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State University

April, 1990

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Colorado State Normal School
Bulletins
1904 - 05
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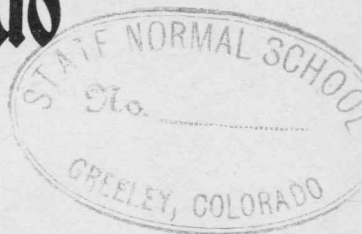
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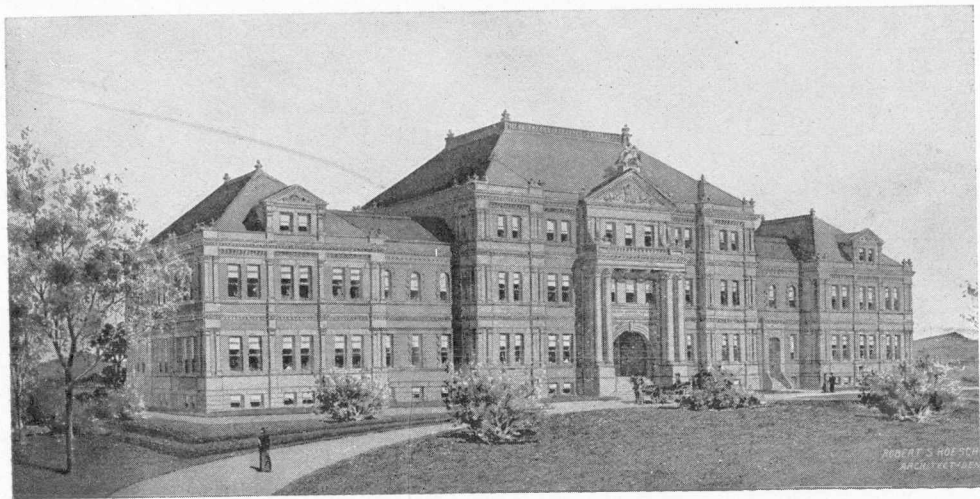
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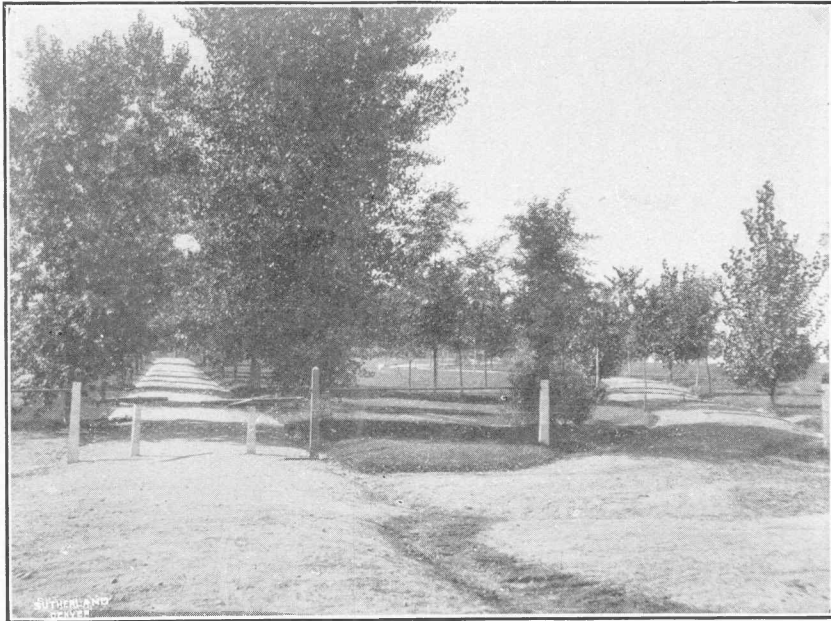
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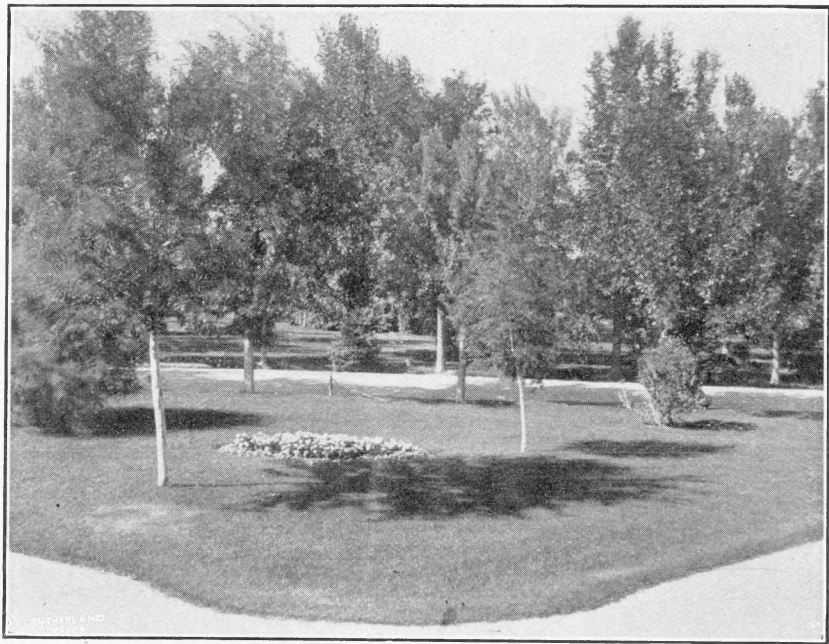
Normal Building.



Ninth Avenue Walk.



West Approach.



Front Campus

*FOURTEENTH
ANNUAL CATALOGUE*

OF THE

*STATE
NORMAL SCHOOL*

OF COLORADO

GREELEY, COLO.

1904-1905

*PUBLISHED BY
TRUSTEES OF STATE NORMAL SCHOOL*

16612

...COLORADO...
STATE NORMAL SCHOOL
GREELEY, COLORADO

CALENDAR

1904

September							October						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	1	2	3	..	..	..	..	..	..	1
4	5	6	7	8	9	10	2	3	4	5	6	7	8
11	12	13	14	15	16	17	9	10	11	12	13	14	15
18	19	20	21	22	23	24	16	17	18	19	20	21	22
25	26	27	28	29	30	..	23	24	25	26	27	28	29
							30	31					

November							December						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	1	2	3	4	5	..	..	..	..	1	2	3
6	7	8	9	10	11	12	4	5	6	7	8	9	10
13	14	15	16	17	18	19	11	12	13	14	15	16	17
20	21	22	23	24	25	26	18	19	20	21	22	23	24
27	28	29	30	..	..	..	25	26	27	28	29	30	31

1905

January							February						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	..	..	..	1	2	3	4
8	9	10	11	12	13	14	5	6	7	8	9	10	11
15	16	17	18	19	20	21	12	13	14	15	16	17	18
22	23	24	25	26	27	28	19	20	21	22	23	24	25
29	30	31	..	..	..	..	26	27	28	..	..	..	..

March							April						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	1	2	3	4	..	..	..	..	..	..	1
5	6	7	8	9	10	11	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22
26	27	28	29	30	31	..	23	24	25	26	27	28	29
							30						

May							June						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	1	2	3	4	5	6	..	..	..	..	1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24
28	29	30	31	25	26	27	28	29	30	..
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ANNOUNCEMENTS.

1904-1905.

FALL TERM.

Opens Tuesday, September 13, 1904.
Closes Friday, December 9, 1904.

WINTER TERM

Opens Monday, December 12, 1904.
Closes Friday, March 17, 1905.

SPRING TERM.

Opens Monday, March 27, 1905.
Closes Friday, June 9, 1905.

SUMMER TERM.

Opens Tuesday, June 20, 1905.
Closes Friday, August 11, 1905.

COMMENCEMENT WEEK.

Baccalaureate Sermon, Sabbath afternoon, June 4, 1905.

Class Day Exercises, Tuesday evening, June 6, 1905.

Alumni Anniversary, Wednesday, June 7, 1905.

Commencement, Thursday, June 8, 1905.

Reception to Graduating Class by President, Thursday
evening, June 8, 1905.

Alumni Banquet, December, 1904, Denver, Colo.

Decommissioned War T's Soft Spray
April 1990

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Term expires 1907.

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Term expires 1907.

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Term expires 1905.

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Term expires 1905.

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Term expires 1909.

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Term expires 1909.

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1903-1904-1905.

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*HARRIET DAY,
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FRANK L. ABBOTT, B. S.,
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*Resigned.

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WILLIAM K. STIFFEY,
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ELIZABETH H. KENDEL, Pd. M.,
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Training Teacher—Primary Grades.

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Training Teacher, Lower Primary Grades.

E. MAUD CANNELL,
Director Kindergarten and Training Teacher.

ALBERT F. CARTER, M. S.,
Librarian and Bibliography.

LILLIAN G. INGRAM,
Assistant Librarian.

.....
Bookbinding and Library Handicraft.

WILLIAM B. MOONEY, Pd. B.,
Assistant Superintendent Training School.

BESSIE A. HILTON,
Pianist.

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Fellow in Mathematics.

MRS. AURORA W. CLEMENT,
Fellow in History and Latin.

VERNON MCKELVEY,
President's Secretary.

Office, Normal Building. Office hours, 8 to 12:50 and
2:00 to 5:30.

A. L. EVANS,
Superintendent Grounds.

ADOLPH LAWSON,
Assistant Superintendent Grounds.

BENJAMIN STEPHENS,
Engineer.

CHARLES STEPHENS,
Janitor.

G. H. ORR,
Janitor.

EXAMINING BOARD.

1904.

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State Superintendent Public Instruction.

W. C. THOMAS,
County Superintendent, Boulder County.

Z. X. SNYDER,
President School.

FACULTY COMMITTEES.

 1904-1905.

Executive.

JAMES H. HAYS. LOUISE HANNUM. T. R. CROSWELL.
F. L. ABBOTT.

Societies.

R. H. POWELL. ANNA M. HEILEMAN.
JAMES H. HAYS. GRACE H. SPROULL.
A. GIDEON.

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R. H. POWELL.

Alumni.

S. M. HADDEN. LIZZIE KENDEL. BELLA B. SIBLEY.
J. V. CRONE. ELIZA KLEINSORGE.
ELEANOR PHILLIPS.

Reception.

F. L. ABBOTT. D. D. HUGH. ANNA M. HEILEMAN.
A. GIDEON. E. MAUD CANNELL.
A. E. BEARDSLEY. GRACE H. SPROULL.

Art.

RICHARD ERNESTI. ANNA M. HEILEMAN.
MRS. ELIZA KLEINSORGE. R. H. POWELL.
BELLA SIBLEY.

Athletics.

A. P. WAY.	ANNA M. HEILEMAN.
S. M. HADDEN.	R. H. POWELL.
R. W. BULLOCK.	T. R. CROSWELL.
DAVID L. ARNOLD.	

Mentor.

D. D. HUGH.	A. E. BEARDSLEY.	KATHARINE CLUTE.
LIZZIE KENDEL.	E. MAUD CANNELL.	
DAVID L. ARNOLD.		

Music.

W. K. STIFFY.	JAMES H. HAYS.
ANNA M. HEILEMAN.	LIZZIE KENDEL.
A. F. CARTER.	R. W. BULLOCK.
DAVID L. ARNOLD.	

Commencement.

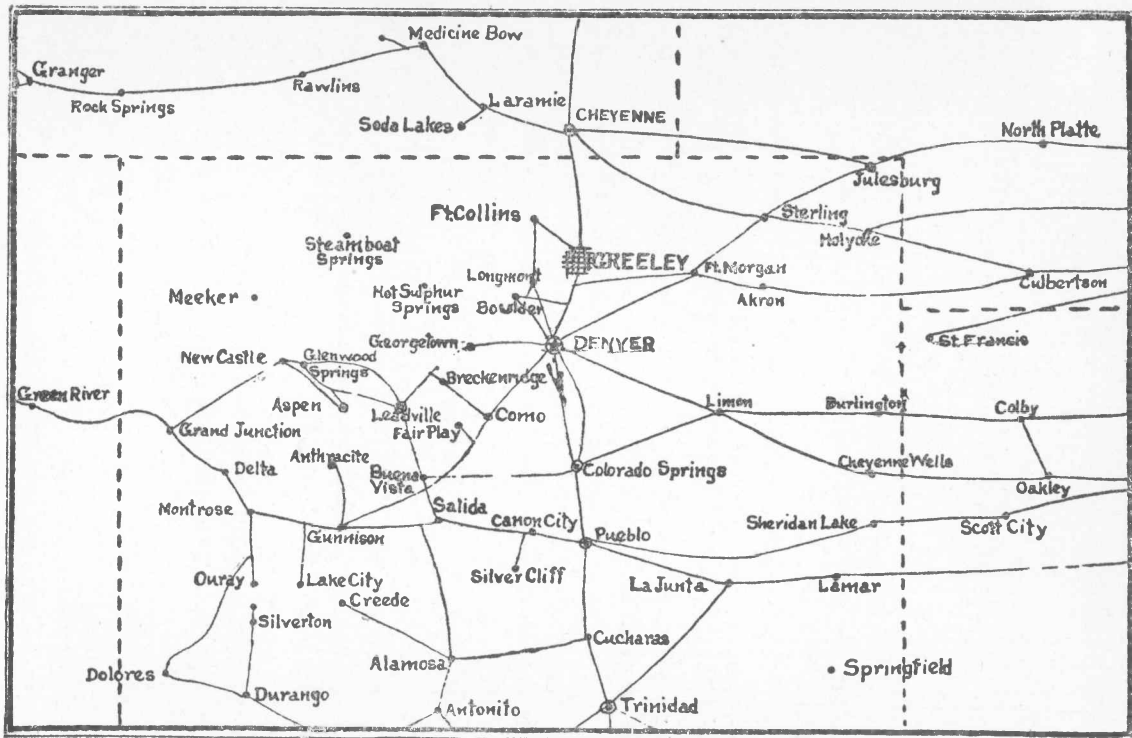
JAMES H. HAYS.	GRACE SPROULL.
ANNA M. HEILEMAN.	E. MAUD CANNELL.
LOUISE HANNUM.	D. L. ARNOLD.

Training School.

T. R. CROSWELL.	R. W. BULLOCK.
ELEANOR PHILLIPS.	E. MAUD CANNELL.
LIZZIE KENDEL.	BELLE B. SIBLEY.
ELIZA KLEINSORGE.	

Museum.

J. V. CRONE.	A. E. BEARDSLEY.	F. L. ABBOTT.
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GREELEY AND VICINITY

HISTORY OF SCHOOL.

The Colorado Normal School was established by an act of the legislature in 1889. The first school year began October 6, 1890.

At the beginning of the second year the school was reorganized and the course extended to four years. This course admitted grammar school graduates to its freshman year, and others to such classes as their ability and attainment would allow.

At a meeting of the board of trustees, June 2, 1897, a resolution was passed admitting only high school graduates or those who have an equivalent preparation, and practical teachers. This policy makes the institution a professional school in the strictest sense.

LOCATION.

The Normal School is located at Greeley, in Weld county, on the Union Pacific railway, fifty-two miles north of Denver. This city is in the valley of the Poudre river, and is one of the richest agricultural portions of the state. The streets are lined with trees, forming beautiful avenues. The elevation and distance from the mountains render the climate mild and healthful. The city is one of Christian homes, and contains churches of all the leading denominations. It is a thoroughly prohibition town. There are about 5,000 inhabitants.

BUILDING.

The building is pressed brick, trimmed with red sandstone. There is no finer normal school building in the United States, and none more commodious. It is 240 feet long. This building is situated in the midst of a campus containing forty acres overlooking the city. The building is heated throughout by steam—chiefly by indirect radiation. A thorough system of ventilation is in use, rendering the building healthful and pleasant. It is supplied with water from the city water works.

There has just been completed a very commodious and well arranged residence for the president. It is so arranged and equipped as to be specially suited for the various functions given to the students and faculty by the president.

The heating plant is the most modern and is in architecture the same as the other buildings.

There is under contemplation a splendid library building 180 feet long.

MAINTENANCE.

The maintenance of the State Normal School is derived from a millage of one-fifth of a mill on the dollar for the entire assessment of the state. The legislature also makes special appropriations for building and general development.

Normal Department

THE FUNCTION OF THE NORMAL SCHOOL.

The function of the Normal School is to make teachers. To do this it must keep abreast of the times. It must lead in public education. It must project the future. The modern conception of education embraces all of human life. This wide and deep and rich notion enlarges the function of an institution that aims to prepare teachers. This function embraces in its relations: the faculty, the child, those preparing to teach, the home, the state, society, and the course of study.

I.—RELATION TO FACULTY.

The faculty is the school. Its power and influence consists in its faculty. The teachers should be picked men and women. They should be persons who have especially fitted themselves. Normal School work is unique. To be a teacher of teachers requires very special qualifications and preparation.

a. Character stands paramount in the equipment of a teacher. Nothing can take its place.

b. Ability to teach ranks next in the hierarchy of qualification. This is ability to adapt self and subject to the pupil. It is ability to inspire to action. It means one whose nature blends with those being taught. It is a natural gift specially trained.

c. Scholarship is the reserve power of every strong teacher. It commands respect. The scholarship of a Normal School teacher should first be liberal, then special.

d. Culture is essential. It gives tone to the entire personality. It is the development of the finer nature. It means good manners, good taste, refined thoughts, elegant expression, pure spirit.

e. Professional ethics and spirit bind the faculty into one harmonious whole, without which there is a great lack of efficiency. A due recognition of the above should characterize all the members of the faculty. Due regard for each other in speech and manner should always exist.

II.—RELATION TO THE CHILD.

In the preparation of teachers the end in view is the education of the children of the state. The child is the supreme concern. The function of the Normal School is to give such an interpretation of the child and its development in all directions as will best prepare it to enter fully, readily and righteously into its environments.

III.—RELATION TO THOSE PREPARING TO TEACH.

a. An individual who enters to take a course in the State Normal School should have maturity of mind. This is absolutely necessary in as much as the student who is studying subjects in their relation to the education of children has a more complex problem than the person who is studying the subject for the subject's sake.

b. The individual who enters should have reasonably good health. The work of the Normal School demands that the student should have good health. The work of the teacher requires it.

c. One who is contemplating becoming a teacher should have a natural fitness to teach. The student can



Rose Bed.



usually feel this; but when the authorities discover a lack of natural ability in a student to make a good teacher, the student should be informed.

d. Common sense is a very superior qualification for the teacher.

e. Clean character is fundamental. Clean thoughts, pure motives, high ideals are essential.

f. Intellectual ability is presupposed in the preparation of the teacher.

IV.—RELATION TO THE HOME.

A very close relation exists between the teacher and the home. The teacher and the parents should be acquainted. The teacher should be intimate enough to talk candidly and freely about the interests of the child. The function of the Normal School toward the home is so to prepare the people who enter that they may intelligently study the nature and wants of the child in common with the parent.

V.—RELATION TO SOCIETY.

Since the child must become an organic part of society, the teacher should have an intelligent view of the relation of a child's education to the needs of society. The needs of the child and society are reciprocal. The aim is to individualize and socialize the child.

VI.—RELATION TO THE STATE.

The function of the Normal School to the state is apparent. The state is interested in the education and general intelligence of all its people. To this end she founds

schools and maintains a public school system. The Normal School becomes the very heart of this system. It prepares those who go out to have charge of the youth of the commonwealth.

The responsibility of no institution of learning is so great as that of a Normal School. It has a great function. It exerts its influence on the mountain and on the plain; the mining district, the stock-growing region and the agricultural sections all feel its influence. It reaches profoundly into the lives and activities of the people. It is the people's school.

NORMAL COURSES OF STUDY.

I. a. Courses leading to degrees in the Colorado State Normal School are of two kinds: 1. Normal; 2. Normal College.

b. The Normal Course leading to the degree Pd. B., is intended to qualify teachers for work in elementary schools, and the Normal College course, leading to the degree Pd. M., is intended to qualify teachers for work in high schools.

c. A Normal Course is usually completed by a high school graduate or a student with equivalent preparation, in two years; and a Normal College course, in three years.

d. A preparatory course of one year is provided for those who are not high school graduates, but are of sufficient maturity to prepare for a regular course in one year.

II. a. The regular school year consists of three terms, aggregating thirty-eight weeks. In addition to this, there is a summer term in which work on the regular courses may be taken. As far as possible the work of each term in any subject is complete in itself.

b. Students are permitted to enter at the beginning of any term, but are advised that it is much to their advantage to enter at the beginning of the fall term.

c. During the summer term the amount of work given in any subject and the credit allowed for it is the

same as in any other term. The necessary amount of work in the subject is accomplished by a proper increase in the number of recitals per week. The number of subjects taken by a student is proportionately decreased.

III. a. One recitation per week for a term shall count as a Term Hour.

b. Sixty Term Hours for the junior Year and sixty-three for the senior year, in addition to Physical Culture work, which is required of all students, constitute a regular year's work in a Normal Course. Ordinarily this consists of four subjects with five recitations per week in each for three terms, with one additional recitation per week in Pedagogy throughout the senior year.

c. Forty-eight Term Hours in addition to Physical Culture work constitutes a regular year's work in a Normal College course. Ordinarily this consists of four subjects with four recitations per week in each of three terms. Five recitations per week in work planned primarily for a Normal Course counts as four recitations per week in a Normal College course. In a Normal College course, also, three periods of laboratory work, or other work in which outside preparation is not necessary, counts as one recitation.

d. By special permission, a student in either a Normal or a Normal College course is allowed to elect one additional subject.

IV. A graduate of a Normal Course, whose academic qualifications are satisfactory, is allowed to complete a Normal College course in one year.

V. The following is an outline of the required work:

PREPARATORY YEAR.

	Number of Terms.	Recitations per Week.
Algebra	3	5
English	2	5
History	1	5
Physics	1½	5
Biology	1½	5
Geometry	3	5
Physical Culture	3	2

REGULAR NORMAL COURSE.

Junior Year.

	Number of Terms.	Recitations per Week.
Psychology	2	5
Pedagogy	1	5
English	2	5
Reading	1	5
Biology	1	5*
Music	1	5
Mathematics	1	5
Art	2	5
Sloyd or Domestic Economy.....	1	5
Physical Culture	3	2

*Three extra periods of laboratory work per week are required.

Senior Year.

	Number of Terms.	Recitations per Week.
Philosophy of Education	3	5
Seminar	3	1
Teaching	3	5
English	2	5
Reading	1	5
History	1	5
Geography	1	5
Music	1	5
Physical Culture	3	2

NORMAL COLLEGE COURSE.

First Year.

	Terms. Terms.	per Week. per Week.
English	2	5(4)*
+Electives	10	4
Physical Culture	3	2

Second Year.

Psychology	2	5(4)
Pedagogy	1	5(4)
English	2	5(4)
+Electives	7	4
Physical Culture	3	4

*Numbers in parentheses designate Term Hours.

†Electives in each year must be approved by the proper faculty committee.

Third Year.

Philosophy of Education	3	5(4)
Seminar	3	I
Teaching	3	5(4)
+Electives	6	4

I.—PSYCHOLOGY.

Psychology, as other branches of science, has both a cultural and a practical value. The maxim, "Know thyself," expressed a legitimate demand of the intellect; hence the study of psychology has a right to claim a share of the attention of every person who desires a liberal education. Apart, however, from its cultural value, psychology has a well-recognized application, especially in educational work. A teacher must understand the phenomena and laws of mental growth, if he is to be an intelligent member of his profession. Otherwise he tends to be a slavish imitator of others, without a just appreciation of the relative value of his subject or of his methods of instruction.

The scope of psychology has been materially widened during recent years. The psychologist must now know something of the anatomy and physiology of the nervous system, and of the relation of mental and nervous processes. It has been recognized, moreover, that a knowledge of the fully developed human consciousness is not enough to satisfy either our theoretical or our practical needs; we must have also a knowledge of the development of mind in the individual and the race. Excursions

into comparative psychology have revealed a fruitful field of investigation; and the study of abnormal mental states has not only proved to be a subject of absorbing interest in itself, but has contributed to a better understanding of our normal mental activities. To understand the relation of these different branches of psychological study, a sketch of the history of psychology is also desirable.

The methods of psychology, not less than its subject-matter, have undergone marked transformation. The most noticeable change has been in the introduction of experiment in the investigation of psychological problems. The value of introspection is not thrown into discredit by this fact, but the desire for greater definiteness of results demands that this method shall be supplemented by experimental work. The study of comparative psychology and child study, moreover, has given a wider range for observation.

In accordance with this conception of the scope and methods of psychology, the work in this department during the Junior and Senior years covers the subjects outlined below. The study of these subjects cannot, of course, be exhaustive; but enough work is done to make the student familiar with psychological problems, and the methods by which they are investigated. In the selection of material for study, especial attention is given to those topics that are most directly related to the work of teaching.

OUTLINE OF THE WORK.

Physiological Psychology.—In the first part of the Junior year a brief study is made of the anatomy and

physiology of the muscular and nervous systems in relation to psychic functions. Structure is illustrated by the dissection of sheep's brains, and by the use of lantern slides, charts and models; function, by a series of experiments upon muscle and nerve. Such topics as the following are discussed: The hygiene of the nervous system; physical and mental fatigue; the rate of growth in boys and girls; the relation of body weight and brain development to intelligence; the localization of cerebral functions; the sensori-motor arc and its pedagogical significance; sensory and motor training; and nascent stages with especial reference to adolescence. This division of the work is intended to enable the student to see more clearly the relation of nervous and mental processes. It thus forms a basis for his future studies in psychology. It also suggests a point of view for the consideration of the problems of education.

Experimental Psychology.—Experiments upon the senses are performed by the students. Problems are selected with the view of enabling the student to discover the more important facts, and to become acquainted with the methods of experimental psychology. Attention is given to the sense defects of children, and to the tests by which they are determined. Some typical experiments are also performed throughout the year upon such subjects as reaction-time, attention, memory, and apperception. For this work a laboratory has been provided. Besides duplicate sets of apparatus for individual work upon the simpler experiments, it contains a number of more elaborate pieces, thoroughly equipping it for such work.

Systematic Psychology.—A systematic study is made of mental processes—cognitive, emotional, and volitional. The chief topics are perception, memory, association of ideas, apperception, attention, conception, judgment, reasoning, the emotions, and the will. Each process is studied not as an independent unit, but in its functional relation to the other activities of the organism. In taking up the study of these topics, students are expected to analyze the data they already possess, or may be able to obtain by introspection or experiment, and to form their own conclusions. No text-book is followed; but, to supplement the class discussion, references are given to books in the library. As this contains most psychological works that are accessible in English, an opportunity is afforded for a comparison of different views.

Pathological Psychology.—A brief study is made of such abnormal mental states as illusions, hallucinations, dreams, and hypnosis. Suggestion both in the hypnotic condition and in normal life is studied in its relation to the work of teaching and to its bearing upon a number of problems of modern thought.

Comparative Psychology.—The relation of human and animal consciousness is considered in the light of the doctrine of evolution. Instinct and habit receive especial attention. The works of such authors as Spencer, Wundt, Morgan, Romanese, Groos, and Mills are used in this connection.

Child Study.—Students are encouraged to study children whenever they have opportunity, and to make reports of their observations. The play-hour upon the

schools grounds is utilized in part for this purpose. This work is intended to bring the student into more sympathetic relations with the child. The reports of the observations are discussed in class on appropriate occasions, and also the more important parts of the literature of child study are reviewed. In this way students become acquainted with the writings of Preyer, Perez, Hall, Baldwin, Barnes, Sully, Chamberlain, Russell, Tracy, Warner, and others.

Historical Psychology.—This work embraces the history of psychology and race psychology. The work in the history of psychology is a review and study of different systems that have developed in the different countries, and also a study of the founders of these systems. The work in race psychology is a study of race elements—physical, mental, and spiritual. It is a study of the race intellect, conscience, and will, as expressed in the history and literature of the race.

Educational Psychology.—In all parts of the work in psychology the relation of the topics under discussion to teaching is made prominent. The courses in pedagogy, moreover, are especially intended to gather up the results of psychological, biological, and sociological study, and to evolve a science of teaching. Care is taken that the student shall get the larger view of the subject instead of being lost in the details.

THE JUNIOR SEMINAR.

The work accomplished in the junior seminar is directly preparatory to the teaching of the senior year.

Running parallel and supplementing the course in psychology, it emphasizes the fundamental principles of method, school management and school hygiene. It introduces the student to the problems of the teacher in the training school, and culminates only when assignments for teaching in the training school during the senior year have been made.

THE SENIOR SEMINAR.

Once a week all seniors meet with the superintendent to discuss problems arising from their work as teachers in the Training School. During the earlier part of the year, these problems are the difficulties which are common to the young teachers at this time. As the problems of discipline and effective instruction are met and mastered, the discussions tend more and more to problems which look to the future progress and pedagogical growth of the student. The wider significance of the class work is pointed out, and an attempt made to form the habit of noting this significance. Conditions in the public school, relating to programs, discipline and general management, are taken up. The students are led to form an acquaintance with the most helpful educational literature, both in book and periodical form. The aim is strong teaching from the start, and that the teacher will continue to grow in strength after graduation.

ELECTIVE PEDAGOGY.

The work varies with the needs of those forming the class. At the beginning of the year, each student files with the instructor a statement of the grade or subject in

which she wishes to specialize. A course of reading and problems are then assigned to each member, and reported upon and discussed in class. In the past, the course has covered a very careful study of the development of the child, in the light of the most recent child study literature; special methods in different subjects; extra opportunity to teach; and a study of educational classics.

II.—PHILOSOPHY OF EDUCATION.

I.—INTRODUCTION.

1. Meaning of the Philosophy of Pedagogy: A love of the wisdom to lead a child.
2. The Imprisonment of the Individual: His potential—an involution—matter, life, mind, spirit.
3. His Freedom: Emancipation, evolution, education.
4. The Mass—Its evolution.

II.—INTERNAL ENERGIES.

1. Evolving, or Growing: The vital, the mental, the social, the spiritual principles.
2. Hereditary, or Directive: a. Race Experiences; wonder, wander, heroic, romantic, altruistic. b. National Experiences; national organism, national mind, national spirit. c. Family Experiences; appearance, organic tendency, temperament, disposition, etc.
3. Volitional: desire, deliberation, choice.
4. Spiritual: deeper nature.

III.—EXTERNAL ENERGIES.

1. Nature: as matter and life.
2. Mind: man, home, church, state, society.
3. Spirit: of nature, of mind, of civilization, of God.

- (1). *These build the potential.*
- (2). *They occasion its unfolding.*

IV.—NATURES.

1. The Physical Life: medium of revelation.
2. The Mental Life.
3. The Social Life: opinion, institutions.
4. The Spiritual Life.

V.—LIVING MOMENTUM.

1. Individuality.
2. Personality: transfiguration, humanity.
3. Spirituality: transformation, divinity.

VI.—CHARACTER—EXPRESSION.

1. Pedagogical Graces: truth, beauty, good.
2. Christian Graces: faith, hope, love.

III.—SCIENCE OF TEACHING.

Science consists in knowing a systematic order of things and their relation, and the laws which regulate them. This is apparent in the science of astronomy, physics, chemistry, biology, mathematics, etc. Equally is this apparent in the science of the mind—psychology. This conception of psychology has given rise to the sci-

entific method in its study. The science of teaching grows out of the same conception. It consists of a knowledge of the physical, vital, mental and spiritual phenomena, involved in and around the individual, the laws which regulate them, resulting in his development. Without psychology there can be no science of teaching.

OUTLINE OF WORK.

I.—AGENCIES INVOLVED IN EDUCATION.

- a. Child—being to be educated.
- b. Teacher—person who directs.
- c. Nature—earth and its force.
- d. Man—civilization.

II.—REQUISITES OF THE TEACHER.

- a. Knowledge of self.
- b. Knowledge of the child.
- c. Knowledge of nature.
- d. A knowledge of the relation of the child to nature and civilization.

III.—ENDS TO BE REACHED IN THE EDUCATION OF THE CHILD.

- a. *Development of*
 1. Body—Health, sanitation.
 2. Mind.
 3. Spirit.
- b. *Participation—*
 1. Actualization—Individuality.
 2. Transfiguration—Personality.
 3. Transformation—Spirituality.

IV.—REQUISITES TO THE ACCOMPLISHMENT OF
THESE ENDS.

- a. *Body must have*
 1. Food—Dietetics.
 2. Exercise—play, gymnastics, athletics.
 3. Training.
- b. *Mind must have*
 1. Knowledge—Facts.
 2. Thought—Relations.
 3. Training—Practice.
- c. *Spirit must actualize*
 1. Duty—Virtue.
 2. Conscience—Good.
 3. Love—Spirituality.

