in uniformity of movements in calisthenics, and in moving from and to various classes. There's an inspiration and an enthusiasm in the harmonious movements of classes. It tends to bring the body and all parts of it under control of the will, and in no way can we do this better than by harmonious movements. There is another item—that is "the show element." I think this element is receiving so much encouragement in the schools that it needs very little mention. It costs a vast amount of energy on the part of teacher and pupils, without a proportionate reward.

I believe in uniformity of text books in the same district, in uniform advancement for promotions from class to class and from the high school to the university; not in all districts, but so far as from the common school to the high school; not because uniformity is in itself desired, but it is needed so long as we are not able to furnish like pupils with like abilities. That is about as far as I can go in uniformity. As has been stated by the speaker, the most serious

charge is that we have formed a sort of pro-crustean bed. You remember if the victim was too long for the bed he cut him off, and if he was too short he stretched him out. I don't believe the charge is true, but if it is true it is a serious matter. We know, as students of history, that a period of history does not receive its impress from those who stay in the common level, but from those who have extended our horizon. The fifteenth and sixteenth centuries are known as the centuries of Kepler and Newton and Bacon. These are the people who have given an impress to their times. Our own country is not known as a country of average citizens; it is known as the country of Blaine and Edison and Grant. They are the ones that give it reputation abroad, and I say if the charge be true, as stated before, we should give the matter our serious attention.

J. H. Hays, Greeley:—

"I am very much reminded by this discussion this morning, of some of my work in the eastern states some fifteen years ago, from the fact that this question of uniformity in the public schools was a subject then discussed among associations and in the school journals. There have been criticisms against the public schools, some of them just and some unjust. Many parents have taken their children out of the public schools and have put them in private schools, on the ground that we do not do what we can do for them. I will not attempt to say whether this charge is true or not, but there is much encouragement for the young teacher this morning. Some of these are teaching out in the valleys and looking forward to better times. To such I would say, "Thank God and take courage." I was interested in noticing in a recent article that Superintendent Frank Fitz Patrick has gathered together a number of little folks who failed to make their promotions, and they are being taught alone; and I think in time they will outstrip those who made the grade work and were promoted * * *. I believe in uniformity along the lines of school management, but the machinery, that is to say, the regulations, must never go before the teacher. The greatest thing in the school room is the teacher; next to the teacher is the school itself. If our schools are made as efficient as they ought to be, there will be little ground for private and parochial schools. I believe there ought to be no place for parochial schools or private schools below the high school. I believe that if we were doing all that we ought to do, there would be no parochial schools. So it has occurred to me that there is much encouragement to be offered to the country teacher. If you are out in some lonely valley, take courage; you have an opportunity of becoming a real teacher. If you are surrounded by mountains, take courage; stay where you are and work out this problem, and become a genuine, live and really good teacher.

I would say to the young teacher, 'keep out of the city schools just as long as you can; stay until you work out this problem; until your pupils become trained, and you will have a glorious reward'."

Mr. Stevens:—

"I worked for fourteen years under a system of uniformity, and know that there is nothing so good for us as uniformity."

Mr. Search:—

I believe in the uniformity that makes us all hungry about this time of day, and move an adjournment for dinner."

Carried.

1:45 P. M.

Address, "Power," President James H. Baker, Boulder.

We enjoy Nature in repose—the autumn landscape, the glad light of noon-day, the twilight hour of reflection, the starry night of cloudless skies, the unrippled surface of the deep, the silent majesty of the mountain. But there is greater interest in contemplating the manifestations of Nature's various energies—the breeze moving upon the verdure, the fast swimming clouds, the ocean beaten into rugged masses by the tempest. Especially, perhaps, do we enjoy energy when directed to useful ends, as when the wind drives the vessel on its way, or the falling stream turns the wheels of manufacture. A historic period of peace and prosperity, a period of silent massing of forces for an onward movement, please us, but we are more attracted by the uprisings and conflicts, the struggles that make progress for the race. A man of reserved force, of many unused resources, commands our respect, but we delight in the strong expression of his inward power, as when he sways the masses by his oratory, or leads a great movement of reform, or carries forward a magnificent enterprise.

We may believe that passive existence is not the plan of Nature or the purpose of life. Everywhere is evolution, progress, aspiration, manifestation, from the upspringing of a blade of grass to the development of high character; from the activity that meets daily wants to the devotion to lofty ideals and the performance of acts of heroism; from the growth of a flower to the wheeling of the planets in their orbits; from the formation of a material earth to the attainment of a spiritual heaven. We do not even know that there is material existence, but we do know that there is manifestation of force, and some conjecture this to be all. Without power in action there would be no world to be known and no mind to know.

RELATION OF POWER TO KNOWLEDGE.

Material nature and its energies are bound together. Physical force is shown only in connection with matter, and matter cannot exist without the potency and manifestation of energy. Try to imagine a world, in which all the life pulsations that constitute the various kinds of force may have ceased—no cohesion, no resistance, no gravitation, no sound, icy darkness, no sign from the outward world, no active mind to receive a sign. One part of the conception is faintly suggested by Byron's Ode to Darkness :

"The bright sun was extinguished, and the stars
Did wander darkling in the eternal space,
Rayless and pathless, and the icy earth
Swung black and blackening in the moonless air."

Now, try to imagine knowledge without power, a mind that is but a photographic sheet for the objects of the outer world, a blank paper for the writing of communicated thought—no active perception, no imagination, no reflection upon ideas, no impulses ending in action. On the other hand, mental power without knowledge is inconceivable. One without knowledge is in the condition of the newly born infant. This attempt to separate the inseparable may assist us in what follows.

As difficult to understand as the relation between matter and force, between spirit and body, between thought and its sign, is the relation between knowledge and power. In a way we may attempt to separate and distinguish them, by a process of emphasizing one or the other. Knowledge, in the sense of information, means an acquaintance with nature in its infinite variety of kind, form, color and force ; with man, in the history of his deeds and thoughts. Power means the ability to gain knowledge, and the ability and motive to use it for growth and for valuable ends. Mere knowledge serenely contemplates nature and history as a panorama that moves before the vision, without serious reflection or progress. Power is able to reflect upon knowledge, and find motives for progress and useful action. Knowledge is the product of the information method ; power, of the method of self-activity.

As we cannot divorce matter and force, so it appears we cannot clearly separate knowledge and mental power ; the distinction is artificial, and almost fanciful. One cannot exist without the other ; they are opposite sides of the shield. Through knowledge comes power. Knowledge is the material for reflection and action. Knowledge, as it were, creates the mind, and is both the source of power and the occasion for its use.

We may speak of physical nature as made up of matter and energy in repose or in action ; of mind, as possessing knowledge and power in repose or in action.

SUGGESTIVE ILLUSTRATIONS AND SOME INFERENCES.

You will recall the familiar caricature of the Chinese lack of original power. A merchant negotiated with a Chinaman for the manufacture of a few thousand plates of a certain pattern, and furnished a sample that by chance was cracked. The plates arrived in due season, admirably imitating the original—and every one was cracked. No need in this instance to employ the mandate once given in my hearing by a choleric superintendent to an employee, who began to apologize for a mishap by saying : " I thought so and so." " Confound it ! I have told you repeatedly you have no business to think."

The Chinese character may be expressed by a parody on a familiar stanza :

For they are the same their fathers have been ;
They see the same sights their fathers have seen ;
They drink the same stream and view the same sun,
And run the same course their fathers have run.

A timorous cow gazing wistfully over the garden gate at the forbidden succulent vegetables, and nervously rubbing her nose by accident against the latch, may open the gate and gain an entrance, and afterward repeat the process. A new and peculiar fastening will prevent any further depredations. An ingenious boy will find the means to undo any kind of unique fastening to the gate that bars him from the watermelon patch.

Charles Lamb humorously describes how the Chinese learned to eat roast pig. A house burned ; the family pig perished in the flames ; the disconsolate family stood around, viewing the ruins ; by accident, one touched the pig, burned his finger, thrust it in his mouth to cool it ; it tasted good ; he repeated the process. Soon there were marvelously frequent conflagrations. All the neighbors burned their homes to roast their pig, that being the only method they had learned.

From these somewhat trivial illustrations, we may rapidly draw a few inferences: First, ingenuity of mind for novel conditions distinguishes man from the brutes. Second, the Chinese method of education emphasizes too much the information side: it is not good. Third, the human mind is ingenious when it is rightly educated and has a strong motive. Fourth, ingenuity is the power that should grow from education. In this idea—ingenuity of mind—I take it, is the very essence of what we mean when we emphasize the power side of the soul.

The problem of education is to make men think. If they finally think the same thoughts as their fathers, this thinking should follow an original investigation of their value. Tradition, authority, formalism have not the same place in education which they formerly occupied. May it not be that we have so analyzed and formulated the work of the schools, that formalism and method have been somewhat substituted for genuine work, full of life and spirit, that makes power for the individual? It may not be strange if we discover that the criticisms from certain high sources have at least a small element of truth in them. A certain routine may easily become a sacred code—a law of the tables—and any variation or omission an impiety.

A person possesses power when his conception ploughs through the unfurrowed tissue of his brain to seek its proper affinity, and unites with it to form a correct judgment. A person who is merely instructed does not construct new lines of thought to bring ideas into novel relations; he does not originate or progress. An original thinker masses all congruous ideas around a dimly conceived notion and there is a new birth of an idea, a genuine child of the brain. His ingenuity will open a gate or construct a philosophical system.

I remember well the stages in my own education when there was a new awakening by methods that invited thought—a power given to conceive and do something not stated in the books or imparted by the teacher. In some schools, even of to-day, it is difficult to find teachers who can impart elementary science in the spirit of science; who can successfully invite speculation as to causes; who can teach accurate perception; who can interpret events in history; train in the use of reference books or invite original thought in mathematics. There is no high school which does not yearly receive pupils untrained in original power, no college which does not annually winnow out freshmen, because they have not gained the power to grapple with virile methods. This fault is sometimes innate, but it is oftener due to false methods of instruction. Our great problem is to make scholars who are not hopeless and helpless in the presence of what they have not learned.

Pardon another illustration. The plant must have good soil, water, air and sun, care and pruning, in order to grow, and it grows of itself, gains strength by proper nourishment. The aggregation of material about the plant does not constitute its growth. The plant must assimilate; the juices of life must flow through it.

The teacher does his best work when he makes all conditions favorable for the self activity of the pupil. Such conditions create a lively interest in the objects and forces of nature; invite examination of facts and discovery of relations; arouse the imagination to conceive

results; awaken query and reflection; stimulate the emotional life toward worthy and energetic action, and make the pupil ever progressive.

REVIEW.

A recent article in one of our magazines strongly emphasizes the methods that make power. It considers the kind of training that finally makes accurate thinkers; that makes original, progressive men—men of power and safe and wise members of society and citizens of the State. The author shows that clear observation, accurate recording of facts, just inference and strong, choice expression are most important ends to be attained by the work of the schools, and that these ends become the means for correcting all sorts of unjust, illogical conclusions as to politics and morals.

There is much profound thought in the view maintained. Unjust inferences—fallacies—are nearly the sum of the world's social and political evils. No one doubts that many false ideas are held as true concerning the currency problem, the tariff question, the theory of strikes and boycotts, mind cure and the host of notions that take possession of men's minds without logical reflection. The fallacy of confounding sequence with cause is almost universal. Financial depression followed the advent of a certain administration, therefore it was caused by the administration. All kinds of subjective and objective duties suffer from illogical minds.

To correct many errors and evils, to make thinking, useful men, we must emphasize the processes recommended: (1) Observation, (2) faithful recording, (3) just inference, (4) satisfactory expression.

The author shows wherein the work of the grades fails to give the desired results. He holds that arithmetic, so emphasized, contributes nothing because it employs necessary reasoning and does not give practice in inference from observation and experience, a process which develops scientific judgment. Inductive reasoning alone can give scientific power. Reading, writing, spelling, geography, as usually taught, contribute but little. Grammar does not add much.

For invention, for correct estimates of the problems of society, government and morals, the original power of inference from observed facts is necessary. It is asked, Do our schools give this power to a satisfactory and attainable degree? It is claimed in the article that the high schools and colleges fail more or less, because so much time is given to memory work and formulated results. In the high schools the work to be most emphasized is not chosen with discrimination. The courses include too many studies, not well done. There should be fewer studies so pursued as to give power.

May it not be well to make the inquiry in all grades as to what proportion of the work contributes toward the final result of accurate reflection upon the world of facts. Let us again repeat the author's list in logical order: (1) Observation; (2) recording, as in noting experiments; (3) inference; (4) expression.

I may say that I do not agree with President Eliot in all his views, but the article in question is well worth reading. It may be found in the December number of *The Forum*, 1892.

The paper admirably emphasizes the methods that make power, the things most neglected in most schools. If it fails, it is because knowledge as a basis of power is given too little importance, the æsthetic power is not emphasized, and full rounded manhood and the value of ideals are somewhat neglected. It is true that poetry implies accurate observation, fine discrimination, discovery of just relations and true insight, but it is equally true that science study does not make poets.

THE RECLUSE AND THE MAN OF ACTION.

The times have changed. The old idea of the scholar was that of one, who, in the serene contemplation of truth, beauty and goodness, found a never failing source of delight for himself and felt little obligation to the world that sustained him, or the social environment that nurtured and humanized him. The devotion to truth for its own sake, the love of nature in repose, the admiration of great deeds, fine sentiments and noble thoughts, were for him sufficient, as if he were isolated in a world of his own. I am far from depreciating this power, for life is worth nothing without it. But there is a demand for action, a call to externalize the power of one's being. Each man is the part of the all, from eternity destined to be a factor in the progress of all. The thoughts and impulses that evaporate and accomplish nothing are not of much more value to the individual than to his neighbor. Do something is the command, alike of religion and of the nature of our physical being. Every sentiment and idea that leads to action forms a habit, in the mysterious inner chambers of our nerve structure, for action, and we gain in power, grow in mental structure day by day, until we are ready for the work of giants.

EXAGGERATION OF POWER.

Power comes through knowledge. There may be too great a tendency to emphasize power to the loss of that knowledge necessary to marshal in one field of view the necessary facts. Imagine a judge trying to reach a decision without the points in evidence before his

mind; a statesman that would interpret current events without a knowledge of history; an investigator in science who had not before him the results of the investigations of others. Imagine, on the other hand, one who has all the facts of history, without the power to generalize, or one who has learned by rote the laws of physics, without the power of proof or investigation. While the latter has knowledge without power, the former lacks useful power through lack of knowledge.

Ideally, knowledge should be varied and comprehensive. It should comprise an acquaintance with the world environment; it should cover, at least in an elementary way, the entire field of nature and of man; it should reach nature in the quantitative aspect, and spatial relations as learned in geometry; it should traverse the entire circle of sciences, through the forms of matter and the forces of nature; it should enter the laboratory of the atoms, trace the evolution of the planetary system, the formation of the earth, and include the forms, structure and growth of plant and animal life; it should trace the deeds of men in history, the thought of men in literature, the nature of man in mental science, and include the philosophy that views and interprets all. Only then has the student the knowledge for wisest power and fullest development. Then only is he best prepared for his life work, if he would make the most of it. A man lost in a forest directs not his steps wisely; when thoroughly acquainted with his surroundings he moves forward with confidence. One who has trained all the muscles of his body delivers a blow with vigor. One who has trained all the powers of his mind, summons to his aid the energy of all his faculties, when the mind acts in a given direction. His knowledge is the light thrown on his endeavor.

CRITICISM OF CERTAIN VIEWS.

This view is opposed to the extreme one that knowledge is of little value. Knowledge is necessary to power, but the abuse lies in not making it the basis of power.

This theory also strongly militates against the position that a student should specialize at too early a period, before he has traversed, in an elementary way, the circle of studies and gained a harmonized general development.

The discussion of a growing fallacy naturally appears in this place, that it makes no difference what knowledge is used provided it gives power. There is a difference in knowledge *per se*. It does make a difference whether one gains power in deciphering an ancient inscription in hieroglyphics, or gains it studying a language which

contains the generic concepts of our native tongue, or in a scientific study which acquaints him with the laws of Nature's forces. In the one case, while the power is great, the knowledge is small, in the other, an essential view of the thought of mankind or of the nature of the world in which we live is gained, and the knowledge is broadly useful for various exercise of power.

Another fallacy lies in the thought that actual execution in practical ways alone gives power. It may give ready specific power of a limited kind, but it may leave the man childlike and helpless in the presence of anything but his specialty.

HIGHER EDUCATION.

Here we find an argument for higher education; for an accumulation of knowledge and power that comes through prolonged labor in the field of learning under wise guidance and through self effort. Many a youth, through limited capacity, limited time and means, must begin special education before he has laid a broad foundation, but this is not the ideal method. The true teacher will always hold the highest ideals before the pupils, will guide them in the path of general education, until that education becomes what is called liberal. The broad minded men who conduct schools for special education are strong advocates of the highest degree of general training first. One of the hopeful signs of the discussions at the National Council of Education last summer was that prominent Normal school men deplored the necessary limitations of a Normal course and said it should inspire a desire for some degree of higher education, that there should be a connection between Normal schools and the colleges.

Four years of college life, with the methods of to-day, more than quadruple the capital of the graduate of secondary schools. They broaden marvelously the field of knowledge, and enlarge the capacity for doing. The world is full of demands for men of knowledge and power. On a recent visit to many colleges, there was a universal complaint that it was almost impossible to find men sufficiently equipped in knowledge, power and character to take the direction, for instance, of college departments in Latin. Men of power and skill are in demand everywhere, and not enough can be found for responsible positions. One-half the fault is insufficient education.

POWER TO ENJOY.

There is another phase of power that must not be neglected; I mean the power to enjoy, to feel the full vigor of manhood, to be rich in emotional life. Knowledge, properly pursued, is a source of rich and refined intellectual emotions. There is joy in discovery, joy in the freedom and grasp of thought.

Then there is the æsthetic power, based upon fine discrimination, that finds a perpetual joy in sky and sea and mountain and forest, in music and poetry, in sentiment and song. Our Teutonic ancestors were better seers than we. The morning sun and the midnight darkness were perpetually to them a new birth. The leaves whispered to them divine messages; the storms and the seasons, the fruitful earth were full of wonder and sacred mysteries. They were poets. This matter-of-fact age will yet return to the primitive regard for nature—a regard enlightened and refined by science. Men will yet find in the most common-place fact of nature, mystery, poetry, ground for reverence and faith in a God.

Last is the ethical feeling, which gives an impulse toward right action. Conduct under the guidance of principle is character, and it leads the world in the line of aspiration toward the highest attainment. Truth, beauty and goodness—these should be the constant aim of man. They should be the soul of education; they should put life into the methods of the teacher, and infuse energy into the endeavor of the scholar. Perfect ideals alone develop the power of completest manhood and womanhood.

ENERGY OF CHARACTER.

I spoke previously of the power of enjoyment. But this alone does not give a fruitful life. It is in the moment of action that we gain the habit that makes power for action. As a recent philosopher expressed it, "Do not allow your finer emotions to evaporate without finding expression in some useful act, if it is nothing but speaking kindly to your grandmother, or giving up your seat in a horse-car."

To make his innate energy a power for the world, is the duty of the young man. He must seek the avenues of approach to others. It is said of an ancient prophet that he was willing to overcome the careless tendencies of his nature, that he might make himself pleasing to men in order to influence them. Be a mediator between your powers and the opportunities for influence. The man who influences others lives in a thousand lives, multiplies his personality, and the sum of power and enjoyment in the world.

There has been a weak and harmful philosophy in vogue for years that would place the natural and useful in the line of the agreeable. Even extreme evolution fails signally to show that the agreeable is always teleological, that is always directed toward useful ends. The latest teaching of the physiological psychology takes us back to the stern philosophy of the self-denying Puritan and shows that we must conquer our habitual inclinations and do something disagreeable every day to prepare for the emergencies that demand men of stern stuff. George Eliot proclaims the same thought with philosophical insight, that we are not to wait for great opportunities for

glory, but by daily drudging, performance of little duties we are to prepare for the arrival of the great opportunities. Our eagle flights must be prepared by many feeble attempts of our untried pinions.

If one but work, no matter in what line of higher scholastic pursuit, he will in a few years waken to a consciousness of power that makes him one of the leaders of the earth. There is every encouragement to the student to persevere, in the certain assurance that sooner or later he will reach attainments beyond his present clear conception.

Our inheritance is a glorious one. We spring from the Anglo-Saxon branch of the Teutonic race, the best and most progressive of all. Their character is seen from the earliest history. Amid the clash of weapons they fought with a fierce energy and a strange delight. They rode the mighty billows and sang heroic songs with the wild joy of the sea fowl. Later we find them contending earnestly for their beliefs. Then they grew into the Puritan sternness of character, abounding in the sense of duty. Their character has made them the leaders and conquerors of the world. It finds expression in the progress and influence of America. This energy has gradually become more and more refined and humanized, and in its highest and best form, it is the heritage of every young man; and by the pride of ancestry, by the character inherited, by the opportunity of his age, he is called upon to wield strongly the weapon of Thor and hammer out his destiny with strong heart and earnest purpose.

POWER IN ALL NATURE.

All nature is energy at rest or in action. Carlyle speaks of the all-encircling mysterious tide of force, thousandfold, billowing shoreless on, bearing us along with it, ourselves a part of it. From its bosom rise and vanish, in perpetual change, the lordliest Real-Phantasmagory which is being. The making of systems, the formation of a world, the growth of the plant, the development of animal life, the progress of man, spiritual aspiration are parts of the universal development which is but a manifestation of power. The race obeys the law; the individual is under its direction and fulfills his destiny when he exercises his powers in his own growth and in adding to the universal tendency. As it were, he has received a spark of divine life from heaven, making him a responsible originator—a creator. He is to create and add to the sum of force that tends ever upward. Any profound contemplation of the problem of life gives us faith that the end is not here; that the creative unit, called man, has a destiny, to be completed beyond the limits of time, under other conditions, in the exercise of a heaven-given power, in accord with the divine plan of progress.

In Memoriam.

ISAAC C. DENNETT.

Address: Eugene C. Stevens, Trinidad.

MR. PRESIDENT, TEACHERS OF COLORADO:—Since this Association last met, the shadow of death has fallen across its roll of membership. In consequence of this melancholy event, we deem it not inappropriate to pause in our deliberations, while we recount the virtues and pay our tributes of love to the memory of one who was an active member of this organization from its early days upwards, and one whom this body has honored with the gift of its presidency. I refer, sir, to the late Dr. I. C. Dennett, who passed away from his earthly home on the 14th day of last October.

Isaac Chase Dennett was of New England parentage. He was born December 7, 1849, and was, therefore, in his forty-third year at the time of his untimely decease. His early education was obtained in the public schools of his native city, Lewiston, Maine, and he graduated from Bates College in the class of '73. For the three following years he was engaged in high school work in his native state. In 1876 he dropped the work among the hills of New England to resume it in the mountains of Colorado, taking the position of principal at Central City. After one year he removed to Pueblo to fill the office of city superintendent. In 1879 he was called to occupy a chair in the State University at Boulder, and from that date until the hour of his departure his life was intimately interwoven with the life of the University.

Thus, briefly, have I outlined the biography of Dr. Dennett. He was my friend. Although reared within thirty miles of the home of his boyhood, I had not the pleasure of his acquaintance until after I came to the Centennial State, where he was among the first, if indeed not the first to extend to me the grasp of cordial fellowship and to give me a schoolmaster's hearty welcome. I shall never forget the kindness of that greeting. There was nothing cold, nothing distant, nothing condescending about it. I felt that it was like the noble man who

gave it, genuine, and it sent a warm gleam of social sunshine through that gloom which sometimes surrounds a man amid new scenes and strange faces.

Colorado has been most fortunate in its supply of school teachers. The north, east and the south have paid tribute in brave sons and fair daughters; public and private schools, normal schools, scientific institutions, colleges and universities have sent numerous graduates; and here, amid our lofty mountains and in our beautiful valleys, have they poured out the richness of their culture and the ripe fruit of their experience. Conspicuous among this number came Mr. Dennett in the full strength of early manhood, and in the flush of young life's ambition. With a decision and an energy inherited from New England ancestry, he entered into the labors of his chosen profession. For sixteen years did he throw into the school work of Colorado the strength of his great individuality, exerting more than an ordinary influence in shaping the educational thought of the State. But he has gone. His bright eye, his beaming countenance, his royal fellowship, his brilliant repartee, his accurate judgment—all are sadly missed at this, our Christmastide gathering, and there are left to us now only the loving remembrance of our dear friend, and the lofty example of his noble life. Worthy lives are valuable libraries. "Virtue alone outbuilds the pyramids; her monuments shall stand when Egypt's fall."

I regret, sir, that the briefness of the time at my command limits the scope of analysis which the fulness of Dr. Dennett's life eminently merits. His character was of the highest order—"A tower of strength which stood four square to all the winds that blow." As a friend, as a citizen and as a schoolmaster he was universally esteemed and loved by those who came within the circumference of his influence. His nature was frank and ardent. Scorning all chicanery, he pursued those lines of action which his conscience approved and his judgment warranted with intense earnestness.

" A man to whom rare gifts were lent,
But manhood first of all;
And that so strong he was content
By that to stand or fall."

He was a student; not a mere recluse finding delight only in the classics and in the masterpieces of pure English, but, also, a student of the great book of human nature; his erudition was of that life-giving character, that presented to his associates, and to his students lofty and inspiring ideals; he "allured" to higher planes of intellectual thought, "and led the way." He was an excellent citizen; his example in this respect is a reminder that the teacher can be a teacher

and still be a member of society. He was loyal to his profession. I entertain no hesitation, sir, in making a free use of the word profession; if teaching be not so commonly recognized, such omission is, in my judgment, due more to the low standard of work entertained by teachers, than it is to any other cause; our lamented friend never did aught but that which had a direct and positive influence in elevating the teacher's occupation to that high position, which, of itself, commands the deepest respect. Withal he was a courteous gentleman, unassuming in manners and unostentatious in all his professional labors.

" Rich in saving common sense
And, as the greatest always are,
In his simplicity, sublime."

His private life was pure and essentially Christian; he was a loving husband, a wise father; and when some three years ago, death removed from that charmed family circle, the cherished wife, the tendrils of the father's affection clung more closely to his boy, and, with a fond father's well-grounded pride, did he contemplate and plan for his boy's future. But in the high-tide of life and mental vigor, and in the full strength of usefulness, he is removed from earth's narrow to heaven's wide field of action.

The commencement exercises are closed; our loved friend has graduated with honors from life's great university, and has entered into that beautiful condition of peace where the soul of man comes into fellowship with the God that gave it. In classic Boulder's beautiful cemetery his body rests under the shadows of the mighty mountains, fitting tombstones for such a noble man.

"Ay, men may wonder while they scan
A living, thinking, feeling man,
Confirmed in such a rest to keep;
But angels say, and through the world
I think their happy smile is heard,
He giveth His beloved sleep."

But benign influences never die. A schoolmaster, with the culture, the force and the nobility which characterized our loved friend, has engraved an epitaph on something more enduring than marble columns or blocks of granite, the tablet of the soul of youth, and when the mountains shall have crumbled, and time, as recorded on earth, shall be no more, those influences will still live on, expanding into greater perfection amid the environments of the eternal life beyond the "Great Divide."

EUGENE C. STEVENS.

Trinidad, Colo.

At the conclusion of Mr. Stevens' address, the Association adopted, by a rising vote, the following resolutions, and directed that a copy of them be forwarded to the orphan son :

WHEREAS, Dr. I. C. Dennett, a faithful member and former president of our Association, and for sixteen years a leading educator in Colorado, has been removed by death, therefore,

Resolved, That we recognize with gratitude the great value of his active life to the State and country ;

That we lament the great loss which popular education and sound classical learning sustain in his untimely death ;

That we extend our warmest sympathy to his son, and to the faculty of the State University ;

That these resolutions be spread upon the records of the Association.

STEVENS,
BRACKETT,
COURTNEY,
Committee.

LIST OF THE MEMBERS

OF THE COLORADO STATE TEACHERS' ASSOCIATION, REPORTED BY
THE TREASURER AS HAVING PAID THE ANNUAL MEMBERSHIP
FEE AT THE SESSION OF DECEMBER, 1892.

NAME.	RESIDENCE.	COUNTY.	STATE.
Abrams, Mrs. Annie	Brighton	Arapahoe	Colorado
Arnold, E. G.	Denver	Arapahoe	Colorado
Beggs, R. H.	Denver	Arapahoe	Colorado
Bird, T. B.	Denver	Arapahoe	Colorado
Bradley, C. A.	Denver	Arapahoe	Colorado
Burchard, Ada H.	Denver	Arapahoe	Colorado
Bethel, E.	Denver	Arapahoe	Colorado
Cannon, Geo. L., Jr.	Denver	Arapahoe	Colorado
Carter, Lillian	Denver	Arapahoe	Colorado
Carter, C. M.	Denver	Arapahoe	Colorado
Case, Zilla	Denver	Arapahoe	Colorado
Collier, Elsie J.	Denver	Arapahoe	Colorado
Courtney, A. C.	Denver	Arapahoe	Colorado
Coy, Nathan B.	Denver	Arapahoe	Colorado
Devalon, Elizabeth	Denver	Arapahoe	Colorado
Dewey, Lora C.	Denver	Arapahoe	Colorado
Draper, Carrie	Brighton	Arapahoe	Colorado
Draper, Effie	Brighton	Arapahoe	Colorado
Eagleton, M. E.	Littleton	Arapahoe	Colorado
Elder, Andrew W.	Denver	Arapahoe	Colorado
Erwin, J. M.	Denver	Arapahoe	Colorado
Faris, F. E.	Denver	Arapahoe	Colorado
Flower, Elizabeth	Denver	Arapahoe	Colorado
Fortner, Sarah E.	Denver	Arapahoe	Colorado
Force, Anna L.	Denver	Arapahoe	Colorado
Gass, B. R.	Denver	Arapahoe	Colorado
Giddings, Ella E.	Denver	Arapahoe	Colorado
Gove, Aaron	Denver	Arapahoe	Colorado
Greenlee, L. C.	Denver	Arapahoe	Colorado
Guibor, Louise	Denver	Arapahoe	Colorado
Hale, Horace M.	Denver	Arapahoe	Colorado



GRAND JUNCTION HIGH SCHOOL.