V.—NECESSARY CONDITIONS IN THE EDUCATION
OF A CHILD.

- a. Activity is fundamental in all development, whether physical, mental or spiritual.
- b. Activity results, primarily, from energies acting from without.
- c. All the natures of a child are interdependent.

IV.—ART OF EDUCATION.

I.—ORGANIZATION OF SCHOOL.

- a. *Parts—*
 1. Children.
 2. Teacher.
 3. Directors.
 4. Patrons.

b. Functions—

1. Of children.
2. Of teacher.
3. Of directors.
4. Of patrons.

II.—GOVERNMENT OF SCHOOL.

c. Harmony.

- a.* Object—preservation.
- b.* Aim—discipline.
- c.* End—Freedom.

III.—INSTRUCTION.

a. Processes—

1. Thinking.
2. Knowing.
3. Expressing.

b. Results—

1. Knowledge.
2. Power.
3. Culture.
4. Motivity.
5. Realization.

V.—HISTORY OF PEDAGOGY.

1. Educational systems—the conceptions underlying them, their evolution, their founders, their success, their failure.

2. A study of the great educators—theoretical and

practical—and their influence on pedagogy and the social problems of their time.

3. The influence of the doctrine of evolution on pedagogy, and also its influence on moral and social problems—the universality of the doctrine.

4. The practical outcome of a study of the history of pedagogy in relation to teaching and in relation to life.

SCIENCE.

The work in science is done from the pedagogical standpoint. While the subject matter is treated, it is from the standpoint that the student is able to teach it to children or to adults.

The foundation of all knowledge consists in correctly representing sensible objects to our senses so that they can be comprehended with facility.—John Amos Comenius.

Science teaching is leading the pupil to be able to interpret his surroundings as a composite of objects and forces, and to see his own individual relation to nature, so as to be able to utilize these objects and forces and to derive a discipline and culture therefrom, whereby he may be a potent factor in the development of the race; and as a being who possesses an immortal nature, see in objects and forces and laws Providence as an intelligent and supreme ruler of the universe.

This conception of science teaching requires activity upon the part of the pupil. In accordance with this view, the work is done.

The school has well equipped

LABORATORIES.

The entire third story of the main building is now devoted to the departments of science. The laboratory for *Zoology and Botany*, over the library, is the largest, and contains ten tables, each large enough for four students. These are supplied with drawers, small aquaria and facilities for microscopic work and dissections. Around the walls are large aquaria, blackboards and cabinets containing the natural history collections and a department library. Especially noticeable are the herbarium cabinet and the fine cases for insects.

Adjoining the laboratory at the west end is the recitation room for biology and at the east end is the recitation room and laboratory for *human physiology*. This is supplied with demonstration table, anatomical models, charts and apparatus to illustrate the physics and chemistry of the human body.

Across the corridor is the *physical laboratory* and recitation room. It is fitted with substantial cherry-topped tables for individual work by about thirty students at once, and has also a large demonstration table for the instructor's use, with sink and water, drawers and closets. This room and two others used by the instructors in biology and geography are equipped with facilities for solar projection work.

The *chemical laboratory* adjoins the the physical, and is probably as conveniently arranged as that of any similar school in the country. It is furnished with eight desks, exclusive of that used by the instructor, having shelves,

cupboards and drawers with individual locks for three divisions of thirty-two students each. Each desk is intended for four students at a time and has two lead-lined sinks with water and gas pipes and a two-chambered ventilating hood with glass doors, lead floors, and copper flues through the ceiling for carrying off foul gases. The desks are of butternut and have renewable oil-cloth tops. The instructor's desk is similarly furnished, but has also apparatus for the distillation of water, including a large copper retort and condenser with block tin worm. There are also tables and a work bench with a set of tools for the making of apparatus. On three sides of the room are cases with glass doors for the department library and for apparatus, chemicals and other supplies; the remaining side has blackboards, bulletin board and keyboard.

Handsome cases all about the walls of the large corridor on this floor are also used for the larger apparatus of the department of physics and physiology and for museum collections in natural history. A gas machine is to be provided to furnish gas for laboratory use.

PHYSIOLOGY AND HYGIENE.

The claim of physiology to a place in the curricula of our schools is receiving fuller recognition in recent years. Its worth as a subject of instruction consists not alone in its contribution to the general culture of the student, nor in the mental discipline derived from its study; the practical knowledge it supplies must also be taken into account. As self-preservation is the first law of nature, the maintenance of the health of the body must

always be an object of interest to every intelligent person. Hence, as Herbert Spencer says, "such a course of physiology as is needful for the comprehension of its general truths, and their bearings on daily conduct, is an all-essential part of a rational education."

The methods of teaching physiology are those that belong in common to the various departments of scientific instruction. A knowledge of the subject, to have any value, must be founded upon observation and experiment. It is needless to say that this mode of procedure has not always been followed. Too often the memorizing of words has taken the place of the study of objects; ready-made conclusions have been learned by heart instead of being gradually reached by an inductive process. Even where observation and experiment are introduced, the object is usually to illustrate the descriptions of the text-book. All this is undoubtedly wrong. As in the other sciences, the student should begin by studying objects, and the text-book should be used afterward to supplement and systematize the knowledge gained from the laboratory work. This method is not impracticable, even in schools which have a very moderate equipment, and is the one which will yield the most valuable results.

In order to prepare students to be teachers of physiology and hygiene in the public schools, an elective course in these subjects will be offered to the members of the junior and senior classes. The course will extend through the school year. While most of the time will be devoted to a study of the functions of the body and to the conditions that are necessary for the preservation of its health,

the study of structure, gross and microscopic, will also be pursued, in so far as this can be made to contribute, in the time allotted to the course, to a better understanding of the normal bodily activities. A great deal of emphasis will be placed on the subject of hygiene, on which about a third of the time will be spent. This will include a consideration of such topics as the relation of bacteria to disease; modes of dissemination of communicable diseases; immunity; school-room heating, lighting and ventilation; the seating of pupils; hygienic conditions of study, and the case of the sense organs. The diseases of school children and the symptoms by which they can be recognized will receive especial attention.

About one-half of the recitation periods will be spent on laboratory work. In the study of anatomy dissections of suitable mammals will be made to illustrate the more important facts of structure. Injected specimens will be prepared for work upon the circulatory system. The laboratory is also supplied with charts, articulated skeletons and models, including a full set of the Bocksteger anatomical models, and eight sets of the Witmer models, and one large Auzoux model, of the brain. Lantern and microscopic slides will be used to illustrate the finer structure. Numerous experiments will be performed in studying the physiology of muscle, nerve, circulation, respiration and digestion. Students will become familiar with the use of the kymograph, sphygmograph, ergograph, reaction-time apparatus, cardiograph, phonendoscope, Du Bois Raymond inductorium, commutator, muscle forceps and lever, time marker, electrodes and other apparatus used in

a physiological laboratory. In connection with the work on hygiene a study of bacteria will be made in the biological department.

Reading will be assigned on the various topics discussed. A good supply of books for this course is kept in the library, including the standard works on anatomy, histology, physiology and hygiene.

SOCIOLOGY.

No subject of instruction has aroused such intense popular interest in recent years as sociology. This is due, according to one of our sociologists, to "a dawning social consciousness." We are beginning to realize that the society of which we form a part is not less worthy of our study than our physical environment. There is a growing conviction, moreover, that the organization of society and the modifications which it is undergoing should not be left to chance, but must be subject to intelligent direction if each member of society is to attain his highest possible well-being. Thus the interest in the study of sociology is not due merely to our curiosity, but is the outgrowth of the desire for better conditions of life for ourselves and others. Upon the teacher the subject has especial claims, for it is apparent that education does not mean merely the development of the powers of the individual, but his preparation for membership in a social organism. Hence the study of the child that is to serve as a basis for pedagogy must include a consideration of his social relations. We must know not only the value of the subjects of instruction, but also how the social environment of the

school can be made most effective in the work of education.

To meet the need for instruction in sociology an elective course, extending through the school year, will be offered in this subject. The first topic to be considered will be the scope of sociology and its relations to the allied branches of knowledge. This will be followed by a brief study of a number of problems of sociological and economic interest, as the evolution of our modern industrial system, trades-unions, strikes and lockouts, arbitration, co-operation, profit-sharing, workingmen's insurance charities, correction, trusts and monopolies, direct legislation, municipal ownership and socialism. In the latter part of the year the chief emphasis will be placed upon the study of education from a sociological point of view. This will include a brief survey of the leading European educational systems in comparison with that of this country, and the consideration of the material for a course of study and of the methods of instruction that are best adapted to train children to be intelligent and useful members of society.

The work of the class will consist to a considerable extent of reports by the instructor and students and of the discussion of the subjects presented. References to reading matter will be given in connection with each topic. Provison will be made in the library for suitable literature. A large addition has recently been made to the books of the sociological department, and every effort will be made to keep it abreast of the times.

PHYSICS.

Physics is studied by the laboratory method. Students here learn to "read nature in the language of experiment." They spend two hours consecutively in the laboratory once a week, performing the experiments themselves, taking notes, making drawings and explaining what they observe. This is followed by reading from reference books and discussions.

Special attention is given to the application of physical principles in the explanation of common inventions and every-day phenomena. Illustrations of the law of the conservation of energy are everywhere sought for.

The school is provided with many valuable pieces of physical apparatus, including a fine air pump, a hydrostatic press, a whirling table, an Atwood's machine, a delicate Trœmner balance, a microtome, a steam engine, a thermopile, a Tœpler-Holtz electric machine, a hand dynamo, Westinghouse generator of 125 volts, 15-ampere, four-horse-power gasoline engine, a motor, induction coils, galvanometer, batteries, heliostat with stereopticon slides, a spectroscope, a polariscope, a siren, sonometer, organ pipes, diapasons, etc.

But though good use is made of these, the members of the class are taught to improvise, from such materials as may be gathered anywhere without expense, apparatus which they can take into the public schools and use in performing simple experiments to explain the elementary facts of physics, chemistry, physical geography, meteorology and physiology.

Following are some of the pieces of

SCHOOL-MADE APPARATUS

which pupils are taught to construct:

Barometer,	Magnetic needle,
Air pump, from a bicycle pump, and accessory apparatus for the above pump to illustrate experiments in gases.	Plunge battery,
Lifting pump,	Boyle's law apparatus,
Force pump,	Capillary tubes,
Model of respiratory organs,	Spirit lamp,
	Unequal expansion apparatus,
	Conductometer,
	Air thermometer, etc.

In connection with this work students are taught how to bore and cut glass bottles, lamp chimneys, etc., and the manipulation of glass tubing and metals.

Further, the course in Sloyd has been so planned as to include a graded series of wood-working exercises in the making of apparatus to be used in the course of physics and chemistry and in teaching elementary science in the public schools.

CHEMISTRY.

ELECTIVE.

First Year—5 Periods Per Week.

This course assumes that the student has had at least a half year's work in chemistry in some high school.

The subject is given by laboratory work and recitations.

The laboratory is fully equipped and students are required to do individual work. Four periods per week of laboratory work are required for the first twenty-four weeks. The remaining time is spent in analytic work and requires ten periods per week. One laboratory period is equivalent to one class period.

The subject is correlated with Physiology, Physiography and Domestic Economy, that students may make immediate use of the chemical experiments in elucidating the teaching of the above subjects.

OUTLINE OF WORK.

I. General Chemistry—

- (1) Review properties of oxygen, nitrogen, hydrogen and carbon.
- (2) Study of compounds of the above elements.
- (3) Relative importance of these elements and their compounds in the inorganic and organic worlds.
- (4) Writing of chemical equations and solution of chemical problems.
- (5) Characteristic acids, bases and salts.
- (6) Preparation of salts, acids and bases.
- (7) Study the properties of typical acids and bases.
- (8) Study properties of non-metals, metals and some of their compounds.

II. *Quantative Analysis*—

- (1) Twenty or more solutions, containing but one salt.
- (2) Solution containing any or all of the common metals.
- (3) Alloys.
- (4) Baking powder, etc.

Second Year.

I. Organic Chemistry—24 weeks.

1. Methane and Ethane.
2. Halogen Derivatives of Methane and Ethane.
3. Oxygen Derivatives of Methane and Ethane. Alcohols—Fermentation—Formic and Acetic Acids, etc.
4. Nitrogen Derivatives of Methane and Ethane or the Cyanides, etc.
5. Hydrocarbons of Methane or Paraffins.
6. Oxygen Derivatives of Paraffin Series, or the Higher Alcohols—Stearic Acid, Soaps, Glycerine, etc.
7. Carbohydrates—Glucose-Sugars—Starch—Gums, etc.
8. Benzene Series of Hydrocarbons and their Derivatives, etc.

II. *Quantative Analysis*—10 weeks.

III. Mineralogy—2 weeks.

Blow pipe tests, heating in open and closed tubes, etc., simply to determine name of many of common minerals.

BIOLOGY.

BOTANY.

Physiology—

Protoplasm and its movements.
Absorption. Diffusion. Osmose.
Absorption of liquid nutriment.
Turgescence. Root pressure. Transpiration.
Path of movement of liquid in plants.
Diffusion of gases. Respiration in plants.
The Carbon food of plants.
Chlorophyll and the formation of starch.
Nutrition. Members of the plant body.
Growth.
Irritability. Causes of movement in plants.

Morphology—

Spirogyra or "brook silk." *Ædogonium*.
Vaucheria or "green felt." *Colochæte*.
Brown and red algæ.
Fungi; moulds; downy mildews, rusts; ascomycetes.
Liverworts; mosses.
Ferns; horsetails; club-mosses; quillworts.
Comparison of ferns and their relations.
Seed-plants. Gymnosperms. Angiosperms.
Lessons on Plant Families.

Ecology—

Winter buds. Growth of leafy shoots.
Leaf arrangement.
Seedlings.

Formation of early spring flowers.

Seed distribution.

Struggle for occupation of land.

Soil formation by plants.

Plant communities.

Adaptation of plants to climate.

ZOOLOGY.

Morphology—

Study and dissection of typical forms—

Earthworm.

Grasshopper.

A fish.

Frog.

Turtle.

A bird.

A mammal.

Study under the microscope of *Amœba* and *Paramecium*, and of sections and tissues of animals of higher groups.

Physiology—

Protoplasm and the cell.

Animals consisting of a single cell.

One-celled plants.

Physiology of the simplest animal.

Manner and means of taking food.

Metabolism—

Secretion.

Digestion.

Assimilation.

Production of energy.

Elimination of waste—

Respiration.

Excretion.

Growth.

Movement.

Irritability.

Reproduction.

Physiology of many-celled animals—

Comparison of the functions of *Amœba* with those of higher organisms.

Organs for the performing of function.

Adaptation of form to function.

Adaptation of form to environment.

The elements of classification and the development theory.

ZOOLOGY.

(Optional.)

Principles and main outlines of classification.

Laboratory and field work.

Natural History studies of chosen groups.

The museum collections of entire animals and of dissections and preparations of special parts, together with a large series of permanently mounted microscopic preparations, furnish abundant material for illustration.

Students will be required to dissect a considerable number of forms and to make permanent microscopic preparations. The laboratory is provided with a good equipment of microscopes, micortomes, stains and reagents. Alcoholic material for dissection is kept on

hand, and fresh material is obtained as required. Considerable time will be given to field work and the study of habits. The reference library is well supplied with the literature of this subject.

NATURAL HISTORY.

Studies of the homes, habits and food of animals.

Insects—

Monarch Butterfly—Depositing the egg; form and appearance of the egg; hatching; mode of feeding; moulting and growth; pupation; study of the chrysalis; emergence of the imago; term of life; existence through the winter. Other common insects will be studied in a similar way. Students will be encouraged to study the insects in the field and to make collections for further study and comparison. For this purpose frequent excursions will be made to points of interest in the vicinity.

Literature—

Comstock's Insect Life.
Hyatt & Arms Insecta.
Scudder's Butterflies.
Scudder's Frail Children of the Air.
Gibson's Sharp Eyes.
Weed's Life Histories of American Insects.
Miall's Natural History of Aquatic Insects.
Brightwen's Inmates of My House and Garden.
Badenoch's Romance of Insect Life.
Lubbock's Ants, Bees and Wasps.
Articles in magazines and periodicals.

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Department of Public Relations

COOPERATING WITH

Department of Public Instruction, The County Superintendents of Public Instruction, The Colorado Education Association awards this

Reading Circle requirements for the year

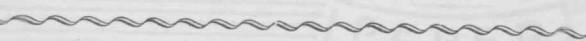
Craig B. Spineer

Executive Secretary of Colorado Education Association

Freed

Superintendent of Public Instruction

COLO



Birds—

Red-winged blackbird, magpie, flicker, Canada jay (camp robber), crested jay, English sparrow, crimson-headed house finch, robin, water ousel, meadow lark, horned lark, yellow warbler, Bullock's oriole, quail, ruffed grouse, ptarmigan, cliff swallow, barn swallow, etc.

Literature—

Chapman's Hand-book of Birds.

Elliot's North American Shore Birds.

Maynard's Hand-book of Sparrows and Finches.

Baskett's Story of the Birds.

White's Natural History of Selborne.

Many volumes by Olive Thorne Miller, Samuel Lockwood, Bradford Torrey, Schuyler Mathews, C. C. Abbott, Ernest Ingersoll, and Ernest Seton Thompson; also magazine and periodical literature.

Mammals—

Studies of fur-bearing animals; common wild animals; big game; noted animals of other countries.

Literature—

Lydeker's Royal Natural History.

Kingsley's Popular Natural History.

Ernest Seton Thompson's Wild Animals I Have Known.

Ernest Seton Thompson's Biography of a Grizzly.

Ernest Seton Thompson's Trail of the Sandhill Stag.

White's Natural History of Selborne.

Articles in magazines and periodicals.

Reptiles, Frogs and Fishes—

Studies of some of our native species.

PHYSIOGRAPHY.

This course aims to make not only students of geography, but *teachers*. To be the latter requires: 1. A broader and deeper knowledge of the subject than the prospective teacher expects to teach. 2. The skill necessary to sketch and model readily, and to be master of good methods. 3. That kind of training which enables the student to recognize in his own neighborhood the elements and forces of the whole world. Ritter says: "Wherever our home is, there lie all the materials which we need for the study of the entire globe."

The geography *library* contains about one hundred and fifty bound volumes, well representing such lines as: Descriptive, commercial and historical geography, physiography, geology, meteorology, astronomy, agriculture, methods and general geographical reading, besides most of the standard geographical magazines in the English language. The government publications which are of interest to the student of geography are regularly received.

We practice *daily observations* of climatic elements, both for immediate results and as a preparation for advanced work. These observations include: Thermometer

readings, barometer readings, direction and velocity of wind, clouds, rain or snow, sun's noon altitude, place and time of sun's rising or setting.

Field work is also given to enable pupils to examine any locality from a geographical standpoint. The same work is the basis of primary geography teaching.

The *laboratory* furnishes the opportunity to study the most faithful representations of nature, as government maps and charts, photographs and accurate models of actual and typical forms in nature. Work and study upon such materials accompany text-book study and readings, and have produced marked results.

We have all the customary *apparatus*, as terrestrial globes, celestial globe, black globe, tellurian, solar lantern, wall maps, relief maps, thermometers, barometers, hygrometers, rain gauge, and a number of home-made pieces. Lantern views, photographs and models have become an important feature in our equipment.

We are indebted to the Santa Fe and Colorado Midland Railroads for some excellent and valuable framed pictures, which are very useful as geographical illustrations. The Florence & Cripple Creek and Midland Terminal roads have also given us excellent views.

Cabinet specimens are rapidly accumulating, including already a collection of woods, agricultural products, and an interesting mineral cabinet. Contributions from students and all friends of the school are always welcome.

OUTLINE OF THE WORK.

Mathematical Geography and the necessary Meteorology are taken up after Physiography of the lands. While the latter is being studied, constant observation and records of climatic elements are required.

Continuous records are expected of the following elements: Temperature, relative humidity, dew point, barometer pressure, sunset (place), sunset (time), sunrise (time), sun's noon altitude, sun's meridian time, clouds—kind—proportion, wind — direction — velocity, precipitation.

PHYSIOGRAPHY OF THE LANDS.

Submerged and exposed portion of earth's surface—

Divisions of submerged area—

Deep seas.

Continental shelves.

Mediterraneans.

Sediments of marginal and abyssal seas.

Distribution of ocean life.

General conception of wasting land—

Illustrations showing how the rate varies with climate, rock material and texture, and surface slopes.

Conclusion—All lands, regardless of texture or dimensions, must in time reach base level.

Contrast constructural and destructional forces.

Systematic succession of forms.

Classification of land forms based on evolution.

Weathering—

Preparation for transportation.

Mechanical agencies.

Chemical agencies and solution.

Organic agencies.

Manner of access of agents of weathering.

Soils.

Common minerals and rocks.

This section will cover the work of several weeks. A recognition of the commonest minerals and rocks is demanded, but they are treated chiefly as illustrations of the weathering processes and as sources of soils and other rocks.

What becomes of the rain—

Evaporation.

Percolation.

Run-off.

Work of running water—

Corrosion—

By chemical action and solution.

By mechanical work of tools.

Transportation—three ways—

In solution.

In suspension.

By rolling and pushing.

Deposits from water—

Interpretation of deposits.

Grading.

River life, features common to all regions—

Constructional valleys.

Modification of constructional valleys.

Development dependent upon materials—

 Differential deepening.

 History of falls.

 Differential widening.

 Migration of divides—captures.

 Adjustment to structure.

Stages of development—

 Infancy, youth, adolescence, maturity, old age.

Interruptions of cycle —

 Volcanic, climatic, crust movements.

History and characteristics of different constructional forms.

(a) Under ordinary climatic conditions, plains plateaus, mountains, volcanic features.

(b) Topographical features due to unusual climatic conditions.

 Features of arid countries.

 Of arid once humid.

 Of glaciated countries.

Work of the sea upon shore lines—

 How the shore line is offered to the waves.

 Forms of each as offered.

 Nature of waves and their work.

 Tides.

 Development of coast lines offered by the several constructional agencies.

THE EARTH AS A GLOBE.

Discussion of the mathematical principles involved in climate, and through climate in the physiography of the lands.

Essential consideration, the distribution of sunshine.

Secondary consideration, locating places on surface of the earth.

Form of the earth—movements of the earth—

Longitude and time, with special reference to the determination of longitude.

Phenomena of our latitude—phenomena of other latitudes—

Tilting of horizon in traveling north or south—

Changing position of oblique circles and of north star.

Sun's altitude—various places and seasons.

Place of rise and set (from the globe).

Apparent path at any place on any day.

Lengths of day and night—demonstration of seasons—

A general view of the globe.

All relations shown with apparatus to be carefully translated into phenomena as seen from the earth.

THE ATMOSPHERE.

Nature of the atmosphere—

Geologically considered.

One of three envelopes.

Action upon other envelopes (stress here).

By virtue of its close relation to :

1. The earth's heat.
2. The earth's moisture.
3. The earth's life.

Also through :

4. Chemical action.
5. Mechanical action.

Composition of the atmosphere—

With relation to life.

With relation to weathering.

With relation to heat.

Heat of the atmosphere—

Absorption, conduction, convection.

Heating by pressure.

Control of heat distribution.

Latitude.

Altitude.

Pressure of water.

Water of the atmosphere—

Three states of water.

Dew point.

Relative humidity.

Evaporation.

Clouds.

Condensation and precipitation.

Circulation of the atmosphere—

How equilibrium is disturbed by heat.

Planetary circulation.

Equatorial calms, trades, tropical calms, westerlies.

Phenomena of shifting belts.

Contrast of summer and winter hemispheres.

Monsoons.

Special winds not cyclonic.

Storm areas of temperate latitudes—

High pressure areas.

Low pressure areas.

Path of storm centers.

Special winds connected with cyclones.

Weather maps—

Principles which make forecasting possible.

Rainfall chart of the world.

METHODS IN GEOGRAPHY.

I.—Primary Work (first four years), when Geography and Nature Study are not separated, embracing the following:

1. Mathematical Concepts.
2. Weather Elements (and seasons).
3. Plants.
4. Animals.
5. Minerals.
6. Physical Properties and Phenomena.
7. People.
8. Type Studies.
9. Representation.

II.—The course of Geography proper (three or four years).

Material of Geographic Studies:

Anthropic (read down).	{	Races. Industries. Society. Political Divisions.	
Astronomical Mathematical Geography	{	Natural Divisions. Life Distribution (formal). Life Conditions.	{ The traditional course, chiefly Areal Geog- raphy.
Physical (read up).	{	Forms. Forces. Materials.	

The above subjects are detailed and arranged in order according to the principle of Pedagogy to constitute a course of study.

APPLICATION OF THIS COURSE TO GRADE WORK.

Map making, projections.

Sketching.

Moulding in pulp.

Sketching in sand.

Supplementary reading.

Course of study for grades.

Primary science teaching.

MATHEMATICS.

The fundamental purpose of the department of mathematics is two-fold: namely, to induce and cultivate power in mathematical thinking, and to apply this power to the

practical use of making the teaching of arithmetic and of elementary algebra and geometry in our common schools more rational and effective.

In all courses given the primary effort is to develop accuracy of thought, clearness of judgment, forcibleness of expression and rapidity and accuracy of action.

It is believed that satisfactory teaching is impossible unless the teacher's work is founded on a real knowledge and mastery of the principles involved in the subject. Hence the old question "How?" is constantly replaced by the more modern and vital "Why?" Thus memorizing is replaced by understanding, and the mathematical parrot by the mathematical thinker—the assumption being that the individual who knows *why* he acts will easily and rightly construct the *how*.

In all work the student is urged and assisted to interpret concretely and in terms of his own experiences the truths he learns, so that they may become a part of himself. He is kept constantly in a laboratory atmosphere, and is encouraged to discover new truths, or new ways of testing and proving truths already known.

A special course in arithmetic is worked out in which the effort is made to arrive at the fundamental principles underlying the work in arithmetic, and thus to discover the material that should be given to children, and the best methods of presenting it to them.

Courses in advanced algebra and geometry and in trigonometry and coordinate geometry are offered. Whenever there is demand for them, courses in more advanced mathematics are given.

LITERATURE AND ENGLISH.

The general aim of the work of this department is four-fold: first, to give the pupil some conception of the meaning of the greater forms of literary expression in their relation to the development of man; second, to introduce the student to a few masterpieces in such a way as to lay the foundation for enjoyment of literature as art; third, to develop the power of self-expression side by side with knowledge and interest; fourth, to bring forward and illustrate in the treatment of the pieces read those fundamental principles which should be used by grade teachers in preparing the literary material selected for English work, and in correlating with it oral and written composition.

TEXT BOOKS.

Pupils will find themselves greatly assisted in their work by the possession of a few books which, unlike those belonging to the library, may be always at their command. Especially recommended (if the student have no more extensive works covering the same ground) are certain history and literature primers, especially Fyffe's History of Greece, Creighton's Rome, Brooke's English Literature, Jebb's Greek Literature, and Dowden's Shakespeare (price, thirty-five cents per volume). Other desirable helps include a good dictionary, an historical atlas, a manual of mythology, and an annotated edition of Shakespeare's chief tragedies and comedies.

PREPARATORY YEAR.

The primary purpose of the preparatory course in English is to prepare for regular junior work a class of pupils who have not received regular high school training, but who have in most instances had experience as teachers. There is accordingly presupposed on the part of the student more maturity of mind than is usually found in high school classes, and more work is attempted than in any high school class. In fact, there is made in this class an attempt to give in one year the essentials, both in knowledge and mental attitude, of what is given in the high school course.

The literature of the course consists of :

1. The Narrative: Enoch Arden, Serab and Rustum, the Rime of the Ancient Mariner.
2. The Drama: Macbeth.
3. The Essay: Sesame and Lilies, Crown of Wild Olive.
4. The Complex Modern Poem: In Memoriam.

The composition work of the course is intended to give the student a definite idea of the fundamental principles of clear and effective writing and a reasonable facility in applying these principles in his own composition.

I. (1) Review of grammar with special attention to syntax and good use, and to the securing of a basis for such teaching of the sentence in the grades as shall be of genuine aid in expression, oral and written. (2) Theory of the paragraph as an organic unit; elementary laws of the chief types of composition (narration, description, exposition).

II. (1) Introductory study for conception of the fundamental meaning of literature in its relation to the developing human consciousness. (2) Presentation of the first great form of literature, the natural epic; study of the Iliad as the greatest example of this form. (3) Practice in narrative structure through discerning the theme of the short story and synthesizing the action in such a way as to show clearly the development of this theme. (4) Weekly practice in paragraph writing: one narrative paragraph based on personal experience and one expository paragraph based on some phase of the current literary work.

III. Brief study of transition from epic to lyric and drama in Greece. Presentation of *Œdipus Tyrannus* and *Œdipus Coloneus* for simple dramatic structure and for the indwelling idea as illustrating the growth of the Greek consciousness since its expression in the Iliad.

SENIOR YEAR.

I. (1) Introductory survey of the development of English literature to the time of Shakespeare, applying the principles gained from the outline study of the development of Greek literature. (2) Careful study of one of Shakespeare's great tragedies. (3) Study of one novel for theme, structure, treatment, and comparison with the epic and the drama.

II. (1) Brief study of the development of English prose, with readings in the eighteenth and nineteenth century essay. (2) Application of the principles of composition to larger wholes: three long themes. (3) Applica-

tion of aims and methods of literary study to work in the grades.

ELECTIVE COURSE.

Earlier Nineteenth Century Poetry. The chief aims of the course are: (1) To develop the characteristics of a particular literary period (that of the Georgian poets) more fully than is possible in the required courses. (2) To give special attention to a great form of literature not taken up in the other courses, namely, the lyric. (3) To study in detail a variety of lesser art-wholes for greater refinement of appreciation and for aid in presenting literature to children with more point and delicacy.

I. Introductory study for (1) deeper conception of the nature of poetry; (2) primary laws of poetic form as related to content.

II. (1) Conditions and characteristics of Poetic expression in the eighteenth century, with some study of (a) Pope (b) the transition poets.

III. (1) New sources of inspiration in nineteenth century poetry. (2) Careful reading of many individual poems of Burns, Wordsworth, Coleridge, Shelly, Byron. Keats. (3) Study of the characteristic quality, feeling and attitude toward life and its deeper questions of the Georgian poets, based on the poems read. (4) Suggestions for comparison of the Georgian with the Victorian poets.

LATIN.

In the study of Latin, three objects are kept constantly in view :

1. Careful attention is given to the etymology of English words of Latin origin. Students are encouraged to search for and note the English derivatives of Latin words, with correspondences and differences in shades of meanings. Thus, by careful comparison of the words of both languages, students will be given such an acquaintance with English words as can by no means be obtained from the study of English alone.

2. A strict observance is made of the idioms of the language. Roman forms of thought are examined in order to make a comparison with the idioms that are peculiarly English. In no way can a student better see the beauty and strength of his own language and be inspired with a proper regard for his mother tongue. A student never knows that his own language contains idiomatic expressions until he has studied some language other than his own.

On all suitable occasions, and in the reading of Latin texts, especial care is taken to form an acquaintance with the customs, habits and literature of the Roman people. Roman history is thus brought nearer to the student through the medium of a knowledge of Roman thought and speech. Accuracy of pronunciation and the mastery of Latin quantity is insisted upon. The systematic study of prosody begins with the reading of Latin verse. The time allotted in the course to this study is five hours per

week for two years. It is confidently believed that under proper linguistic methods, the time is sufficient to gain a working knowledge of the language; to read such texts as will render students proficient in teaching elementary Latin; to form within them some taste for further study, and secure to them some of the culture and refinement which are the natural concomitants of classical study. This work is done to the end that proper methods may be developed.

HISTORY.

History, as well as geography, is largely a culture study. As geographical teaching is building up in the pupil's mind vivid notions of the earth as the *home* of the human family, so historic teaching is building vivid concepts of the *deeds* of the human family; not only deeds in reference to time and place, but in relation to each other, and as a great whole, involving all human action. The study of geography and history are very closely related. They are a study of man in his home moving toward his destiny.

That those who are preparing to teach may receive information, power and culture, and be imbued with the right spirit and notion of presenting this great subject to children, the course pursued by them is substantially the same as that which they should teach, only it is more comprehensive.