LIST OF MEMBERS—*Continued.*

NAME.	RESIDENCE.	COUNTY.	STATE.
Harris, Joe A.	Denver	Arapahoe	Colorado
Hanghey, Iona	Denver	Arapahoe	Colorado
Hays, Charles F.	Denver	Arapahoe	Colorado
Henderson, Luella	Denver	Arapahoe	Colorado
Hermans, Ed. F.	Denver	Arapahoe	Colorado
Hinman, Kate	Denver	Arapahoe	Colorado
Holman, Cordelia E.	Highlands	Arapahoe	Colorado
Houghan, Mrs. Froua	Denver	Arapahoe	Colorado
Houran, Bird	Denver	Arapahoe	Colorado
Howe, Herbert A.	University Park	Arapahoe	Colorado
Johns, T. A.	Denver	Arapahoe	Colorado
Jones, Edith	Denver	Arapahoe	Colorado
Jones, Winifred	Denver	Arapahoe	Colorado
Knapp, W. E.	Denver	Arapahoe	Colorado
Kram, Mrs. C. V.	Denver	Arapahoe	Colorado
Laurence, Effie L.	Denver	Arapahoe	Colorado
Lees, M. P.	Denver	Arapahoe	Colorado
Lloyd, Mrs. Louisa	Denver	Arapahoe	Colorado
McClure, Z. B.	Denver	Arapahoe	Colorado
McClure, Francis C.	Denver	Arapahoe	Colorado
McDowell, W. F.	University Park	Arapahoe	Colorado
Maxwell, E. E.	Denver	Arapahoe	Colorado
Miller, Oma	Denver	Arapahoe	Colorado
Mitchell, Emma	Denver	Arapahoe	Colorado
Mitchell, Julia M.	Denver	Arapahoe	Colorado
Morrison, Alice	Denver	Arapahoe	Colorado
Murphy, Kate	Harris	Arapahoe	Colorado
Murray, J. F.	Denver	Arapahoe	Colorado
Murphy, Ellen H.	Denver	Arapahoe	Colorado
Norvell, L. P.	Denver	Arapahoe	Colorado
Osenbaugh, C. M.	Denver	Arapahoe	Colorado
Parsons, Mary	Denver	Arapahoe	Colorado
Phillips, H. S.	Denver	Arapahoe	Colorado
Phillips, F. E.	Denver	Arapahoe	Colorado

LIST OF MEMBERS—*Continued.*

NAME.	RESIDENCE.	COUNTY.	STATE.
Pease, Martha A.....	Denver.....	Arapahoe..	Colorado
Pike, Lillian.....	Denver.....	Arapahoe..	Colorado
Putman, Mary.....	Denver.....	Arapahoe..	Colorado
Robinson, Fannie.....	Denver.....	Arapahoe..	Colorado
Royce, Endora D.....	Denver.....	Arapahoe..	Colorado
Sabin, Mary S.....	Denver.....	Arapahoe..	Colorado
Shattuck, Joseph C.....	Denver.....	Arapahoe..	Colorado
Schayer, Fannie.....	Denver.....	Arapahoe..	Colorado
Scott, Jessie.....	Denver.....	Arapahoe..	Colorado
Shepard, A. D.....	Denver.....	Arapahoe..	Colorado
Smith, Nannie O.....	Denver.....	Arapahoe..	Colorado
Smith, Sidney F.....	Denver.....	Arapahoe..	Colorado
Smith, Hettie M.....	Berkeley.....	Arapahoe..	Colorado
Spalding, F. S.....	Denver.....	Arapahoe..	Colorado
Spears, W. M.....	Denver.....	Arapahoe..	Colorado
Strong, William C.....	University Park.....	Arapahoe..	Colorado
Tarbert, J. T.....	Island Station.....	Arapahoe..	Colorado
Taylor, Bertha B.....	Denver.....	Arapahoe..	Colorado
Teall, W. J.....	Denver.....	Arapahoe..	Colorado
Thompson, Lucy.....	Denver.....	Arapahoe..	Colorado
Underhill, Annie.....	Denver.....	Arapahoe..	Colorado
Vansickle, J. H.....	Denver.....	Arapahoe..	Colorado
Wilson, J. M.....	Denver.....	Arapahoe..	Colorado
Witter, M. A. B.....	Denver.....	Arapahoe..	Colorado
Williams, Lelia.....	Denver.....	Arapahoe..	Colorado
Wood, Alice M.....	Denver.....	Arapahoe..	Colorado
Wyatt, G. W.....	Denver.....	Arapahoe..	Colorado
Zirkle, H. W.....	Denver.....	Arapahoe..	Colorado
Baker, F. J.....	Colorado Springs.....	El Paso....	Co'orado
Condit, P. M.....	Colorado City.....	El Paso....	Colorado
Cowperthwaite, Julia.....	Colorado Springs.....	El Paso....	Colorado
De Bot, Etta.....	Colorado Springs.....	El Paso....	Colorado
Dexter, E. G.....	Colorado Springs.....	El Paso....	Colorado
Gile, M. C.....	Colorado Springs.....	El Paso....	Colorado

LIST OF MEMBERS—*Continued.*

NAME.	RESIDENCE.	COUNTY.	STATE.
Grafton, L. B.	Colorado Springs	El Paso	Colorado
Hunter, Nettie S.	Colorado Springs.	El Paso	Colorado
Jackson, J. P.	Colorado Springs	El Paso	Colorado
Kellar, George.	Colorado Springs.	El Paso	Colorado
Pattison, P. K.	Colorado Springs.	El Paso	Colorado
Slocum, W. F.	Colorado Springs	El Paso	Colorado
Turnbull, G. B.	Colorado Springs.	El Paso	Colorado
Baker, J. H.	Boulder	Boulder	Colorado
Brackett, J. R.	Boulder	Boulder	Colorado
Casey, W. V.	Boulder	Boulder	Colorado
DeLong, Ira M.	Boulder	Boulder	Colorado
Fonda, Mrs. Ida	Boulder	Boulder	Colorado
Gardiner, John	Boulder	Boulder	Colorado
Griffin, J. L.	Boulder	Boulder	Colorado
Hall, Emma A.	Valmont	Boulder	Colorado
Harding, G. L.	Longmont	Boulder	Colorado
Kingsley, C. M.	Boulder	Boulder	Colorado
Knight, Alice C.	Noland	Boulder	Colorado
Nichols, Frank	Boulder	Boulder	Colorado
Rand, Louisa	Longmont	Boulder	Colorado
Remington, W. W.	Boulder	Boulder	Colorado
Shellenger, S. H.	Lafayette	Boulder	Colorado
Tripp, Clara	Salina	Boulder	Colorado
Fisher, E. M.	Bald Mountain	Gilpin	Colorado
Haskell, M. E.	Central City	Gilpin	Colorado
King, Mary	Central City	Gilpin	Colorado
Kruse, Mrs. R. C.	Central City	Gilpin	Colorado
Lake, Dr. E. F.	Central City	Gilpin	Colorado
Morris, J. Sherman	Russell Gulch	Gilpin	Colorado
Russell, Mary	Bald Mountain	Gilpin	Colorado
Smith, J. A.	Central City	Gilpin	Colorado
Walters, Mrs. Mary Wall	Bald Mountain	Gilpin	Colorado
Johnson, Clara T.	Hill Top	Douglas	Colorado
Matthews, J. H.	Castle Rock	Douglas	Colorado

LIST OF MEMBERS—*Continued.*

NAME.	RESIDENCE.	COUNTY.	STATE.
Fynn, A. J.	Alamosa	Conejos	Colorado
McNaughton, Sarah	Alamosa	Conejos	Colorado
Brown, Tempie W.	Aspen	Pitkin	Colorado
Eddingfield, W. T.	Aspen	Pitkin	Colorado
Dempsey, P. J.	Sterling	Logan	Colorado
Oakes, Alta N.	Fleming	Logan	Colorado
Boyd, Psyche E.	Fort Collins	Larimer	Colorado
Broadman, Alice E.	Fort Collins	Larimer	Colorado
Fowler, C. A.	Timnath	Larimer	Colorado
Goodell, Nellie A.	Fort Collins	Larimer	Colorado
Griffith, Alice F.	Fort Collins	Larimer	Colorado
Hamilton, A. L.	Loveland	Larimer	Colorado
Hamilton, S. T.	Fort Collins	Larimer	Colorado
McGuire, L. B.	Loveland	Larimer	Colorado
Parker, C. V.	Fort Collins	Larimer	Colorado
Varney, E. D.	Fort Collins	Larimer	Colorado
Whitcombe, Lizzie	Fort Collins	Larimer	Colorado
Price, J. M.	Glenwood Springs	Garfield	Colorado
Drake, R. C.	Como	Park	Colorado
Kesner, E.	Fairplay	Park	Colorado
Stephenson, D. E.	Alma	Park	Colorado
Bourquin, Florence	Silver Plume	Clear Creek	Colorado
Collins, Mrs. E. W.	Georgetown	Clear Creek	Colorado
Hooper, Lydia	Idaho Springs	Clear Creek	Colorado
Lobdell, M. H.	Georgetown	Clear Creek	Colorado
Wood, Mary M.	Silver Plume	Clear Creek	Colorado
Caldwell, J. O.	Pueblo	Pueblo	Colorado
Cornell, C. S.	Pueblo	Pueblo	Colorado
Foley, T. H.	Pueblo	Pueblo	Colorado
McClung, J. S.	Pueblo	Pueblo	Colorado
Search, P. W.	Pueblo	Pueblo	Colorado
Sogard, John	Pueblo	Pueblo	Colorado
Ward, Daniel	Pueblo	Pueblo	Colorado
Holdridge, Adella	Leadville	Lake	Colorado

LIST OF MEMBERS—*Continued.*

NAME.	RESIDENCE.	COUNTY.	STATE.
McDonald, Flora	Leadville	Lake	Colorado
Larson, Kate R.	Leadville	Lake	Colorado
Baker, T. O.	Durango	La Plata	Colorado
Hoff, W. H.	Durango	La Plata	Colorado
Beardsley, A. E.	Greeley	Weld	Colorado
Boyd, David	Greeley	Weld	Colorado
Bybee, W. F.	Greeley	Weld	Colorado
Copeland, A. B.	Greeley	Weld	Colorado
Dresser, Helen C.	Greeley	Weld	Colorado
Fenneman, N. M.	Greeley	Weld	Colorado
German, Caroline J.	Greeley	Weld	Colorado
Glisan, Sarah Alice	Greeley	Weld	Colorado
Guss, Roland W.	Greeley	Weld	Colorado
Hays, James H.	Greeley	Weld	Colorado
Hewett, Edgar L.	Greeley	Weld	Colorado
Howard, Marian	Greeley	Weld	Colorado
Jones, Nora	Fort Lupton	Weld	Colorado
McClelland, R. A.	Highland Lake	Weld	Colorado
McFie, E. Mabel	Evans	Weld	Colorado
McFie, Vina	Evans	Weld	Colorado
Reid, Mary D.	Greeley	Weld	Colorado
Sargeant, Mary	Greeley	Weld	Colorado
Smith, Fred E.	Greeley	Weld	Colorado
Snyder, Z. X.	Greeley	Weld	Colorado
Souvin, Elizabeth A.	Erie	Weld	Colorado
Thomas, W. C.	Greeley	Weld	Colorado
Work, C. T.	Greeley	Weld	Colorado
Augustine, J. W.	Burlington	Kit Carson	Colorado
Kelley, Alice O.	Flagler	Kit Carson	Colorado
Robison, F. W.	Delta	Delta	Colorado
Douthit, John W.	Trinidad	Las Animas	Colorado
Stevens, Eugene C.	Trinidad	Las Animas	Colorado
Condit, James	Buena Vista	Chaffee	Colorado
Killeen, Mary A.	Salida	Chaffee	Colorado

LIST OF MEMBERS—*Continued.*

NAME.	RESIDENCE.	COUNTY.	STATE.
Robinson, A. H.	Buena Vista	Chaffee	Colorado
Brown, H. J.	Elbert	Elbert	Colorado
Bull, F. B.	Kiowa	Elbert	Colorado
Lindsley, C. F.	Elbert	Elbert	Colorado
Biggs, Alice	Gunnison	Gunnison	Colorado
Gray, Nannie R.	Monte Vista	Rio Grande	Colorado
Karr, Grant	Monte Vista	Rio Grande	Colorado
Shartel, S. Grant	Monte Vista	Rio Grande	Colorado
Hoff, G. F.	Lake City	Hinsdale	Colorado
Lowell, H. A.	Hngo	Lincoln	Colorado
Carson, Mary G.	La Junta	Otero	Colorado
Daniels, J. M.	La Junta	Otero	Colorado
Fenlason, C. W.	La Junta	Otero	Colorado
Haviland, Hattie A.	La Junta	Otero	Colorado
Kollock, W. M.	La Junta	Otero	Colorado
Lyon, Mary E.	La Junta	Otero	Colorado
Newberry, H.	Fowler	Otero	Colorado
Christensen, Dora	Golden	Jefferson	Colorado
Davidson, Eleanor	Golden	Jefferson	Colorado
Eagleton, J. S.	Golden	Jefferson	Colorado
Green, R. C.	Arvada	Jefferson	Colorado
Hatch, D. R.	Golden	Jefferson	Colorado
Hay, Ida V.	Buffalo Creek	Jefferson	Colorado
Rooney, Alice	Archer	Jefferson	Colorado
Strickland, Anna	Morrison	Jefferson	Colorado
Triplett, W.	Golden	Jefferson	Colorado
Allen, J. H.	Canon City	Fremont	Colorado
Freeman, Jacob H.	Canon City	Fremont	Colorado
Hall, Luella A.	Canon City	Fremont	Colorado
Irwin, Flora	Cotopaxi	Fremont	Colorado
Leake, Mrs. R. G.	Florence	Fremont	Colorado
Moles, O. S.	Canon City	Fremont	Colorado
Seelye, Mabel V.	Canon City	Fremont	Colorado
Allen, Lela	Walsenburg	Huerfano	Colorado

LIST OF MEMBERS—*Concluded.*

NAME.	RESIDENCE.	COUNTY.	STATE.
Elliott, J. V.	Rouse	Huerfano	Colorado
Condit, Emma R.	Yuma	Yuma	Colorado
Combs, Geo. W.	Chivington	Kiowa	Colorado
Farrington, Tillie	Saguache	Saguache	Colorado
Pennock, O. M.	Bonanza	Saguache	Colorado
Rambo, Luella H.	Saguache	Saguache	Colorado
Clifford, Norman	Breckenridge	Summit	Colorado
Fisher, E. T.	Grand Junction	Mesa	Colorado

Appendix.

- Report of the Organization of the State Teachers' Association, with List of Presidents and Revised Constitution and By-Laws, as adopted December, 1892.
- Report of the State Kindergarten Association.
- Report of the Organization of the State Teachers' Reading Circle.
- Report of the Organization of the Colorado Center of University Extension.
- Report of the Organization of the State Library Association.
- Report of the Committee on College Preparatory Courses of Study.
- General Circular of State Superintendent to County Superintendents at the Beginning of a New Term, January 13, 1891.
- General Circular of Inquiry of State Superintendent to County Superintendents, Respecting New Course of Study, Free Text Books, Compulsory Education Law and Penal Fund, etc., December 7, 1891. Replies of County Superintendents.
- General Circular of State Superintendent to County Superintendents, Relating to Preparation of Annual Reports, July 18, 1892.
- Form of Blank for Reports of Private Educational Institutions, November 21, 1892.

The Colorado State Teachers' Association.

ORGANIZATION.

The Colorado State Teachers' Association was organized under the Territorial administration by a convention that met in Denver, December, 1875, at the call of Hon. Horace M. Hale, Superintendent of Public Instruction.

PRESIDENTS, PLACES AND DATES OF MEETINGS.

PRESIDENT.	PLACE.	DATE.
Horace M. Hale	Denver	1875, December 28-30
Aaron Gove	Boulder	1877, January 2-3
Jos. C. Shattuck	Denver	1878, January 3-4
Lucinda Washburn	Denver	1879, January 2-3
J. A. Sewall	Denver	1879, December 30-31
James H. Baker	Denver	1880, December 28-29
Isaac C. Dennett	Colorado Springs	1881, December 28-30
J. S. McClung	Pueblo	1882, December 27-29
Horace M. Hale	Greeley	1883, December 26-28
David Boyd	Denver	1884, December 29-31
Leonidas S. Cornell	Denver	1885, December 29-31
H. F. Wegener	Denver	1886, December 28-30
W. W. Remington	Denver	1887, December 27-29
Eugene C. Stevens	Denver	1888, December 26-28
Paul H. Hanus	Denver	1889, December 26-28
Fred Dick	Denver	1890, Dec. 30-Jan. 1
Warren E. Knapp	Denver	1891, December 29-31
Nathan B. Coy	Denver	1892, December 28-30

PREAMBLE AND CONSTITUTION.

Preamble and Constitution of the Colorado State Teachers' Association, as revised and adopted at a general meeting of the Association, held Wednesday evening, December 28, 1892.

COMMITTEE ON REVISION.

Ira M. De Long, Boulder ; S. T. Hamilton, Fort Collins ; Joseph C. Shattuck, Denver.

At the request of the State Superintendent of Public Instruction, the chairman of the committee, Professor De Long, kindly furnished the following statement of the reasons which led to the revision.

The new Constitution originated as follows :

The executive committee of the Colorado Teachers' Association, for 1891, were all men inexperienced in this position. When they met for organization, no one of them was familiar with the duties or the powers of their office ; no records of meetings of previous executive committees could be found ; even the minutes of the last meeting of the Association were found with difficulty, and proved, when found, very imperfect ; the old Constitution, when appealed to, informed the committee quite fully of its powers and duties ; but, for all other officers and committees, was found very meagre in this respect. Facing all these things, the committee decided to recommend to the Association the appointment of a Committee on a New Constitution. In due time the recommendation was made, and Ira M. De Long, S. T. Hamilton and Joseph Shattuck were appointed as the committee. The chairman of this committee had, for the three years previous, been taking private notes of the excellences and defects of the old Constitution. After his appointment upon the committee, at its request, he wrote to Superintendents of Public Instruction in a score of states, asking for copies of constitutions. More than a dozen such copies were received. In June last the committee met in Denver, and completed its first draft of the new Constitution, this draft appearing in the July number of the *Colorado School Journal*, as per the instructions of the Association ; the final draft was then made, just prior to the last meeting of the Association, and was at that meeting unanimously adopted, after a careful consideration of each article and section.

The new Constitution may be thus analyzed :

Preamble. Defining the constituency and objects of the Association.

Article I. Stating the name, and providing for incorporation.

Article II. Pertaining to the fees, rights, and duration of membership.

Article III. Providing for officers, and defining their duties.

Article IV. Providing for the organization and government of sectional departments.

Article V. Providing for the organization and government of an Educational Council.

Article VI. Pertaining to time of meetings, length of papers and speeches, order of business, voting, by-laws and amendments.

PREAMBLE AND CONSTITUTION OF THE COLORADO TEACHERS' ASSOCIATION.

PREAMBLE.

We, the teachers of Colorado, for the purpose of increasing our efficiency, elevating our profession, and promoting in every wise educational movement accessible to us, do ordain and establish this Constitution for the Colorado Teachers' Association.

CONSTITUTION.

ARTICLE I.

INCORPORATION AND NAME.

The teachers organized and acting under this Constitution shall be incorporated as the Colorado Teachers' Association.

ARTICLE II.

MEMBERSHIP.

1. Any teacher or friend of education shall, upon paying the stipulated dues, be entitled to receive a certificate of membership, running from the date of payment.

2. Membership shall be : (a). *For one year*, depending upon the annual payment of one dollar ; or, *for life*, depending upon the payment either of ten dollars in one sum, or of one dollar annually for

fifteen years. (b). *Active*, including all life members and such annual members as are engaged in some distinctly educational work ; or, *associate*, including all other members.

3. Associate members shall not be eligible to office ; but, in speaking and voting, all members shall have equal rights, save that associate members may not vote on any particular question when an open objection thereto, made before taking up the next business in order, has been sustained by a majority of the active members present.

ARTICLE III.

OFFICERS.

1. The officers shall be, a president ; as many vice presidents, and four times as many nominators as there may be sectional departments ; a secretary, who shall (when feasible) reside in the place of meeting ; a treasurer ; three directors, and three auditors.

2. Where not herein otherwise prescribed, an official year shall begin with the final adjournment of the electing session and end with that of the next regular session ; but all officers shall hold over until their successors are duly qualified.

3. The president and vice presidents shall serve one year ; the secretary and the treasurer three years ; the directors and the auditors three years (but so chosen at the first election that only one need retire each year thereafter) ; the nominators during the session at which they are chosen.

4. The nominators shall consist of the nominators of the sectional departments, co-operating with an equal number chosen *viva voce* by the Association ; and it shall be their duty, sitting as a committee, the chairman of the directors presiding, with right to speak and vote, and a majority being a quorum, to nominate all officers not otherwise provided for, (giving due weight to fitness for the positions, sectional and geographical rotation, and seniority in membership), and report the same to the Association in a business session held at least one-half day session before final adjournment. The adoption of this report as given or as amended shall complete their election.

5. It shall be the duty of the president to preside at all meetings ; appoint committees not otherwise provided for ; send and answer fraternal messages ; time speakers with precision and fairness ; fill inter-sessional vacancies not otherwise provided for, and call extra sessions, subject in both cases to the prior approval of the directors ; and perform any other acts pertaining to his office.

6. The vice-presidents shall consist of the chairmen of the sectional departments; and, when the president fails to serve, it shall be the duty of one of their number, in the order of personal seniority, to act in his place.

7. It shall be the duty of the secretary, with the aid of the reporter, to keep an accurate record of the proceedings, including all motions, discussions, resolutions and reports, publishing the same if the directors so order; collect and file all papers read before the Association, and copies of all circulars, programmes and other official publications; keep the necrology of the Association in a book for the purpose, reporting thereon annually to the Association; act as secretary of the directors and of the Educational Council, keeping a concise record of their proceedings, and reporting thereon annually; and perform any other acts pertaining to his office.

8. It shall be the duty of the treasurer to collect and hold all moneys due the Association, paying out the same only on the written orders of the directors, attested by the secretary and accompanied by the itemized bills (duly receipted) of the payees, filing such orders and bills as his vouchers to the auditors; make, under classified heads, an annual statement of the receipts and disbursements, starting with the cash balance named in the report of the auditors for the previous year; issue all certificates of membership, retaining a membership stub as a voucher to the auditors; collect the council fees and issue credentials therefor; furnish the secretary an alphabetical list of all members, giving their addresses, their official positions as teachers, and the sectional departments to which they belong; and perform any other acts pertaining to his office.

9. It shall be the duty of the directors, sitting as a committee, the senior official being chairman, and two being a quorum, to meet each year early in October, and at such other times as occasion may require, for the transaction of business as follows: To execute orders of the Association; fix the time and place of meetings; prepare and publish the annual programme before the end of November; designate a suitable hotel for official headquarters; appoint annually a reporter, if feasible, and a clerk of rates; limit the annual expenses to the funds on hand; fix the remuneration of the secretary and of the reporter, and pay the same when the year's work has been satisfactorily completed; require all claims for money to be in the form of fully itemized bills; draw all orders for the payment of approved bills; revise triennially the basis of sectional representation in the council; designate (subject to approval) annually, prior to each regular session, some standard school journal as the official organ for the ensuing year;

reserve, at all sittings, central seats in a body for the use of members ; and perform any other acts which the interests of the Association may require.

10. It shall be the duty of the auditors, sitting as a committee, the senior official being chairman, and two being a quorum, to make annually a faithful examination of the books, vouchers, and membership stubs, submitting a written report thereon, engrossed in a book kept by the secretary for this purpose, setting forth the condition of the books, the accuracy of the accounts as checked by the vouchers, the cash balance with its place of deposit or investment, and any other items which in their judgment should come before the Association.

11. It shall be the duty of the reporter to keep an accurate record of the extempore proceedings, with the names of the speakers, and to turn the same over to the secretary in legible long hand at the close of each session.

12. It shall be the duty of the clerk of rates to arrange with the railroads and hotels for reduced rates to members, making written contracts when desirable, and providing for such identification as may be demanded; report all terms secured to the directors in time for insertion in the annual programme; and perform any other work appropriate to his office which the directors may prescribe.

ARTICLE IV.

DEPARTMENTS.

1. Upon a written petition, signed by twenty members identified with a special line of work in the State, permission may be given to organize and maintain a sectional department.

2. Subject to the government of the Association, each department shall qualify its own members, and determine its rules of procedure; choose at the opening of its annual session two nominators to name (subject to amendment and approval) a chairman, a secretary, and the representatives in the Council; make assessments for necessary expenses not otherwise provided for; and take any other action demanded by the special interests which it represents.

3. The chairman and secretary of each department shall perform the duties suggested by their titles, and shall serve also as an executive committee for the preparation of the sectional programme, and for the performance of any other work connected with their department. Moreover, each secretary shall promptly file with the secretary of the Association a copy of his minutes.

4. Not more than one-half day of each regular session shall be set apart for sectional meetings, and the special programmes for these meetings shall be printed in the annual programme of the Association, provided that the committees in charge shall prepare and submit them to the directors prior to the middle of November.

5. During any one year, each department may, with the approval of the directors, draw upon the treasurer for an amount of money not exceeding (save with the prior consent of the Association) one-fourth of the fees contributed by its members at the last regular session.

6. If any department shall, at any regular session, fail to meet for such deliberation and action as its special line of work may need, it shall thereby forfeit its organization, and can then be re-organized only by the original process.

ARTICLE V.

THE EDUCATIONAL COUNCIL.

1. An Educational Council, composed of representatives of the sectional departments, on a ratio to be determined by the directors and revised by them every three years thereafter, may be organized by a two-thirds vote at any regular meeting of the Association.

2. Representatives shall be chosen for three years, (but so chosen at the first election that, as nearly as may be, one-third of the whole number may be chosen each year thereafter) from members in attendance who attended the previous year also; shall forfeit their council seats by absence from two successive sittings, unless excused for serious cause; shall pay to the treasurer of the Association an annual council fee of two dollars, and receive from him their council credentials; and shall not be reimbursed for their expenses beyond an annual rebate of not more than one-half (as may be allowed by the directors) of their necessary outlay for a single railroad fare.

3. The Educational Council shall meet annually, just prior to the regular holiday session, and in the same place; and at other times and places upon its own adjournment; or the call of one of its presiding officers, the Superintendent of Public Instruction, or the president of the Association, who, in conjunction with three representatives chosen by the Council, shall act in all matters as its executive committee.

4. It shall be the duty of the Educational Council to report to the respective departments seats made vacant by absence or otherwise; consider all matters referred to it by the Association; communi-

cate with the directors respecting the work and welfare of the Association; discuss advanced educational topics; propose educational reforms in legislation and in practice; stimulate and maintain a local interest in the National Educational Association, and co-operate in every practical way with the progressive educational forces of the State and country.

ARTICLE VI.

MISCELLANEOUS PROVISIONS.

1. The regular sessions shall be held annually, some time during the winter holidays, but extra sessions may be held at other times, provided that all officers shall be personally notified by mail or otherwise, and all other members by a prominent statement of the call in the leading dailies of at least four large cities within the State.

2. All papers are limited to twenty minutes, and shall, when read, be deposited with the secretary as the permanent property of the Association. The leading discussions are limited to ten minutes each, and shall be presented in extempore form. All other discussions are limited to five minutes each.

3. A business session shall be held at least one half-day session before final adjournment for the following purposes:

- (1) Reports of special committees.
- (2) Petitions for sectional departments.
- (3) Reports and election of officers.
- (4) Instructions to incoming officers.
- (5) Consideration of amendments.
- (6) Any other appropriate business.

4. Voting shall ordinarily be done by acclamation, but a minority of one-third may demand a ballot, and a majority of all the yeas and nays.

5. A majority may at any time enact by-laws in harmony with the constitution, and may in business session alter or suspend them. In open session a two-thirds standing vote shall be required for all changes. Points not otherwise covered shall be settled by Roberts' Rules of Order.

6. This constitution shall be adopted in a business session by a three-fourths vote, and may at any regular session thereafter be amended in the same manner.

BY-LAWS

1. Not more than three topics shall be assigned to any one session of the annual programme.

2. Speakers who are interrupted by the call of time, as also those who do not respond in their assigned order, may be allowed by the president to continue at the conclusion of the regular programme.

3. In the organization of departments concise and expressive names shall be chosen, such names being in every case subject to the revision of the directors.

4. Parliamentary points not otherwise covered shall be settled by Roberts' Rules of Order.

Report of State Kindergarten Association.

The State Kindergarten Association was organized in the summer of 1891, by a convention called to meet at Colorado Springs. It manifested but little vitality until re-organized in the fall of 1892 by the election of Superintendent Aaron Gove, of Denver, as president, and Mrs. John H. Denison, of Montclair, as secretary. The following report of the meeting, held during the week of the last meeting of the State Teachers' Association, is taken from the *Rocky Mountain News* of December 29, 1892:

Shortly before 10 o'clock yesterday morning, the corridors of the East Denver High School building were filled with a throng of people, in which the fair sex somewhat predominated. The uninitiated observer in trying to decide the social status of the individuals would have found them far above the average in intelligence and appearance. It was the State Kindergarten Association which, with its friends to the number of over 200, met for the discussion of the various questions relating to the future of the kindergartens of this State.

City Superintendent Aaron Gove welcomed the Association in a short address. In speaking of the movement to petition the legislature to incorporate the kindergarten into the public school system of the State, he said it would add twenty-five per cent. to the school expenses. He referred to the fact that Colorado has no school fund. Her citizens pay for their schools out of their own pockets, just as they do for their shoes and groceries. Although there is a school fund of \$1,000,000, \$750,000 of it is badly placed, yielding only three per cent. interest, which was only \$1 per capita. Speaking of the subject of primary education, he said there were two broad sides to be presented. The earnest advocates of the kindergarten believe that the training of a child up to the age of six years has the most important influence on its future life, laying the foundation of all good mental and physical habits. The friends of the higher education claim

on the contrary, that a broad, full education given to one man after the age of eighteen, training him to the highest pitch of perfection of which he is capable, makes him of more value to the community and the world than hundreds or even thousands who leave school at an earlier age.

Mr. Gove introduced Dr. Snyder of the State Normal School, who was listened to with the greatest interest and attention

A SPECIES OF EVOLUTION.

"The kindergarten is an evolution. The law of unity in all things is the great law on which it rests. Heraclitus, Socrates, Plato and Quintilian all expressed true kindergarten principles. These thoughts, however, slumbered for years in ignorance, to appear with fresh vigor during the sixteenth century. Erasmus, Rabelais and Montaigne, Bacon, Comenius, Locke, Rousseau and Pestalozzi wrought them into philosophy, theory and practice. But it was left for Frederick Froebel to weave them into a system of education. This system has spread until it is found in every civilized nation. Some countries and some states of this union have adopted it in the system of public instruction. It is found that wherever it has been given a fair trial it has done all it claims. What is known as the new education is only this kindergarten adapted to the various grades. The industrial phase of education is entirely due to this kindergarten, whether in primary school, high school, college or university.

"The science education, as found in the schools of the world, is based upon the philosophy of the kindergarten. The partial failure of the school to meet our expectations is largely due to the fact that the children are not gotten early enough, and that not enough of them fall under the influence of the school for a long enough period. The kindergarten is continuously compelling more and more recognition. It now stands at the very verge of our public school system and will presently step over and become a part. It is an historical fact that whatever inroads the system has made have been gained by laymen as a rule and not the regular school men. This is probably attributed to inertia. Hence, from a historical standpoint: First, because of its tenacity of existence, having gone through the mental crucible of nearly every reputable philosopher and remained alive; second, because of its insinuation into our schools, giving us our best methods; third, because it has given us a philosophy of education, as we trace in it the development of philosophy, the kindergarten should be treated with judicial fairness and given a place in our public school system.

"The philosophy of the kindergarten lies in the treatment of the child as an involution of possibilities. It treats the child as a living, pulsating, spiritual being, possessing inherent energies capable of evolution, growth, strength, development. These energies are observed in the unfolding of the three natures of the child—the physical, the mental and the spiritual. This trinity of energies would lie dormant were it not touched from without. A trinity of external energies—earth, man, spirit—all touch this inner germ. Hence the great work of education, as based upon the philosophy of the kindergarten system, is to bring about, as completely as possible, a harmony of all the powers of the child with nature, with self and with others, and with a higher power. This idea of harmonious development is accepted by all thoughtful educators, but as a rule it is not applied early enough in life. It therefore stands as a formidable argument for the introduction of the kindergarten into our public school system.

THE PLASTIC PERIOD.

"During the plastic period of the child's life, the first seven years, he is most susceptible of impression. His senses are then active, his perception intense, imagination vivid, emotions egoistic, will pliable, and social and ethical nature formative. At that time all that touches influences.

"The kindergarten is intended not to supplant, but to supplement the home. In the training of a child, there is a gap between the home and the lowest grade of public school. This gap the kindergarten aims to fill, by supplementing the home and preparing for further school work. Children from the very best homes need the kindergarten. The transition from home to the public school is too sudden. At home the child has not been associated with equals in age, disposition and tastes. In the majority of cases he is petted and spoiled. At kindergarten the child is trained to surrender individual rights, that the rights of the many may be preserved. The kindergarten is a miniature society where the child meets its equals.