1. A course of juvenile historic readings of different countries, especially the United States and England.

The work outlined for the school is as follows:

2. A methodic and comprehensive course in United States history.

3. A course in general history, such as will develop the relations of the different races of the human family, such as will show its progress in civilization, and such as will reveal the great law of *inner connection*, which is in and among all things.

The school is well prepared to do this work:

1. It has a rich library of juvenile historic literature, an excellent library of United States history, and a very creditable selection of general histories.

2. It has historical charts, maps and reference books and relics, which add to the interest of the subject.

3. As a rule the laboratory plan is followed, known as the "Seminary Method." The student is put in possession of sufficient material or data by which he can work out the subject in the library. The result is an accumulation of knowledge, development of power, and culture.

READING AND INTERPRETATION.

The course in Reading is based upon the use to be made of books in life:

1. Training in grasping factual matter, rapidly, accurately and orderly.

2. Training in finding the meaning of a book, then the study of the character. This involves training of the imagination to experience the emotions portrayed, and to catch the spirit of the literature.

3. Training in reproductive power. Responding vocally and physically to such literature as requires ex-

pression for its fullest appreciation, gives pleasure, and a deeper insight into the meaning of the text.

The two years' work is divided into three parts:

I. The use of the narrative, and expository literature to gain facility in applying "I" of the foregoing. This study is to prepare the teacher to assist her pupils to read history, science, biography, etc., and to classify the subject matter in an orderly manner.

II. Interpretation: The use of Julius Cæsar or The Merchant of Venice in applying "II" and "III" of the above.

a. Rapid reading of the play for theme, and the subject and function of each scene.

b. Reading to get a clear notion of the separate influences, and what each character contributes to the play.

c. Intensive study of selected scenes, line by line, followed by the impersonation of the characters.

d. The representation of scenes, and plays by the classes.

III. Methods: (1) The selection of material, and the presentation of a Course of Study applying the basis already given, for the grades, including the high school. (2) The observation of the teaching of Reading in the different grades, followed by conferences with the Supervisor. (3) The practice of exercises for the correction of voice and speech defects in children. (4) Discussion of the principles employed in teaching of Reading.

CIVICS.

Realizing the importance of intelligent citizenship and the necessity of clear views of our social and political relations, much stress is laid upon this branch of study. From fifteen to twenty weeks are devoted to a careful study of the subjoined topics: The nature, theory, and necessity of government. The rights, obligations and duties of citizenship. The distinctions among the several forms of government. Republic defined, and the distribution of the powers in our republic. The study of these departments is national, state, county and local government. The relation of the citizen to each grade of government of which he is subject. The relation of states to each other and to the general government. The history of the formation of our government and the adoption of the constitution. A careful analysis of the text of the constitution. Composition of each house of congress, qualifications for membership, apportionment, mode of selecting, term of office, salary, etc. The officers, committees and rules of each house. The powers and limitations of congress. The executive and several departments of state—treasury, war, navy, interior, postoffice, attorney general, state and agriculture. The subdivisions and duties of each department. The eligibility, nomination and manner of election of president and vice president. The term of office, salary, power and duties of each. The law of presidential succession and impeachment. The constitution of the federal courts—supreme, circuit and district, claims and commissions, with officers of each. Distinc-

tion between original and appellate jurisdiction. Distinction between federal and state courts. Congressional control of territories, districts and other federal lands. Formation of new states. Personal rights guaranteed by the constitution.

Lectures and lessons on the following topics of the school law of Colorado: The school district, classes, officers, their election and duties. The sources of revenue for the school fund. Composition and duties of the state board of land commissioners and the state board of education. Relation of the state and county superintendents to the schools of the state. The location, purpose and maintenance of the several state schools of higher and professional education. The qualifications and duties of teachers in the public schools of the state; the branches to be taught, text-books, school blanks and reports; and school year, school month, school day and public holidays.

NORMAL DRAWING COURSE.

TWO YEARS.

For the purpose of those desiring to fill positions as supervisors of drawing, a Normal drawing course is given. The course of study will be drawing in light and shade in charcoal and ink from still-life, casts and life, clay modeling, from ornament, antique and life; free-hand perspective and sketching, design and composition as applied to book covers, surface patterns and borders. Composition as applied in line, light and dark, color and landscape. Water color from still-life and landscape. Instrumental drawing which covers the principles of common working drawings, both architectural and mechanical. Chalk modeling and methods of drawing.

Psychology—See Junior year.

English and Literature—See Junior and Senior year.

History of Art and Philosophy of Education—See Senior year.

Teaching in Model School.

REQUIRED DRAWING.

The required work for use of grade teachers in elementary and secondary schools. It is divided into three inter-related lines—representative, decorative and constructive.



Art Room.

OUTLINE OF WORK.

Light and shade drawing in pencil, charcoal and ink, from still-life, ornament, antique and life.

Perspective—Lessons and lectures on freehand and instrumental perspective and sketches required illustrating principles.

Designs—Decorative and applied design composition as applied in line, light and dark, color and landscape.

Water color — Still-life and landscape chalk modeling.

Blackboard sketching—Quick work for illustration.

Clay modeling—Casts and antique.

ELECTIVE.

A course for students who desire to do advanced work. The aim is to teach true art according to the highest ideals with latest and most approved methods. The course is as follows: Drawing from still-life, casts, antique, head from life and life figure.

Perspective and clay modeling.

Design and composition.

Painting in oil and water colors from still life, costume and life.

Illustration in pen and ink and wash.

DRAWING.

GRADE ONE.

Color—Teaching of standards, collecting examples and use of color in decorative arrangements.

Nature Study—Simple flowers, grasses, etc. Lead children to consider arrangement on sheet. Blackboard drawing and illustrative sketching from memory.

Object drawing—From common flat objects or objects pertaining to a child's life.

Paper cutting and clay modeling.

Correlation and picture study.

GRADE II.

Color—The review of standards and one tint and shade of each. Laying scales of six colors in three tones of each color.

Nature study of plants, insects, birds and animals.

Elementary Design—Arrangement of lines, spots and nature forms.

GRADE III.

Nature Study—Plants, simple sprays and simple landscape.

Object Drawing—Simple objects and composition in simple grouping.

Elementary Design—Teaching of line. Balance of proportion. Free arrangement of units suggested by flowers for borders or surfaces.

Historical Ornament—Study of Gothic ornament.

Life Drawings—Drawings in mass of children.

GRADE IV.

See Grade III.

GRADE V.

Color—Review of color study and study dominant, analagous and complimentary harmony.

Nature Study—Drawing of pleasing arrangement within appropriate enclosing forms and application of it to book covers, etc.

Decorative Design—Application of original units in design. Applied design.

Historic Ornament. Egyptian.

Object drawing. Pencil sketches of objects in group.

Pottery making and decorating.

GRADE VI.

See Grade V.

GRADE VII.

Color—Review of work given in V and VI grade. Study of various harmonies.

Nature Study—Study of pleasing space divisions within enclosing geometric forms.

Object Drawing—Study of perspective principles. Light and shade drawings of groups.

Design and Composition—Principles of composition as applied in line, light and dark, and color, and to landscape composition. Study of balance and rhythm, using abstract spots as elements of design.

Historic Ornament. Greek Architecture.

Constructive Design—For vase forms, candlesticks, etc.

Life Drawing—From children in interesting attitudes.

GRADE VIII.

See Grade VII.

GRADE IX.

Color—Study of color harmony—nature study; study of plant growth and arrangement of drawing upon the paper.

Design—In one tone, study of balance and rhythm, using abstract spots as elements of design. Study of historic examples of design.

Object Drawing—Studies in pencil and pen and ink in groups. Shaded drawing in charcoal from still-life.

Constructive Design—Original designing of useful articles—comb, buckle, etc.

GRADE XI.

See Grade X.

HISTORY OF ART.

A course of lectures on the history of art and fine art principles will be given for seniors.

These lectures will occur once each week through one semester, and will aim chiefly to make students more familiar with the work of the great artists and to show the value of fine art to the teacher.

Picture making in school work, considerations on methods and courses of "form study and drawing" now in use, and a brief review of studio and office practice will form an interesting part of this course.

The well known principles of light and shade, color, projections and ornament will be demonstrated in the recitation room.

MUSIC.—
COURSE OF WORK.

Every effort will be made to give students of this department the same thorough grounding in Music that they secure in English and other branches—not merely a theoretical but a practical knowledge of teaching to sing. To this end, a special feature of the training will be demonstrations of the child's voice by the director of the department, showing the various kinds of voice with attention to the peculiarities, quality, range and defects of each. This study will cover voices of all ages from the kindergarten to senior classes of the Normal department. The ability to treat voices in such a way as to conserve them and permit their best development is the first essential to a teacher of this art. The demonstrations will show what may properly be expected as to purity, power, endurance, flexibility, range and compass. As each defect appears, it will be dealt with and treated. These demonstrations thereby became a most valuable series of lessons in the art of teaching, as well as in the method of singing.

Skill in this work is attained only by those who make a special study of the child's voice at first hand and who then studiously compare the results of their own observations with those of other specialists qualified to speak.

The director is well informed as to the best thought on this subject, having had fifteen years of successful ex-

perience in the work, and recently a course under Mr. Tomlins, acknowledged to be the authority on children's singing.

Further technical training of special teachers is outlined in the following course :

FIRST YEAR.

1. Sight Singing and Theory.
2. Musical History.
3. Harmony.
4. Psychology.

SECOND YEAR.

1. Sight Singing and Theory.
2. Composition and Analysis.
3. Methods.
4. Philosophy of Education.

Note—In Composition and Analysis, hymn tunes, glees, madrigals, part songs, oratorios and opera choruses will be studied with reference to their harmonic content and musical form. Illustrations will be sung in order that students may have the effect and peculiar quality of each well impressed upon the consciousness.

Detail of work will more fully appear by reference to Course of Training School, which is also included in course for music supervisors. Persons taking this course will teach in Training School throughout the final year.

Lectures on the masters in Modern Music will be given each alternate Friday throughout the year, with vocal and instrumental selections from their works and stereopticon illustrations of the people, places, and instru-

ments related to each subject. The course will comprise the following: Lassus and Palestrina, Bach, Handel, Haydn, Mozart, Mendelssohn, Schumann, Schubert, Chopin, Rossini, Spohr, Beethoven, Wagner, Folk Songs.

These lectures will treat not only of the works from a musical standpoint, but also from that of an expression of the spirit of the times in which they were composed, and will endeavor to show that the development of the art was in response to a deepened consciousness and an enlarged appreciation of the meaning of life and the dignity of man.

A glee club is organized at the beginning of the year for the practice of glees and part songs, and is free to all students.

A chorus will be formed to study anthems, choruses of the standard oratorios, operas, etc. Students who are qualified to do so, will be allowed to become members.

A course in piano will be made accessible, by which as thorough a knowledge of the resources and literature of the instrument will be given, as the time at the student's disposal will permit. Musical playing is the desideratum and technical exercises are to be clearly adapted to this end. Good touch is an achievement possible to all persons. Thought and sentiment, the mind and heart, can be expressed by a variety of touch as great as is the variety of feelings which move the heart. The problem is to bring these feelings to expression, through the adjustment of the muscular activity to the mechanism of the piano. Our teachers know how to do this.

Instruments and facilities for practice will be provided for those who desire them.

An equivalent in piano playing will be accepted for second year theory. Students will be allowed to pass out of any subject of this course by examination.

Diplomas will be given to all who satisfactorily complete the two years' course and give evidence of necessary teaching power, recommending them as directors of music in public schools.

To such persons as complete the first year's course, certificates will be granted, which will be a recommendation to teach as specialists in the primary and intermediate grades.

All Normal students are expected to take first year's course in sight singing and theory and one semester of second year in methods and to teach and observe the work in the Training School.

COURSE FOR TRAINING SCHOOL.

FIRST YEAR.

Songs and exercises from teacher's pattern. To produce the third and fifth of any key tone and their octaves. Accent and sign for the same. To sing and write exercises from memory. To point phrases on modulator after teacher's pattern. To indicate the same by manual signs. Primary and secondary forms.

The beat divided into halves; into quarters. Two-part exercises from manual signs. Ear exercises. Exercises sung to a given syllable.

Daily practice with manual signs and modulator. Notation necessary to the foregoing.

SECOND YEAR.

The dominant chord. To sing every interval possible with the tones of the tonic and dominant chords. Songs and exercises sung, written, pointed from modulator, and indicated by manual signs, from memory. Two-part rounds. Exercises and songs beginning with half-beat tones. The beat-and-a-half tone. Two-part songs. Daily use of ear exercises, manual signs and modulator. Familiarize pupils with rhythm employing half-beat and quarter-beat tones.

THIRD YEAR.

The sub-dominant chord and all new intervals possible with tones of the same. Melodic resolution of tones. Motion of parts. Two-part singing. Simple dissonances. Sing, write, point, and indicate the half-and-two-quarters beat; the two-quarters-and-a-half beat. The three-quarters and quarter beat. The triplet. Given the key tone to recognize and write any exercise or song involving the foregoing elements. Ear exercises daily.

FOURTH YEAR.

Meaning of key and time signs. Ear exercises daily. Chromatic seconds. To reproduce easy songs from teacher's singing. Three and four-part rounds. Two-part songs. Transition to first remove. Given C to find any key. To reproduce the modulator as far as four sharps and four flats. Part pulse dissonances. Daily use of modulator and manual signs.

FIFTH YEAR.

Daily use of ear exercises, modulator and manual signs. Quarter-beat rest. Syncopations. Chromatic tones taken by leaps. Sharp four and flat seven as chromatics. Voice leadings indicating transition. Chromatic resolution.

SIXTH YEAR.

Minor modes. Phrases, sections, periods, melodic cadence. Daily use of modulator, ear exercises and manual signs. Major, minor and diminished chords contrasted.

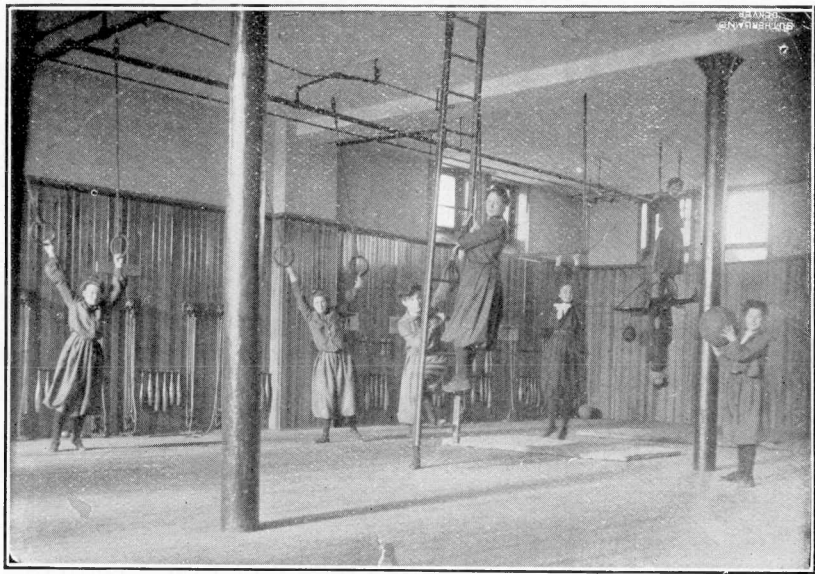
SEVENTH YEAR.

Write relative minor to a given major phrase or section and to sing the same. Three-part songs and exercises. The modulator by tone. To know the common chords of the major and minor mode, also the dominant seventh and supertonic seventh of both modes. Daily use of ear exercises and modulator.

EIGHTH YEAR.

Transitional modulation. Transposition. Rare divisions of time. Transitions of two and three removes. To determine the key in imperfect notation. Three-part songs and exercises. Daily use of ear exercises and modulator.

Note.—This outline is intended to give the natural order in which the elements of music are acquired and the time necessary to their acquirement by the average pupil under good teaching. It is a guide to the teacher as to



Gymnasium

the order of presentation, however, rather than as to the time necessary. Technical exercises are to be incidental to singing.

HIGH SCHOOL.

Pupils who have had no previous training will have daily instruction during the first year in the Elements of Music, with special attention to the following items: Key-relationship, tone quality, rhythm, simple forms, pronunciation, breath control, voice training, ear training, expression and notation.

Those who are prepared for it will be assigned to classes doing such advanced work as they may properly undertake. It is the intention to grade the work according to the needs of the student, offering advantages in music as advanced as their preparation may warrant.

MANUAL TRAINING.

PRINCIPLES UNDERLYING TOOL WORK.

I. The value of tool work in the elementary school is educational; it is an expression of an impression—the realization of an idea in construction; it is incidentally useful in an economic sense.

II. In tool work the children in the elementary school should make such things as are useful in *their* lives *now*; then the things they make are part of *their* lives; not the making of things that are ultimately useful.

1. This word “useful” has been misapplied in tool work in the schools. It has been interpreted to mean “useful” from an economic standpoint.

2. Useful in tool work in the elementary school means to make something that touches the child’s life now—gives interest—has educational value. The child may not be interested in this same object the least bit in a week, or month; but the making has served its purpose. The child has had the educational value growing out of thinking, designing, constructing and enjoying something that touches its life at the time. It may be that what he makes has also a permanent value, but this value is incidental. The more stress that is laid on permanent value, the more the economic or commercial side is emphasized.

III. As soon as the doing of a particular kind or piece of work has become automatic, it has largely reached the limit of its educational value.

IV. Tool work should be correlated with other subjects, as history, nature work, science, etc. This is when it has its highest educative value.

V. The æsthetic in tool work should be correlated with the work the child does, in so far as it corresponds with his development and interests. Excellent results grow out of a proper correlation of the tool work department with the art department.

*COURSE OF WORK.

JUNIOR YEAR.

Time: Two forty-five minute periods per week.

The course for those taking the required manual training work includes class work as follows:

The underlying principles of manual training are considered from the historical and psychological points of view, followed by practical work involving the use of various tools and materials in working out a series of objects in accordance with the underlying principles of the system. Models are used during the first semester, that the pupils may in the shortest space of time possible become acquainted with a variety of tools and acquire skill in their manipulation. The second semester is devoted to working out new ideas along the lines of constructive and

*For full particulars in this department send for Manual Training Bulletin.

ornamental manual training. The work is mainly manual, preparatory to taking up the elective manual training in the senior year.

ELECTIVE MANUAL TRAINING.

Time: Five forty-five-minute periods per week.

This course is designed for students who desire to specialize and to prepare for teaching manual training. It is advised that it be taken as the elective work of the senior year. The required work of the junior year makes a good foundation for specialization. Successful practice in the training department is requisite to the completion of the special course.

In general, the course is as follows: Methods in teaching training, relation of teacher to work, plans, presentation, execution, correlation, invention, etc. Discussion of materials, means and forms used in manual training, practical limitations of the work, adaptation to conditions, equipment, cost, etc.

The practical work includes work suitable for all grades: Basketry, including the making of trays, baskets, mats and plates of various forms of raphia, hemp and rattan; constructive work in pasteboard, weaving with various materials, yarn, strips of cloth, etc., on loom made by pupils; bent iron, including exercises in the use of stove-pipe iron and more expensive Venetian iron; constructive work in wood, preparatory to decoration, -with carving and pyrography; wood carving used in decoration of objects constructed, as chairs, tabourets, jardiniere stands, boxes, book-cases, etc.; pyrographic decoration in

wood and leather, as picture frames, book racks, boxes, chairs, sofa pillows, shopping bags, etc.

Practice in designing, historic ornament.

Preparation of materials, care of tools, working drawings, planning models, designing, uses of ornament with a view of suiting the decoration to the object to be decorated.

CORRELATED TOOL WORK—NORMAL DEPARTMENT.

As the student sees the need of apparatus which he can use in some other department, he uses the Sloyd laboratory for its construction. This gives rise to considerable correlated work, which changes from year to year, but may consist of—

IN THE LIBRARY DEPARTMENT.

Apparatus of various kinds, T square, triangle, drawing board, sewing bench, card catalogue box.

ART DEPARTMENT.

Drawing board, easel, stretcher, palette, molding board, clay modeling tools and board.

PHYSICS.

Apparatus will be made as needed in the classes in physics and chemistry.

DOMESTIC ECONOMY.

Knife, cleaning box, bread board, kneading board, cake stand, wooden spoon, meat board, knife box, towel rack, spoon rack, salt box.

SEWING.

Ironing board, cutting board.

BIOLOGY.

Dissecting needles, insect mounts, setting frame, flower press.

MATHEMATICS.

- a. Solid: Cube rectangular prism, rectangular pyramid.
- b. Dissected—Parallelogram, triangular circle, pythagorean blocks.

DOMESTIC SCIENCE.

FIRST YEAR.

Biology—

I. Botany.

- a. This includes the study of the classification of vegetables, herbs, roots, spices and condiments.
- b. Mounted specimens of herbs, leaves, spices and roots used in cooking which can be obtained will be made and bound in folios for the student's future use in teaching.
- c. The aim is to train students to observe the plants, trees and flowers about them, to recognize familiar and edible plants wherever they may see them.

II. Zoology.

- a. It is taken up in reference to Domestic Science or vegetation, treating especially of insects injurious to plants, the crustaceans, birds, fish, wild and domestic animals used for food by man.

III. Bacteriology.

I. Yeast.

- a. Preparation and use of yeast plant.
- b. Its use, form, structure, and mode of growth.
- c. Experiments in growing yeast under various conditions necessary for its best development.
- d. The food of the yeast plant, its products—carbon dioxide, alcohol, etc.
- e. Functions of yeast in bread making.

2. Moulds

- a. Structure of common moulds.
- b. Practical studies of their development and dissemination of spores.
- c. Means of preventing growth of moulds by sterilization.
- d. Edible and poisonous fungi, or mushrooms.

3. Bacteria.

- a. Their structure, mode of growth, development and reproduction.

- b. Conditions of growth; dissemination, changes produced in food by bacteria.
- c. Useful bacteria; deleterious effect of some bacteria.
- d. Bacteria in Arts.

Chemistry—

I. General Chemistry.

- a. It is required of all pupils taking this course that they may be able to understand the chemical action which takes place in effect of heat upon food. If they have this knowledge, they are able to grasp the reasons underlying many of the methods of cleaning.
- b. The power to analyze substances in general chemistry not only gives the pupils ability to analyze baking powders, etc., but trains them in habits of neatness and exactness which they could not acquire in the same time with any other study.

II. Organic Chemistry.

- a. This treats of the carbon compounds, such as alcohol, starches, sugar, turpentine, etc. This gives practical knowledge of substances used as food and brings organic chemistry into practical use.

Physics—

- I. Physics is required of all taking this work, because it gives a clear understanding of na-

- ture's phenomena and the laws that govern them.
2. Widens the pupils' mental vision, forcing them to think of the great and universal laws which must be obeyed, and, if obeyed, can be used as a power for man.
 3. It gives the pupil an understanding of the mechanism of electric utensils, ventilation, heating and lighting.

English—

Regular Junior work.

Psychology—

Regular Junior work.

Cooking—

Four periods a week for thirty-six weeks.

1. First principles of cooking.
 - a. This includes the study of the five food principles (protein, fats, carbohydrates, mineral salts and water.)
 - b. Their action when treated with heat.
 - c. The best methods of cooking.
 - d. Cooking of simple foods, such as cereals, soups, bread, rolls, desserts, cakes, etc.
 - e. The combinations of certain foods to be most nutritious, digestible and economical.

- f. Simple menus for breakfast, luncheons and dinners.
- g. Cooking and serving of meals.
2. Simple experiments in foods.
 - a. The effect of different degrees of heat on food.
 - b. The action of acids.
 - c. The proportion of thickening needed for the different uses, as sauces, gravies, etc.
3. Invalid Cookery.
 - a. The diets of hospitals are given and courses of work planned in each. Talks on methods of work in a hospital diet kitchen.
 - b. The classes of foods for patients studied, such as,
 - Beef extracts, teas, etc.
 - Acid and stimulating drinks.
 - Gruels and mushes, etc.
 - c. Preparation of trays for invalids.

Sewing—

Two hours per week—thirty-six weeks.

- a. Twenty-five models involving all the principles of simple hand-sewing. Practice on bleached muslin.
- b. Matching stripes, hemming, patching and darning are given until thoroughly mastered.

- c. The study of textiles.
 1. History, growth and manufacture.
 2. Patterns of underwear are drafted and garments made, thus combining hand and machine sewing.

Mechanical Drawing—

The object of this work is to make the pupils familiar with the technical drawings, tables, etc., and to enable them to draw an intelligible diagram that can be used by a carpenter, builder or tinsmith if necessary.

Physical Culture—

Regular Junior Work.

SECOND YEAR.

Household Science—

One hour per week—thirty-six weeks.

- I. The study of the development of homes from huts, and showing how what we now enjoy was developed as an outgrowth from the experience of others, or where we fall back instead of progressing.
- II. The history of the development of furniture. The study of beautiful shapes, etc.
- III. Discussion of furnishing and decoration of modern houses—apartments, etc.

Chemistry—

- I. Organic Chemistry continued.

II. Dietaries :

- a. Study of the composition of man's body.
- b. Daily waste and repair.
- c. Need of foods; kind and proportion required.
- d. The composition of various food material, digestibility and desirable combinations of each.
- e. The calculation of dietaries and the comparison of the dietaries for people engaged in different occupations and of different races.

Emergencies—

1. Home Nursing.
 - a. Care of the sick room—nurse's duties.
 - b. Preparation of food.
 - c. Training in making bed and poultices.
 - d. Symptoms of special diseases and their care.
2. Bandaging.
 - a. Kind of bandage.
 - b. Methods of bandaging burns, cuts, sprains, bruises, etc.
3. Treatment in case of Emergencies :
 - a. Treatment of cuts, burns, scalds.
 - b. Fractures, temporary relief and modes of transporting in case of accident.
 - c. Treatment of croup, convulsions, fainting, sunstroke or frostbite.

Philosophy of Education—

Regular Senior work.

Mother Play—

See Junior work—Normal Kindergarten Course.

English—

Regular Senior work.

Cooking—

I. Advanced work.

1. Canning and preserving.
2. Chafing dish course.
3. Fancy cookery.
 - a. Fancy roasts.
 - b. Fancy desserts.
 - c. Boning birds, etc.
4. Menus for full course dinners, etc.

II. Practice work.

- a. Cooking in Eighth Grade.
- b. Assisting in Junior work.
- c. Outside work..

III. Invalid Cookery.

Sewing—

Two periods per week—thirty-six weeks.

I. Third Division:

- a. Drafting French waist and thin dress skirt.
- b. Study of relation of form and color to that of the individual.

- c. Making of thin lawn or organdy dress from patterns drafted.
- d. Making of lined dress.

Laundry Work—

- a. History of Laundry Work.
- b. Necessity of good work ; neatness, system, proper methods ; result of lack of these.
- c. Removing of stains from clothing.
- d. Method of cleaning floors, brooms, windows, etc.
- e. Proper care of kitchen and laundry supplies.

MODERN LANGUAGES.

The object of this department is to give a reading knowledge of the most important modern languages. Conservation is introduced rather with the purpose of fixing in the mind idioms and points of grammar than with the hope of teaching the fluent use of the language in speech. To this end, the following courses or their equivalents are offered.

GERMAN.

First Year—First Semester—

Elementary. Thomas' *German Grammar*; Guerber's *Marchen und Erzählungen*, Vols. I and II.

First Year—Second Semester—

Continuation of Thomas' *German Grammar*; translation of *Hoher als die Kirche*, *Eingeschnitten*, *Immensee*, *Germelshausen*, and *L'Arrabbiata*.

Second Year—First Semester—

Reading of *Brigitta, Der Fluch der Schonheit, Der Neffe als Onkel*; Prose composition.

Second Year—Second Semester—

Die Journalstein, Gustav Adolfs Page, and Die Freiherren von Gemperlein; Prose composition.

Third Year—First Semester—

Marie Stuart and Soll und Haben; Prose composition and paraphrasing.

Third year—Second Semester—

Minna von Bornhelm and Hermann und Dorothea; Prose composition and paraphrasing.

FOURTH YEAR.

History of German Literature throughout the year, with lectures and reading.

FRENCH.

ELECTIVE.

First Year—First Semester—

Frazer and Squair's *French Grammar*; *L'Abbe Constantin*.

First Year—Second Semester—

Colomba, and Michael Strogoff; Prose composition.

Second Year—First Semester—

Modern French Comedies; Prose composition and paraphrasing.

Second Year—Second Semester—

Tartuffe, Polyucte and Athalie; Prose composition.

Third Year—First Semester. —

Eighteenth Century Authors.

Third Year—Second Semester—

Nineteenth Century Authors.

SPANISH.

ELECTIVE.

First Year—First Semester—

Edgren's *Spanish Grammar*; Worman's *First Spanish Book*. Matzke's *Spanish Readings*.

First Year—Second Semester—

El Final de Norma, and El Capitan Veneno; Prose composition.

Second Year—First Semester—

Padre Isla's Gil Blas, La Familia de Alvereda and Electra; Prose composition.

Second Year—Second Semester—

Dona Perfecta and Jose; Prose composition.

THIRD YEAR.

History of Spanish Literature with lectures and reading throughout the year.

ITALIAN.

A class in Italian may be organized if there is a sufficient number of applicants.

Training School
and
Child Study Department

FACULTY OF TRAINING SCHOOL.

- Z. X. SNYDER, Ph. D., President.
T. R. CROSWELL, Ph. D., Superintendent of Training
School.
ROYAL W. BULLOCK, Principal of High School.
ELIZA GEORGE KLEINSORGE, Supervisor Grammar
Grade.
ELIZABETH H. KENDAL, Pd. M., Supervisor
Grammar Grade.
ELEANOR PHILLIPS, Pd. M., Supervisor Primary Grade.
BELLA B. SIBLEY, Pd. M., Supervisor Primary Grade.
E. MAUD CANNELL, Supervisor Kindergarten.

ASSOCIATE SUPERVISORS.

- JAMES H. HAYS, M. A., Latin and History.
LOUISE HANNUM, Ph. D., Literature and English.
ARTHUR E. BEARDSLEY, M. S., Biology and Nature.
Study.
DOUGLAS D. HUGH, A. M., Physiology.
ANNA M. HEILEMAN, Reading and Physical Culture.
RICHARD ERNESTI, Art.
KATHERINE CLUTE, Domestic Science.
SAMUEL M. HADDEN, Pd. B., Manual Work,
Sloyd.
J. V. CRONE, Pd. M., Nature Study.
FRANK L. ABBOTT, B. S., Physical Science.
GRACE H. SPROULL, Ph. B., History and Literature.
A. GIDEON, Ph. D., Modern Languages.
DAVID L. ARNOLD, A. M., Mathematics.
W. E. STIFFEY, Music.

THE TRAINING SCHOOL.

WHAT IS IT?

It is the heart of the Normal School. It is the teacher's professional laboratory. In it the student teacher works out the ideals which she gains in other departments of the Normal School. In it the regular instructors of the Normal department, acting as supervisors, realize in the concrete the principles which they teach. The interaction between the Normal department and Training School is constant and vital. Each is continually modified and helped by the other.

But it is more than a mere department of the Normal School. It is a complete school system in itself. It forms the larger part of the life of the child for a dozen years, for in it a pupil may enter the Kindergarten and go from grade to grade, until a broad and thorough High School training has been completed.

In as much as it is the life of the child, the work of the school is made to center about that life, to broaden and enrich it.

More of the culture which comes from participating in the social and industrial life of man is present, not so much time is given to some phases of the traditional curriculum as in most public schools. Though the essentials of all subjects are taught, less time is wasted upon the unessentials or arithmetic, geography, and spelling grinds.

More attention is given to the vital parts of literature, to the development of the power to express one's self in language, drawing, sloyd, and other forms of handicraft; to the appreciation of the meaning of life as revealed by the cultivation of a taste for the best in literature and art and music, and by living the life of literature, history, and society about them.

GAINING THE IDEAL.

The first distinctly professional work of the teacher in training is a thorough grounding in the fundamentals of psychology to lay a foundation for a sound pedagogy. This, with kindred work in the normal development of the child, continues throughout the Junior year.

Toward the middle of the year and running parallel is a course leading to the formation by each student of a definite ideal of what a teacher's work should be, and a careful study of the proper condition of development, which furthers the realization of this ideal. This latter study includes not only the proper hygienic conditions, but (those) general psychological principles which form the basis of scientific instruction, and of rational discipline.

This course is constantly supplemented by observation of classes in the Training School, use being made of the following outline to guide and unify the work.

OBSERVATION.

I. The Juniors will report at assigned times to their Training Teachers, who will determine the class or classes

to be visited during the week and the hour for general discussion of the visit, as well as any special points to be noted.