"The children of very busy parents need the kindergarten training. As a rule this class of parents get their children all that is necessary for health and support, but they are unmindful of any training which will enable them to attain a high and noble life. The children of the wilfully neglected homes need the kindergarten. From these homes come most of our criminals. The children from them enter the public schools, if they enter at all, with bad habits already formed. Could these children be taken two or three years earlier than they are, at the age of three or four, before they have become so habituated in wilfulness and vice, most of them would become bright and interesting

children, tractable in the higher grades and able to help their own homes. The children of the foreigner need the kindergarten. Most of our immigrants are poor. Could we place these children in a kindergarten they would get an English training for three or four years at least. I know of no better means of bringing the foreign born parent into sympathy with our institutions than having his little children in a kindergarten. I believe the kindergarten can be made a great Americanizer.

"Let such a mighty influence touch all the children of our country between the ages of four and six, and there would be such a change in American life in our generation as to surprise the most sanguine. Three years of that training would have more to do in raising the intelligence and morality of our people than any other influence that could be put to work. No other system of education than the kindergarten is fitted to deal with the little child. Consequently it should find a place in our public school system."

SHOULD BE INCORPORATED.

Mr. F. A. Meredith said the time had arrived when this work should be taken out of the hands of voluntary effort and incorporated in Colorado's public school system. He thought the addition of twenty-five per cent. as stated by Mr. Gove was somewhat exaggerated. At any rate it would apply only gradually and to the more prosperous and wealthy portions of the State first.

Mr. Herbert Griggs, supervisor of music, wished to inquire if the mothers of these children were all dead. He considered that they were able to train their own children during the period of infancy. A kindergarten over in the Bottoms might be a blessing. On Capitol Hill it was an outrage. This assertion was met with marked disfavor and a storm of opposition.

Mr. Horace Hale, ex-president of the State University, said he would like to inform the gentleman that, in a good many cases, these mothers were supporting fathers. He wanted the kindergarten not only to supplement but to supplant the home. He was speaking then not of homes on Capitol Hill, but for the districts where there were no homes to supplement. He did not care whether children from wealthy homes entered the kindergarten or not. They had kindergarten at home in the loving attention of mothers and relatives. He wanted it for the thousands that had no such advantages.

Mr. Remington, of Boulder, said that the statement that a kindergarten on Capitol Hill was an outrage could not in any way be supported. He knew that as primary teachers, they could all say that

they found just as much selfishness, wilfulness and ignorance in the children from Capitol Hill as from anywhere else ; and had he a child to send to kindergarten, he would rather it would go to the school at the Bottoms than to the school on the Hill.

THE WORK OF THE MOTHERS.

Mrs. Charles Dickinson, who has been prominent in kindergarten association work in the city, said that no one had yet answered poor Mr. Griggs. He had asked what the mothers of Capitol Hill were doing. It was a reasonable question, and she proposed to answer it. Some of them were visiting schools and looking after these teachers. She could not speak as an educator ; she was only a mother. It was not allowed by most of the men of this country that a mother could be an educator, or could speak with authority on any subject pertaining thereto. Still many mothers were constant visitors at the schools and kindergartens, and were identifying themselves more and more with the work of education. They were striving to educate themselves so that they would not necessarily be relegated to the nursery as their only proper place.

Miss McArthur, the teacher of a private kindergarten, rose to inquire of Mr. Griggs at what precise period the insult to motherhood, in taking her children from under her charge, was supposed to cease. Was it presumably at the age of six? Why was it any more an outrage to take them into school at the age of three than at that of six?

Mr. J. J. Smith stated that the constitution of Colorado said that not one dollar should be spent in the education of children under six. His assertion was met by denials. Mr. Gove said there was no provision either way for children under six. The constitution only provided that the State should educate those between the ages of six and twenty.

Mr. Smith went on to say that the cost of educating one child for a month by the Free Kindergarten Association was ninety-seven cents, and a millionaire died lately worth \$72,000,000, more than a dollar a head to the entire population. And America allowed one man to accumulate such a fortune as that while hesitating over ninety-seven cents for the little children. The question of kindergartens was a question of humanity, not commercialism. The spirit of commercialism in the country is its ruin to-day.

PERTINENT RESOLUTIONS.

Mr. Meredith proposed the following resolution :

Resolved, That this Association respectfully hereby petition the General Assembly of the State to make such provisions in the statutes

as shall enable any school district in this State legally to provide, if it so desires, for the education of children over three and under six years of age, to the end that any community may be enabled, in its option, to establish and maintain kindergarten culture for little children. The president of the Association is requested to transmit an official copy of this petition to the proper officers of the General Assembly.

The resolution provoked much discussion. Miss McArthur stated that she had children doing good work at three and a half years. One gentleman said that he thought the State would hesitate to add three years to the school age at one time; that he thought the kindergarten age should be left to the option of school districts. Most of them would probably place it at five, adding only one year to the school age.

Mr. Berdick, of Boulder, inquired if the kindergarten education was to be made compulsory. It was one of the most difficult points to be met in the east. Also, was any regard to be paid to the religious question? Believers in parochial schools objected very strongly to sending their children to the kindergartens, believing that a great moral influence was brought to bear.

The resolution was finally unanimously adopted as above.

Mrs. John Denison, secretary of the Kindergarten Association, was elected editor of the kindergarten column in the *Colorado School Journal*.

Mr. Gove congratulated the Association on the very successful meeting, the largest and most successful yet held.

Mr. Hale asked if it would not be proper to ask the State to make some provision for the training of kindergarten teachers. Dr. Snyder said that such provision was already made in the Normal school, where several were now pursuing the course.

The meeting then adjourned *sine die*.

The Colorado State Teachers' Reading Circle, 1892.

OFFICERS.

Secretary and Manager, W. T. Eddingfield, Aspen.

ADVISORY BOARD.

Hon. Nathan B. Coy, Denver.

J. P. Jackson, Colorado Springs.

James H. Hays, Greeley.

The Colorado State Teachers' Reading Circle was organized by the State Teachers' Association at their annual meeting in December, 1891. The plan of organization and the outline of work for the first year are exhibited in the following circular, which was issued in the summer of 1892, under the supervision of Mr. W. T. Eddingfield, the secretary and manager of the Circle.

To the County Superintendents and Teachers of Colorado, Greeting:

The Teachers' Reading Circle has been regularly organized in this State, and a course of reading has been selected with a special view to meet the requirements of the common school teacher. For the benefit of those who are not already informed, it may be well to explain something of the manner in which this Circle is to be carried on.

PLAN OF ORGANIZATION.

The Reading Circle is under the general control of an Advisory Board of three, with a secretary and manager, selected during the State Teachers' Association.

The Board meets in regular session at least once each year, to select books, make rules and regulations, and transact any other business relating to the Circle generally.

Each county superintendent is made manager of the Circle in his county, and has supervision of the work in detail, so far as his own county is concerned.

All teachers in the State, or persons desiring to become teachers, are eligible to membership. No fee will be charged. The only requirement made of members is that under the direction of the county superintendent they pursue diligently the course of reading as outlined by the State board.

The Reading Circle year begins July 1 and ends June 30. Provision should be made on the programme of each Institute for Reading Circle work. This will enable the county superintendent to explain fully to the teachers of his county what is expected of them in this line.

All teachers showing that they have completed the course for the year shall be furnished with a certificate to that effect, signed by the advisory board and by the county manager.

FIRST YEAR'S COURSE.

The books selected for the present year are Page's Theory and Practice of Teaching and Hale's Lights of Two Centuries, which will be furnished to teachers at the special prices agreed upon with the publishers.

An outline of reading for each month will be furnished free to each member. The whole cost to the teachers during the next year for this purpose will be small.

When the county superintendent has a supply of books on deposit they will be furnished by him at the following special prices:

Page's Theory and Practice, ninety cents.

Hale's Lights of Two Centuries, \$1.30.

Or they can be procured of the publishers by sending direct to the American Book Company, 258 Wabash Avenue, Chicago, Ill., at the following prices: When four or more copies are ordered at one time,

books will be sent prepaid at the same prices they are furnished to the county manager; or they will be sent by mail postpaid to Reading Circle members direct from the publishers, at the following prices:

Page's Theory and Practice, \$1.00.

Hale's Lights of Two Centuries, \$1.40.

W. T. EDDINGFIELD,
Secretary and Manager.

294 Lake Avenue, Aspen, Colo.

If you desire any further information on the above subject, call upon or write to the county superintendent and manager.

ENROLLMENT CARD.

TO THE COUNTY MANAGER:

YOU ARE AUTHORIZED TO ENROLL MY NAME AS A MEMBER OF THE

Colorado Teachers' Reading Circle,

FOR _____ COUNTY, AND I HEREBY AGREE TO PROCURE
THE TWO BOOKS CONSTITUTING THE PRESENT YEAR'S COURSE OF READING, VIZ:

PAGE'S THEORY AND PRACTICE AND
HALE'S LIGHTS OF TWO CENTURIES.

AND TO CAREFULLY AND SYSTEMATICALLY READ THE SAME DURING THE YEAR.

TEACHER,

P. O. _____

DATE, _____

MEMBERSHIP CARD.

This Certifies That _____
 has been duly enrolled as a member of the

COLORADO TEACHERS' READING CIRCLE,
 for _____ County, Colorado, and is thereby
 entitled to a copy each of the required books at the reduced
 rates; and also to the full privileges of any local or county
 meetings in the State of Colorado.

_____ County Manager.

Date, _____ 189__

The Colorado Center for University Extension.

OFFICERS.

President, Hon. Nathan B. Coy, Denver.

Secretary, Chancellor William F. McDowell, University Park.

The Colorado Center for University Extension, a branch of the American Society for University Extension, was organized March 12, 1892, by a conference of the presidents of the various higher institutions of learning in the State with the Superintendent of Public Instruction.

The members of the Center consist of the faculties of these institutions, together with such other persons as may become members by a vote of the presidents.

After organization was effected, by order of the Center, the following circular was published.

1. What is university extension?

A recent circular states:

"The design of the university and school extension is to supplement and to strengthen the university and the school system; to increase the culture and to promote the interests of teachers as members of a profession; and, in general, to advance the knowledge of letters and of the arts and sciences.

"The work is not, however, restricted to teachers; it is open to all persons of the required ages. No one can expect, through the university and school extension, to secure a university education; but university graduates and others, ladies and gentlemen, will have an opportunity of taking up each year some one or two studies under university guidance and recognition.

"The courses in university extension will be parallel to those of the universities, and, within the necessary limitations, of the high grade maintained in the best universities. The work in school extension, which will be slower in development, will be in the subjects taught in the schools. It will also include the methods and the principles involved in teaching the respective subjects.

"University extension is not simply a course of popular lectures; it has distinguishing features, such as "home study, class work, lectures, instructions by correspondence, lectures by correspondence, the library, public examinations, prizes and certificates—various marks of honor for work of high grade, but no degrees.

"The same lecturer gives from six to twelve or more lectures upon the same subject. His audience is not a crowd to be amused, but a class to be taught. The syllabus, in the hand of each hearer, is a guide to the work in hand and to independent work in the absence of the lecturer. Of course, university extension is not a substitute for the university, any more than Chautauqua is. It is rather only carrying a certain taste of university life to the towns and country round about. It brings people and schools into close touch."

2. How shall a town secure university extension lectures?

Let two or three people call a meeting for the organization of a local "Center." It may be a general meeting or a meeting of specialists, like teachers or farmers. A body already organized, like a Y. M. C. A. or a Chautauqua circle, could begin the matter. As a hint at constitution and mode of procedure, some paragraphs are quoted from the Greeley constitution, the first in Colorado, so far as known.

NAME AND OBJECT.

"The name of this society shall be the Greeley Center for the Extension of University Teaching, and its object shall be to bring within reach of the citizens of Greeley and vicinity the teaching of such university studies as the persons thus associated together may select. This Center shall be connected with the American Society for the Extension of University Teaching, and shall conform to all the requirements of the same.

MEMBERSHIP.

"Any person may become a member of this society by signing the constitution and by-laws, and on payment of \$1.00 there shall be issued a membership ticket which shall entitle the holder to admission without extra charge, to all the lectures and other exercises of the

class to which he may belong. The duties of the members shall be to attend one or more courses of lectures given by the society, with the class exercises belonging to the same, and to provide himself with the text books chosen for such course, provided by the by-laws, and to study the same.

LECTURES AND COURSE OF STUDY.

"The society shall give courses of lectures in university teaching, as the members may desire, upon conditions hereinafter named. The lecturers for such a course shall be selected and engaged by the executive committee, and the class exercises shall be under the control of the lecturer. Each course shall be divided into two courses of six lectures each. The conditions instituting a course of lectures shall be as follows: The first course shall be on history, and the first section shall be on 'The French Revolution.' When any number of persons desire a course on any other subject, they shall make their desire known in writing to the executive committee, with an agreement to assume all necessary expenses attending such a course, provided always, that no member of a class shall be relieved of responsibility thereto by joining together."

3. What lectures can be obtained from the institutions in Colorado? At a recent meeting, Presidents Slocum, Baker, Snyder, Ellis, Chauvenet, Superintendent Coy and Chancellor McDowell being present, the following announcements were authorized, showing what each institution is prepared to do in this line:

SUMMARY OF THE COURSES OF LECTURES OFFERED BY COLORADO COLLEGE.

Greek literature, six lectures; Dr. Augustus Taber Murray.

Latin literature, six lectures; Dr. Wilfred P. Mustard.

Philology, six lectures; Dr. Wilfred P. Mustard.

English language and literature, twelve lectures; Professor Augustus G. Upton.

History, six or twelve lectures; Dr. Augustus Taber Murray and Dr. Wilfred P. Mustard. "The Making of the United States Government," nine lectures, Professor William M. Hall; "The English Revolutions of 1641 and 1688," six lectures, Professor William M. Hall. "Personal Glimpses of Historic Europe," four lectures, Professor Augustus G. Upton.

Philosophy—Greek philosophy, twelve lectures, President Slocum; modern philosophy, twelve lectures, President Slocum; ethics, twelve lectures, President Slocum; psychology, twelve lectures, President Slocum; elementary logic, six lectures, Miss M. McG. Noyes; advanced logic, six lectures, Miss M. McG. Noyes; modern philosophy, six lectures, Fred R. Hastings, B. A.

Political Economy—Socialism, six lectures, Professor William M. Hall; State and Local Taxation, six lectures, Professor William M. Hall.

Physics—Electricity and magnetism, six lectures (illustrated), Professor Florian Cajori.

Chemistry—"On the Application of Chemistry to the Arts," six lectures, Professor William Struby; "Every Day Chemistry," detached chapters of science, six or twelve popular lectures, Professor Douglas Carnegie; The Elementary Theory of Electricity, six or twelve lectures, Professor Douglas Carnegie.

Meteorology, six lectures, Professor F. H. Loud.

Address all inquiries to President Slocum, Colorado Springs.

STATE UNIVERSITY OF COLORADO.

The State University of Colorado announces the following subjects for University extension courses. Additional subjects will be announced as the progress and importance of the extension movement may require.

Subjects, terms and dates may be arranged by direct correspondence with the lecturers or with Professor M. E. Dunham, secretary of the faculty.

Psychology—President James H. Baker; course of six or of twelve lectures.

Isaac C. Dennett, Ph. D.; Roman history, Latin literature. Roman archæology, six lectures to a subject.

Literature and Art—J. Raymond Brackett, Ph. D.; comparative literature and art, twenty-two lectures.

The aim is to cultivate a taste for the beautiful. Two courses of six lectures. Each may be selected covering a period of two years. At least one-half of the lectures will be illustrated by stereopticon.

Physics—William J. Waggener, A. M.

These lectures will be illustrated by suitable physical apparatus.

Chemistry—Charles Skeeel Palmer, Ph. D.; four courses, six or twelve lectures in each course.

Mathematics and Astronomy—Ira M. DeLong, A. M.

Biology—John Gardner, B. S.

Greek—Maurice E. Dunham, A. M.

History and Political Economy—Lectures on these subjects, together with the name of the professor of history and political economy, will be announced early in September.

Ethics—The Rev. Charles Caverno, LL. D.; one course; six lectures.

STATE AGRICULTURAL COLLEGE.

Professor James W. Lawrence, six lectures on mechanics.

Professor David O'Brine, six lectures on chemistry.

Professor Louis G. Carpenter, six lectures each on irrigation and physics

Professor Charles S. Crandall, six lectures each on horticulture and botany.

Professor Clarence P. Gillith, six lectures each on physiology and entomology.

Professor Walter W. Quick, six lectures on scientific agriculture.

Dr. Alston Ellis, six lectures each on history and literature.

For terms, dates, etc., address Dr. Alston Ellis, Fort Collins, Colorado.

STATE NORMAL SCHOOL.

History of Education, six or twelve lectures.

Educational Psychology, six or twelve lectures.

Psychology of Education, six or twelve lectures.

General Pedagogics, management, six or twelve lectures.

Evolution, six or twelve lectures.

All of the above courses are by President Z. X. Snyder, Greeley, Colo., to whom inquiries may be addressed.

The State School of Mines makes no announcement at present. Any special inquiries may be directed to President Regis Chauvenet, Golden, Colorado.

UNIVERSITY OF DENVER.

Ethics, six or twelve lectures, by Chancellor McDowell.

Political Economy, six or twelve lectures, by Chancellor McDowell.

History, French Revolution, six lectures, by Chancellor McDowell.

Christian Evidences and Philosophy of Religion, six or twelve lectures, by Chancellor McDowell.

English Bible, six lectures, by Chancellor McDowell.

Astronomy, six or twelve lectures, by Dean H. A. Howe.

Mathematics, six or twelve lectures, by Dean Howe.

Greek Language and Literature, six or twelve lectures, by Dr. Hyde.

Art Criticism, six lectures, by Dr. Hyde.

Latin Language and Literature, six or twelve lectures, by Dr. Stroeter.

German Language and Literature, six or twelve lectures, by Dr. Stroeter.

English Literature, six or twelve lectures, by Professor Anna A. Fisher.

American Literature, six or twelve lectures, by Professor Fisher.

English Literature and Studies in American History and Literature, by Mrs. Mary Lowe Dickinson.

Greek Philosophy, six or twelve lectures, by Professor Mitchell.

Modern Philosophy, six or twelve lectures, by Professor Mitchell.

American History, six or twelve lectures, by Professor Mitchell.

Current Topics, six or twelve lectures, by Professor Mitchell.

Dante, six or twelve lectures, by Professor Mitchell.

French Language and Literature, six or twelve lectures, by Professor Annie Louise Lord.

Mathematics, six or twelve lectures, by Professor Herbert E. Russell.

For terms, dates, etc., address William F. McDowell, University Park, Colorado.

Any general inquiries may be addressed to either the president or secretary.

The Colorado Library Association.

OFFICERS.

President, J. C. Dana, Denver Public Library.

Vice-Presidents, S. F. McCreery, State Normal School Library, Greeley ; B. M. Lewis, Young Men's Christian Association Library, Denver ; M. Chapman, McClelland Library, Pueblo.

Secretary and Treasurer, C. R. Dudley, Mercantile Library, Denver.

The relations of libraries to schools, yearly becoming more intimate and essential, justify the insertion with other State educational organizations of the report of the Colorado Library Association, which was organized during the week of the State Teachers' Association. The call for the meeting to organize and the action of the meeting are herewith presented.

DENVER, COLORADO, December 12, 1892.

A meeting of those interested in libraries will be held at 3 p. m., Thursday, December 29, in the High School, district number one, Denver. The following question will be discussed :

"Is it advisable to organize an association of librarians for such purposes as the following ?

"(1) To stimulate library interests in Colorado by means of addresses, articles in the press, circulation of printed matter and other proper means.

"(2) To promote co-operation among the librarians of Colorado.

"(3) To co-operate with the American Library Association in promoting general library interests.

"(4) To gather reliable statistics in regard to libraries of the State.

"(5) To consider library legislation, etc."

Should it be decided at the meeting to form a permanent organization, a constitution, similar to that outlined below, might be considered. This draft is the outcome of a comparison of the constitutions of similar associations in other states.

1. This association shall be called The Colorado Library Association.

2. Its objects shall be to promote the library interests of the State of Colorado.

3. Any person engaged in library work, or interested in the objects above stated, may become a member on the payment of one dollar (\$1.00).

4. The officers of the Association shall be a president, vice-presidents, a secretary and treasurer, who shall constitute the executive committee, which shall have power to act for the Association in the intervals between its meetings.

5. A meeting shall be held during the session of the Colorado State Teachers' Association, and at such other times as the executive committee may determine.

6. Dues for necessary expenses shall not exceed one dollar (\$1.00) per year.

It is hoped that you will attend this meeting. This circular is not sent out to forestall criticism or suggestions, but simply to suggest to you a possible course of procedure.

(Signed)

J. C. DANA,
Librarian Public Library.

C. R. DUDLEY,
Librarian Mercantile Library.

B. M. LEWIS,
Librarian Y. M. C. A. Library.

N. B. COY,
State Superintendent Public Instruction.

In response to this call, a number of librarians from Denver and other parts of the State met in the East Denver High School building December 29. After a brief discussion, they resolved to organize a Library Association, and elected the officers already named.

The constitution quoted above was adopted, except as to clause five, which was changed to read as follows: Two stated meetings shall be held each year, one during the session of the Colorado State Teachers' Association, the other on the second Saturday in June. Other meetings shall be held at such times as the executive committee may determine.

The executive committee was instructed to appoint committees on legislation, library statistics and publication and library promotion. It is expected that a special meeting will be called at an early date, when matters of importance will be discussed.

Report of Committee on College Preparatory Courses of Study, Colorado.

REPORT No. 2.

PRESENTED TO STATE TEACHERS' ASSOCIATION, DECEMBER 30, 1891.

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

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

1. The course of study that best prepares for higher education should also be, in the essentials, the best preparation for intelligent citizenship and the active duties of life.

2. There should be no point in the primary or secondary courses of study where the student may not go on to higher education; i. e., the primary school, the grammar school, the high school, the college and the university should all be in line as integral parts of one common system, so that the student desiring to advance may do so with economy of work and time whenever opportunity presents itself.

3. As regards secondary education, the high school represents a distinctive idea. Work that belongs essentially to the grammar grades should not be carried into the high school, excepting as applied study.

4. The university and college courses of study should be adapted so as to continue, without interruption, the work of the approved high schools.

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

CLASSICAL COURSE.

Mathematics—Algebra, through quadratics; plane geometry.

Latin—Latin lessons, with grammar; Cæsar's Commentaries, 4 books; Virgil's *Æneid*, 6 books; Cicero, 7 orations; prose composition.

Greek—Greek lessons, with grammar; Xenophon's *Anabasis*, 4 books; Homer's *Iliad*, 3 books; prose composition.

Modern Languages—German or French, one year.

Science—Physics, one year.

History—General history.

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

LATIN-SCIENTIFIC COURSE.

Mathematics—Algebra, through quadratics; plane geometry.

Latin—Latin lessons, with grammar; Cæsar's Commentaries, 4 books; Virgil's *Æneid*, 6 books; Cicero, 7 orations; prose composition.

Modern Languages—German or French, one year.

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

History—General history.

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

Drawing—Free hand and mechanical.

SCIENTIFIC COURSE.

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

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

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

History—General history.

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

Drawing—Free hand and mechanical.

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

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

Physics—Worthington's Physical Laboratory Practice; or the Harvard Course of Preparatory Experiments; or Chute's Physics. Reference books: Deschanel, Ganot, or Stewart and Gee.

Chemistry—Smith & Keller's Experiments; or Shepard's Chemistry; or Reynold's Experimental Chemistry. References: Richter's Inorganic Chemistry; Barker's Chemistry; Mixter's Chemistry; Remsen's Advanced Chemistry.

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

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

Botany—Gray or Campbell with analysis of fifty specimens.

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

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

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

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

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

Signed for, and with the unanimous endorsement of the committee, by

P. W. SEARCH,
Secretary.

COMMITTEE:

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

ISAAC C. DENNETT, University of Colorado.

H. A. HOWE, University of Denver.

CHAS. S. PALMER, University of Colorado.

WILLIAM F. SLOCUM, JR., Colorado College.

P. W. SEARCH, Public Schools of Pueblo.

RESOLUTIONS.

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

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

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

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

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

AUGUSTUS T. MURRAY,
Principal of Cutler Academy.

COLORADO COLLEGE,
December 23, 1891.

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

WILLIAM F. MCDOWELL,
Chancellor.

December 29.

The foregoing report was adopted by the State Teachers' Association and the following committee appointed for the ensuing year:

The State Superintendent of Public Instruction; the Presidents of the University of Colorado, of the University of Denver and of Colorado College; the Superintendent of Schools, Pueblo, District No. 20, and the Principals of High Schools, Denver, District No. 1, Colorado Springs, Aspen, Greeley, Georgetown, Trinidad and Durango.

At a meeting of the committee in the office of Principal Smiley, Denver, District No. 1, on the afternoon of December 28, 1892, at which the universities, colleges and leading high schools were represented, it was decided that experience suggested but little change in the course as presented and adopted the preceding year. Many high schools were reported as working in accordance with its plan with very satisfactory results.

At an adjourned meeting, on Thursday, P. M., it was decided to continue the committee. President Baker, was elected chairman. It was decided to postpone all further consideration of changes in the course until the report of the national committee, consisting of ten leading representatives of colleges and preparatory schools, appointed by the National Educational Association, at Saratoga, in 1892, should make its report. The committee adjourned to meet at the call of the president early in October, 1893.

CIRCULAR LETTER.

STATE OF COLORADO,
DEPARTMENT OF PUBLIC INSTRUCTION. }

To the County Superintendents of Schools :

GENTLEMEN :—The beginning of another official term, and the unusual number of changes incident thereto, prompt me at this time to call your attention to the nature of your work and its bearing upon the school interests of the State.

As you are, doubtless, well aware from your acquaintance with the school law, your duties are, to a considerable extent, CLERICAL ; as (a) The distribution of supplies to the various school districts. (b) The apportionment of school funds. (c) The keeping of records. (d) The compiling and forwarding of reports to the State Superintendent, etc.

In all of these matters accuracy, thoroughness and neatness should be carefully observed. Disregard of these particulars, especially in making out the quarterly examination reports, and the annual reports to this department, occasion much unnecessary labor and annoyance.

But by far the most important of your duties are EXECUTIVE and supervisory ; as, (a) The examining and licensing of teachers. (b) The fixing of district boundaries. (c) The visiting and inspecting of schools and school property. (d) The examining of district records and accounts. (e) The conserving of the financial interests of the school districts. (f) The hearing of appeals from decisions of district boards. (g) The administering of oaths of office to district school directors. (h) The filling of vacancies in district school boards. (i) The revising of district census reports. (j) The guarding of the timber upon State lands. (k) The collecting and assigning of the penal fund, etc.

Faithfulness and thoroughness in the care of all these interests will largely determine the character of the schools in your county.

There were present at the meetings of the State Association held in Denver, during the last week of December, forty county superintendents, representing thirty-one counties. Of nine counties, both the retiring and the incoming officials were present. I think all will admit that the sessions of the Association were both interesting and profitable.

For the benefit of those who were not present at the meetings, it may be well to formulate some of the more important conclusions reached as expressive of the sentiments of the Association.

1. That the meetings of the Association should be attended by every county superintendent.

2. That the ideal superintendent should combine the qualities of an accurate accountant and an intelligent supervisor.

3. That incompleteness and inaccuracy are very common faults of county superintendents' annual reports.

4. That district secretaries' reports to the county superintendent are often exceedingly defective and erroneous; hence superintendents should take pains to visit directors and instruct them in the manner of keeping their records and of making their reports; to this end an excellent plan is to organize county associations of district school directors.

5. That the county superintendent should keep a close watch of the financial condition of the school districts by examining the books of the county treasurer.

6. That the county superintendent should inform himself as to his duties, privileges and responsibilities, and firmly adhere to them without fear of threat or intimidation.

7. That the county superintendent should be the educational leader of his county.

8. That friction between patrons and school managers may, to a large extent, be prevented by a closer acquaintance of the county superintendent with pupils, teachers, parents and school boards.

9. That the county superintendent should cultivate cordial relations with all county officers, especially the treasurer and commissioners, who, with a clear, correct understanding of school interests are more than likely to be friendly to those interests.

10. That a county superintendent should guard against issuing a temporary certificate without satisfactory evidence that the applicant has sufficient scholarship to obtain a full certificate at a regular examination.

11. That the greatest difficulty encountered by a county superintendent, at the beginning of his term, is lack of acquaintance with the educational condition of his county. That this lack can be overcome only by personal visitation.

12. That section 64, School Law, as modified by the Eighth General Assembly, contemplates the levying of a county school fund of \$10.66 $\frac{2}{3}$ per capita, so as to enable districts having fifteen pupils and over to hold at least four months school during the year; the fund thus derived to be used only for paying the teachers' salaries; other expenses to come from a special tax levied by the district board; failing to do which the county superintendent is empowered to certify the necessary amount to the county commissioners, who shall thereupon assess the district for that amount.

To these recommendations of the County Superintendents' Association, permit me to add that encouragement and aid should be given to all organized means for raising the educational standard in the State. Among the organized means referred to may be mentioned:

(a) County Associations of Teachers and of School Directors. (b) Normal District Institutes. (c) The State Associations of Teachers and of County Superintendents. (d) The State Courses of Study, elementary and secondary. (e) Teachers' Reading Circles, and County Teachers' Circulating Libraries; also District Libraries for the benefit of school children and communities. (f) The State Higher Institutions of learning—including the University, as the crowning step in the general school system; the Normal School, the School of Mines and the Agricultural College, for professional and technical training.

Still further may be mentioned legislative enactments of recent date for special ends, viz:

1. The act relating to the "Nature of Alcoholic Drinks and Narcotics" (1887).
2. The act to "Secure the Benefit of Elementary Education" (1889).
3. The act "Prohibiting the Sale or Gift of Tobacco in any Form to Minors" (1891).

The observance of these several enactments should be intelligently but firmly enforced.

The acts establishing Arbor Day and authorizing the "Purchase and Display of Flags upon School Buildings," are permissive and suggestive, rather than mandatory. But the spirit that prompts them—

love of nature and love of country—should be regarded in the literary, historical and geographical studies of the schools, in current topics and in special public exercises.

You will thus see that your work is varied and far reaching ; that it implies unflagging industry, "eternal vigilance."

The elective character of your office, and the consequent exposure to the shifting sands of biennial political deals, hinders in no small degree effective, progressive work. There is cause for congratulation, however, that so large a proportion of those recently elected were taken from the ranks, and so are practical school men. This fact gives promise of efficient service from the start.

With best wishes to all for the term just entered upon,

Cordially,

NATHAN B. COY,

Denver, January 13, 1891.

State Superintendent.

STATE OF COLORADO,
DEPARTMENT OF PUBLIC INSTRUCTION, }
DENVER, COLO., December 7, 1891. }

To County Superintendents:

GENTLEMEN:—Kindly inform me at your earliest convenience what has been the experience in your county during the past year with,

1. Graded course of study,
2. Free text books,
3. Compulsory education law,
4. Penal fund.

This information, and all other information of a statistical character not yet rendered, should reach me by December 15, if possible.

Yours very truly,

NATHAN B. COV,
State Superintendent.

REPORT ON GRADED COURSE OF STUDY.

ARAPAHOE COUNTY.

Twenty-one districts have a course of study.

ARCHULETA COUNTY.

Working very successfully.

BOULDER COUNTY.

I have insisted that teachers follow, as nearly as possible, the graded course of study prescribed by the State Superintendent and the committee appointed to draft such course, and my observation is that much better work is done. I find more system to the work, and more interest taken in school work by both teacher and pupil. The district boards, with few exceptions, are in sympathy with the efforts made in this matter, and are lending assistance in every way they can. The fact that the pupils are marked on their daily recitations, and look forward to an examination at the end of the school term, has induced better work, and the results are more satisfactory. The greatest diffi-

culty has been in schools that have, say, five months school in the year; I have instructed the teachers in such districts to divide the work accordingly, and try to do thoroughly what is attempted. More or less difficulty has been encountered in the fourth and fifth grades within the past year, because pupils are not uniformly advanced. One will be in advance of another—proficient in two studies of his grade, and deficient in two more. Have instructed teachers to do the best they can with such pupils, and see to it that the coming classes are uniformly advanced in the grade work.