II. On visiting a recitation, the following things are to be especially noted:

1. Hygienic conditions and their causes. (a) Light—amount, direction; (b) Air—condition, evidences; (c) Temperature— 68° - 70° . Signs of wrong condition; (d) Posture, incorrect—occasion; (e) General spirit of room, (1) Busy and contented, or restless and inattentive; (2) Unnecessary tension, as shown by worry, fatigue or confusion.

2. Criticism of the recitation.

a. Activity of the pupils.

(1) Toward what end?

(2) How shown? (In silent thinking? In oral or written expression? In creative expression?)

b. Interest.

Due to the nature of the subject? Or to the manner of presenting it?

c. The Lesson. (Write out your observations on this.)

(2) Aim—What is being taught, and why?

(2) Method—Describe the recitation briefly from beginning to end.

(a) The steps, preparation, presentation, comparison, gen-

eralization, application. Which of these are used, and which emphasized in this recitation?

- (b) Notice the form, sequence, and purpose of the questions asked.
- (3) Results obtained.
 - (a) What facts have been taught?
 - (b) In what other particulars have the pupils been helped?

The observation is carefully organized so that each student gets a broad and comprehensive view of the entire school system from Kindergarten to High School, inclusive. The universality of the general principles of method are thus emphasized, and the differences, due to the development of the child, shown more definitely. An attempt is made not only to see all grades, but also all the different subjects, in order that each teacher in training may have her ideals of school work definite and well rounded. The observation is so arranged that only the best work is seen, and every lesson observed is critically discussed under the guidance of the faculty of the Training School. This criticism is positive. The emphasis is on those essentials which go to make an ideal recitation.

After sufficient progress has been made in the study of principles, the teacher in training is instructed in the preparation of plans. The outline followed allows not alone for the application of these principles but in practice,

helps to form the habit of careful attention to details, while it insures superior teaching.

PLANNING WORK.

A Training School is often loosely thought of, and spoken of as a "practice school," implying that it is a place in which young people learn to teach by experimenting upon the children. Such a view is incorrect and unjustifiable. If properly conducted, there is much less of experimentation and inferior work in a training school than in the average public school.

To accomplish anything with certainty, with economy of energy and time, it is necessary to be able to forecast the end and the intermediate steps. Good teaching implies such forecasting of the work. (1) What is to be taught; (2) why this is to be taught, and (3), how this is to be taught.

The Training School enables the young teacher to do the first teaching in a limited field which permits of thorough preparation, and under such careful guidance that the teaching shall be done properly from the first. Continued practice in teaching a little well gives the power to plan and carry out work when the details multiply, as in the public school.

The Senior teachers will make out the following plans in

FORECASTING WORK.

I. *General plan* for entire period of teaching a subject, to be left with Training Teacher before beginning to teach.

1. *Scope.* A clear and definite topical outline of the subject matter to be taught.

2. *Purpose.* A definite statement of the general benefits that the pupils may be expected to derive from the work.

3. *Method.* Your general plan of conducting in this subject.

4. *Sources.* A list of the references, pictures and other illustrative material you intend to use.

II. *Weekly plan*—Tuesday to Tuesday, due every Monday morning.

1. *Scope.* A more detailed outline of subject matter.

2. *Purpose.* In addition to general aim of study any special results you expect to secure during the week.

3. *Method.* The manner of presenting the work. A very definite statement of the work to be required of the pupils. Plan with the children and try to get their standpoint.

4. *Sources.* A list of sources of information and material for illustrations which you have used in preparation.

III. *Daily Plan.*

1. *Scope.* A statement of what you expect to teach today.

2. *Purpose.* Your reasons for teaching these particular things.

3. *Method.* The important details of the lesson,

with special emphasis on the part the children are to take in the recitation.

4. *Sources.* A list of those consulted for the day.

THE REALIZATION OF THE IDEAL.

At the close of junior year the teacher in training is assigned a class to teach during the first twelve weeks of the senior year. This assignment is made by those knowing best the capabilities of the individual juniors and the needs of the training school. Thus by assigning congenial work the success of the young teacher is made more certain, and the progress of the children is assured. By making out a general plan, working with her supervisor and training teacher, the teacher in training acquires the habit of seeing school work in larger wholes than the single recitation. Working with the same helpers in her daily teaching, she rapidly acquires the art of effective instruction and discipline. A wider experience is gained by changing the subject and grade every twelve weeks.

The aim throughout is to safeguard the children and render the growth in power of the student teacher rapid and positive. No student is given a diploma until she has shown her ability to discipline and instruct successfully. Power to do effective work is the test.

COURSES OF STUDY OF THE TRAINING
SCHOOL.

Making use of a physiological figure, we may consider a course of study merely as the blood vessels which determine the general trend of the material furnished for the growth of the pupil, while the material itself of each subject, constantly changed and enriched by the influence of all, children, teachers and supervisors, more nearly corresponds to the life-giving blood. But even such a figure is too static. It does not allow for the change constantly being made in the general trend. The following course gives a glimpse of the work in its present plastic condition.

In several particulars it differs from the course followed in most schools. While none of the essentials of the common branches are neglected, less time is devoted to geography, history and arithmetic. Each is studied for but a part of each year, but this study is made more definite and more intensive.

This definiteness of purpose and richness in meaning is best seen in the courses for literature and reading. "Literature is meaning," and this course has meaning.

Reading, instead of being the most perfunctory and meaningless study of the school, has a definite purpose and is taught with this in mind in every grade. Throughout one can trace: *Study I*, an attempt "to grasp the meaning"; *Study II*, "to feel the literature"; *Study III*, "to express the thought and feeling" of all that is read.

The time gained by more intensive work, and by the

neglect of many unessentials, allows more time for the literature, reading, arts and crafts, including manual training, drawing, weaving, etc.; for vocal music and the development of an appreciation of what is good in art through picture study, and in instrumental music through the pupils' constantly hearing classic music and being guided in recognizing and interpreting what is heard.

The physical culture and athletic work touches each pupil, not simply a selected few.

High social ideals are fostered by regular social afternoons in each grade. The pupils meet at stated intervals for a good time, which includes some definite work, as basketry or sewing. Simple programs are given, while the conversation and conduct is carefully directed along proper channels.

The courses for music and the arts-crafts, as well as for the kindergarten and the high school will be found in other parts of the catalogue. See Vocal Music, Drawing, Manual Training, etc.

LITERATURE.

GRADES I AND 2.

Aim—To introduce the child to the ground ideas of love, growth, labor, sympathy, happiness, sharing, sacrifice, beauty, through wider participation in the fundamental form of human life, the family.

General Character of Material—I. Stories, poems, descriptive and historical matter presenting the home as a progress from the animal home wrought by instinct to

the developed and idealized human home. 2. The simpler interests which homes have in common—holidays, holy days, etc. 3. The primitive poetry, in myth and fairy story, of the larger home out-doors.

GRADE 3.

Aim—To develop the individual through contact with natural impulses, desires, longings, affections, and passions, as these are typified and idealized in literature: (1) Calling forth the child's latent consciousness of his own possibilities, (2) developing comprehension and sympathy through imaginative participation and a wide range of feeling, (3) cultivating judgment on varied aspects of conduct and motive—the wise and unwise, moderate and excessive, efficient and inadequate, tactful and bungling, beautiful and repellent, noble and petty, right and wrong.

General Character of the Material—Stories, poems, and myths sounding the gamut of human feeling in its more primitive and self-centered manifestations; these arranged in a series leading from the grosser to the finer, from the simpler to the more developed desires and passions; of the latter, the sex passion alone excluded, stories of which sex feeling is the chief motive being translated into those of simpler human feeling.

GRADE 4.

Aim—(1) To carry the individual beyond ordinary, restricted experience, beyond normal human limitations, into the exaltation and delight of great deeds, wonderful personalities, supreme achievements; (2) to suggest

through all admiration of the splendid and unusual that the essence of worth lies deeper than the most brilliant adventure can reach.

Material—1. Nature myths of struggle and victory. 2. Hero legends and poems. 3. Tales from the great epics. 4. Stories of wonderful historic deeds and personages.

GRADE 5.

Aim—To purify the emotions and exalt the imagination through devotion to the ideal as presented in the great enthusiasms of literature and history—patriotic, chivalric, personal, and religious.

Some of the Material—Beowulf's rescue of Hrothgar from the view-point of the hero's chivalric service (review from grade 4). Stories setting forth the education of the knight, his vigil before his armor, the charge he received with the accolade, the oath he gave; tales of knightly adventure with the purpose of righting some great wrong, of knightly deeds in the service of the king, of lady-love, of the poor and unfortunate. King Arthur's great enterprises—the founding of a pure knighthood and a noble kingdom; successes and failures of his knights. The story of the search for the Holy Grail. Historic knights of courtesy, courage, and truth like Sir Philip Sidney and Sir Thomas More. Women who did knightly deeds, like Antigone, Charlotte Corday, Joan of Arc. The great adventure of mediæval times, the crusade to gain possession of the Holy Sepulchre.

GRADE 6.

Aim—To build up the consciousness that the growth of personality (grade 3), the delight in great achievement (grade 4), and the “deathless passion for the ideal” (grade 5), find their satisfying fulfilment only in service of the real under the actual conditions of man’s life.

Material—1. Short, vivid sketches of the immigration establishment, rise and achievement of remarkable peoples (Greeks, Romans, Norman-French, Icelanders, Anglo-Saxons, Americans) for the purpose of giving an epic conception of life in the whole. 2. Stories of great public crises which call out the heroism and devotion of the individual (Roman stories from Livy, stories of the Græco-Persian wars, of Roman and Carthagian, of the siege of Leyden, Mondonerry, Calais, of the American revolution). 3. Tales of more obscure patriotism or devotion to human needs. 4. National hymns, battle songs, and patriotic poems.

GRADE 7.

Aim—To introduce the pupil to the formed products of great literature in such a way that he shall grasp their presentation of the human significance which has been developed in the preceding grades—the passions, the achievements, and the ideals which form the heart of literature and of human experience.

Material—Literature of action, beginning, if desirable, with mere stirring romance and passing on to that which at the same time presents personal conflict and de-

velopment, large national movements, or, as supremely in the case of the Iliad, both. The Lay of the Last Minstrel, the Iliad, the Odyssey, Ivanhoe.

GRADE 8.

Aim—To present literature not only as disclosing the essential meaning and relations of individual experience, but as reflecting the larger phases of a people's change and development; literature as both an expression of personality and a reflection of national life.

Material—Pieces typical of the Colonial, Revolutionary and National periods of American literature.

Summary—It will be seen that, in the application of the culture-ladder principle suggested above (only one, of course, of a variety of possible applications), the course of development which literature is to mediate assumes the following sequence: 1. Establishing—in aid of home and kindergarten—the child consciousness in its first grasp of larger human life (grades 1 and 2), enriching this consciousness (grade 3), extending and stimulating it (grade 4), purifying and exalting (grade 5), and setting it in its relation to the larger life of man (grade 6), thus showing, in the work of the sixth grade, a return to that of the first after a cycle of growth. The work of the seventh grade exercises and further develops this mental content through the interpretation of literature which presents in artistic wholeness what has been separately assimilated, while that of the eighth grade adds to the same discipline a more explicit conception of literature in its relation to national life.

- II. Sequence of literary material to be used in carrying out the part-aims of the different grades, together with detail of means for securing coherence and steady advance. (To be presented in another bulletin.)
- III. Outline of general method for presenting oral literature.
 1. Preliminary hint of the character of the piece by reference to its relation to some theme already familiar.
 2. Telling the story as vividly and harmoniously as possible, using the "development method" and rhetorical questions only so far as these stimulate the interest and secure the participation of the children.
 3. Discussion of the point or theme of the story, helping the pupils to seize on essential features in determining this theme and to touch with exactness the shade of meaning given by the context.
 4. Deepening the impression by selecting the structural parts of the piece and pointing out their relation to the total impression. Often the discriminating of these parts may be an aid in fixing on the theme. (See 3.)
 5. Discussion of character, points of special interest, relations with foregoing pieces in treatment, touching in each case on relation to the main impression (theme), and keeping this dominant over other features of interest.

- IV. Order of method for teaching written literature.
- I. Preliminary mastery of the text as a medium of communication. (When this part of the work must be accomplished in class.)
 - a. Selection by pupils of the next class reading by discovery of the natural divisions of the text into "pictures," structural parts, phases of thought, together with justification of the separation by reference to the general unity of effect felt in the passage.
 - b. Directing of attention to any passage or locution, the explanation of which is essential to the meaning, with reference, when desirable, to books for consultation. Careful and effective use here of pupils' knowledge of syntax, structural parts, etc., using all that has been gained as a tool for gaining more.
 - c. Brief attention to any illustration of principles, grammatical or rhetorical, which may be interesting or helpful.
Results to be aimed at in this part of the work—rapidity of grasp and suspense of thought (pending acquirement of the point of view from which study of the piece as literature can be engaged in. See 2, a. b.); use to this end of the pupils' whole English equipment so far as this is needed.
 2. Study of the piece as literature
 - a. Discussion of the theme or meaning of the

whole. Care that, in seeking to determine this, the pupils take into account all the chief elements of the piece in due proportion and on the appropriate plane.

Note. This is probably the most valuable single exercise in teaching literature. It rescues the mind from the narrow and provincial point of view, teaches it to grasp meaning as the essential of literature, and cultivates that elementary critical faculty which consists in the power to discern the means used in their relation to the primary end sought.

- b. Study of the manner in which the theme is carried out by the essential structural parts of the piece. Test of pupils' insight by proposing or gaining from the class alternative methods and discussing the relative advantage of the method used. Persistence in synthetic interpretation until it is clear that the pupils have a definite conception of the manner in which the incidents used and the characters presented are determined by the conditions necessary for the development of the theme.
- c. Extension of the same method, i. e. relation of all parts and elements to the dominant purpose, to the author's treatment in its salient, and, if time and the special purpose of study permits, in its minuter features,

and to the elements of style—paragraphs, sentences, words, poetic units and coefficients (in the case of verse).

- d. Return to the fundamental meaning of the piece, enriched by all that the more detailed study has contributed to a feeling for the total effect.

GRAMMAR—TEACHING IN THE GRADES.

A. *Aims*—

I. Development of the sentence-sense.

1. Feeling for the unity of the sentence as against the broken, fragmentary type and the formless, “run-on” type of expression.
2. Familiarity with words, phrases, and clauses as coherently related functions of the sentence-whole; phrase and clause architecture.
3. Constant gain in the freedom and ease with which these functions are managed, the children acquiring power to modify the subject and predicate as they speak and write without putting the sentence out of joint.
4. Increasing aptness in recognizing the three sentence types (simple, complex, compound) and in selecting for use the type best suited to the kind of thought-unit to be expressed.

- II. Knowledge of the modifications by which words express changes of use or meaning in the sentence and growing accuracy in the use of these forms as spoken and written.
 - III. Cultivation of taste.
 - IV. Mental discipline.
- B. *Principles of Teaching*—
- I. Aim I, not Aim II, should be the basis.
 - II. Aim I should be sought by constructive work, not by sentence-analysis.
 1. Teach each sentence-fact by making for the children a problem in speech (e. g. What to do when we want to make the subject more vivid or interesting without *telling* anything more about it? What do we do when we want to show that one act was done before another without stopping our story to explain which act was done before the other?) which they can answer, giving a sufficient number of examples to test the answer, then clarifying, further illustrating, and enforcing the answer until it is ready to be accepted and learned as a useful law or rule.
 2. In the first series of lessons and in reviews for perspective, the order of presenting the sentence-functions (syntax) should be (1) name word (noun, subject), telling word,

and pronoun (2) adjective and adverb (3) adjective phrase and clause (4) adverbial phrase and clause (5) sentence types, with their appropriate punctuation (6) conjunctions (7) prepositions (8) verbals in their simplest constructions in 3. In later reviews, these should be recognized as principal, modifying, and connecting functions, and the relation of each to good and poor expression emphasized, i. e.—if a principal function is slurred or ill chosen the sentence is unclear or forceless; if modifying functions are wanting, the sentence is bare, crude, or inadequate; if connecting functions are not used with care, the sentence is incoherent or illogical.

- III. Attention to each language-fact should be justified either in advance or while it is being taught by the practical help which it gives in speaking and writing. This supplements II, 1 and 2. At first presentation of a language-fact, the simpler points of use only are brought out, other points being added with review lessons and as the interconnection of language-facts enable them to be understood; e. g. When the verb is first presented, the need of finding the word that tells most (leap, run, frisk, scurry, hasten, instead of just go or move) and care about saying *is* or *are* as suits the subject, may be the only practical points taught; next time,

the need of suiting the form of the verb to the time of the act (primary tenses only); then the need, for adjective and adverbial phrases, of verb-forms that do not explicitly assert (review of B, II, 2, (8), with a better basis), teaching now the distinction between finite verbs and verbals with the general use of each, and the use of the participle for the secondary tenses; then all the number and person forms; then a review of the distinction between verbs that do not need an object and verbs that do, which has already been brought forward when case was taught.

- IV. The situation used in teaching each language-fact should be either actual in the experience of the pupil or familiar from the literature being presented. Abstract, meaningless illustrations must give place to those which recall definite circumstances, e. g. not, The girl wore a blue dress, but Sir Geraint wanted Enid to ride in her faded silk dress (for the adjective). This principle is parallel with that now recognized in teaching arithmetic.
- V. The practical meaning of each language-fact taught must be enforced in every literature lesson as well as in the language lesson itself, until the pupils have gained the power of self-criticism as respects that point, and no further language-fact must be taken up until the children begin to incorporate the new knowledge in their

class-work at least. This principle does not necessitate losing the point of the recitation or interrupting the pupil, but it does necessitate constant care and tact in unifying the various sides of English work.

- VI. If the teacher is unable to teach any language-fact through its practical use to the pupils, or is unwilling to help the children want to enforce it, she would better leave that fact out; to teach it pointlessly only does harm.
- VII. It will be seen from the principles already laid down that the order of facts in teaching should be determined by the use that is to be made of them and by their necessary interconnection, not by their grouping round one part of speech. Moreover, the use may often involve laws commonly excluded from grammar texts. For example, the adjective would be taught to enforce the need of using a greater variety of adjectives and making them specific, the adverb to call attention to the care needed in avoiding the use of the adjective in place of the adverb. In general, the order of facts should be somewhat as follows:
1. The main sentence-functions (see B. II, 2) for simplest points of use.
 2. Number of nouns.
 3. Case, teaching with the objective prepositions and the transitive-verb-nouns and personal pronouns only.
 3. Tense (see B, III).
 4. Classes of phrases:

syntactical; according to inner structure, with more work on verbals. 5. Principal and subordinate clauses, with more work in the sentence-types. 6. Conjunctions, in connection with subordinate clauses, for greater variety of thought-relations (avoidance of indiscriminating use of *and* and *but*) and more exact logical expression. 7. Complete declension of nouns and pronouns. 8. Voice. 9. Mode. 10. Complete conjugation of verb. 11. Classes of pronouns with all the points of usage. 12. Classes of nouns with all the points of usage. 13. Nicer points of tense. 14. Nicer points of mode. 15. Modified functions of each of the parts of speech. 16. Properties of each of the parts of speech. 17. Frequent reviews for relation of all facts to the syntax of the sentence as a whole. 18. Grouping of all facts under sentence architecture (syntax constructively viewed) and modifications (changes of words to suit one another or fit together). 19. The principle of good-use (better perhaps, taught earlier) as supplementing the facts and laws of language. 20. Sentence analysis, for drill work, should be mainly from hearing. The diagram may be used occasionally, especially in the earlier stages of the work, to help young pupils grasp the relations of the main functions in the sentence as a whole.

READING.

GRADES I AND 2.

Purpose—To enable the child to think in response to printed and written stimuli, and to express such thought orally, in writing, in action, by means of dramatization.

Method—Story as means for imaging words and sentences, plays, games, blackboard illustrations, and many devices used in connection with the development method.

Material—The child's own vocabulary, nature study, literature, printed charts, and all available primers.

GRADE 3.

Purpose—(Study I) Develop power to learn facts from a book, to reproduce a simple story with coherence. Continue visualizing of words and phrases for mastery of symbols. (Study II) Develop enjoyment of, and eagerness to read a good book; to form friendship with character in books. (Study III) Develop habit of oral reading, marked by grouping and emphasis; clear voice, good position, distinct articulation.

Method—Persistent practice in visualization rather than study of meaning and pronunciation; i. e. the selection of a few words per week to be mastered, but the large mass of new words to be recognized by context. (Study I) Use of legend and striking episode to study character.

Material—(Study I) Study of information lessons, short narratives and descriptive parts. (Study II) Fairy

tales, direct discourse of a narrative. (Study III) Blackboard exercises, concert reading, poems memorized, dramatization of short stories.

GRADE 4.

Purpose—(Study I) To grasp simple expository literature rapidly; to see a group of words at a glance; to reproduce a simple narrative by selection of salient points, to know the vocal sounds. (Study II) To develop feeling for separate characters, and to love poems and beautiful descriptions. (Study III) A habit of oral reading marked by distinctness, clearness and intelligence.

Method—Gaining information, using a time limit. Rapid oral and visual practice. Outline on blackboard. Use of key words. Diacritical markings of new words. Impersonation of characters. Work out expression by imitation and practice drills.

Material—Such as correlates with nature study, drawings, biography.

GRADE 5.

Purpose—(Study I) To get information *rapidly*; word study; to see the relation of parts of the narrative, and recognize the salient points independently. (Study II) To develop an attitude toward each character, and thus broaden one's own experience. (Study III) To clear voices, and get a conversational tone. To detect voice defects and prescribe remedies.

Method—(Study I) Marking, meaning and use of words. Continuation of previous methods. Tests, re-

views, reports, sight reading. (Study II) Noting of appearances and qualities; practice of reflection, use of subjective paraphrase. (Study III) Practice of tones; sight reading.

Material—(Study I) Selections from different readers for factual side. (Study II) Pilgrim's Progress, Wonder Book, Jack-a-napes. (Study III) Commit parts "The Building of the Ship"; "The Noble Nature," by Ben Johnson; "The New Year," by Tennyson; Home Thoughts from Abroad; and "The First Spirit," by Whittier.

GRADE 6.

Purpose—(Study I) Develop greater *independence*. Assist pupils to recognize the paragraph as a unit. (Study II) Attend to individual tastes of pupils. (Study III) Increase power of pupils to realize the feeling by expressive reading. To listen to each other's reading with pleasure. Correct emphasis, phrasing and tone color.

Method—(Study I) Time limit more marked. Reproduction of the central thought of the paragraph. (Study II) Noting the character's influence, growth, change, by the examination of his speeches and actions. (Study III) Use of subjective paraphrase by pupils. Extension of methods of previous grade.

Material—(Study I) Lessons from readers correlating with some subject in which there is already marked interest. Lamb's Tales from Shakespeare, extensive study of "The Great Stone Face." (Study II) Dramatization of "King of the Golden River."

GRADE 7.

Purpose—(Study I) To get information *accurately*, and enlarge on aims of grades immediately preceding. (Study II) To describe characters and notice changes in them. (Study III) Mastery of diacritical marks. To get clear articulation, pure enunciation, volume, flexibility, quality, emphasis, phrasing; let action accompany speech in dramatization.

Method—Silent reading preceded by interest in the subject matter. Oral and written reproductions, comparisons, searching questions, criticisms, drawings. Develop sense of sequence. Subject of paragraph. Notice all contrasts (emphasis). Develop imagination by vivid pictures. (Study III) Review of all consonants and vowels. Combination of difficult consonants, syllables and words, whispering at a distance. Imitation of vowels. Concert drill on climax sentences. Use of strong speeches. Changing meaning of a word by change of inflection. Examples of very high and very low pitch; of harshness, smoothness, richness, thin quality, guttural.

Physical and breathing exercises.

Material—(Study I) Information lessons. Short anecdotes, current events, e. g. from *The Youth's Companion*, and *Saturday Evening Post*. Assign books to be read outside.

Class study of a narrative (extensive). Intense study of a whole (The Nuremburg Store). (Study II) Use adjectives appropriate to characters as shown by their conversation and actions. Compose different parts, different

conversations, moods. (Study III) Dictionary work. Use of keys.

GRADE 8.

Purpose—(Study I) To get information rapidly, accurately, and *independently*; theme and parts of story. Intelligent reproduction. (Study II) To know and contrast the characters, to follow all changes in the feeling of the characters. To feel the spirit—to love good literature. (Study III) Mastering of vocabulary of readers used. Independent preparation of a selection. To lead pupils to select parts for dramatization.

Method—(Study I) Silent study followed by searching reviews. Many modes of reproduction. Reading in class of the cutting made from the book read, with suitable introduction. Read extensively for theme, intensively for accuracy. (Study II) Write sketch, justify by text. Comparison of and with beginning under different circumstances. Subjective paraphrase. Committing of dialogues, concert work. (Study III) Constantly requiring perfect preparation. Assign selections and assist outside of class. Appoint leaders who shall be responsible for the scene. Rapid attempts by many to read same passage.

Material—Assignments of books and articles to be read and abstract to be prepared. Christmas Carol, Dog of Flanders. (Study II) Tiny Tim, Little Lord Fauntleroy. Parts of Ulysses. (Study III) Selected poems, speeches and dialogues.

HISTORY.

No effort towards formal work in history is attempted before the fifth grade. Much work, however, in the previous years and in the kindergarten in connection with language, geography and literature is valuable history material, and should be so regarded by the teachers of these grades. In the kindergarten, such historical concepts as *time* and *change* as shown in the celebration of birthdays, in the comparison of *then* and *now*, as exemplified in stories of social, domestic and industrial interests in the life of the child, his parents and his grandparents, are most valuable beginnings in history work.

So, too, the celebration of Thanksgiving and Christmas brings the child, in the one case, into touch with the early settlers of our land, and into a knowledge of the home life of that kind; and in the other, into a realization of the existing of other lands and other peoples beyond the seas.

Many of the classic and Norse myths are taught in the early grades. Many historic stories found in the reading books of these grades are valuable material. National holidays are observed, and their meanings are explained.

No fact of history within the comprehension of the children should be neglected. In the fifth year, formal history lessons are given in accordance with the following outline of the course.

GRADE 5.

(Last half of year.)

Purpose—To acquaint pupils with several historic types of men of the several nations, which explored or

colonized portions of America. These should be studied as types, not as heroes.

Material—The story of La Salle, Cortez, Drake, Raleigh, Smith, Bradford, Boone, Carson, and the story of the Lewis and Clark expedition.

GRADE 6.

(Last half of year.)

Purpose—To give pupils a comprehensive view of the history of the United States, without going too much into the tedious details. Attention to facts and matters of real importance only, and the avoidance of all questions which are beyond the understanding of pupils of this grade.

Material—McMaster's Primary History of the United States, supplemented by appropriate readings and frequent discussions of local government, with observations of such civic and social life as may come within the grasp of pupils.

GRADE 7.

(Last half of year.)

Purpose—(a) To prepare pupils for a fuller interpretation of the essential facts of American history. (b) To unfold the motives of exploration and colonization of European nations in the new world, and the causes which resulted in permanent English control. (c) To show how European history and civilization have been carried over into American history through colonization.

Material—Guerber's Story of the English, Green's

History of the English people (adapted), brief stories of the other nations of Western Europe, and their relations to England. Harding's Story of the Middle Ages.

GRADE 8.

(Entire year.)

Purpose—To organize the facts of American history by a proper interpretation of the great thought movements. To acquire an intelligent conception of the problems which have affected, and are yet affecting, the American people socially, educationally, religiously, politically and industrially. To prepare pupils to enter intelligently and sympathetically into all questions of social order..

Material—Fisk's United States History, supplemented by McMaster's and others. Efforts to acquire ability to consult authorities. Entire year devoted to the history of our own land and people.

GEOGRAPHY.

This subject should be so taught in all grades that the children will learn to interpret relations.

GRADE 3.

Purpose—(a) To show the relation of different occupations to the life of the people; (b) to familiarize pupils with the main divisions of the globe, and such geographic facts as are necessary for the study of literature and other related work of the grade; (c) to interest

pupils in local government; (d) to form habit of making simple meteorological observation.

Material—A study of food products found in the locality, as of beet sugar, flour, beef and mutton; of building material as seen in a house in the process of construction; of clothing, woolen, silk, cotton and linen; of different means of transportation. The names of the seasons, change in length of day, where moon rises and sets, direction of the winds, cardinal points, etc.; the duties of the mayor, councilmen and marshal of the city.

GRADE 4.

(First half of year.)

Purpose—(a) Continuation of grade three; (b) Names of the physical and political divisions of North America.

Material—Relief and political maps, Tarr & McMurray's geography, illustrated articles.

GRADE 5.

(First half of year.)

Purpose—Correlate with other work of grade, studying Europe, Asia, South America, Africa and the Phillipine Islands.

Material—

- I. Relief maps in sand or pulp in connection with topics.
- II. Industrial topics.
 - i. Mountain regions—mining.

2. Plains.
 - a. Products of agriculture.
 - b. Products of mines.
- III. Density of population as shown by maps
- IV. Manufacturing.
- V. Transportation (study rivers, seas and lakes in this connection).
- VI. Government (very general).
- VII. Political (study in connection with government).
- VIII. Climate.
 1. Course of winds (unequal temperature of places).
 2. The planetary belts—equatorial calms, trade winds, horse latitude calms and prevailing westerlies.
 3. Winds that are getting warmer take up moisture.
 4. Winds that are getting cooler deposit moisture.
- IX. Learn the principal political divisions in connection with IV, V, and VI.

GRADE 6.

(First half of year.)

North and South America—

- I. Relief maps made in connection with study of topics.

II. Industrial topics.

1. Mountain regions.
 - a. Mining—
Coal, iron, gold, etc.
 - b. Lumbering.
2. Plains.
 - a. Stock raising—
Cattle and sheep.
 - b. Agriculture.
3. Prairies.
 - (1) Agriculture.
 - a. Corn, wheat, other grains, stock raising and fattening, and fruits.
 - (2) Mining.
 - a. Coal, iron, copper.
 - (3) Lumbering.
 - (4) Coast plains.
 - a. Agriculture.
Cotton, rice, sugar and fruit.
 - b. Fisheries.
Cod, salmon, mackerel.

III. Centers of commerce, transportation, manufacturing—

1. Pittsburg and Pueblo.
- 2-3. Chicago, Omaha, Kansas City.
4. New Orleans, Galveston.

IV. Climate.

1. Causes of seasons, etc.

GRADE 7.

(First half of year.)

Europe and a general review.

NATURE STUDY.

The aim or purpose of Nature Study is to broaden and deepen life by putting the child into touch and sympathy with its environment, or, at least, a part of its environment often neglected. In doing this, latent interests are developed and new ones created, and both are made permanent. Nature Study aims to educate according to correct principles, and it is believed that its influence tends directly and wholly toward developing a rational human being. Because of her great influence upon man and her close relation to God, Nature should be well known to all; and as a foundation for proper understanding of the problems of all ages, this knowledge is of the most vital kind. But it is in the broadening and deepening of everyday life through interest in and sympathy for Nature that results are most pronounced.

The method of studying Nature as emphasized in the Normal School is by personal investigation. In no subject should "learning by doing" receive more emphasis. The most skillful teacher is the one who, while securing a proper amount of progress in the attainment of knowledge and interest, gets the most work done by the pupils themselves. The teacher should herself study nature, but *with* the children, not for them. Most of all the teacher needs to avoid the habit of getting information,



Nature Study—Field Work.

always uncertain, from books and passing it on to the children. The excursion by teacher and pupils, or by individuals, is the most successful device thus far discovered for securing the study of Nature by personal investigation.

Hence the preeminent source of Nature Study must be Nature herself. "Nature studied first hand" is the foundation motto of the whole present movement. The work as being followed in the Normal School draws from the following original sources: Domestic animals, birds, mammals, fishes, insects and such other miscellaneous wild animals as are accessible; and trees, flowers, fruits, flowerless plants, plant products, and the rearing of plants in competitive contests and in the home and the school garden. It should be observed that all these are sources which are a part of Nature herself. The minor, supplementary sources, too often made the main ones, are books, specimens, pictures and persons. These have their value when properly used but cease to do harm instead of good only when *made supplementary*.

Following is a list of the subjects for study for each grade. They are all found in the vicinity of Greeley. It is expected that as a result of the year's work each grade will have an acquaintance with and an interest in each of the subjects designated for that grade.

GRADE I.