CHAFFEE COUNTY.

Followed by country schools in most districts. My observation is that its chief value lies in the fact that it makes clear what is meant and what is desired by grading. Hitherto, grading our country schools has been an intangible idea; now, all working from the same basis, the ideas unified, we get a practical result. Our schools have been much improved by this step.

CONEJOS COUNTY.

The teachers in all the schools of our county have been greatly aided in the work of grading their schools by the "State Manual and Course of Study," adopted at the May, 1890, meeting of the county superintendents.

CUSTER COUNTY.

Very satisfactory. About one-half the schools have legally adopted it.

DOUGLAS COUNTY.

Graded course of study in this county is a success. The greatest difficulty to be overcome is the different length of terms schools are in session during the year. This is corrected by extending the time for completing the course in schools having short terms. On the whole it has been a great benefit to the school work.

ELBERT COUNTY.

The "State Manual and Course of Study" is in the hands of all teachers in the county. They have instructions to use them without modification, if possible, with modification where absolutely necessary. Its influence is apparent in the *better* gradation of our schools. Questions for examinations in grades have been prepared by the

superintendent and used in a number of the schools, though not in all. Altogether I consider that the new course of study has *proven a success in this county.*

EL PASO COUNTY.

Some progress has been made during the past year in the graded course of study. Most teachers have endeavored to grade their schools as outlined by the State course adapted for country schools, but work is slow.

FREMONT COUNTY.

I have insisted upon the teachers in the district or rural schools bringing the work of their respective schools to conform as nearly as possible to the "Graded Course," and most of them have endeavored to do so and with results *quite satisfactory.*

GILPIN COUNTY.

There are but four graded schools in the county. An attempt has been made to grade the country schools, but from various causes, such as difficulty of getting co-operation of parents, ignorance or carelessness of school boards, and sometimes even of teachers, and the irregularity and smallness of attendance, very little progress has yet been made. I provided teachers last summer with classification registers and blanks for report, and a few have reported. It is a beginning, but small. But there is not much object in classifying a school of six or sometimes four pupils and they changing constantly.

JEFFERSON COUNTY.

The graded course of study is being followed in all our rural schools. There is very little difficulty in adapting it to most schools. The results are very encouraging.

KIOWA COUNTY.

We have not been able to do very *much* with the course of study for the reason that many of our schools only have from four to six months' school during the year, and some of the children live so far from school in the country, that it is impossible for them to go regularly. These are the two greatest disadvantages.

KIT CARSON COUNTY.

But little has been accomplished owing to the following: 1. Sparsely settled condition of the districts and irregular attendance of pupils. 2. Interference of parents. 3. Lack of energy upon the part of the teachers. Still much good has been accomplished by awakening a desire for a better condition for school work.

LA PLATA COUNTY.

The population of this county in the rural districts is so shifting, that it has been impossible to do much with the course of study as recommended by the State office. But we are hopeful of accomplishing something in the next two years. At present I can report that practically nothing has been done with it.

LAS ANIMAS COUNTY.

Impossible among Mexicans, but among English speaking people has been carried on with success. Supervision necessary on account of incompetent teachers often found in poor districts. Lack of intelligence and stubbornness on the part of directors and the tyranny of parents, who are disinterested in the welfare of the children, has more weight than the individual advice of a superintendent. The county superintendent has the power of an advisor, and cannot compel a board of directors to adopt a course of study. Irregularity of attendance due to long, muddy roads, snow, failure of close supervision, inefficiency of teachers, all combine to make a failure of a graded course of study.

LINCOLN COUNTY.

We have no graded course of study.

LARIMER COUNTY.

The graded course of study has increased the efficiency of our schools fifty per cent. Teachers and pupils alike realize that something is expected of them. Attendance and interest have been increased.

MESA COUNTY.

The graded course of study is only a partial success. Terms of school too short. Too frequent changes of teachers. Too great a variety of text books for the county superintendent to accomplish much in aiding.

MONTROSE COUNTY.

We have adopted graded course of study which is giving good satisfaction, but is not a perfect success.

MORGAN COUNTY.

Graded course of study has been put into the hands of all the teachers of this county, and it has been made the basis of classification by them. But one district in the county has adopted it as a course of study for the school. Several districts had adopted the courses issued by myself in 1889, before the State course was published.

OURAY COUNTY.

The graded course of study is used by three schools in this county, and partially used by four others. It "fills the bill" very nicely. The progress is very rapid and thorough. The only trouble is to find teachers who can carry it out. It seems to me that the subject of "grading a country school" might be made a hobby at our Normal Institutes, with much benefit. I find the average rural teacher does not know how to grade a school, much less to carry out graded course methods.

PARK COUNTY.

The graded course of study has been adopted in nearly all the schools in this county, with slight modifications, and with very satisfactory results.

PHILLIPS COUNTY.

Graded course of study has been quite satisfactory, and the progress made all that could be expected in the time since its introduction. Our schools lack much of a perfect grade yet, but much advancement has been made, and teachers are striving to still further perfect their work.

PROWERS COUNTY.

Teachers and pupils have been greatly benefited by the use of it.

PUEBLO COUNTY.

Graded course of study has been adopted by all district boards in the county, and an effort has been made to make the schools uniform

throughout the county. Monthly examinations have been held in all schools, and reports have been sent to county superintendent and parents. (Report cards and blanks used are inclosed.)

RIO BLANCO COUNTY.

The graded course of study has been in successful operation in this county for a year and a half. At first there was some opposition. Some parents claimed the right to dictate what their children should learn and when they should learn it, but we have succeeded in persuading them that we have teachers who know how to teach school and know what the children ought to study. A few pupils completed the regular course last year and were awarded diplomas of graduation. Considerable good was derived also from the use of certificates of promotion to those who completed the course of any grade. Heretofore children looked upon school life as something which had no end, and believed that when they had gone until they were tired of it they could stop. Under the graded course they realize that there is so much work to be done each year, and that school life is only seven or eight years in the common school. It gives them an aim, and when finished the education is evenly balanced.

ROUTT COUNTY.

It has been successful and satisfactory.

SAGUACHE COUNTY.

Where we have been able to work with the graded course of study our work has been more satisfactory in every particular. Several of our schools are working to that end.

SAN JUAN COUNTY.

We have no properly so-called course of study in this county.

SAN MIGUEL COUNTY.

One school in this county graded. That one having but two teachers.

SUMMIT COUNTY.

Good. Have followed daily register.

WASHINGTON COUNTY.

An earnest attempt was made in the county last year to introduce the use of a course of study, but with very little success. In only two schools, to my knowledge, was it adopted, and in those it was a success. The trouble seemed to be in a large number of schools, the smallness of attendance and a more or less shifting population. Many of the country schools only having an enrollment of from one to five or six, very few exceeding that number.

WELD COUNTY.

We are working toward the course of study and find it helpful. We are not able to follow it very closely.

REPORT ON FREE TEXT BOOKS.

ARAPAHOE COUNTY.

Four districts own the text books used in the schools.

ARCHULETA COUNTY.

All the school boards furnishing free text books seem thoroughly satisfied with the plan and could not be induced to go back to the old way. It is especially helpful to our country schools where school boards and teachers are so much annoyed about enforcing the law regarding books when furnished by parents.

BOULDER COUNTY.

Two districts have bought text books and own them. Both teachers and patrons are pleased. The teacher does not have the ordinary trouble, as all pupils are supplied with necessary books, and are held responsible for the care of them. The books are much cheaper than when bought at retail of the dealers in our towns.

CONEJOS COUNTY.

With the exception of a few text books furnished to indigent children, we have no free text books in Conejos county. Unless the experiment made by other states in providing free text books has

proved a failure, it seems to me desirable that the State should furnish the text books for our public schools free of charge. I opened a primary geography class in one of the public schools of our county of twenty-four scholars, in which there were but four geographies. I called the attention of the school board to the fact and they refused to furnish the books on the ground that most of the parents whose children were not provided with geographies could afford to buy, but preferred to have the district pay for the books. The school closed shortly thereafter, or I should have followed up the matter to action of some kind.

CHAFFEE COUNTY.

Free text books is as yet an experiment in this county, only one district having made provision therefor.

CUSTER COUNTY.

Only one school in the county furnishes text books and they have voted to stop it.

DOUGLAS COUNTY.

We have no district using free text books. Expect to have a few districts vote on this subject next May.

ELBERT COUNTY.

We have not had occasion to try free text books. The people prefer to provide the books for their children in all cases.

EL PASO COUNTY.

Free text books have not been adopted in any of the districts of this county. I am now preparing a circular setting forth the advantages of free text books and requesting school boards to submit the question to the electors at their next annual meeting.

FREMONT COUNTY.

At present we have only one district wholly using free text books. With that district it has proven a success. The teachers like it and it is much more economical to the district and more convenient to the teachers and pupils. The question has recently been discussed by our Teachers' Association where it was strongly favored, and resolutions adopted recommending its adoption by the school districts of the county.

GILPIN COUNTY.

No free text books anywhere in this county.

JEFFERSON COUNTY.

There are five districts furnishing free text books.

KIOWA COUNTY.

We have thirteen districts using free text books, and the plan gives satisfaction. We hope to have the plan extended over the whole county soon.

KIT CARSON COUNTY.

The plan gives satisfaction. About one-third of the districts of the county have purchased text books for the use of the pupils. These schools show the largest per cent. of attendance, and are making marked progress in their studies.

LA PLATA COUNTY.

Nothing has been done in this matter.

LAS ANIMAS COUNTY.

We have none in this county. In fact, only one district could afford them. In country districts, in many of which fifteen mills would have to be levied to supply them, I believe in erecting and furnishing school houses first. Free text books are secondary. I am in favor of free text books in all the county, not in one or two districts only.

LINCOLN COUNTY.

Free text books are in use in some of the districts and the system is well liked so far. I am in favor of the system.

LARIMER COUNTY.

Free text books are gradually becoming the rule in this county. Twenty out of fifty-four districts have free text books, and district No. 15 will soon vote upon the question with certain result in favor. The experience of those districts using the free text books is the only influence needed. The matter is now taking care of itself.

MESA COUNTY.

Have been unsatisfactory. I am unable to give the reason. Possibly the children are too careless with the books, which is the fault of the teacher.

MONTROSE COUNTY.

I am heartily in favor of free text books for country schools.

MORGAN COUNTY.

Seven of the fourteen schools of this county are using free text books. I have heard no complaint from either patrons or teachers, where the system has been adopted. On the other hand, frequent complaints are heard from other schools, and the remedy given in each case is, "Furnish free text books for your school."

OURAY COUNTY.

Free text books are used in two districts, four schools. The verdict is, it is economy; permits better classification and unity of work, but that it requires much vigilance on the part of the teachers to prevent unnecessary destruction, damage or loss of the books. I would suggest that school boards be required to have regulations, keeping a record of all books given out, and that they must be accounted for at the close of the term, or when the grade is completed, and, if unnecessarily damaged or lost, must be replaced by the parent or guardian. I think it would be a good thing to make the text books and their condition a part of the secretary's annual report. It would furnish statistics as to the comparative life of a free text book.

PARK COUNTY.

The free text book system has been adopted by three districts, and has been demonstrated a success. In time, I hope to see it adopted in every district in the State.

PHILLIPS COUNTY.

Free text books are furnished to about one-half our schools, and this number is being added to each year.

PROWERS COUNTY.

The use of them, where adopted, grand success; causing an increase of attendance.

PUEBLO COUNTY.

We have had free text books in two districts for over three years, and four districts have adopted them during the past year. The system has been a decided success and fully one-third of the districts of the county will adopt them next spring.

RIO BLANCO COUNTY.

We have not been so successful with the free text books. We have too many bachelors among our tax-payers for that. I have put forth my best efforts in that direction, and all I have been able to accomplish was to get free pens, pencils, ink and paper in a few of the schools.

ROUTT COUNTY.

Only one district and works well.

SAGUACHE COUNTY.

I can say nothing about free text books.

SAN JUAN COUNTY.

We have not adopted the free text book plan. Our pupils buy their own books.

SAN MIGUEL COUNTY.

The question of free text books has never been agitated here. I am much in favor of it myself, as one of the great troubles with a shifting population is the difficulty of getting the children properly provided.

SUMMIT COUNTY.

One district only has free text books; result good.

WASHINGTON COUNTY.

Fourteen districts have free text books, and the system has proven satisfactory, so much so that I think it is only a question of a short time when all the districts in the county will adopt them. One objection that I have to offer is the lack of care of the books that

seems to prevail in many schools, that is, no one seems to assume the responsibility for their care, and as a consequence many of them show very hard usage.

WELD COUNTY.

Free text books are in use in a half dozen districts. None have adopted them within a year. I favor it.

REPORT ON COMPULSORY EDUCATION LAW.

ARAPAHOE COUNTY.

Six districts have reported that they have enforced the "Compulsory Education Law."

ARCHULETA COUNTY.

Very little attention has been paid to this by school boards. Scarcely a case occurs within the two-mile limit, except in Pagosa Springs, and the board there have not enforced the law, and I have done nothing more than to urge the matter upon them. The board seemed to think it best not to enforce the law in the cases that came to their notice.

BOULDER COUNTY.

I have heard of a few cases where the compulsory law was not observed. In each case I have spoken to the board in regard to the matter, and have insisted that the parents of such children as had not attended the legal number of months be informed of the requirement of the law, and the law enforced. It is a difficult matter to get anyone to proceed against delinquents in a district where such failure exists, as the children are, in nearly all cases, the children of poor parents, and are kept out to assist in the support of the family. The cases, I am glad to say, are rare in this county.

CONEJOS COUNTY.

The Compulsory Education Law is enforced in some districts vigorously; in others, its enforcement would require the purchase of too much clothing, shoes, etc., for poor children.

CUSTER COUNTY.

Very little occasion for it. I do not know of a case of arrest under it.

DOUGLAS COUNTY.

Compulsory Education Law has been enforced in a very few cases. There is little need of it in this county. The twenty per cent. of children not in school each year are made up somewhat as follows: Three per cent. are too far from school houses; these live chiefly in the mountain districts. Ten per cent. are over fourteen years of age, and have already received a fairly good common-school education. The other seven per cent. are made up of a few who ought to be in school, and young married women, young teachers, young people attending school in other counties, etc.

ELBERT COUNTY.

Compulsory attendance has never been enforced in a single instance in this county.

EL PASO COUNTY.

The compulsory education law has been enforced to a limited degree. No case has been carried into court, but parties who have failed to comply with the terms of the law have been waited on, and requested to observe it, and in this way it has been reasonably well enforced.

FREMONT COUNTY.

Attention was called to "Compulsory School Law" by circulars sent to teachers and school officers. In many instances it had a good effect, but the law has never been strictly enforced.

GILPIN COUNTY.

I don't know a single case where the law has been enforced. Where it is most needed it would not apply.

JEFFERSON COUNTY.

The Compulsory Education Law is practically a dead letter in most places.

KIOWA COUNTY.

We have no occasion to enforce the Compulsory Education Law in our county. We have thought to use it a few times, but have succeeded in getting parents to send their children to school without. I believe it a good law, and it has a good effect.

KIT CARSON COUNTY.

But little can be done in compelling attendance at school, owing to the size of the districts and the distance children live from school—"more than two miles, etc.," Still, something has been accomplished by the influence of the law.

LA PLATA COUNTY.

The school officers report no necessity for enforcement, for there are practically no infringements of it in rural districts. In town the officials have been able to secure attendance in compliance therewith without resorting to severe measures.

LARIMER COUNTY.

Compulsory Education Law is growing in favor and in efficiency. Certificates of attendance are furnished to districts, and pupils complying with law are given such certificates. Non-compliance is made known to parents at the close of the first term by printed notice sent to parents of such pupils as have not complied with the provisions of the law.

LAS ANIMAS COUNTY.