I. *Animals*—Dog, house finch, meadowlark, robin, mocking bird, lark, sparrow, yellow warbler, Say's phoebe, mourning dove, striped spermophile, bat, house mouse,

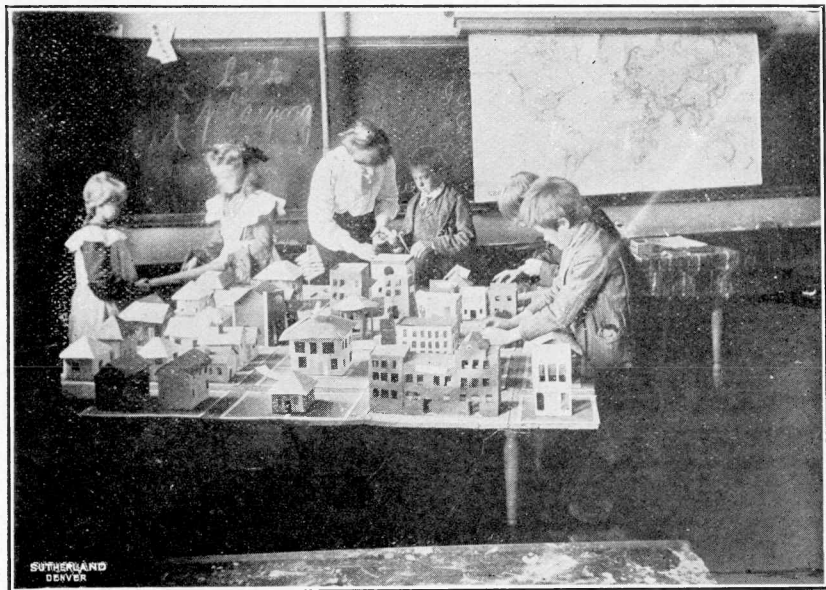
goldfish, cecropia moth, monarch butterfly, yellow swallowtail butterfly, honey bee, sexton beetle, giant water-bug, locusts, meadow grasshopper, garter snake and common toad.

II. *Plants*—Competitive flower rearing; flower calendar; spring flowers: white mountain lily, evening primrose, snowball (*abronia*), dandelion, beggar's tick, star-flowered Solomon's seal; fall flowers as listed by supervisor; school garden work: rearing radishes, onions, rhubarb, parsley, plum, soft maple, Lombardy poplar, golden currant and selected perennial and annual flowers; and the fern.

GRADE 2.

I. *Animals*—The cat, cagebirds, English sparrow, bluebird, killdeer, red-winged blackbird, Arkansas kingbird, black-headed grosbeak, red-headed woodpecker, pocket gopher, muskrat, zebra minnow, modest sphinx moth, viceroy butterfly, mourning cloak butterfly, agricultural ant, Colorado potato beetle, blue bottle fly, box elder plant bug, crickets, mud turtle and horned toad.

II. *Plants*—Competitive flower rearing; flower calendar; spring flowers; blue violet, shepherd's purse, red false mallow, beard tongue, scarlet gaura, spiderwort; and fall flowers as listed by the supervisor; school garden work: rearing lettuce, onions (from seed), potatoes, savory, raspberries, Carolina poplar, white elm, bush honeysuckle, and perennial and annual flowers as selected; and mosses.



Construction Work—Second Grade—City of Greeley.

GRADE 3.

I. *Animals*—Tame rabbits, turkey, horned lark, nighthawk, Townsend's solitaire, screech owl, junco, barn swallow, Bullock's oriole, kingbird, yellow-headed blackbird, magpie, lark bunting, sparrow hawk, American dipper, fox squirrel, chipmunk, beaver, sunfish, polyphemus moth, clouded sulphur butterfly, orange sulphur butterfly, bumble bee, water boatmen, house fly, dragon flies, carrion beetles, frog, sand lizard and pond snails.

II. *Plants*—Competitive flower rearing; the flower calendar; spring flowers: yellow violets, prairie thermopsis, puccoon, silky sophora. Fall—As listed by supervisor; school garden work: rearing peas, beets, carrots, selected sweet herbs, strawberries, willow, ash, bridal wreath, and annual and perennial flowers as selected; spiogyra and cladophora.

GRADE 4.

I. *Animals*—Chickens, cattle, long-crested jay, pinon jay, flicker, northern shrike, bobwhite, cowbird, bronzed grackle, cliff swallow, white-rumped shrike, wren, crow, kingfisher, yellow-throat, Brewer's blackbird, brown thrasher, kangaroo rat, white-footed mouse, bear, badger, carp, cut-worm moth, crescent spots butterfly, paper wasp, May beetle, black swimmers, mosquitoes, damsel flies, snapping turtle, hog-nosed snake, and crayfish.

II. *Plants*—Competitive flower rearing; flower calendar; wild flowers: Platte milk vetch, water crow-foot, spreading cress, little lupine, woolly loco-weed; school garden work: rearing parsnips, beans, horse-

radish, cucumbers, selected sweet herbs, blackberries, box elder, linden, tamarisk and annual and perennial flowers; mushrooms, toadstools, etc.

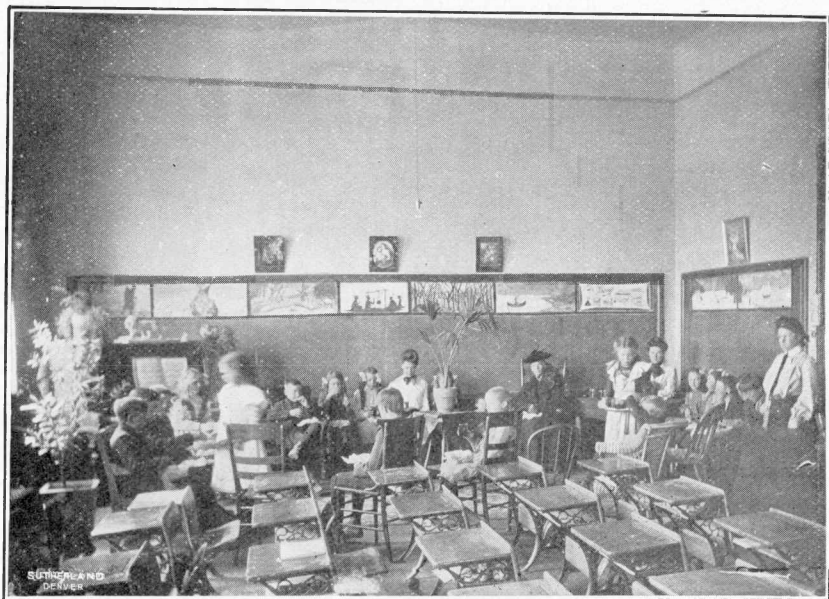
GRADE 5.

I. *Animals*—Horse, pony, broncho, burro, tame ducks, golden eagle, bald eagle, Chinese pheasant, turkey vulture, Rocky Mountain creeper, downy woodpecker, long-eared owl, western horned owl, bank swallow, burrowing owl, great blue heron, black-crowned night heron, prairie dog, cottontail rabbit, wild cat, mountain lion, Canada lynx, raccoon, Johnny darter, black bull-head; tomato worm moth, marbled white butterfly, *vespa* paper wasp, tumblebug, bedbug, plant lice, aphid, lion, ferrymen, horseflies, termites, tiger salamander, fresh water mussel, and wood louse or pill bug.

II. *Plants*—Spring and fall flowers as listed; school garden work: rearing tomatoes, spinach, muskmelon, sweet corn, selected sweet herbs, gooseberries, selected evergreens, silver poplar, lilac, and annual and perennial flowers as listed.

GRADE 6.

I. *Animals*—Pigeon, sheep, goat, guinea pig, tree sparrow, short eared owl, American eared grebe, pied-billed grebe, American bittern, least bittern, Wilson's phalarope, American coot, Virginia rail, sora rail, black tern, Forster's tern, pelican, ring-billed gull, loon, swan, coyote, deer, elk, antelope, bison, big horn sheep, top minnow, yellow perch, white lined sphinx moth, cabbage butterfly,



Fourth Grade—Social Hour.

mud dauber wasp, lady-bird beetles, louse, squash bug, stable fly, cockroach, leather-back turtle, bullsnake and centipede.

II. *Plants*—Spring and fall flowers as listed; school garden work: rearing cabbage, turnips, rutabaga, peppers, selected sweet herbs, currant, honey locust, black locust, buffalo berry, and annual and perennial flowers as selected.

GRADE 7.

I. *Animals*—Domestic animals not listed for previous grades, hawks and shore birds not previously listed, mink, otter, porcupine, weazel, ferret, wolverine, white sucker, black-spotted trout, clothes moth, yucca moth, thistle butterfly, leaf-cutter bee, tiger beetles, larder beetle, stink bugs, robber flies, crane flies, spotted water snake, earth worm and spider.

II. *Plants*—Spring and fall flowers as listed; school garden work: rearing sage, peanuts, pumpkins, sugar beets, selected sweet herbs, apples, dewberries, black walnut, catalpa, selected shrub, and annual and perennial flowers as selected.

GRADE 8.

I. *Animals*—Domestic animals not previously studied, game birds, any miscellaneous birds not previously studied, gray spermophile, gray wolf, red fox, swift fox, skunk, red fin or "shiner," large mouth black bass, underwing moth, fritellaries, tortoise shell butterfly, fleas, any beetles not on previous lists, scale bugs, botflies,

flesh fly, and any miscellaneous animals not on previous lists.

II. *Plants*—Spring and fall flowers as listed; school garden work: rearing tree tomato, lettuce, salsify, asparagus, popcorn, selected sweet herbs, selected fruits, hackberry, selected shrub, and annual and perennial flowers as selected.

The various grades will also review previous work as follows: Grade 5, review the subjects of grade 1; grade 6, those of grade 2; grade 7, those of grade 3; grade 8, those of grade 4.

Grades 5-8, inclusive, will keep an animal calendar.

In all grades the myths, legends, stories, pictures and specimens of the plants and animals belonging to the grade should be studied.

(NOTE.—The above course is largely adapted from Hodge's "Grade Plan," as outlined in his "Nature Study and Life." Acknowledgement of indebtedness to Prof. Hodge is hereby made.—JNO. V. CRONE.)

COURSES IN ARITHMETIC.

GRADES I AND 2.

- (1) The thirty-three primary addition facts.
- (2) The corresponding subtraction facts.
- (3) The multiplication facts to products 12.
- (4) The corresponding division facts.
- (5) The corresponding partition facts.
- (6) The meaning of $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, * * * $\frac{1}{12}$,
and $\frac{2}{3}$, $\frac{3}{4}$, $\frac{2}{5}$, $\frac{3}{5}$, $\frac{4}{5}$, $\frac{5}{6}$.

- (7) Relations of foot, yard, inch; pint, quart, gallon; nickel, dime, dollar; for illustrations.
- (8) Use known number facts in space 1-100.
- (9) Ratio. (10) Area and volume.

GRADE 3.

- (1) Mastery of operations with integers in number space 1-100. New facts especially.
- (2) Easy work in space to 1000.
- (3) Meaning and use of fractions to "twelfths," in addition, subtraction, and simpler cases of multiplication, division and partition.
- (4) Relations between fractions to twelfths.
- (5) Denominate number facts where relations are expressed by numbers less than 100. (Used primarily in illustrations.)
- (6) Ratio. (7) Area and volume.

GRADE 4.

- (1) Mastery of operations with integers in number space 1-1000.
- (2) Easy work in space to 100,000.
- (3) General meaning of fractions, and general use in partition.
- (4) General method of addition and subtraction of fractions,—work confined, however, to fractions in common use.
- (5) Simpler cases of multiplication and division of fractions. Relations to thirtieths.
- (6) Denominate numbers in common use. (Used primarily in illustrations.)

- (7) Simpler multiplication and division by numbers of two places.
- (8) Decimal notation for tenths.
- (9) Ratio. (10) Area and volume.

GRADE 5.

- (1) Work mainly in space to 10,000.
- (2) Some easy work in space to 1,000,000.
- (3) Multiplication and division by numbers of two or three places.
- (4) General methods of multiplication and division of fractions.
- (5) Decimal notation for hundredths, thousandths, etc. Work mainly confined to hundredths and thousandths.
- (6) Ratio. (7) Area and volume.

GRADE 6.

- (1) (2) Same as Grade 5. The use of approximation emphasized.
- (3) Multiplication and division by numbers of three or more places.
- (4) General methods for multiplication and division of decimals.
- (5) Percentage as a treatment of hundredths in a new notation.
- (6) Much work involving "per cents" most used.
- (7) Application of percentage to simple cases of interest, commissions and bank discounts.
- (8) Ratio. (9) Area and volume.

GRADE 7.

- (1) Constructional and inventional geometry.
- (2) Areas of parallelograms, triangles, trapezoids, etc., and circles.
- (3) Volumes and areas of prisms, pyramids, right circular cones and cylinders, spheres, etc.

GRADE 8.

- (1) Review of principles of arithmetic. Some attention to short cuts in work.
- (2) Introduction of simple algebra symbols and methods.
- (3) Application of percentage in business,—interest, taxes, stocks, bonds, etc.
- (4) Significance and units of metric systems of weights and measures.
- (5) Involution of small numbers. Meaning.
- (6) Extraction of square root.

SEWING.

GRADE 5.

Position.	Hemming
Use of thimble	Gathering
Length of thread	Articles.
Knot	Handkerchiefs
Warp and woof	Bags:
Models.	Laundry
Basting	Sewing
Running	Doll clothes
Overcasting	Simple aprons

GRADE 6.

Review of former stitches.	French seam
Overhanding	Placket
Bands	Aprons
Gathering	Fancy bags
Felled Seam	Petticoat

GRADE 7.

Button holes	Christmas work
Hemstitching	Cooking outfit for next year
Fancy stitches	Study of different materials
Garments	

GRADE 8.

Cooking.

HIGH SCHOOL.

Model book, suit of underwear, shirtwaist suit,
study of material, cooking.



Club and Dumb Bell Exercises.

PHYSICAL EDUCATION.

HYGIENE.—GYMNASTICS.

Aim—Health, improved bodily development, recreation, promotion of growth and functions, discipline and attention, are aims throughout the training school.

The means employed to these ends are play, games and sports, drill, gymnastics. The basis of efficiency in developing the physical condition is a proper understanding of the individual health.

This is accomplished by the careful physical examination given at the beginning of each year. This investigation of the conditions of health, growth, and general and special development is carried on by a specialist, and forms a valuable aid in the direction of the child's instruction.

All the influences that bear upon the preservation of the best physical conditions for the child are scrutinized and regulated as far as possible.

GRADES I AND 2.

Aim—Development of co-ordination, muscular and rhythm senses. Emphasize recreative element. Develop spontaneous activity and attention.

Means—Use imitative games, exercise songs and stories, minute plays. Exercise of large fundamental

muscle groups; running, skipping, simple marching, easy fancy steps, bean bags and ball tossing. Bounding balls, games which may be developed from the plays and exercises. Imitation and musical accompaniment derive uniformity and later discipline.

This work will occur several times during the day, for a few minutes between classes.

GRADES 3 AND 4.

Purpose—Begin to *require* discipline and attention, ease and precision of muscular co-ordination and control.

Means—Free exercise by command.

Breathing drill, fancy steps and marching, running games, ball games, easy dumb bell drill. Alphabet of wands. Bounding ball drill.

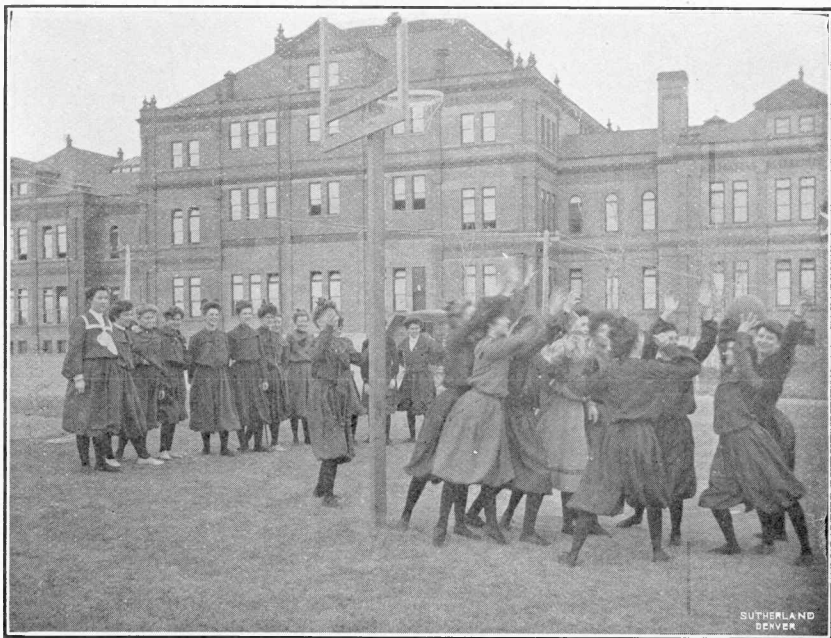
Gradually increase required attention and precision. Instruct as to carriage and posture, breathing, etc. Lessons occur every day in the gymnasium.

GRADES 5 AND 6.

Aim—*Emphasize* development of discipline. Relaxation from class work. Correction of posture and carriage. Improve general appearance of class.

Means—Swedish free exercises. Fancy steps and marching. Military drill, with organization of company. Setting up exercise. Drill with one club, bells and wands. Manual of arms with wands. Competitive games. Field day sports.

At this period increased growth requires a large amount of carefully adjusted exercise. The respiratory



Basket Ball

and heart power should receive attention and be developed. The teacher must instruct, by precept, example and correction.

The lessons occur daily under the physical culture teacher.

GRADES 7 AND 8.

Aim—In these grades individual conditions of growth and development receive especial attention. The teacher directs exercise to assist the formation of correct habits of posture and carriage, and to correct defective habits.

The hygienic value of the relaxation of gymnasium games and exercise is fully utilized.

Discipline and orderly habit is still a direct aim.

Means—Free exercise, fancy steps, figure marching, dumb bell exercises, Indian club drill, games and sports for the girls.

The boys will have military drill, with the organization of a regular company with officers, military "setting up" exercise, wooden and iron bell drill, Indian clubs. In more advanced class work on fixed apparatus in gymnasium, field and track sports outdoors, school fencing.

The work occurs daily for twenty minutes on play ground or in gymnasium.

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High School Department

HIGH SCHOOL.

GENERAL NOTES.

The school opens September 13, 1904.

In the High School Department of the Normal Training School at Greeley the state offers an excellent opportunity for High School training free of tuition to those who have completed the Eighth Grade work of a public school, or its equivalent.

Students who hold an Eighth Grade County Diploma are admitted to the Ninth Grade without an examination.

High School students have full use of the various laboratories of the Normal School, and of the studios and library, on the same condition as the Normal students.

Tuition is free. Text-books are furnished by the school. A library fee of \$2.50 per half year is charged for the use of books.

A deposit of \$2.00 is required when the student registers, and is returned, less the value of any books damaged or not returned, when the student leaves school or at the end of the year.

The Shakespearian Literary Society is organized, officered, and controlled by the students, and offers opportunity for practice in literary, dramatic, forensic, and musical work. It meets weekly at 2:15 Friday afternoons.

“The Normal High School Cadets” is a military company organized, officered, uniformed, and managed by the High School boys.

The enrollment in the High School for the year 1902-1903 is 135.

For further information address The Normal School, or Dr. T. R. Crowell, Superintendent of Training.

COURSE OF STUDY—1904-1905.

1. 36 weeks in a year's work.
2. 22 recitations per week required.
3. 792 recitations in one year's work.
4. 18 recitations count one “point.”
5. 44 points in a year's work.
5. 132 points required to graduate.
7. Figures below denote number of recitations per week in the subject.
8. “R” denotes required subjects.
9. “E” denotes elective subjects.
10. In order to take full work, pupil must take all the required work of each year, and elect enough to make 22 recitations per week.

NINTH GRADE.

Literature and English.....	3	R
Reading and Physical Culture.....	2	R
Algebra	5	R
General History.....	4	E
Biology and Zoology.....	4	E

Latin	4	E	} E I
German	4	E	
French	4	E	
Spanish	4	E	
Sloyd	4	E	} E I
Cooking	4	E	
Sewing	4	E	
Art	4	E	
Library Work (limited to 4 students)	4	E	
Taxidermy	4	E	
Vocal Music	3	E	

TENTH GRADE.

Literature and English	3	R	
Reading and Physical Culture	2	R	
English History	4	E	
Algebra	5	E	
Botany	4	E	
Physics	5	E	
Latin	4	E	} E I
German	4	E	
French	4	E	
Spanish	4	E	
Sloyd	4	E	} E I
Cooking	4	E	
Sewing	4	E	
Art	4	E	
Library Work (limited to 4 students)	4	E	
Taxidermy	4	E	
Vocal Music	4	E	

ELEVENTH GRADE.

Literature and English.....	3	R	
Reading and Physical Culture.....	2	E	
Industrial History and Economics.....	4	R	
Geometry	4	E	
Chemistry	5	E	
Astronomy and Physiology.....	4	E	
German	4	E	} E I
French	4	E	
Spanish	4	E	
Latin	4	E	
Sloyd	4	E	} E I
Cooking	4	E	
Sewing	4	E	
Art	4	E	
Library Work (limited to 4 students).....	4	E	
Taxidermy	4	E	
Vocal Music	4	E	

Kindergarten Department

FACULTY.

Z. X. SNYDER, PH. D., President,
History of Pedagogy and Philosophy of Education.

T. R. CROSWELL, PH. D., Superintendent,
Pedagogy and Supervision.

E. MAUD CANNELL, Supervisor,
*History and Philosophy of the Kindergarten, Mutter und
Kose Lieder, Theory and Practice of Gifts and Occu-
pations, Songs and Games, Theory of Kinder-
garten Practice, Garden Work, Story Tel-
ling, Supervision of Practice Work.*

LOUISE M. HANNUM, PH. D., Preceptress,
Literature and English.

DOUGLAS D. HUGH, A. M.,
Psychology.

ANNA M. HEILEMAN,
Reading.

HARIET DAY,
Art.

SAMUEL M. HADDEN, PD. B.,
Sloyd.

WILLIAM K. STIFFEY,
Vocal Music.



Shrub Bed.

KINDERGARTEN TRAINING DEPARTMENT.

The fundamental principle in Kindergarten training is to condition the child for development by rendering it active through the play impulse.

In the evolution of public education it is becoming apparent that the Kindergarten is to serve as a transition from the home to the primary school. It serves to initiate the child into the long established primary school, just as industrial education initiates it into civil society.

The School Law makes the Kindergarten a part of the educational system of the state of Colorado. Hence, there is a demand throughout the state for well-equipped kindergartners. To this end, the Normal School has increased the efficiency of its Kindergarten Department, and its primary purpose is to give a strong and thorough theoretical and practical training for teachers of Kindergartens.

As the diploma given upon finishing the two-year Kindergarten course licenses the holder to teach in the public kindergartens and primary schools of Colorado, ample opportunity is given for practice and observation in the primary grades of the training school.

KINDERGARTEN COURSES.

Entrance Requirements—

Graduates from High Schools, or schools whose course is equivalent to that of a High School, are admit-

ted to the Kindergarten Department without examination, provided they give evidence of some musical ability. Failing to have the musical requirement, and other requirements being satisfactory, the applicant, by taking lessons and practicing at least one hour a day, may overcome this condition.

As character, culture and a certain aptitude are peculiarly necessary for Kindergarten work, the department reserves the right of selection and decision in each case, and as soon as it is determined that the individual has no aptitude for the work, she is requested to withdraw from the class.

Those who have finished the Sophomore year of the regular Normal course may elect the two years' Kindergarten training course, if they show fitness for that work.

Graduates from State Normal Schools and Colleges may complete the Kindergarten course in one year, provided they have the requisite training in music.

Persons who do not come under the above conditions may be entered by submitting satisfactory credentials.

OUTLINE COURSE OF STUDY FOR KINDERGARTEN DEPARTMENT.

Junior Year—

I. Kindergarten Theory.

Discussion of practical child-training questions, based upon the observation of the children in the kindergarten supplemented by the student's recollection of his

own childish interests and pleasures. The discussions will include such topics as the significance of physical activity, proper means for securing motor co-ordination, the uses and limitation of imitation, the proper training of the senses, etc. From a first hand discussion of such topics the student will pass to the study of Froebel's Mutter und Kose Lieder, which embodies his philosophy of child nature. Abstracts will be written on each song.

Gifts—Theory of the gifts in general with experimental work with the first three.

Occupations—Theory and practical working out of perforating, sewing, intertwining and weaving. These are used as points of departure for the general construction work of today with the effort to use nature's materials and those found in the usual home surroundings.

Games—"In the Gifts and Occupations the child becomes conscious of his will as a power over matter to convert it to use. In the games and plays he becomes conscious of his social self and there dawns the higher ideal of a self that is realized in institutions." The chief value of Froebel's system lies in the plays and games rather than in the Gifts and Occupations; therefore especial emphasis is placed on developing

the play spirit of the student. Games are played which secure large, broad movements, general motor co-ordination and quick reaction time. The traditional street games of children form the point of departure and competitive games with the ball are emphasized.

Program—Students observe systematically in the morning kindergarten, following the development of the circle program and discussing it with the supervisor.

Kindergarten Observation—As given above. Especial attention is given the first quarter to conditions of light, seating, alternation of work and play, length of periods and other physical factors entering into a good kindergarten.

2. Psychology.
Same as Normal Junior Work.
3. Pedagogy.
Same as Normal Junior Work.
4. English.
Same as Normal Junior Work.
5. Art.
Same as Normal Junior Work.

Second Quarter—

1. Kindergarten Theory.
Mutter und Kose Lieder continued.
Gift—Theory and practice with the fourth and fifth gifts.

Occupations—Free hand weaving, folding and cutting.

Games—Traditional street games continued. Circle kindergarten games stressed, dramatization of natural forces of the industrial world, etc. Finger plays.

Program—Continued. Stories selected and adapted to the child's interests and the needs of the room.

Observation—Continued. Each student is assigned a particular child to study; written reports are made from time to time. The work of the kindergarten is now observed according to a given plan and the student is expected to make constructive and interpretative observations.

2. English.
Same as Normal Junior Work.
3. Psychology.
Same as Normal Junior Work.
4. Pedagogy.
Same as Normal Junior Work.
5. Music.
Same as Normal Junior Work.

Third Quarter—

1. Kindergarten Theory.
Mutter und Kose Lieder continued.
Gift—Theory and practice with the sixth and seventh gifts.

Occupations—Theory and practical work in poster work. Cardboard constructions, Peas and clay modeling.

Games—Games cultivating rhythm; simple hand and foot movements worked out spontaneously and in sequences. Utilization of such traditional rhythms as “bean porridge hot.” Each student will originate a game to be tested in class. Theories of play advanced by Spencer, Groos and others discussed and compared.

Program—A fuller discussion of the value and limitations of the kindergarten program as based on the work students have now had in their pedagogical seminar. Practice in making programs for circle and table work.

Observation—Continued with a fuller analysis of the pedagogical points observed.

2. Psychology.
Same as Normal Junior Work.
3. Pedagogy.
Same as Normal Junior Work.
4. Reading.
Same as Normal Junior Work.
5. Art.
Same as Normal Junior Work.
6. Instrumental Music.
Soft touch, perfect time and rhythm necessary. Selection of instrumental

music suitable for kindergarten. Ability to interpret this music. Realizing the power of music, not only educationally, but ethically, the atmosphere of a good kindergarten should be harmonious, rhythmical, musical. Realizing the demand throughout the country for kindergartners who are also musicians, much stress is laid upon this phase of the course. The chief object is to develop in the student a taste for good music, that she may bring the best to the children in this line, as she presents the best in literature and art. Also to form the habit of looking for the thought expressed in every musical composition and endeavoring to interpret that thought. At the close of the Senior year, each student will be required to play music suited to the various needs of the kindergarten as found in such books as Miss Hofer's Volumes of Music for the Child World, rhythms and marches by Anderson and Scammell and the best kindergarten song books.

Senior Year, First Quarter—

I. Kindergarten Theory.

Froebel's Mutter und Kose Lieder continued.

A fuller treatment and more discussion of the modern views of the psychological questions there treated.

Froebel's Education of Man—A careful study of the first division as the ground work of kindergarten philosophy with parallel reading from educational writers of today. Thesis will be written on selected topics making practical application to the problems of daily teaching in kindergarten and beyond.

Gift—Theory and practice with gifts dealing with the line and the point.

Program—Advanced work; discussion of daily difficulties. Constant practice in making subject plans and lesson plans utilizing the "formal steps" as far as they are helpful to the spirit of the kindergarten.

Games—Same as Junior work.

Stories—Methods in story telling. Adaptation of stories for kindergarten use.

2. Practical Work in Kindergarten.

Each student will have ample opportunity to carry out with the children the theoretical knowledge she has gained, not only at the tables, but in telling stories, teaching songs, conducting morning circle, march and games.

3. History and Philosophy of Education.

Same as Normal Senior work.

4. Reading.
Same as Normal Senior work.
5. Music.
Same as Normal Senior work.
6. Teaching. In the primary grades.

Second Quarter—

1. Kindergarten Theory.
Mutter und Kose Lieder continued.
Education of Man—Part two in some detail.
Topics from the rest of the book assigned for individual work, relating with modern school methods. Symbolic Education Studies.
Program—Continued.
Games—Same as Junior work.
Stories—Original stories presented in sketch form for discussion and tested with the children.
2. Teaching in kindergarten continued.
3. Philosophy of education continued.
4. English—Same as Normal senior work.

Third Quarter—

1. Kindergarten Theory—This will now center itself about the practical work of the kindergarten and the problems it suggests. Program and story work will be continued.
2. Philosophy of education continued.
3. English continued.

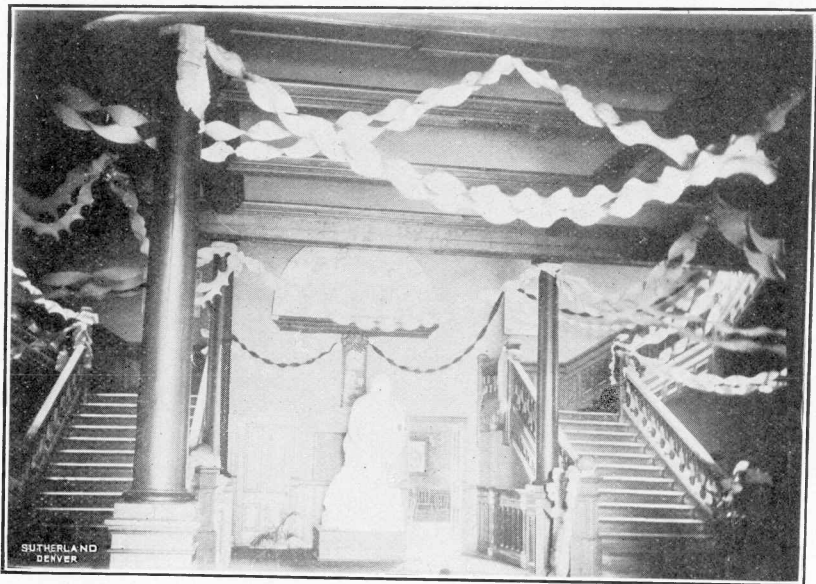
4. Teaching in kindergarten continued.
5. Basketry—Kindergarten Sloyd course.

ELECTIVE KINDERGARTEN COURSE.

Realizing that the educational sentiment of today asks that all teachers have at least a general understanding of Froebel's philosophy, and also that the best primary positions are open only to those who can make close connection with public school kindergartens, an elective course is offered to prepare Normal students to meet these requirements. This is a one year course giving the same credit as other elective courses and is designed especially to meet the need of those preparing for lower grade work. The work is similar to that of the special kindergarten course in the Junior year, but less minute. It aims to give a general survey of kindergarten philosophy as it relates to general educational theories, with discussions on the resulting reconstruction of school curriculum and methods. The kindergarten hand work is selected and adapted to primary needs. This course in games and rhythms corresponds to that of the Junior year. Observation in the kindergarten is required, followed by interpretative and critical discussion with the supervisor.

GENERAL KINDERGARTEN OBSERVATION.

It is a necessary part of the pedagogical training that the principles and practice of the kindergarten be understood by all the graduates of the School. Hence in connection with their pedagogical seminars all the students



Lower Hall, Junior Reception Decorations.

of the Normal School occasionally observe in the kindergarten room. This is followed by critical discussions of the work seen.

ONE YEAR COURSE.

Graduates of the State Normal School may complete the kindergarten course in one year.

1. Kindergarten theory with both Juniors and Seniors.
2. Kindergarten observation and practice.
3. Kindergarten Sloyd. Basketry.

THE TRAINING SCHOOL KINDERGARTEN.

The morning Kindergarten gives opportunity of putting into practice the principles and instructions given in the theoretical work. One is useless without the other. The points made under the Training School Department are equally applicable in the Kindergarten. The real center about which all the Kindergarten work depends is the child's instinctive interest in Nature and life, and it is the endeavor of the Kindergarten to make the child's contact with nature as close and vital as possible. To this end, each child has a garden plot in which he digs, sows seed, and watches and tends the growth of his plants. This garden work will be the basis of much of the nature work with the children.

"It is of the utmost importance that children should acquire the habit of cultivating a plot of ground long before the school life begins. Nowhere as in the vegetable

world can his action be so clearly traced by him, entering in as a link in the chain of cause and effect."—FROEBEL.

As many animals as possible will be cared for by the children. When the weather permits the games and work will be carried on out of doors.

Since the Kindergarten is situated at the edge of town, it is specially conducive to the frequent excursions which each Senior takes with her group of children. The flowers, leaves, stones, etc., gathered upon these walks are brought back to the Kindergarten and are there utilized in some way, such as being pressed, pasted or painted. While it may be necessary that the Senior have sufficient scientific knowledge as a basis for this work, she must also have an appreciative love of nature, that she may unconsciously lead the children to see the beauties and mysteries of nature.

"The child's first tutor is nature and her tuition begins from the moment that the child's senses are open to the impressions of the surrounding world."—PESTALOZZI.

MOTHER'S CLUBS.

All over the country mothers are becoming interested in child study. They are appealing to kindergartners for guidance in this work.

Frequent requests have been made of the supervisor of our Kindergarten Department for suggestions and plans of work in regard to mothers' clubs. These have led us to attempt to do some work in this line by correspondence. It is proposed to furnish clubs that may de-

sire it with such subjects for discussion and study as are relative to child study. All this may be arranged by correspondence.

Beside the correspondence work, the supervisor of the Kindergarten would be glad to meet such clubs, at a time to be arranged, and give talks relative to the work. There would be no expense except such as would be incurred in traveling and entertainment. For information address the Normal School.

The supervisor holds occasional mothers' meetings during the year at the Normal School.

Music Department

render them attractive to her class. Nothing is to be presented in which she herself does not feel a real interest. The nature of the interest felt by the teacher and child will differ in this as in other subjects; to the one it will be pedagogical, to the other musical.

II.—Choice of Music is to be Determined by Needs of Pupil and not by Taste of Teacher.

As in literature, Shakespeare and Browning would wait on "Mother Goose" and Robinson Crusoe, so the musically elementary should precede and lead up to Beethoven and Brahmos. The training which leads to an understanding and consequent enjoyment of good music works is as truly an evolution as is all education. The history of the art clearly shows the lines along which the race came to its present musical consciousness. The child must go through the same stages, in the same succession to reach the same end. The first songs should be such as imply the simplest harmonie, involving at the same time the fewest possible elements of melody. They should be in the major mode, quick in movement and bright in color.

Rote Singing—

The purpose of rote singing is to develop taste. Good taste demands, first, that the songs shall be worthy the time expended on them both as to words and music. Unless the words are worth while—poetic thought, poetically expressed—the song is not to be used. The music must be genuinely melodious and so adapted to the words as to bring out and enhance their meaning. The song



Stairway to Third Floor.

should be carefully phrased and the phrases so contrasted as to show their relative importance and to clearly set forth the climaxes. Rote singing is justified only when done in an artistic manner.

Good taste demands, secondly, that the songs shall express such sentiments as belong to the child. Avoid songs that express strong, intense emotions. Happy and bright subjects are natural to and therefore right for the child. The emotional life of the happy child is calm and even.

In presenting the song, the teacher will create an atmosphere which is absorbed by her pupil; it will envelop and permeate as the sunlight envelopes and permeates. This atmosphere is that certain something which is the power of the orator to move his hearers. It is that compelling influence, commonly called magnetism. Without it, there is no art.

III.—An Understanding of the Child's Voice, Its Power and Range, is an Essential Equipment of the Teacher of Singing.

Compare the speaking voices of children with those of adults. You will notice that the low tones of even the adult soprano voice are rarely used by the little child. There is a steady deepening both in pitch and quality from babyhood to maturity. This is not to say that the voice is limited in range. The lower tones are lacking and the finer rhythms calling for quick, light, elastic tones meet the physical and mental needs of the little child. This period of activity is especially adapted to the accomplishment of agility. The piping shrill tone of the little

child is a matter of common remark. Its singing voice is likewise high in pitch. Proper songs and exercises are such as recognize this peculiarity. They will not lack in upward range but will avoid the low tones.

IV.—Sight Singing is Hearing through the Eye.

The sight singer has the power to sing correctly from a series of printed notes, the series of sounds corresponding to such notes, and gets at first sight of the music page the effect which comes to one not a sight singer, only through the medium of the piano or another person. To the sight reader the tone symbols instantly bring to his mental hearing that for which they stand. To realize the mode power of the page, music, being a language, is to be learned as languages are learned—the ear is to lead. Notation is to be relegated to its proper place—a sign for something already known. Signs are not used for teaching music, but music is to be used for teaching signs.

V.—Sight Singing is Possible Only when a Sense of Tonality is Acquired.

To this end all instruction must be directed. Tonality is a sense of key, by which one is able to instantly sound or sing the key note of any piece just heard. More than this—if, in the progress of the piece, there be a modulation or transition, he is able to give the new key note. By this sense the hearer instantly perceives the relation of any tone to a given tonic. This same sense establishes in the mind a relation of all tones, so that the mental effect or “mood power” of each tone of the scale is clearly apprehended, giving the power to note down

anything heard. This "mood power" of the tones in scale corresponds to the thought power of words in a sentence and produces a feeling which is as clearly apprehended as is the thought expressed by the word. When this sense of tonality is established and the relation between the effects and the signs for the same clearly known, the pupil will readily write what he hears. Hand in hand with this tonal sense there must be developed a sense of rhythm and a knowledge of its notation.

A single tone, alone and unrelated, is entirely without musical meaning. Indeed, no tone disassociated can be properly called a musical tone. The mind, when regarding it as music, thinks of it at once as a tonic or as related to a tonic. G has a totally different effect as the third of the key *E_b* from what it will have as a member of any other key. On the other hand, F as third of key *D_b* will have the same meaning—will say the same thing as is said by G in *E_b*. The power of the tone does not depend on its pitch, but upon its place in key. The problem of teaching the accurate production of pitch is the development of the sense of the individuality of tone in key. To do this we proceed along the line of least resistance as shown by the evolution of the art. The child is taught to produce a fifth for any tonic. With these two tones a third is associated. Ear and mind are tuned by the use of interesting exercises, so devised as to secure and maintain the pleased interest of the child, and are trained to recognize differences in pitch as well as tone qualities. In like manner the dominant and sub-dominant chords come into the vocabulary and are incorporated into

exercises, rounds and songs. In these exercises rhythm is a marked feature.

The regular recurrence of accents in groups of pulses or beats has a charm which we all feel. This and this alone is the attractive power of the drum, cymbals, the gong and other instruments of percussion. This charm is universally felt, even by those to whom all tunes are alike. It accounts for the popularity of "Mother Goose" and other nursery rhymes. It is the basis of the tonal art—the form which is later clothed upon with melody. The perception of rhythm is the easiest art exercise of the mind. Rhythmic perception becomes highly developed in people whose harmonic sense is but quite elementary. Fine illustrations of this are afforded by the music of the Negroes, the Omaha Indians and the Cubans. Within the phrase there should be enough variety to clearly define its limits and enough similarity between phrases to unmistakably show their relation. In first exercises it is well that a number of the phrases should exactly repeat the rhythm of the first.

The teacher should bear in mind that the great composers, while using simple harmonies by rhythmic devices, produced masterpieces which expressed the healthy emotional life of a vigorous and sane-minded people. Rhythm belongs to the play period and is a delight to the child. Note the rag-time tunes and Sunday School music, which have no musical interest apart from their rhythm.

The teacher, in private practice or preparation, should begin with the simplest forms and elaborate them both as to tone and rhythm, thus gaining facility and readiness before her class. She should know how to construct

interesting musical exercises as readily as she can propound problems in number and dictate sentences in English.

Pupils should be taught to *feel* rhythm, to enter into and move with the rhythm as the result of an inner impulse. When this is accomplished a chorus of four, forty or four hundred will move together in absolute accord.

VI.—Immediately after the thing is learned it is to be named.

This name is kept as the specific description of the effect. Each effect is to have but one name. As soon as the relation is well established between the effect and the name, the sign is to be given. This sign must be definite, clearly and unmistakably indicative of the special effect and in no way indicative of any other. It is a matter of prime importance that the child should not be permitted to guess nor to be in any doubt as to the meaning of the signs. To this end, the most easily perceived effects are to be taught first. As in teaching color, we begin with two primary colors and add other primary ones, finally coming to shades and tints, so in teaching tones we proceed slowly, using the law of contrast.

It is a reasonable and fair test of the teaching of English that pupils shall be able to write English from dictation, *i. e.*, make the written signs on hearing the spoken words. It is no less reasonable that they shall make signs for tones sung to them. This furnishes a means for determining the individual accomplishment of a class.

Music is beauty in utterance—

The child is to be trained to see beauty. Music's place is not merely amusement, nor even diversion. These are incidental or minor effects. The satisfaction of the mind and heart must come from art work if that work is genuine. The final result must be kept in mind from the first lessons. Increase of power to enjoyment must come from each lesson. This means that something new is to be accomplished by each lesson—some new perception gained or clarified. The engrossing and absorbing nature of music as an emotional expression tends in an unusual degree to obscure the fact that the judgment and will must also receive attention. The heart is to be quickened, the judgment to be exercised and the will trained. The heart responds to the beautiful, the judgment is exercised by comparisons and perceptions of relations, and the will is trained by doing a part which contributes to an enjoyable result. A simple tuning exercise or a round contains all the material necessary to accomplish this in the early stages. The impulsive and childish must give place to the reflective, well considered and mature—and this must be a growth. The child, at the most receptive age, when its ear is most sensitive, is to store impressions, learning the signs which stand for them, from which it will later make comparisons and form judgments.

“The reason why the higher work of music finds fewer to appreciate it is because no art can satisfy one to whom it appeals, except so far as his mind can compare its parts together and perceive in them how *unlike complex wholes are grouped on the principle of putting*

together their partial effects." Constructive ability is therefore absolutely essential to the highest enjoyment of the art of song. Comparison of parts is necessary from the start. Art is a question of just relations. In music it is comparison of tone with tone and duration of one tone with that of another. The pupil's perception must be trained to observe these relations, first, in their simplest forms, and, later, in complex adjustments.

It should be the aim of all teaching to create an appreciation for good music, so that the student will be impelled to pursue the subject beyond what the public school course can supply. We must make the student feel the worth and nobility of the subject, showing that it ministers to his mental as well as his emotional nature. This implies that he must be provided with a key to the understanding of good music.

COURSE OF WORK.

For course of work in vocal music see Vocal Music in another part of catalogue. The vocal music in the Normal School is free and is required.

INSTRUMENTAL MUSIC.

The instrumental music is not connected in any official or financial way with the State Normal School. mental music, and this insertion is to inform them of the opportunities they have in connection with their other work.

PIANO DEPARTMENT.

Preparatory—This is intended for beginners. Recent years have more fully demonstrated a child may be advanced to musical playing by rational methods of instruction and practice in one-third the time usually consumed.

Our plan of work is of this character :

First year—Foundation materials from Prentice, Reineke, Landon, Curwen, MacDougall, Mozart, Haydn, Nurnberg, Engelmann, Mueller, Hummel and others ; incidental application of Mason's Touch and Technic to all playing.

Second year—Etudes from Lemoine, Loeschhorn, Duvernoy, Burgmueller and Koehler. Easy pieces by Gurlitt, Engelmann, Lichner, Schumann, Krug and others. Scales and chords.

Third year—Studies from Heller, Czerny, Bertini and Loeschhorn ; Sonatas by Mozart, Clementi and Dussek ; easy Sonatas by Haydn, Hummell and others.

Normal Course—This requires that students shall have had the equivalent of the Preparatory Course.

First year—Bach's Inventions (two-voiced); Czerny's School of Velocity Studies; Mason's Technics; Etudes of Duvernoy, Heller, Krause, Schytte, Handel, Bertini and others; pieces by Mendelssohn, Beethoven, Schubert, Chopin, Schumann, Tschaikowsky and others.

Second year—Cramer's Studies; Mason's Technics; Bach's Inventions (three voices); Sonatas by Mozart and Beethoven; works of Chopin, Gade, Grieg, Raff, Rheinberger, Moszkowski, Scharwenka and others.

Third year—Bach's Well Tempered Chavichord; octave Studies; Mason's Technics; more difficult Sonatas of Beethoven; larger compositions of Mozart, Haydn, Mendelssohn, Rubenstein, Schubert, Schumann, Weber and others; selections from the best American compositions.

VIOLIN COURSE.

A violin course is in process of arrangement. It will be in keeping with the high character of work in other branches of the Music Department.

Students in piano and violin will have free access to sight-reading classes, recitals, lectures and other incidental advantages of the school.

SCHEDULE OF PRICES.

PIANO.

Private lessons, one per week, per term.....\$18.00

Private lessons, two per week, per term..... 30.00

VIOLIN.

Private lessons, one lesson a week, per term..... 18.00

Private lessons, two lessons a week, per term..... 30.00

Tuition payable each term in advance. Lessons missed will be at loss of students. In case of prolonged illness, the loss will be shared with the student. Rates of tuition quoted above are not good for less than a full term.

Inquiries should be addressed to the Director.

Miscellaneous

MISCELLANEOUS.

GOVERNMENT.

That government of school which brings about self-control is the highest and truest type.

Discipline consists in transforming objective authority into subjective authority.

The *object* of school government is to preserve the thing governed; the *aim* is to develop the power of self-control in the students, the *end* is to make the pupils willing subjects of their higher motives and obedient servants to the laws of man and God. This conception of government put into execution is the only kind capable of developing high character. The school aims to develop this power of self-control, and to cultivate such sentiment as will render discipline unnecessary. Activity is the principle of development. Self-government makes him strong and fits him for life, while coercion, or government from without, renders him unfit for self-regulation. Thus bringing the student's regulative powers into use—his self-acting—there is an abiding tendency to self-government remaining. This is nothing more than training the will. If in the *government* of a school no effort is made to develop the will, no other opportunity so potent presents itself. The aim should be to build up a symmetry of growth in the three general powers of the mind—intellect, sensibility and will. Students who cannot con-

form to such training, and who cannot have a respectful bearing toward the school, will, after due trial and effort on the part of the faculty to have them conform, be quietly asked to withdraw.

All students who come from abroad, boarding in homes other than their own, are under the control of the institution while they are members of the school. Their place of boarding must be approved by the faculty, and their conduct in the town and elsewhere must always be such as to be above criticism.

DISCIPLINE—MORAL AND SPIRITUAL INFLUENCE.

While the school is absolutely free from denominational or sectarian influence, yet the aim is to develop a high moral sense and Christian spirit. As an individual who is weak physically or mentally lacks symmetry of development, so does one who has not his moral and spiritual nature quickened and developed. One who is being trained to stand in the presence of little children, and to lead, stimulate and inspire them to higher and nobler lives, should not neglect the training of his higher nature. God has immortalized us with His Divinity, and it is our duty to respond by continuously attaining to a higher life.

TRAINED TEACHERS.

Trained teachers are in demand. Many districts and towns employ no others. We have inquiries for good teachers. We expect to supply this demand from the graduates of the Colorado State Normal School.

THE STANDARD OF THE SCHOOL.

It is the purpose of the trustees and faculty of the Colorado State Normal School to maintain a high standard of scholarship and professional training. Those who are graduated shall be thoroughly prepared and worthy of all for which their diplomas stand. It shall be the policy of the school to protect those who employ our graduates by making them "worthy of their hire;" because, in so doing, we also protect them (the graduates) and the children whom they teach.

DIPLOMA.

Any person who completes the required course of study, and who possesses skill in the art of teaching, and who is of good moral character, will receive a diploma, which, according to law, is a life certificate to teach in the state of Colorado; and, in addition, he will have conferred upon him by the trustees and faculty of the institution the degree of Bachelor of Pedagogy.

LIBRARY AND READING ROOM.

"The true university is a collection of books."—
THOMAS CARLYLE.

"Reading makes a full man."—BACON.

For the delight and improvement of students and faculty the institution has connected with it an excellent library and reading room. As a means of education this feature of a school is indispensable. It is a fountain of

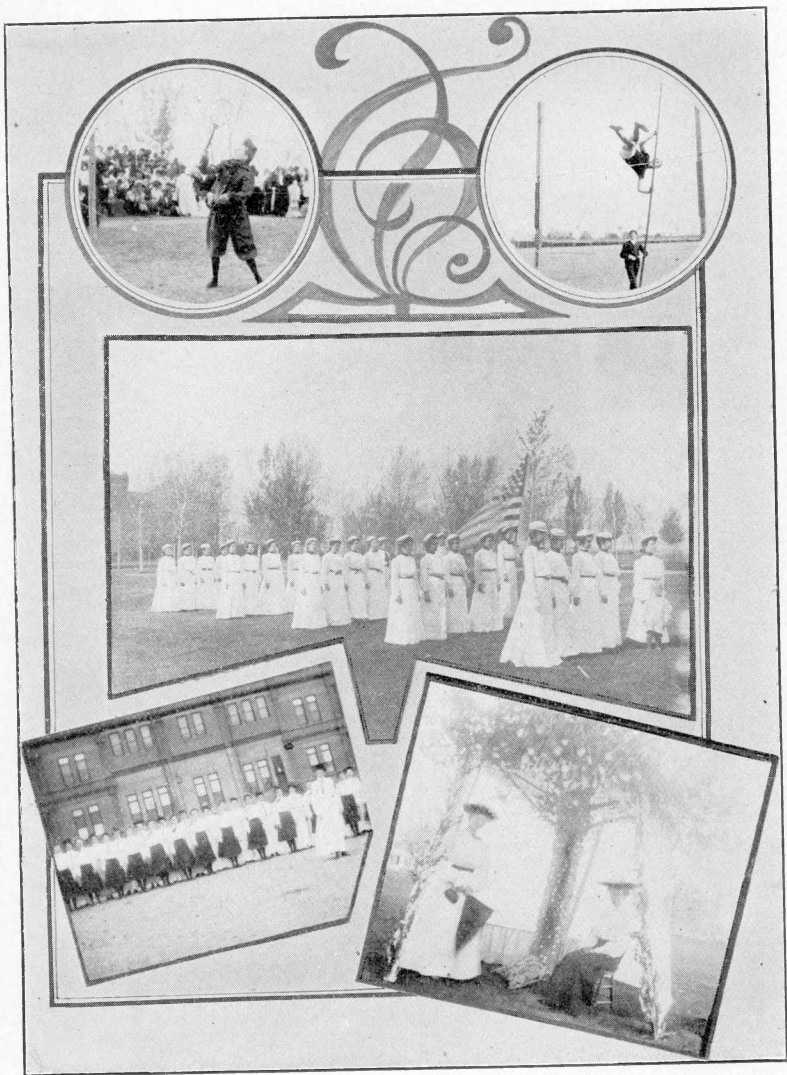
knowledge, a source of *discipline*, and a means of culture. The room is fitted up to serve the purpose of a "literary laboratory;" including reference books and works of a general nature, as history, biography, literature, fiction, poetry and science. There are about eighteen thousand volumes.

Among the reference books are: The Encyclopædia Britannica, American, Johnson's, People's, Young People's, and a number of small cyclopædias; Lippincott's Biographical and Geographical Gazetteers; Universal Biographical Cyclopædia; Webster's International Unabridged Dictionaries; Appleton's International Scientific Series, and several fine Cyclopædias of History; Reclus' Earth and Its Inhabitants; Century Dictionary; Standard Dictionary; Encyclopædic Dictionary; Dictionary of Woods.

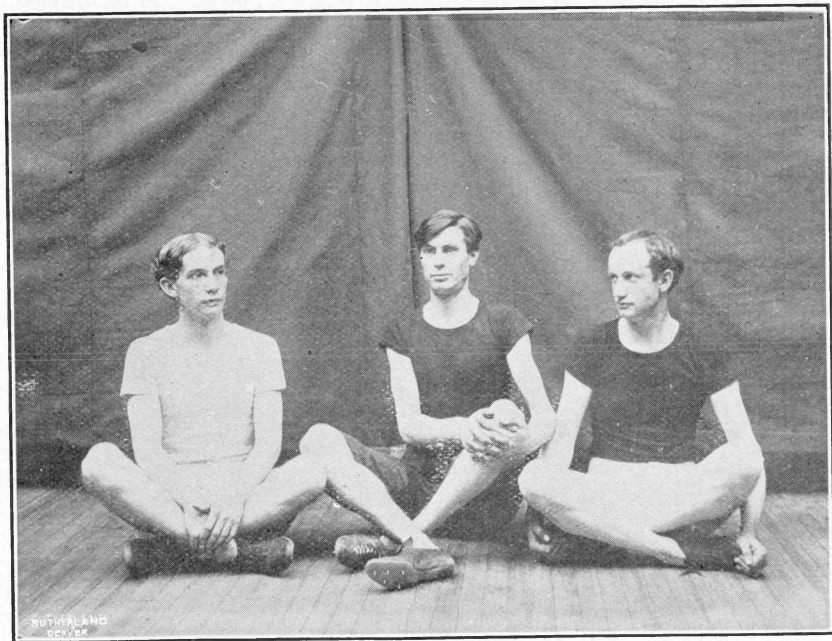
In addition to the above there is a pedagogical library. It contains works on philosophy, history of philosophy, science and art of education, philosophy of education, history of education, psychology, school management, methods, and general pedagogics.

The reading room contains an assortment of the ripest, richest and freshest magazines and educational journals published.

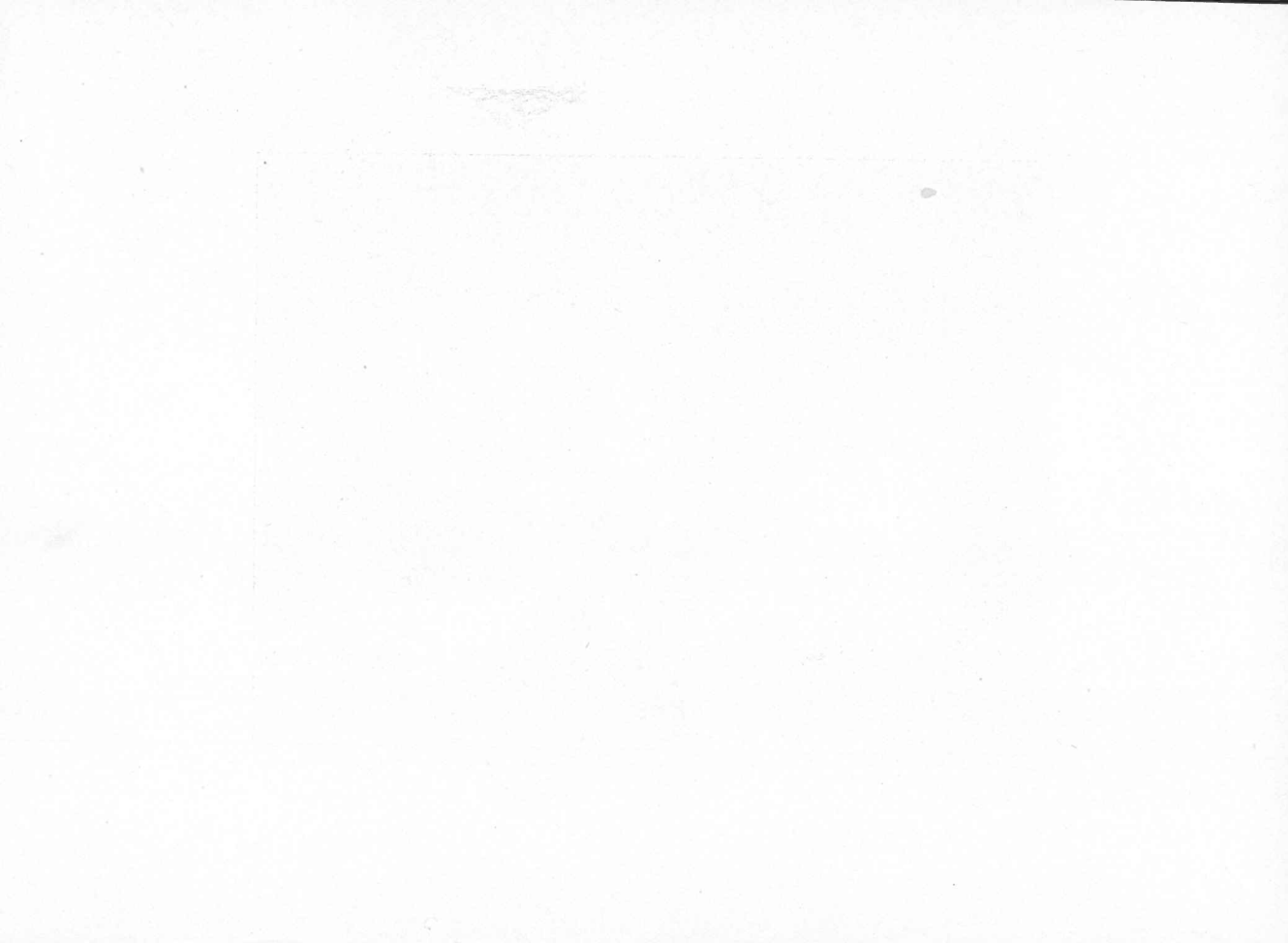
For further information regarding the library in detail send for Library Bulletin. This gives a very detailed account of it.

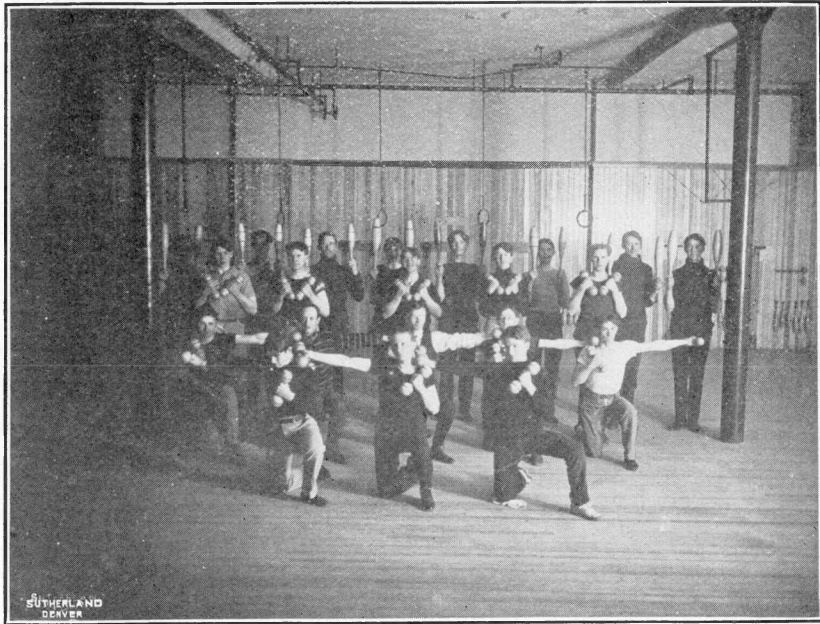


Field Day Snap Shots.



Runners.





Boys' Club Work.



Girls' Movements.

ATHLETICS.

"*A sound mind in a sound body.*"—*Juvenal*. Much interest is manifested in athletics. The object of athletics is two-fold: recreation, or enjoyment, and physical training. All participate in some way or other. The boys' field day in the fall and the girls' field day in the spring arouse much interest.

The events consist of *Foot Ball, Lawn Tennis, Croquet, Alley Ball, Tug of War, Base Ball, Delsarte, Calisthenics, Archery, Golf, Target Shooting, Club Races and Relays.*

All teachers and students in the school are members of the athletic association. The membership fee is fifty cents per year. This fee is compulsory.

All students of the Normal and High School departments are required to wear in the gymnasium classes, and when exercising on the field, suits as follows:

Women—Navy blue blouse and bloomers; and short skirt for outdoor wear, thirteen inches from the ground. This suit may be made at home.

Rubber soled shoes.

Men—Gray Turner trousers.

Black quarter sleeved Jersey.

Rubber soled shoes.

The men's suit may be obtained in Greeley at a minimum cost of \$2.75.

THE CRUCIBLE.

The *Crucible* is a monthly magazine, conducted by the students. It contains articles in literature, science, art and pedagogy, besides school news in general and of the Normal especially. It has a circulation of about 800.

CRUCIBLE STAFF.

1904-1905.

Editor-in-Chief, Mr. Blaine; Business Manager, Mr. Snook; Advertising Agent, Mr. Hall; Circulator, —; Proof Reader, Miss Kulp; Literary Editor, Miss Kerr; Pedagogical, Miss Meddins; Kindergarten, Miss Cope; Art and Handicraft, Miss Sibley; Athletic Editor, Miss Holland; General Notes Editors, Miss Crane, Miss McFarland; Exchange Editors, Miss Zorn, Miss Ferguson; Junior Representative, Mr. Draper; High School Representative, Glen Reid.

CHRISTIAN ASSOCIATIONS.

Realizing the necessity for religious and social culture in the school, and believing much good would come of Christian association, a large number interested have organized themselves into the Young Women's and Young Men's Christian Associations. The meetings are held at various times, and persons who have given considerable thought to the life and aspirations of young people are invited to address the meetings. Much good is also done by these associations in the way of creating closer social relations among the students.



Indian Vases.

Y. W. C. A.

The officers of the Young Women's Christian Association are as follows:

President, Freeda Kulp; Vice President, Pearl Holland; Secretary, Harriette Kerr; Treasurer, Josephine Work.

Cabinet—Freeda Kulp, Harriette Kerr, Josephine Work.

Pearl Holland, Chairman Membership Committee.

Frederica Zorn, Chairman Bible Study Committee.

Adella Lucas, Chairman Missionary and Intercollegiate Committee.

Arba Brown, Chairman Devotional Meetings Committee.

Mary Brush, Chairman Social Committee.

Membership Committee—Mabel Pasley, Anna Smith, Myrtle English, Blanche Sibley, Beulah Shull and Anna Harbottle.

Y. M. C. A.

The officers of the Young Men's Christian Association are as follows:

President, George W. Roup; Vice President, Ray P. Alexander; Secretary and Treasurer, I. C. Hall.

COMMITTEES.

Membership—Harry W. Heighton, Earl G. Morand, Mac Moore.

Social—William D. Blaine, Eugene Beardsley, Martin O. Rendahl.

Bible Study—Harry Snook, Prof. D. D. Hugh, Earl L. Johnston.

Meetings—Religious—Earl K. Terry, Boyd Reid, Ralph Ellis.

Employment—Everett Draper.

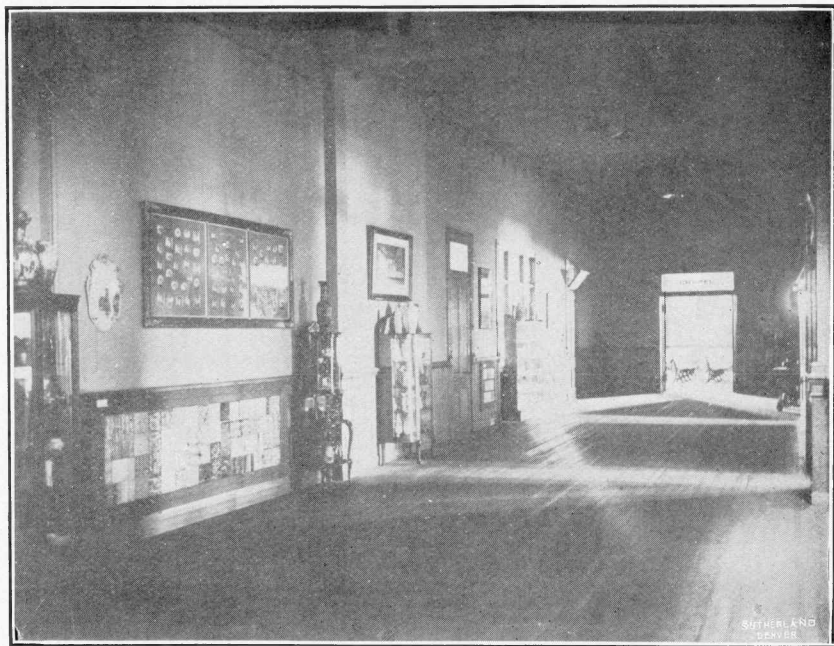
There will be committees from the Y. W. C. A. and Y. M. C. A. to meet incoming students at the trains and will wear the badges of the associations.