The Compulsory Education Law has been enforced here in ten districts since September, 1891. The law is all right if somebody would enforce it. Very few people like to meddle with other people's affairs, and consequently there have been no complaints or fines levied during my term of office, but I have observed a decided increase in attendance in these districts. In our coal mines boys of fourteen or less work, and do not attend school owing to the rapacity of parents. The remedy for our school law, in my humble opinion, would be to amend such law and appoint a supervisor, whose duties would be to visit different parts of the State, and, protected by law, compel such children to attend school. Our present law is "everybody's business," and no head to direct it. If the superintendent were to complain anathemas would be his portion and personal spite would be the cry. Not many superintendents are posing as martyrs.

LINCOLN COUNTY.

No enforcement of the compulsory law has been made to my knowledge.

MESA COUNTY.

It is all right in those cases that don't understand its weak points. I have had it enforced in a few cases where I was quite positive the persons did not fully understand it.

MONTROSE COUNTY.

It has helped the attendance but has not been fully enforced.

MORGAN COUNTY.

To my knowledge but one complaint has ever been made against persons who failed to send to school, and in that case the children were put into school at once.

OURAY COUNTY.

The compulsory education law has been used as a threat or incentive to compel attendance at school, but I think in no instance has the law been enforced. There are few evasions, however, where the law would apply.

PARK COUNTY.

The Compulsory Education Law has not been enforced in this county. Threats have been made in some instances.

PHILLIPS COUNTY.

The compulsory law is fairly well enforced.

PROWERS COUNTY.

No case requiring enforcement.

PUEBLO COUNTY.

Circulars in regard to the Compulsory Education Law are mailed to the boards and teachers at the opening of the schools and also reports are required from the teachers every month. In case it is

reported that the law is not observed in any district, notice is sent from the office of the superintendent. The law has very materially increased the attendance, but the time should be extended to four months, and where school is taught seven to nine months it should be made compulsory to attend at least six months.

RIO BLANCO COUNTY.

The Compulsory Education Law has failed to compel.

ROUTT COUNTY.

We make law known and no occasion to enforce.

SAGUACHE COUNTY.

Compulsory Education Law is a step in the right direction, but does not go far enough, and is too indefinite.

SAN JUAN COUNTY.

The Compulsory Education Law is inoperative—a dead letter. The clause compelling the Board of Directors to supply the children of indigent people with clothes renders the law null. Should it be now attempted to compel folks to send their children to school they make a plea of “no clothes,” and the School Board would have need of a ready-made clothing department. The law should be amended giving the District Board the option of supplying clothes when in their judgment needed.

SAN MIGUEL COUNTY.

There has never been any necessity except in one case, for applying the Compulsory Education Law.

SUMMIT COUNTY.

A dead blank.

WASHINGTON COUNTY.

No attempt has been made to enforce this law, there being no necessity for it. My private opinion of the law is that it is both defective and incomplete, and can easily be evaded if desired.

WELD COUNTY.

The law has been enforced in the few cases where it needed enforcing. No case of violation of this law has come to my knowledge where the law has not been enforced.

REPORT ON PENAL FUND

ARAPAHOE COUNTY.

During the year ending September, 1891, \$3,495.66 was collected from the penal fund.

ARCHULETA COUNTY.

The law relating to this has been observed by officers and county treasurer.

BOULDER COUNTY.

I sent to each justice of the peace in this county a circular, stating what fines should go to the penal fund, and requested that they make their reports accordingly. Last year there was \$500 in the penal fund.

CHAFFEE COUNTY.

We have collected fines amounting to \$135.50 during the past year, and which has been credited to the general fund for school purposes. We think this amount would be larger were it not for the fact that most of the offenses occur in the incorporated towns, and are fined under an *ordinance*, usually, instead of a *statute*, and the money received goes to the credit of the towns instead of the school fund.

CONEJOS COUNTY.

The penal fund is regularly accounted for, though small in amount.

CUSTER COUNTY.

Has all been turned into the general school fund.

DOUGLAS COUNTY.

I can find but \$5.00 from this fund since July 1, 1891, and that was placed to the credit of the special fund of District No. 21.

ELBERT COUNTY.

Forty-seven dollars penal fund has been collected and applied to the school fund of the districts. I find that this fund is frequently liable to be misapplied, and should be closely looked after by the county superintendent.

EL PASO COUNTY.

Strict attention has been given to the enforcement of the law concerning the penal fund. The amount of money secured to the school fund from this source has been small, only \$444.

FREMONT COUNTY.

The attention of the proper officers has been called to their duty in regard to the placing to the credit of the school fund all sums due it, but the county treasurer has been relied upon to attend to the matter and, as far as we are able to tell, has satisfactorily done so.

GILPIN COUNTY.

The treasurer keeps no separate record of the penal fund, and the two independent districts keep their own funds, including a great part of the penal fund.

JEFFERSON COUNTY.

The revenue from the penal fund is so small in this county that very little attention is given to it.

KIOWA COUNTY.

The penal fund of our county is very small indeed. In fact, it has only been a few dollars during the past year.

KIT CARSON COUNTY.

But little difficulty is met with in enforcing the requirements of this act. (1.) The officers report promptly to the county treasurer. (2.) The settlers are few and law-abiding. Hence no fines.

LA PLATA COUNTY.

There has been paid into this fund from fines since my annual report the sum of \$19.35. This includes all money collected by way of penalties. Our rural population are law-abiding it would seem from this state of affairs, while in towns fines arise almost solely from violations of city ordinances, and consequently go into the city treasury.

LAS ANIMAS COUNTY.

I don't understand our penal law in the least. It is not specific. The superintendent has no record of fines paid into the treasury. He must take the word of the county treasurer, or investigate personally. I have sent out notices to all officials of the courts that their fines must be turned in. I collected a considerable sum in this way. But the vagueness of the law leaves the superintendent in doubt as a case I shall cite. A criminal under bond of \$3,000 defaults and leaves the country. His bondsmen are sued; under decision of State Superintendent, this money can be paid to regular county revenue. It is undoubtedly a forfeiture and I should think should be credited to school fund. The ambiguity of Section 69 should be remedied. The penal fund question has been an eyesore to me for the two years of my term.

LINCOLN COUNTY.

Only one contribution to the penal fund the past year. I try to look after this thing.

LARIMER COUNTY.

We receive all penal fines, not otherwise provided, paid into the county treasury. I have filed a list of the fines that belong to the school fund with the treasurer, and he places to the proper credit all fines collected.

MESA COUNTY.

So far I have had no trouble.

MONTROSE COUNTY.

There seems to be a difference of opinion in regard to whom the funds belong, as we have both city and county attorney in the same person. Outside of town no trouble.

MORGAN COUNTY.

The penal fund is small in this county and justices are slow in turning it into the county treasury. In my last inspection of dockets I found three delinquents which were referred to the county board and the matter settled by them.

OURAY COUNTY.

The penal fund is very promptly turned over to the county treasurer and reported, except in the case of some *forfeited bonds* which will require an order of court to turn over. Fines for the year have amounted to \$92.50.

PARK COUNTY.

Some collections are made for the penal fund, but in my judgment only a tithe of what would be made if the money would go to the district in which the fine is collected.

PHILLIPS COUNTY.

The penal fund I cannot report fully on as yet.

PROWERS COUNTY.

None imposed nor collected in county.

PUEBLO COUNTY.

Fines from the sheriff's office and the district court have been placed to the credit of the general school fund. The city claims the right to the fines from the police court.

RIO BLANCO COUNTY.

We are a law-abiding people and our penal fund since the organization of the county in 1888, has amounted to only \$107.50.

ROUTT COUNTY.

Penal fund affords a small revenue.

SAGUACHE COUNTY.

I hardly understand what you mean, but will say that our laws need enforcing. A great many cases go unnoticed and unpunished.

SAN JUAN COUNTY.

I do not know to what you refer when you say penal fund.

SAN MIGUEL COUNTY

The penal fund has not generally added much to the school revenues. This year, however, there is considerable addition owing to the raid made on the gamblers.

SUMMIT COUNTY.

None.

WASHINGTON COUNTY.

I have taken care to see that all the *monies* going to this fund were properly reported, but I found this year, that for the past two or three years the county treasurer had credited all such monies to the *general county revenue fund* instead of to the school fund. I at once had a transfer made to the proper fund.

WELD COUNTY.

No report.

STATE OF COLORADO. }
DEPARTMENT OF PUBLIC INSTRUCTION. }

To County Superintendents:

GENTLEMEN—As you doubtless well know, the data for the statistical tables of the biennial report of this department are derived mainly from the annual reports of the county superintendents. You will agree with me, I think, that September 1 to November 15 is a short time for the compiling of such tables. Hence the necessity of annual reports being not only on time, but uniform, accurate and complete, that there may be the least possible loss of time in the revision of them at this office. If it is possible for counties having only a small number of districts to report prior to September 1 such special help will be greatly appreciated.

Your reports should embrace all statistics for the year beginning July 1, 1891, and ending July 30, 1892, *and no others*. It is suggested that a list of all the districts should be first made, and then checked off as the reports come in.

Before statistics from the secretaries' reports are entered those reports should be carefully inspected to see that they are accurate, consistent and complete.

All blanks should be filled and all columns added, but totals should not be set down until the absolute correctness of the work has been verified. Each total should be proved by adding both ways. To illustrate:

	MALE.	FEMALE.	TOTAL.
School population between 6 and 16.....	20	15	35
School population between 16 and 21.....	15	10	25
School population between 6 and 21.....	35	25	60

So of "enrollment," "number of teachers employed," etc.; especially should this method of proof be applied to financial statement on pages four and five, where column five equals the sum of columns one, two, three, four; and column ten equals the sum of columns six, seven, eight, nine.

The census returns, as given in the annual report, should agree with those reported separately in June. In two-thirds of last year's reports there were discrepancies; in some cases, wide.

The total number of applicants examined and receiving certificates during the year should agree with the sum of those reported quarterly. Likewise of enrollment, which can in no case *consistently* exceed school population.

There has been lack of agreement in the method of computing averages. In a recent circular from this department, attention was drawn to instructions on this point, given on the district secretaries' annual report blanks. Unless those instructions have been strictly followed, county superintendents will not be able to report correctly upon the same items; and statistics bearing thereon become thus practically valueless. As a rule, the average for the county, in each case where the average is required, may be satisfactorily obtained by dividing the total by the number of districts in the county; for example: "the average number of days of school in the county" equals

the total number of days of school in all the districts, divided by the number of districts in the county. Similarly, "the average monthly salary for the county" equals the sum of the averages for the different districts, divided by the number of districts. In the same way, "the average cost per month for each pupil," "average daily attendance," etc., may be ascertained.

Financial statements should be strictly accurate. To this end, the books of the county treasurer, as well as those of the district officers, should *in all cases* be consulted. Each secretary's report should be carefully scrutinized, in the presence of the secretary, if possible, to see that the total receipts equal the expenditures, plus the balance on hand.

Temporary loans should be added to items included in column four, page four (county superintendent's report); also to receipts in "financial summary," on page six.

Distinction should be made between "number of mills levied by county" and "number levied by district." Number 31, on page 9, includes only county tax levy.

"Assessed valuation of property in the county" (number 40, page 9), should be taken from the latest available returns.

If secretaries do not give all facts called for, let them be notified of failure, and supplemental report be demanded. The same will be required of you.

The exact amount of money received by county superintendent for his services during the entire school year should be reported. This can be obtained from the books of the county treasurer.

As far as possible, statistics of private as well as graded schools should be given.

Let the report as submitted be in the best possible form; neat and free from notes, additions or corrections. Explanations may be made on separate sheet and enclosed with the report. If the report is double, requiring two pages, page totals should not be entered at bottom of first sheet, but carried to the top of second sheet as "brought forward." For dollars and cents, each figure should be placed in its proper column, and figures as well as writing made plain and legible. Let all head lines and dates be properly filled in. Reports should not be folded or creased, but rolled for insertion in pasteboard tubes, which will be forwarded to you later. The reports of each year are bound and filed for public inspection in the office of the Superintendent of Public Instruction.

Please send in as soon as possible the revised list of school officers. The information is needed for use as early as it can be procured.

Under "Remarks" you are requested to make note of special features of the school work in your county, whether favorable or unfavorable, and to offer such suggestions as may have occurred to you during the year's experience.

In closing we again urge promptness in the rendering of reports; thus may the labors of this department be materially lightened. Take it for granted that there will be delay on the part of those who are to report to you, and proceed accordingly, exercising unremitting diligence until your reports are mailed to this office, accurate, consistent and complete in every detail.

If the instructions and suggestions herein offered are faithfully followed, we are confident that a large proportion of reports will this year be found to stand the test of close inspection.

Cordially,

NATHAN B. COY,
State Superintendent.

Denver, July 18, 1892.

STATE OF COLORADO,
DEPARTMENT OF PUBLIC INSTRUCTION, }
DENVER, COLO., November 21, 1892. }

DEAR SIR:—For the sake of a full representation of all the educational institutions of the State in the Eighth Biennial Report of the Department of Public Instruction, you are kindly requested to report the institution under your charge on the attached blank, and forward the same to this office on or about December 7, 1892.

Please report on separate blanks for each of years 1891 and 1892.

Respectfully,

NATHAN B. COY,
State Superintendent Public Instruction.

STATISTICS FOR THE YEAR ENDING 1891.

Name of institution

Location

Name of presiding officer

ENROLLMENT, ATTENDANCE, ETC.

	MALE	FEMALE	TOTAL
No. of persons under six years of age enrolled during year			
No. of persons between six and twenty-one enrolled			
No. of persons between eight and fourteen enrolled			
a. Whole No. of persons enrolled during year (count no name twice)			
b. No. of days institution was in session during year (omit legal holidays)			
c. Aggregate days of teaching (a × b)			
d. Aggregate attendance (sum of days present)			
e. Aggregate absence (sum of days absent)			
f. Average daily attendance (d ÷ b)			
g. Average membership [(d + e) ÷ b]			
h. Per cent of attendance [d ÷ (d + e)]			
i. Average age of pupils (sum of ages ÷ a)			
Number of graduates for the year: male,; female, total,			
Whole number of graduates			
What degrees are conferred upon graduates			

INCORPORATION, MEANS OF SUPPORT, ETC.

If incorporated, in what year	
If denominational, under what control	
In what year opened	
How is institution supported	
Total assets of institution, including buildings, libraries, cabinets, apparatus, books of reference, supplies, etc.	\$
Volumes in library	
Receipts: from productive funds	\$
Receipts: from tuition	\$
Receipts: from voluntary contributions and other sources not included in foregoing	\$
Total receipts	\$
Expenditures: for teachers' wages	\$
Expenditures: incidentals (current expenses)	\$
Expenditures: sites, buildings, furniture, repairs, etc.	\$
Total expenditures	\$

TEACHERS' WAGES.

Number of teachers during year: male,; female,
total,

Average wages of teachers, per month of twenty days each: male,
.....; female,

LENGTH OF SESSION PER YEAR.

How many months of four weeks, or twenty days each (express frac-
tion of month in days), has the institution been in session?

COURSE OF STUDIES.

Please indicate what studies are taught by placing a cross (x) after each in the following list:

Algebra,	History, General,
Arithmetic,	History of United States,
Astronomy,	Latin Language,
Bookkeeping,	Mineralogy,
Botany,	Music,
Carpentry,	Natural History and Nature Studies,
Chemistry,	Orthography,
Civil Polity,	Painting,
Cooking,	Penmanship,
Domestic Economy,	Physics,
Drawing,	Physiology,
English Grammar,	Printing,
English Language,	Psychology,
English Literature,	Reading,
English Written Composition,	Rhetoric,
French Language,	Sewing,
Geography,	Stenography,
Geology,	Surveying,
Geometry,	Telegraphy,
German Language,	Trigonometry,
Greek Language,	Typewriting,
Gymnastics,	Zoology.

If institution publishes catalogue please send copy with returns.

If not able to furnish all of foregoing statistics, please report such as you can.

Kindly forward to office of State Superintendent of Public Instruction on or before December 7, 1892.

NATHAN B. COY,
State Superintendent.

Denver Public Library





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