ALUMNI ASSOCIATION.

The Alumni Association is the strong organization for influence connected with the school. There are now 704 members. This means as many centers of influence for better educational work and for their *Alma Mater*, "Old Normal."

MUSEUM.

A museum is an indispensable adjunct to an educational institution. In this age of science teachers of public schools must have a working knowledge of the subject, as well as skill in presenting it. While outdoor work is first as a means in giving knowledge and cultivating a sentiment for nature, yet, collections are valuable in giving a view of nature in small compass, if they are properly arranged. The school has a fair working museum. There is no special room under lock and key set apart for storing specimens, but the cases are built in the laboratories where the specimens are to be used. About 200 linear feet of casing, ten feet high, and from ten to thirty inches deep, line the walls of the various laboratories. In them are



Pottery Museum Hall.

found most of the birds of Colorado and many from other states; many insects from this and other states; plants of Colorado and surrounding states; a great variety of liquid specimens; a number of mammals, fossils, etc.

If there are persons who have specimens and do not have places to keep them, we shall gladly give them room in cases where they may put them on deposit for safe keeping. If there are persons who have specimens and care to donate them, the institution will cheerfully receive them and give full credit to the donor. Quite a number have been donated by friends of the school.

The Trustees are arranging to secure, in pairs, stuffed specimens of all the large animals of Colorado. During the year a number of specimens will be added to the collection. At present a taxidermist is at work preparing the smaller animals and collecting all such specimens as are necessary to complete the collection.

ART GALLERY.

The Art Gallery is one of the features of the institution. In sculpture there are life and heroic size pieces of Niobe and Child, the Annunciation of the Virgin, the Wrestlers, Spinario, Venus de Milo, The Boy and Swan, David, Nike, or Victory, Joan d'Arc, Beatrice, Paul Revere, Plato, Froebel, Armor of Archilles, Beethoven, Judgment, Trojan Shields, Miltonic Shield, Water Nymphs, Declaration of Independence, Treaty of Peace, Frieze of the Parthenon, Singing Boys, Apollo Belvedere, Diana of the Stag, Pestalozzi, Hiawatha, Chief Ouray.

Olympian Hermes, Demosthenes, Greek Slave, Flight of Night, Lincoln, Washington, Shakespeare, Two Doves.

In pictures there are many very good ones—oil and water color, and about ten thousand fine photographs of the best art schools of the country.

In pottery there is one of the best collections of any school in the country. It represents all countries and many of the stages of development of the same country.

DIRECTIONS.

1. Those who contemplate attending a teacher's school would do well to write us. Do not hesitate to ask questions about the school; that is what we want. We like to answer them.

2. Persons who propose attending our school should let us know as soon as they make up their minds; let us know how you want to board, and whether you want us to make arrangements; let us know on what train you will arrive.

For any information you want, address the secretary or president.

SESSIONS OF SCHOOL.

There is one session a day, commencing at 8:15 a. m. and closing at 12:45 p. m. Study hours are from 3 to 5 and from 7 to 10. Students are expected to conform to these as far as is reasonable. A pupil is more liable to contract habits of study who has a time to study and a time to exercise. The Training School has two sessions a day.

EXPENSES.

To all citizens of the state sixteen years old or over, who declare their intention to teach in the public schools of the state of Colorado, and who fulfill the conditions for entrance, the tuition is free.

TEXT BOOKS AND OTHER FEES.

NORMAL DEPARTMENT.

1. All students who enter the Normal department of the State Normal School will pay the half yearly fees at the first of each semester. The fees for the first semester are: Book fee \$5, Laboratory fee \$1, Athletic fee 50 cents and Industrial fee (if the individual takes the subject), \$1.50. For the second semester these fees are the same.

TRAINING SCHOOL DEPARTMENT.

1. All students who enter the High School of the Training School department will pay the first semester: Book fee \$2.50, Athletic fee 50 cents; should the student take Sloyd, Cooking, Sewing or Library handicraft, \$1.50. For the second semester the fees will be the same.

2. All pupils entering the grammar grades of the Training School will pay for the first semester a book fee of \$1.50 each and \$1 per semester for Sloyd, Cooking, Sewing or Library handicraft, if they take either. For the second semester the fees will be the same.

3. All pupils entering the primary school will pay:

Book fee for first semester of \$1, and the same amount for the second semester.

4. All children entering the Kindergarten department will pay \$1 for each semester.

GENERAL STATEMENT.

All students entering from other states who are not at the time of entering citizens of Colorado, will pay the following: Tuition, first semester \$10, Laboratory fee \$2, Book fee \$4 and Athletic fee 50 cents. Should the individual take Sloyd, Cooking, Sewing or Library handicraft, the fee will be \$1.50. The same fees will be paid for the second semester.

Students electing chemistry are required to pay a fee of \$3 and deposit \$2, which two dollars will be refunded at the close of the year, less breakage.

BOARDING AND ROOMING.

Students board and room in private families from \$3.50 to \$4.50 per week. Boarding alone \$2.50 to \$3.50 per week. Self-boarding costs from \$1.50 to \$2.00 per week. Rooms rent from 75 cents to \$1.00 and \$1.25 per week, two in a room.

ADMISSION.

At a meeting of the board of trustees, held June 2, 1897, a resolution was passed making the course three years—namely, Preparatory, Junior, and Senior years.

The resolution regulates the admission.

1. All who enter must give evidence of good moral character.
2. High school graduates, or those having at least an equivalent education, may enter the Junior class without examination.
3. Persons who hold a teacher's certificate will be admitted to the Preparatory class without examination. All also who have an equivalent education will be admitted.
4. Graduates of other normal schools of high standing will be admitted to the Senior year.
5. College graduates will be admitted to the Senior year.

VISITORS.

The school is open to visitors. All are made welcome. The teachers and educators of the state are especially invited. The school belongs to the state—it belongs to the teachers of the state. Any one who may have a day, a week or a month to spare would be profited by paying us a visit, entering the classes, taking part if he so desires. It should be quite a privilege to visit our school.

COSTUMES.

All members of the Senior class provide themselves with the College gown and Normal cap. Gowns may be purchased ready made at prices ranging from \$4.00 to \$6.00. The price of the caps ranges from \$1.60 to \$2.50. The color of both gown and cap is black.

STUDENTS' RELIEF FUND.

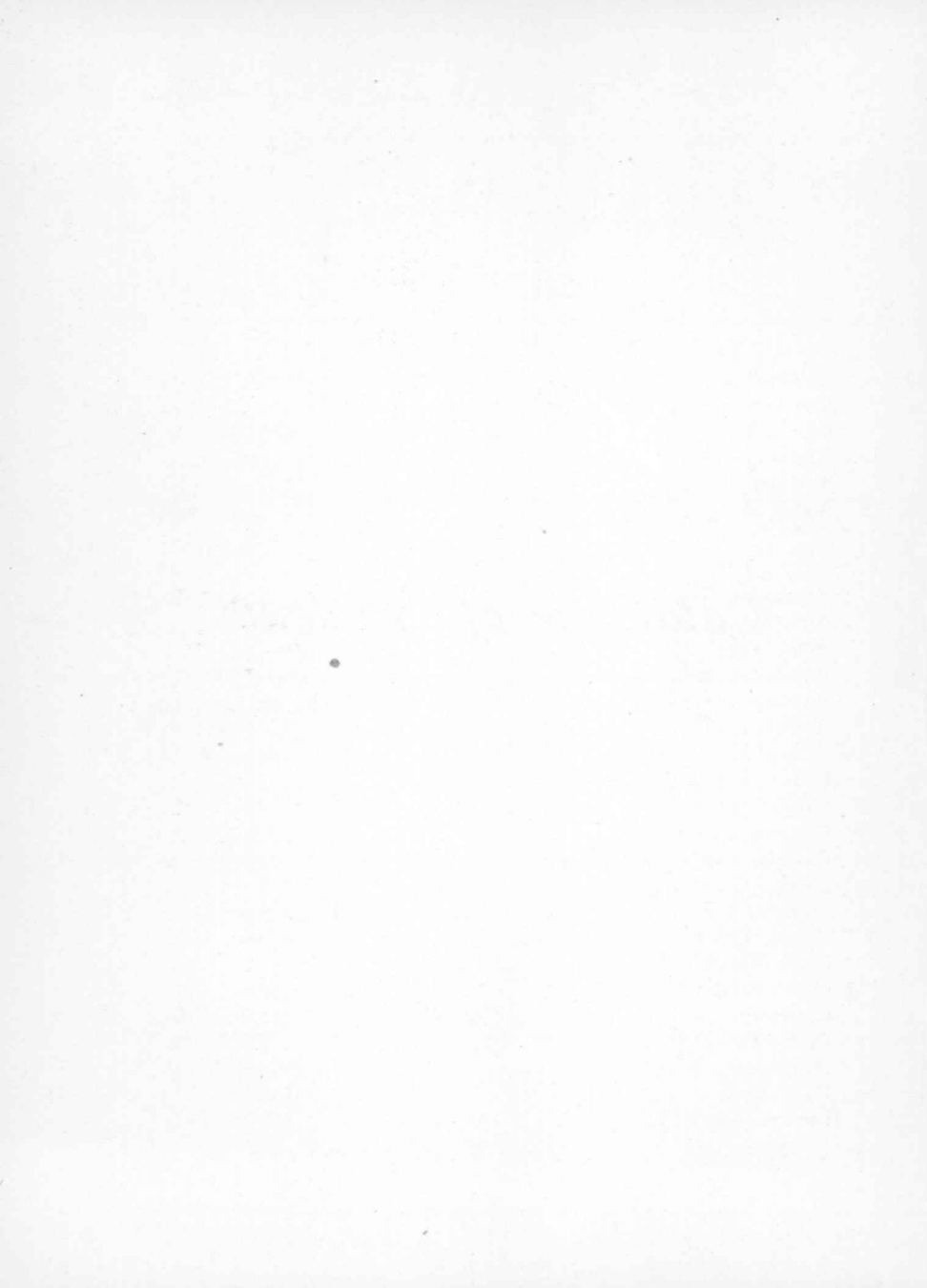
The object of this fund is to afford pecuniary assistance to meritorious students who have exceptional need of such help. It not unfrequently happens that a promising student who has entered upon his work with the expectation of carrying it through until graduation, meets with an unexpected loss, through sickness or other causes, which compels him either to leave the school or to continue the work under conditions that are not conducive to the best results. To meet the need of these students, a fund has been established, called the Students' Relief Fund, from which money is loaned to such students until they are in a position to repay it.

The money constituting this fund consists of contributions from persons and organizations disposed to help in the work, and of the interest derived from loans. The treasurer of the Board of Trustees of the Normal School is the custodian of the fund.

Applications for loans are made to the Mentor Committee, which is composed of members of the faculty of the school. This committee carefully investigates the record of the applicant, and grants his petition only in case it is satisfied that he is worthy of such help, and will be in a position to repay the money within a reasonable time. No loan is made unless the student has already completed the greater part of his course in the school, and is consequently well known to the teachers. In case of a favorable vote of the committee, the money is paid the applicant by the treasurer of the fund upon presentation of an order signed by the president of the school and the chairman of the committee. The treasurer accepts the student's note for the amount, and collects it when it becomes due.

It is believed that this fund will be the means of helping many capable and deserving young people to complete their education and to fill positions of usefulness in the public schools of the state. It is earnestly commended to all public-spirited persons as worthy of their consideration and support.

Catalogue of Students



CATALOGUE OF STUDENTS.

NORMAL DEPARTMENT.

POST-GRADUATE COURSE.—6.

Clement, Aurora W. (Mrs.).....	White Hall, Mich
Clement, H. Harman.....	White Hall, Mich
Crone, John V.....	Marathon, Ia.
Kleinsorge, Eliza.....	Des Moines, Ia.
Mitchell, Miriam V.....	Denver, Colo.
Sibley, Belle B. (Mrs.).....	Denver, Colo.

SENIORS.—86.

Alexander, Grace L.....	Greeley, Colo.
Alps, George W.....	Loveland, Colo.
Blunt, Carrie E.....	Greeley, Colo.
Buckley, Emma F.....	Greeley, Colo.
Burbank, Myrtle E.....	Longmont, Colo.
Bushyager, Genetta.....	Sheffield, Ia.
Campbell, Jennie M.....	Loveland, Colo.
Candor, Ethel.....	Evanston, Ill.
Carrel, Mabel.....	Greeley, Colo.
Cartwright, Mabel.....	La Junta, Colo.
Cassidy, Eva.....	Ames, Ia.
Cleave, Clara Josephine.....	Denver, Colo.
Coleman, Cora.....	Grand Junction, Colo.
Colvin, Ona V.....	Pueblo, Colo.
Cook, Florence.....	La Junta, Colo.
Cope, Minnie M.....	Salida, Colo.
Crawford, Sadie R.....	Bloomfield, Colo.
Curtis, Grace E.....	Ellison, Ia.
Doane, Maude S.....	Fairfax, S. D.
Dale, Dora.....	Greeley, Colo.
Dayton, Georgian I.....	Pueblo, Colo.

*Deceased.

Dillman, Caroline.....	Cheyenne, Wyo.
Dolan, Margaret J.....*	Leadville, Colo.
Douglas, Edith S.....	Denver, Colo.
Doull, Elizabeth G.....	Denver, Colo.
Dullam, Ethel P.....	Denver, Colo.
Evans, Katharyne M.....	Denver, Colo.
Elliott, Elizabeth.....	Brighton, Colo.
Elliott, Percis C.....	Brighton, Colo.
Frink, Ruby.....	Ft. Lupton, Colo.
Garrigues, Helen.....	Greeley, Colo.
Hamm, Anna R.....	Saguache, Colo.
Hooper, Dorothy P.....	Windsor, Colo.
Hughes, Emma E.....	Ferris, Ill.
Ingersoll, Nettie R.....	Delta, Colo.
Johnson, Axel E.....	Greeley, Colo.
Jones, Bessie E.....	Telluride, Colo.
Jones, Katharine.....	Stratton, Neb.
Kauffman, Harriet.....	Greeley, Colo.
Kelley, Edith.....	Greeley, Colo.
Kelsey, Wheeler.....	Ft. Lupton, Colo.
Kendel, Mary.....	Greeley, Colo.
Kerr, Berdie.....	Durango, Colo.
Lakin, Irene R.....	Brighton, Colo.
Lewis, Ella M.....	Loveland, Colo.
Lincoln, Clara S.....	Greeley, Colo.
Little, Isabel M.....	Red Cliffe, Colo.
MacArthur, Jessie J.....	Denver, Colo.
McDonald, Mollie A.....	Leadville, Colo.
McKeon, Madge L.....	Denver, Colo.
McMurphy, Jessie.....	Pueblo, Colo.
Meddins, Winfred C. P.....	Greeley, Colo.
Menke, Alice.....	Denver, Colo.
Merrill, Ada M.....	Leadville, Colo.
Miller, Mary Grace.....	Denver, Colo.
Morey, Jessie.....	Brush, Colo.
Mulford, Rachel D.....	Greeley, Colo.
Nelson, Josephine.....	Denver, Colo.
Nelson, Lena M.....	Canon City, Colo.
Oldham, Ethel J.....	Las Animas, Colo.

Osborne, Mary C.....	Cobb, Wis.
Pendery, Alice E.....	Denver, Colo.
Patterson, Elizabeth V.....	Greeley, Colo.
Perry, Geraldine M.....	Littleton, Colo.
Porter, Frances.....	Longmont, Colo.
Ramsey, L. Fern.....	Denver, Colo.
Reid, Pearl.....	Greeley, Colo.
Russell, Mabel N.....	Aspen, Colo.
Said, Nettie A.....	Pueblo, Colo.
Sanborn, Roma.....	Greeley, Colo.
Savage, Ella G.....	Pueblo, Colo.
Scott, Bertha L.....	Greeley, Colo.
Scott, Ethel.....	Maher, Colo.
Singer, Harriett H.....	Greeley, Colo.
Smith, Lavinia.....	Tuskagee, Ala.
Snyder, E. Tyndall.....	Greeley, Colo.
Stevens, Laura C.....	Denver, Colo.
Sutherland, Mary L.....	Grand Ledger, Mich.
Terry, Earl K.....	Denver, Colo.
Thedinga, Mary E.....	Colorado Springs, Colo.
Thomas, Lillie.....	Woodburn, Ia.
Turner, Mattie.....	Lamar, Colo.
Wetzel, George L.....	Curtis, Neb.
Woodbury, May.....	Greeley, Colo.
Worley, James.....	Akron, Colo.
Worley, Victor E.....	Akron, Colo.

JUNIORS—161.

Adams, Roxie.....	Greeley, Colo.
Alexander, Ray.....	Greeley, Colo.
Allsworth, Brainard H.....	La Junta, Colo.
Anderson, M. Dorothy.....	Denver, Colo.
Appleby, Carrie L.....	Poncha Springs, Colo.
Arbuckle, Jennie.....	Aspen, Colo.
Armstrong, Margaret.....	Greeley, Colo.
Barger, Lewis S.....	Greeley, Colo.
Barnard, Eva M.....	Johnstown, Colo.
Ballard, Cora.....	Rock Camp, W. Va.
Beardsley, Eugene.....	Greeley, Colo.
Beckford, Edith R.....	Sterling, Colo.

Bennett, Nellie R.	Greeley, Colo.
Benston, Hilma	Holyoke, Colo.
Blaine, William D.	DeBeque, Colo.
Broman, Cora C.	Denver, Colo.
Brown, Arba D.	Sterling, Colo.
Brown, Susie	Idaho Springs, Colo.
Brush, Mary	Greeley, Colo.
Buchanan, Louisa	Greeley, Colo.
Buchanan, Lucile	Barnum, Colo.
Bunning, Elsie L.	Benkelman, Nebr.
Butcher, Arthur J.	Erie, Colo.
Campbell, Mrs. Ella P.	Buena Vista, Colo.
Carson, Jessie N.	Denver, Colo.
Carson, Madge	Denver, Colo.
Carver, Emma	La Veta, Colo.
Chace, Bertha	Ft. Morgan, Colo.
Chandler, Bertha M.	Denver, Colo.
Churchill, Harry V.	Greeley, Colo.
Clarke, Florence M.	Denver, Colo.
Clark, May	Denver, Colo.
Connell, Cliffe	La Junta, Colo.
Cope, Myrtle E.	Salida, Colo.
Cozzens, Bertha	Greeley, Colo.
Craine, Carrie E.	Denver, Colo.
Crawford, Mabel L.	Washington, Ia.
Cummings, Josephine	Greeley, Colo.
Cuney, Nannie I.	Wray, Colo.
*Danielson, Hilda	Lucerne, Colo.
DeSellem, Mrs. Bella H.	Atwood, Colo.
Eadie, Isabel P.	Soda Springs, Ida.
Ellis, Ralph	La Salle, Colo.
English, Myrtle I.	Greeley, Colo.
Evans, Clara	Greeley, Colo.
Ferguson, Mabel	Denver, Colo.
Ford, Rae R.	Denver, Colo.
Forsyth, Clara	Mankato, Kan.
Foster, Jessie M.	Beatrice, Neb.

*Deceased.

French, Sarah T.....	Greeley, Colo.
Fulweider, Eva.....	Denver, Colo.
Garrigues, Edith.....	Greeley, Colo.
Godley, Sophia L.....	Edgewater, Colo.
Goldacker, Mary V.....	Las Animas, Colo.
Graham, Anna.....	Greeley, Colo.
Graham, Veda S.....	Denver, Colo.
Grannar, Elsie L.....	Hubbard, Ia.
Grimoldby, Winifred.....	Colorado Springs, Colo.
Hall, I. C.....	Greeley, Colo.
Heighton, Harry W.....	Colorado Springs, Colo.
Hines, Viola.....	Denver, Colo.
Hogue, Rose M.....	Salida, Colo.
Holland, M. Pearl.....	Greeley, Colo.
Horton, Harrie D.....	Cripple Creek, Colo.
Hotter, Anna M.....	Aspen, Colo.
Hughes, Mildred B.....	Fowler, Colo.
Hull, Cora B.....	Steamboat Springs, Colo.
Hummer, Ruthella.....	Cripple Creek, Colo.
Hunting, Adelaïd.....	Arapahoe, Nebr.
Hunter, Leona D.....	Lake City, Colo.
Hutchinson, Jessie A.....	Denver, Colo.
Ingram, Lizzie E.....	Greeley, Colo.
Jenkins, Marie.....	Denver, Colo.
Jones, Ella M.....	Julesburg, Colo.
Jones, Sidney S.....	Denver, Colo.
Johnson, Alice.....	Denver, Colo.
Johnson, Mamie.....	Delta, Colo.
Kendel, J. C.....	Greeley, Colo.
Kerr, Harriette.....	Ft. Collins, Colo.
King, A. B.....	Greeley, Colo.
Kitts, Myrtle E.....	Nevada City, Cal.
Kuhnley, Mabel L.....	Delta, Colo.
Kulp, Freeda M.....	Denver, Colo.
Lawrence, Edna.....	Greeley, Colo.
Lewis, Mabel A.....	Raleigh Springs, Tenn.
Lillard, Belle.....	Canon City, Colo.

Lindgren, Freda.....	Brighton, Colo.
Lucas, M. Adella.....	Canon City, Colo.
Lundy, Alice (Mrs.).....	Evans, Colo.
Magner, Bessie.....	Grand Junction, Colo.
Mahoney, Elizabeth M.....	Pueblo, Colo.
Mainard, Ethyl.....	Fruita, Colo.
Maine, Lottie V.....	Denver, Colo.
Marks, Fannie L.....	Ft. Lupton, Colo.
Martin, Maud E.....	Denver, Colo.
McBreen, Barbara.....	Denver, Colo.
McDermet, Ella F.....	Gibbs, Mo.
McDonald, Anna.....	Leadville, Colo.
McFarland, Rachel B.....	Greeley, Colo.
McGovern, Gertrude.....	Denver, Colo.
McKelvey, Nina.....	Denver, Colo.
McKune, Hazel D.....	Del Norte, Colo.
McLeod, Ethel G.....	Denver, Colo.
McLravy, Pearl.....	Aspen, Colo.
McRobbie, Sarah L.....	Leadville, Colo.
Mead, Lexie.....	Greeley, Colo.
Meddins, Beatrice.....	Greeley, Colo.
Morand, Earl G.....	Trinidad, Colo.
Monroe, Nellye V.....	Sterling, Colo.
Moore, Alice.....	Evans, Colo.
Morgan, Retta A.....	Erie, Colo.
Mosier, Leila.....	Rico, Colo.
Nash, Katharyn A.....	Georgetown, Colo.
Nash, Katharine F.....	Georgetown, Colo.
Nelson, Louise.....	Greeley, Colo.
Norine, Phoebe.....	Grand Junction, Colo.
Norris, Luella B.....	Greeley, Colo.
Palmer, Addie.....	Greeley, Colo.
Pasley, Edith L.....	Grand Junction, Colo.
Pasley, E. Mabel.....	Grand Junction, Colo.
Payne, Daisie A.....	Victor, Colo.
Peterson, Inga M.....	Denver, Colo.
Phillips, Pansy.....	Pagosa Springs, Colo.
Porter, F. Gertrude.....	Fruita, Colo.
Pressly, Estelle E.....	Greeley, Colo.

Pressly, Gladys Mae.....	Lacona, Ia.
Pressly, Katharyn.....	Lacona, Ia.
Pressly, M. M. (Mrs.).....	Evanston, Ill.
Proctor, Emily L.....	Loveland, Colo.
Provis, Rae.....	Hogg, Colo.
Reedy, Mary B.....	Beatrice, Neb.
Reilly, Ada L.....	Pueblo, Colo.
Remington, Katharyn C.....	Fairplay, Colo.
Rendahl, Martin O.....	Longmont, Colo.
Riggs, Carrie E.....	Colorado Springs, Colo.
Robb, Mary.....	Greeley, Colo.
Robb, Pearl G.....	Greeley, Colo.
Robinson, Francis I.....	La Junta, Colo.
Rooney, Annie C.....	Fairfield, Vt.
Roup, George W.....	Rye, Colo.
Runnette, Anna M.....	Denver, Colo.
Rupp, Gertrude.....	Grand Junction, Colo.
Scott, Madeleine.....	Denver, Colo.
Snook, Harry J.....	Greeley, Colo.
Sibley, Blanche T.....	Greeley, Colo.
Smith, Bessie B.....	Greeley, Colo.
Smith, Jessie M.....	Denver, Colo.
Sparling, D. Emma.....	Denver, Colo.
Stewart, Tinnie.....	Greeley, Colo.
Stoddard, Mabel G.....	Loveland, Colo.
Taylor, Mary D.....	La Salle, Colo.
Twomey, Jennie.....	Julesburg, Colo.
Ward, Olive.....	Greeley, Colo.
Welty, J. Florence.....	Boulder, Colo.
Williams, Sarah.....	Denver, Colo.
Witt, Anna I.....	Denver, Colo.
Wood, E. Winifred.....	Greeley, Colo.
Work, Josephine.....	Ft. Morgan, Colo.
Yardley, Alice E.....	Greeley, Colo.
Young, Elizabeth.....	Erie, Colo.
Zorn, Frederica E.....	Pueblo, Colo.

SPECIALS.—15.

Cassidy, Laura K.....	Des Moines, Ia.
Clark, S. K. (Mrs.).....	Greeley, Colo.

Cozzens, Mabel.....	Lucerne, Colo.
Crone, Kittie V (Mrs.).....	Greeley, Colo.
Galbraith, J. T.....	Pueblo, Colo.
Gibbons, Marcella.....	Leadville, Colo.
McCandless, F. J.....	Greeley, Colo.
Patterson, W. R. (Mrs.).....	Greeley, Colo.
Powell, Kittie Lee.....	Blakely, Ga.
Rankin, Edith.....	Greeley, Colo.
Scott, Lewis E.....	Nevada, Mo.
Small, Lavina A.....	Denver, Colo.
Watkins, Minnie.....	Grand Junction, Colo.
Wilson, Elma A.....	Monmouth, Ill.
Woodruff, Myrna.....	Greeley, Colo.

SOPHOMORES.—17.

Arbuthnot, Melissa.....	Boulder, Colo.
Bane, Naomi.....	Frances, Colo.
Blake, Ida D.....	Walsenburg, Colo.
Dumas, Alice D.....	Kohoka, Mo.
Easterly, Sarah B.....	Gunnison, Colo.
Johnston, Earl L.....	Evans, Colo.
Jones, Ida B.....	Sidney, Colo.
Little, Zelma.....	Beulah, Colo.
Munford, L. Lauretta.....	Ketmore, Kan.
Rowe, Edith.....	Lamar, Colo.
Sayer, Emma.....	Florence, Colo.
Smith, Anna P.....	Greeley, Colo.
Watkins, Myrtle.....	Grand Junction, Colo.
Williams, Gertrude O.....	Greenland, Colo.
Witt, Josie.....	Carlsbad, N. M.
Wolfe, Clara L.....	Obelin, Kan.
Yates, Maggie.....	Pagosa Springs, Colo.

HIGH SCHOOL DEPARTMENT.

ELEVENTH GRADE.—41.

Abbott, Vivian.	Kellogg, Pearl.
Alps, Rose.	Laughrey, Maude.
Bodfish, Gertrude.	McMillan, Ella.
Brake, Mona.	Midgett, Alma.
Camp, Leo.	Mincey, Myrtle
Charter, Bessie.	Moore, Mac
Cheese, Cora.	Morrison, Maggie
Cozzens, Mabel.	Murphy, Catherine.
Dean, Edna.	Norris, Louella
Doherty, Anita.	North-Tummon, Allene.
Doke, Carrie.	Pike, Jennie.
Draper, Everette.	Reid, Boyd.
Ellis, Edith.	Rhodes, Edith.
Finch, Myrtle.	Sanford, Margaret.
Foote, Amy.	Schroeder, Helen.
Gardner, Ada.	Shull, Beulah.
Hall, Mabel	Sibley, Winnie.
Hiatt, Grace.	Ward, Olive.
Hoffman, Ethel.	Wilkinson, Mabel.
Hoffman, Pearl.	Wylie, Eva.
Huffman, Lillie.	

TENTH GRADE.—40.

Bane, Naomi.	Edgington, Blanche.
Barry, Lois.	Edgar, John.
Beall, Roy.	Harbottle, Annie.
Bly, Winnie.	Herriott, Mary.
Byers, Sadie.	Hedgpath, Lena.
Cook, Alfaretta.	Hiatt, Paris.
Churchill, Isabel.	Huffman, Verner.
Dean, Iva.	Johnston, Harry.
Doke, Nettie.	Kelsey, Cammie.
Drew, Mamie.	Koster, Bettie.
Drew, Anna.	Laughrey, Leona.

Lanham, Iva.
 Lincoln, Allen.
 Lohr, Charles.
 Miller, Joe.
 Moore, Attie.
 Muncaster, Edith.
 Patterson, Mae.
 Percy, Lillie.
 Reid, Glen.

Sisk, Mamie.
 Smith, Clinton.
 Stampfeld, Alvene.
 Stephens, Joe.
 Trotter, Mabelle.
 Vanaken, Will.
 Vaughn, Mae.
 Waite, Nellie.
 Warner, Martha.

NINTH GRADE.—48.

Annlegate, Frank.
 Archibald, Allie.
 Armstrong, Nellie.
 Baker, Georgia.
 Barry, Susie.
 Beesley, Fred.
 Benton, Ralph.
 Berggren, Harry.
 Brainard, Ona.
 Brainard, Fay.
 Brown, Elva.
 Brown, **Grace**.
 Crawford, Ada.
 Crawford, Edna.
 Currier, Julia.
 Delling, Olive.
 Finch, Lester.
 Holland, Ethel.
 Jones, Mayfield.
 Kellogg, Mina.
 Kyle, Homer.
 Meek, Sadie.
 Morris, Archibald.
 Moore, Charles.

McDonald, Thomas.
 McMillan, Jeanette.
 Neynaber, Rosalie.
 Pier, Harold.
 Piedalue, Laura.
 Putney, Maude.
 Raymond, Dorothy.
 Randal, Homer.
 Ramsdell, Fred.
 Rice, Katie.
 Rhodes, Arthur.
 Rhodes, Hazel.
 Robb, Ben.
 Rowe, Cora.
 Royce, Maude.
 Royce, Artie.
 Saunders, Fred.
 Sedgwick, Richard.
 Skinner, D. D.
 Tormey, Minnie.
 Tormey, Marie.
 Vanaken, Earl.
 Warner, Ruth.
 Willis, John.

GRAMMAR DEPARTMENT.

EIGHTH GRADE.—25.

Alexander, Edith.
Beardsley, Edith.
Billings, Mildred.
Cobb, Ruth.
Cook, Pearl.
Cary, Orly.
Crawford, Charles.
Kindred, Avis.
Kyle, Henry.
Laucendorf, Hattie.
McCreary, Mildred.
Morris, Clara.
Meredith, Bessie.

Miller, Earl.
Neynaber, Hedwig.
Noffsinger, Adelia.
Norcross, Joe.
Patterson, Ethel.
Pattee, Paul.
Park, Olive.
Sharitt, Daisy.
Smith, Cora.
Thompson, Irvie.
Williams, Samuel.
Williams, Lester.

SEVENTH GRADE.—26.

Billings, Carrie.
Bowman, Rae.
Brockway, Ada.
Burchill, John.
Campbell, Susie.
Clegg, Belva.
Elmer, Marjory.
Finch, Clarence.
Granger, Katie.
Harsh, Arvle.
Houghton, Verva.
Hunter, Calla.
Kested, James.

McClanahan, Stella.
McDowell, Susie.
Nordell, Iver.
Noffsinger, Martin.
Pier, Stanhope.
Paine, Velma.
Rogers, Kenneth.
Smith, Bessie.
Thompson, Laura.
Taylor, Sammie.
Wearin, Fern.
Weikert, Hallie.
Winslow, Allen.

SIXTH GRADE.—23.

Barnes, Ralph.
 Beardsley, Inez.
 Bradley, Rosie.
 Brainard, Rose.
 Briscoe, Harry.
 Brockway, Ada.
 Chambers, Earl.
 Cobb, George.
 Douglass, Eulalia.
 Ebberly, Lloyd.
 Erickson, Arthur.
 Ewing, Horace.

Finch, Callie.
 Ling, Bessie.
 Miller, Lois.
 Morris, Ruth.
 Ovesen, Theodore.
 Rogers, Francis.
 Swanson, Harry.
 Swanson, Leila.
 Swanson, Lois.
 Vail, Efton.
 Whitlock, Mary.

FIFTH GRADE.—23.

Adams, Warren.
 Berry Louis.
 Blv. Hazel.
 Crawford, Clarence.
 Davidson, Chief.
 Farr, Gladys.
 Harbottle, Adeline.
 Holland, Dale.
 Kellogg, Bert.
 Michaels, Charlie.
 Newland, Rollie.
 Phelps, Mattie.

Putney, Marie.
 Roseman, Fletcher.
 Rowe, Rollo.
 Rydin, Joe.
 Sears, George.
 Sinover, Mary.
 Snyder, Jessie.
 Stewart, Bessie.
 Tell, Sylvia.
 Waite, Earl.
 Winslow, Marvin.

PRIMARY DEPARTMENT.

FOURTH GRADE.—28.

Adams, Ruth.
Anderson, Fritz.
Benton, Mabel.
Billings, Gordon.
Blaney, Violet.
Brainard, Grace.
Cook, Ada.
Crawford, Myrtle.
Evans, Stella.
Evans, Willie.
Davidson, Lulu.
Houghton, Evelyn.
Harbottle, Adaline.
Johnson, Jack.

Lawson, Mary.
Lewis, Tessie.
Lofgren, Adolph.
Mundy, Emery.
Meredith, William.
Newton, Charles.
Noffsinger, Lloyd.
Patterson, Howard.
Stewart, Hazel.
Stevens, Lewis.
Swanson, May.
Tegtman, Lewis.
Waite, Rosie.
Woods, Forest.

THIRD GRADE.—22.

Adams, George.
Anderson, Ellen.
Anderson, Luella.
Elmer, Catherine.
Granger, Mary.
Granger, Logan.
Hays, Athalia.
Hewring, Malcolm.
Hill, Ethel.
Houghton, Genette.
Jessie, Carrie.

Jensen, Evelyn.
Kindred, Roy.
Ling, Louise.
Lofgren, Hattie.
Phelps, Lulu.
Pier, Josephine.
Rydin, Carl.
Stewart, George.
Tell, Lorette.
Winslow, Dena.
Winslow, Pearl.

SECOND GRADE.—20.

Anderson, Annie.	McAfee, Blair.
Anderson, Albert.	Miller, Jeanette.
Berkheimer, Gladys.	McClenahan, Elizabeth.
Benton, Albert.	McDowal, Harry.
Billings, Ada.	Phelps, Lulu.
Cooke, Agnes.	Rydin, Carl.
Cooper, Arthur.	Snyder, Claude.
Henring, Keller.	Tegtman, Edward.
Jenson, Clark.	Tegtman, Ernest.
Kimrey, Orville.	Travis, Nola.

FIRST GRADE.—20.

Adams, Mary.	Loewus, Sidney.
Anderson, Carl.	Lyons, Mildred.
Anderson, George	Michael, Hanna.
Brainard, Omer.	Newton, Frances.
Cooke, Agnes.	Nynarber, Clarence.
Davidson, Mabel.	Overston, Esther.
Erickson, Clara.	Phelps, Archibald.
Folie, Ruth.	Stoneking, Fay.
Hayes, Harold.	Tegtman, Frank.
Kinrey, Ona.	Waite, Clarence.

KINDERGARTEN.—66.

Adams, Elizabeth.	Clark, Russell.
Adams, Willie.	Crab, Wendell.
Anderson, Henry.	Crawford, Kenneth.
Barger, Virgil.	Crist, Paul.
Bracewell, Helen.	Croll, Ethelbert.
Brainard, Boyd.	Davis, Wenzell.
Bresnahan, Charles.	Dressor, Lucie.
Brewster, Lyman.	Dyde, Marjorie.
Brewster, Warren.	Erickson, Carl.
Calkins, Harvey.	Ewing, James.
Clark, Ella.	Ewing, Katharine.

Gibbeon, Lota.
Goodman, Kenneth.
Hall, Wilbur.
Hall, Edward.
Hays, Robert.
Hays, Thelma.
Heuring, Francis.
Hopkins, Mabel.
Hopkins, Morris.
Hopkins, Pauline.
Houghton, Albert.
Howard, June.
Jackson, Dorothy.
Jensen, Ethel.
Johnson, Lustella.
King, Maxwell.
Kinney, Helen.
Kirkham, Meldon.
Ling, Cecil.
Lowe, Florence.
Lutz, Ella.
Mason, Luthera.

McClenehan, Hugh.
Moose, Wessie.
Moose, Alfred.
Muth, Lysle.
Page, Harold.
Pervard, Hazel.
Pier, Clark.
Purinton, Raymond.
Rothschild, Donald.
Shaw, Kenneth.
Talbert, John.
Timothy, Eldred.
Thompson, Marian.
Turner, Lowell.
Waddington, Inez.
Warde, Marian.
Waters, Dorothy.
Weikerd, Hugh.
Wilkins, Everett.
Wilkinson, Bryce.
Wolf, Raymond.
Yeagie, Jack.

SUMMARY OF ATTENDANCE.

NORMAL DEPARTMENT.

POST-GRADUATES.

Females	4	
Males	2	
		6

SENIORS.

Females	77	
Males	9	
		86

JUNIORS.

Females	145	
Males	16	
		161

SOPHOMORES.

Females	16	
Males	1	
		17

SPECIALS.

Females	12	
Males	3	
		15

SUMMER TERM.

Females	95	
Males	15	110
Total		395

TRAINING SCHOOL.

High School Department:

Eleventh Grade.....	41	
Tenth Grade.....	40	
Ninth Grade.....	48	
		129

Grammar Department:

Eighth Grade.....	25
Seventh Grade.....	26
Sixth Grade.....	23
Fifth Grade.....	23

 97

Primary Department:

Fourth Grade.....	28
Third Grade.....	22
Second Grade.....	20
First Grade.....	20

 90

Kindergarten Department.....

66

Summer Term

141

 523

Total registration

918

Registered both terms

52

Total

 866

*ALUMNI.**OFFICERS.*

Mrs. Isabella Churchill.....	President.
John R. Bell.....	Vice-President.
Laura Snyder.....	Secretary.
Vernon McKelvey.....	Treasurer.

DIRECTORY.

POST-GRADUATES.

Fenneman, Mrs. Sarah Glisson.....	Madison, Wis.
Heath, Herbert.....	Lake City, Colo.
Hewett, E. L.....	Geneva, Switzerland.
Jackson, O. E.....	Holyoke, Colo.
Keightley, Annie K.....	Pueblo, Colo.
Kendel, Elizabeth.....	Greeley, Colo.
Ladd, Dora C.....	Denver, Colo.
Miles, Mrs. Cornelia.....	Denver, Colo.
Mooney, William B.....	Greeley, Colo.
Phillips, Eleanor.....	Greeley, Colo.
Reid, Lois E.....	Greeley, Colo.
Stockton, LeRoy.....	Eaton, Colo.
Ward, John J.....	Castle Rock, Colo.

CLASS OF 1891.

Berryman, Eliza E. (Mrs. Howard).....	Denver, Colo.
Bliss, Clara S. (Mrs. Ward).....	Greeley, Colo.
*Bybee, W. F.....	Colorado Springs, Colo.
Evans, Bessie B. (Mrs. Edgerton).....	Paonia, Colo.
Fashbaugh, Carrie E.....	Evans, Colo.
Hardcastle, Amy B. (Mrs. Davidson).....	Fort Collins, Colo.
John, Grant B.....	Denver, Colo.
Lincoln, Generva.....	Utah.
*Montgomery, Jessie.....	

*Deceased.

McNair, Agnes.....	Eaton, Colo.
Spencer, Clarence F.....	Monte Vista, Colo.
Whiteman, John R.....	Greeley, Colo.

CLASS OF 1892.

Van Craig, Edna E. (Mrs.).....	Greeley, Colo.
Dresser, Helen C. (Mrs. Dressor).....	Cheyenne, Wyo.
Jones, Edith Helen.....	Denver, Colo.
Jones, Winifred.....	Denver, Colo.
Lynch, Andrew R.....	Morenci, Ariz.
McFie, Mabel (Mrs. Miller).....	Albuquerque, N. M.
McFie, Vina (Mrs. LeRoy).....	Evans, Colo.
Meek, Idela.....	Colorado Springs, Colo.
Miller, J. A.....	Albuquerque, N. M.
Moore, Mamie F.....	Denver, Colo.
Mumper, Anna T. (Mrs. Wallace).....	Fort Collins, Colo.
McClelland, Robert A.....	Ruby Hill, Nev.
Putnam, Kate (Mrs. Elms).....	South Denver, Colo.
Robinson, Fannie F.....	Denver, Colo.
*Smith, May L. (Mrs. Batterson).....	Erie, Colo.
Wilson, Elma A.....	LaSalle, Colo.

CLASS OF 1893.

Bybee, Carrie S.....	Colorado Springs, Colo.
Dace, Mary (Mrs. Farnsworth).....	Fort Morgan, Colo.
Dunn, Roaslie M.....	St. Louis, Mo.
Heath, Herbert G.....	Lake City, Colo.
Hewett, Edgar L.....	Geneva, Switzerland.
Hewett, Cora W. (Mrs.).....	Geneva, Switzerland.
Houston, George M.....	Greeley, Colo.
Jacobs, Mary Fay (Mrs. Lunt).....	Eaton, Colo.
*Johnson, Hattie L. (Mrs. Wallace).....	Denver, Colo.
Knight, Lizzie M.....	Evans, Colo.
MacNitt, E. Alice (Mrs. Montgomery).....	Longmont, Colo.
McLain, Minnie E.....	Fort Collins, Colo.
Marsh, Mary B.....	Canon City, Colo.
Nixon, Alice M. (Mrs. Jacobs).....	Greeley, Colo.

*Deceased.

Pearce, Stella.....	Cripple Creek, Colo.
Priest, Lee (Mrs. Shepherd).....	Cripple Creek, Colo.
Seed, Stella H. (Mrs. Freeman).....	South Pasadena, Calif.
Stockton, J. LeRoy.....	Eaton, Colo.
Struble, Lizzie (Mrs. Cole).....	Denver, Colo.
Thomas, Cora M.....	Boulder, Colo.
Varney, Julia A.....	Idaho Springs, Colo.
Walter, Clara B.....	Riverside, Cal.
Wheeler, B. B.....	Denver, Colo.

CLASS OF 1894.

Bond, Dell.....	Dennison, Ia.
Burnett, Ruth.....	Mendota, Ill.
Catherwood, Grace A. (Mrs. Billig).....	Boulder, Colo.
Clark, Charles E.....	Greeley, Colo.
*Coffey, Gillian.....	Denver, Colo.
Cordes, Carrie (Mrs. Loftiss).....	Akron, Colo.
Creager, Katie (Mrs. Bullock).....	Greeley, Colo.
Day, Nellie (Mrs. Tolman).....	Cripple Creek, Colo.
Delbridge, Eloise (Mrs. Petrikin).....	Windsor, Colo.
Durkee, Alice (Mrs. Rockafellow).....	Canon City, Colo.
Freeman, Maude (Mrs. Felton).....	San Francisco, Cal.
Gardiner, Julia.....	Denver, Colo.
Gass, Maud.....	Denver, Colo.
Lewis, Lottie (Mrs. Davis).....	Central City, Colo.
Lynch, John.....	Silverton, Colo.
Melvin, Pearl (Mrs. Ruthledge).....	Belleville, Tex.
*McGee, May (Mrs. Winzer).....	Cripple Creek, Colo.
Merrill, Louisa A.....	Denver, Colo.
Messenger, Edna (Mrs. West).....	Denver, Colo.
Nauman, Minnie (Mrs. Lauritsen).....	Cambridge, Neb.
Peters, Anna.....	Trinidad, Colo.
Rank, Margaret.....	Central City, Colo.
Robinson, Anna.....	Eaton, Colo.
Severance, Dora. (Mrs. Tinsman).....	Windsor, Colo.
Shumway, William.....	Denver, Colo.

*Deceased.

Trehearne, Beatrice.....	Denver, Colo.
Turner, Flora B.....	Hartland, Vt.
Welch, Irene (Mrs. Grisson).....	Denver, Colo.
Williams, Nellie.....	Castle Rock, Colo.
Woods, James.....	Del Norte, Colo.
Work, Anna (Mrs. Shawkey).....	Charleston, W. Va.
Work, Ella (Mrs. Bailor).....	Cripple Creek, Colo.
Wright, Lulu (Mrs. Heileman).....	Greeley, Colo.
Wright, Nana.....	Greeley, Colo.
Yard, Jessie.....	Canon City, Colo.

CLASS OF 1895.

Allen, Mame C.....	Greeley, Colo.
Brown, Rebecca.....	Gallup, N. M.
Canning, Annetta.....	Aspen, Colo.
Coleman, Mary B.....	Florence, Colo.
Clark, Ruth M. (Mrs. Russell).....	Denver, Colo.
Dobbins, Nettie M.....	West Point, Miss.
Downey, Abner.....	Telluride, Colo.
Felton, Mark A.....	San Francisco, Cal.
Freeman, Maude (Mrs. Felton).....	Greeley, Colo.
Gale, Grace M. (Mrs. Clark).....	Los Angeles, Cal.
Goddard, Susan.....	Denver, Colo.
*Hadley, Laurie.....	Eagle, Colo.
Hubbard, Nettie L. (Mrs. Lynch).....	Silverton, Colo.
Huecker, Lydia E. (Mrs. Dr. Rover).....	Denver, Colo.
King, L. C. (Mrs.).....	Berthoud, Colo.
*Lines, Celia.....	Platteville, Colo.
McClave, Blanche M.....	Platteville, Colo.
McCoy, Maude M. (Mrs. Frazier).....	Ordway, Colo.
Marsh, C. T.....	Platteville, Colo.
Miller, Edwin.....	Timnath, Colo.
Molnar, Louis.....	Washington, D. C.
Newman, Emma.....	Denver, Colo.
Peck, Vera.....	Denver, Colo.
Phillips, Stella (Mrs. North).....	Washington, D. C.
Price, J. M.....	Del Rio, Tex.

*Deceased.

Stanton, Kate M. (Mrs. Wallace)	Boulder, Colo.
Snyder, E. R.	San Jose, Cal.
Stratton, Ella E.	Cripple Creek, Colo.
Sydner, Cecil E.	Las Animas, Colo.
Uhri, Sophia	Canon City, Colo.
Woodruff, Myrna	Colorado Springs, Colo.
Wyman, Ree (Mrs. Moyer)	Denver, Colo.

CLASS OF 1896.

Agnew, Minerva (Mrs. Brotherton)	Cortez, Colo.
Ault, C. B.	Goldfield, Colo.
Bell, J. R.	Denver, Colo.
Berger, Florence (Mrs. Miller)	Greeley, Colo.
Bliss, Lillian M.	Denver, Colo.
Boyd, Sela M.	Greeley, Colo.
Briggs, Jennie M. (Mrs. Mayo)	Longmont, Colo.
Cameron, William F.	Ashland, Ore.
Cameron, Agnes (Mrs. Palmer)	Canon City, Colo.
Collom, Mattie (Mrs. Singleton)	Pearl, Idaho.
Dithey, Mollie	Colorado Springs, Colo.
Donahue, J. Leo	Denver, Colo.
Graham, Kate (Mrs. Nierns)	Montrose, Colo.
Hamilton, Ida M. (Mrs.)	Colorado Springs, Colo.
Hanks, Alberta (Mrs. Stevens)	Durango, Colo.
Hollingshead, C. A.	Denver, Colo.
Howard, Florence	Denver, Colo.
Howard, Wellington	Denver, Colo.
James, Annie (Mrs. Preston)	Denver, Colo.
Jamison, Grace (Mrs. Rowe)	Denver, Colo.
Kendel, Elizabeth	Greeley, Colo.
Mathews, Minnie V.	Delta, Colo.
Newman, Winnifred (Mrs. Scoville)	Platteville, Colo.
Norton, Nell (Mrs. Lawyer)	Victor, Colo.
Paul, Isabel (Mrs. Clayton)	Greeley, Colo.
Patton, Mabel	Pueblo, Colo.
Pollock, Emma	Denver, Colo.
Probst, Emma	Denver, Colo.
Shull, Grace (Mrs. Eichmann)	Elwell, Colo.

Smith, Luna.....Greeley, Colo.
 Stevenson, Audrey.....Manitou, Colo.

CLASS OF 1897.

Adams, Helen.....New York City.
 Benson, Franc V. (Mrs. Lanham).....Loveland, Colo.
 Brownlee, Sylvia.....Rocky Ford, Colo.
 Buffington, Lulu (Mrs. Hogan).....Kokomo, Colo.
 Burns, T. E.....Greeley, Colo.
 Dowell, H. L.....Goldfield, Colo.
 Ellis, Carrie E.....Fort Morgan, Colo.
 Guynn, H. G.....Smithton, Pa.
 Hadden, S. M.....Greeley, Colo.
 Hamilton, Jessie M.....Denver, Colo.
 Hammond, Eva V. (Mrs. Blood).....Denver, Colo.
 Hersey, Rose (Mrs. New).....Evans, Colo.
 Hinkley, Anna C. (Mrs. Mathis).....Denver, Colo.
 Hoch, Lillian E.....Montclair, Colo.
 Holaday, Minnie (Mrs. Rathmell).....Ouray, Colo.
 Holliday, Maud (Mrs. Bell).....Denver, Colo.
 Ingersol, May.....Redlands, Cal.
 Jones, B. Ida (Mrs. Stockton).....Greeley, Colo.
 Kendel, Juanita.....Greeley, Colo.
 King, Alpha E.....Rocky Ford, Colo.
 Knapp, Edith A.....Lamar, Colo.
 Lockett, Margarette.....Saguache, Colo.
 McDonald, R. A.....Greeley, Colo.
 McKinley, Hattie (Mrs. Shaffer).....Idaho Springs, Colo.
 McLeod, Carrie.....Canon City, Colo.
 Newell, Agnes (Mrs. Coston).....Fort Morgan, Colo.
 Putnam, Jennie (Mrs. Lyford).....Greeley, Colo.
 Rudolph, Victoria (Mrs. Eldred).....Cripple Creek, Colo.
 Sanborn, Mabel (Mrs. Marsh).....Platteville, Colo.
 Slatore, Nelson (Mrs. Thompson).....Colorado Springs, Colo.
 Smith, Cora E (Mrs. McDonald).....Greeley, Colo.
 Steans, Henry G.....Leadville, Colo.
 Stevenson, Eleanor (Mrs. Kittle).....Greeley, Colo.
 Stockton, Guy C.....Greeley, Colo.

Thompson, Andrew W.....	Colorado Springs, Colo.
Walker, F. A.....	Del Norte, Colo.
Wheeler, Gertrude E (Mrs. Bell).....	Bakersfield, Cal.
White, Esther F. (Mrs.).....	Canon City, Colo.
Wilkinson, Bessie M.....	Pueblo, Colo.
Wilson, Edith.....	Redlands, Cal.
Witter, Stella (Mrs. Kerlee).....	Greeley, Colo.
Work, C. M.	Atwood, Colo.
Wright, Olive.....	Canon City, Colo.
Young, Kate (Mrs.).....	Mankato, Minn.

CLASS OF 1898.

Amsden, Elmer E.....	Durango, Colo.
Ashley, Helen M. (Mrs. Hawkins).....	Cheney, Wash.
Bartels, Bina.....	Pueblo, Colo.
Bryant, Fannie.....	Denver, Colo.
Burgess, Edith (Mrs. Stockton).....	Eaton, Colo.
Butler, May (Mrs. Wiles).....	Trinidad, Colo.
Butscher, Louis C.....	E. Las Vegas, N. M.
Carlson, George A.....	Boulder, Colo.
Clark, Fred W.....	Trinidad, Colo.
Coover, Carrie E. (Mrs.).....	Palo Alto, Cal.
Coover, J. E.....	Palo Alto, Cal.
Cronkhite, Theodora (Mrs. Hubbell).....	Fort Lupton, Colo.
Delbridge, Wychie (Mrs. Desch)	Grand Junction, Colo.
Dolan, Alice.....	Leadville, Colo.
Downey, Elijah H.....	Telluride, Colo.
Farmer, Grace (Mrs. Sweetser) Lihue, Kanai, Hawaiian Islands.	
*Fennell, Anna.....	Greeley, Colo.
Fowler, O. S.	Boulder, Colo.
Harrison, Virginia.....	Canon City, Colo.
Hawes, Mary M.....	Greeley, Colo.
Hetrick, Grace C. (Mrs. McNabb).....	Denver, Colo.
Hodge, Louise W.....	Pueblo, Colo.
Hogarty, Michaella (Mrs. Carpenter).....	Greeley, Colo.
Howard, Ethel.....	Greeley, Colo.
Howard, Sadie (Mrs. Johnson).....	Greeley, Colo.

*Deceased.

Howett, Edwin L.....	Rocky Ford, Colo.
Johnson, Minnie (Mrs. Nelson).....	Leadville, Colo.
Kridler, Grace (Mrs. Haff).....	Cripple Creek, Colo.
Llewellyn, Sarah (Mrs. Snyder).....	San Jose, Cal.
Lory, Charles A.....	Boulder, Colo.
McCracken, Mary (Mrs. Steans).....	Leadville, Colo.
McKeehan, Cora.....	Denver, Colo.
Montag, Ida C.....	Como, Colo.
Morehouse, Geneva.....	Denver, Colo.
Nash, Margaret.....	Georgetown, Colo.
*O'Brien, Emma L.....	Fort Collins, Colo.
Putnam, Nellie (Mrs. Moseley).....	Fort Morgan, Colo.
Reeder, John M.....	Buena Vista, Colo.
Richards, Carrie L. (Mrs. Lory).....	Boulder, Colo.
Riddell, Fannie.....	Denver, Colo.
Ross, Hettie M. (Dr.).....	North Denver, Colo.
Scanlon, Mary.....	New Britain, Conn.
Sibley, Bella B. (Mrs.).....	Greeley, Colo.
Smith, Helen Fay (Mrs. Duluth).....	Denver, Colo.
*Stebbins, Helen H. (Mrs. McLeod).....	Leadville, Colo.
Stevenson, Mildred.....	Manitou, Colo.
Tate, Ethel H.....	Lakin, Kan.
Taylor, Nellie A. (Mrs. Akin).....	Fort Collins, Colo.
Thomas, Helen.....	Greeley, Colo.
Thomas, Kathryn (Mrs. Russell).....	Colorado Springs, Colo.
Van Horn, George.....	Loveland, Colo.
Waite, Vesta M. (Mrs. Daeschner).....	Brighton, Colo.
Watson, Ola.....	Littleton, Colo.
White, Walter (Dr.).....	Denver, Colo.
Wilkins, Emma T.....	Timnath, Colo.
Williams, Mary E.....	Ridgway, Colo.
Wintz, Claudia.....	Goldfield, Colo.
Zimmerman, George.....	Emmit, Idaho.

CLASS OF 1899.

Amick, M. Ethel.....	Canon City, Colo.
Anderson, Emma L. (Mrs. Lyon).....	Greeley, Colo.
Anderson, Myra M.....	Colorado Springs, Colo.

*Deceased.

Bartels, Harriet B (Mrs. Robinson)	Leadville, Colo.
Bashor, Sarah E.	Longmont, Colo.
Braucht, Frank E.	Manila, P. I.
Burnett, Fannie.	Gunnison, Colo.
Camp, Archibald L.	Salida, Colo.
Campbell, Florence E.	Granite, Colo.
Clonch, Minnie B. (Mrs. Decker)	Crested Butte, Colo.
Curran, Katie.	Florence, Colo.
Dare, Adela F. (Mrs.)	Telluride, Colo.
*DeWeese, Luella (Mrs.)	Pueblo, Colo.
Dill, Victoria M.	Racine, Wis.
Dingman, Jennie K.	Pueblo, Colo.
Fleming, Guy B.	Dowagiac, Mich.
Graham, Mary M.	Greeley, Colo.
Gregg, Florence E.	Pueblo, Colo.
Gregg, Maud C.	Pueblo, Colo.
Hammersley, Mabel	Coal Creek, Colo.
Harrison, Lucian H.	Greeley, Colo.
Heath, Edith V.	Loveland, Colo.
Hersey, Nellie R. (Mrs. Luper)	Evans, Colo.
*Huffman, E.	Evans, Colo.
Kellogg, Gertrude F.	Rocky Ford, Colo.
Kendall, Zella A.	Denver, Colo.
Kendel, Arthur I.	Alamosa, Colo.
Kimball, Effie M. (Mrs. Weir)	Windsor, Colo.
Law, Daisy N.	Eaton, Colo.
Law, Nora J.	New Windsor, Colo.
Long, Olive.	Lafayette, Colo.
Lundy, Granville E.	Evans, Colo.
McCord, Emma D (Mrs. Weaver)	Colorado Springs, Colo.
McIntosh, Edith L.	Telluride, Colo.
McLellon, E. Irene (Mrs. Bledsoe)	Bisbee, Ariz.
McLeod, Mary C.	Leadville, Colo.
Manifold, W. H.	Lincoln, Neb.
Miller, Mary F. (Mrs.)	Denver, Colo.
Morehouse, Florence A. (Mrs. Berry)	Lamar, Colo.
Newby, Florence.	Fort Lupton, Colo.
Noel, Maud (Mrs. McMillen)	LaSalle, Colo.

*Deceased.

Patterson, Daisy P.....	Santa Fe, N. M.
Poirson, Henriette (Mrs. Dillie).....	Greeley, Colo.
Pollock, Rose M. (Mrs. Jeter).....	Colorado Springs, Colo.
Potts, J. George.....	Denver, Colo.
Powell, Frances L.....	Colorado City, Colo.
Powell, M. Evelyn.....	Colorado City, Colo.
Powelson, Pearl E. (Mrs. Clark).....	Grand Junction, Colo.
Price, Virginia E.....	Orchard, Colo.
Rankin, Pearl B.....	Greeley, Colo.
Roberts, Stella E. (Mrs. Naylor).....	Canon City, Colo.
Robinson, Angelina B. (Mrs. Johnson)....	Glenwood Springs, Colo.
Robinson, Nellie.....	Colorado Springs, Colo.
Rochat, Emma Cecile (Mrs. Weaver).....	Greeley, Colo.
Ross, Maud E. (Mrs. Casner).....	Pueblo, Colo.
St. Cyr, Helen E.....	Greeley, Colo.
Scheffler, Bertha S.....	Alamosa, Colo.
Seaton, Janet.....	Georgetown, Colo.
Small, Lavina A.....	Chicago, Ill.
Smith, Amy A. (Mrs. Moynahan).....	Cripple Creek, Colo.
Sparlin, Nellie.....	Denver, Colo.
Strayer, Grace A.....	Ouray, Colo.
Strickler, C. S.....	Stratton, Nebr.
Swan, Rosa E.....	Denver, Colo.
Tharp, B. Ellen.....	Eaton, Colo.
Weiland, Adelbert A.....	Boulder, Colo.
West, Edna W.....	Greeley, Colo.
Wilkinson, Marguerite.....	Cripple Creek, Colo.
Williams, Lizzie F. (Mrs. McDonough).....	Las Pinos, Colo.
Wise, Effie M.....	Canfield, Colo.

CLASS OF 1900.

Albee, Emma	Roggen, Colo.
Ashback, Margaret (Mrs.).....	Durango, Colo.
Bliss, Nellie M.....	Greeley, Colo.
Bresee, Minnie.....	Mattoon, Ill.
*Brown, L. E.....	Boulder, Colo.
Calder, Henrietta.....	Canon City, Colo.
Churchill, Isabella (Mrs.).....	Greeley, Colo.

*Deceased.

Clonch, May (Mrs. McDonald)	Crested Butte, Colo.
Collins, C. B.	Manila, P. I.
Cooper, Theda A.	Denver, Colo.
Cooperrider, A. O.	Boulder, Colo.
Cornell, Hattie (Mrs. Goodfellow)	Denver, Colo.
Danielson, Cora	Denver, Colo.
DeVine, Elsie (Mrs.)	Greeley, Colo.
Doyle, Mabel	Saguache, Colo.
Evans, Emma	New Windsor, Colo.
Ellis, Adda	Fort Morgan, Colo.
Ellis, Esther	La Salle, Colo.
Fagan, Jennie	Berthoud, Colo.
Fowler, Ruby	Boulder, Colo.
Frink, Marguerite R.	Denver, Colo.
Gibson, Mildred	Denver, Colo.
Goodale, Nellie	Lamar, Colo.
Grout, Lizzie M.	Pueblo, Colo.
Hughes, Adella	Trinidad, Colo.
Hughes, Ida	Georgetown, Colo.
Imboden, J. W.	Lafayette, Colo.
Jamison, Rea	Pueblo, Colo.
Jones, Jennie	Montrose, Colo.
Kendel, Alice	Leadville, Colo.
Kenwell, Joseph C.	Louisville, Colo.
Kersey, Margaret (Mrs. Cahill)	Greeley, Colo.
Ketner, Sarah	Denver, Colo.
Latson, Elmer	Manila, P. I.
Lewis, W. A.	Boulder, Colo.
Lowe, Elizabeth F.	Central City, Colo.
Lowther, Laura	Canon City, Colo.
Markuson, Martha	Denver, Colo.
Mayne, Fannie	Lamar, Colo.
McKelvey, Eva	New Windsor, Colo.
McNee, Elizabeth	Kersey, Colo.
Melville, Bessie L.	Las Animas, Colo.
Mulnix, Sadie S.	Pueblo, Colo.
Neel, Ora	Eaton, Colo.
Nutting, Drusilla	Leadville, Colo.
O'Boyle, Lila	Cripple Creek, Colo.

O'Connell, Mamie.....	Cheyenne, Wyo.
Olson, Mamie.....	Georgetown, Colo.
Orr, Irma.....	Lupton, Colo.
Poland, Belle.....	Las Animas, Colo.
*Probst, Rose.....	Denver, Colo.
Resor, Virginia.....	Canon City, Colo.
Riek, Meta (Mrs. Irving).....	Fay, Nev.
*Robbins, W. F.....	Highland Lake, Colo.
Romans, Ab. H.....	Denver, Colo.
Sarell, Jessie (Mrs. Rudd).....	Golden, Colo.
Schmidt, Kari (Mrs. Williams).....	Central City, Colo.
Searles, Nina (Mrs. Kendel).....	Eaton, Colo.
Seybold, Bertha.....	Durango, Colo.
Stockdale, Martha.....	Colorado Springs, Colo.
Smith, Frances.....	Cripple Creek, Colo.
Smith, Olive.....	Greeley, Colo.
Taylor, Hazel.....	Durango, Colo.
Veniere, Cecilia.....	Denver, Colo.
Warning, G. A.....	E. Las Vegas, N. M.
Waters, Eva.....	Brush, Colo.
Williams, S. D.....	Rico, Colo.
Williamson, Lucy (Mrs. Griffie).....	Emporia, Kan.
Wilson, Marie (Mrs. Benham).....	Mt. Vernon, Ia.
Wood, Carolyn (Mrs. Greenacre).....	Fort Collins, Colo.

CLASS OF 1901.

Adams, Mary.....	Lamar, Colo.
Allnutt, Frederic.....	Greeley, Colo.
Andrews, Adell.....	Denver, Colo.
Bailey, Louise.....	Pitkin, Colo.
Barnard, Margaret.....	Pueblo, Colo.
Bent, Clinton.....	Castle Rock, Colo.
Beswick, Dolphine.....	Colorado Springs, Colo.
Breuer, Emma (Mrs. Brownell).....	Denver, Colo.
Broquet, Prudence.....	Manhattan, Kan.
Carter, Carrie.....	Monte Vista, Colo.
Carter, Lina.....	Denver, Colo.
*Craven, May (Mrs. Clemens).....	Leadville, Colo.

*Deceased.

Crone, John V.....	Greeley, Colo.
Day, Reba.....	Greeley, Colo.
Delbridge, Lucy.....	Greeley, Colo.
Dempsey, Nettie.....	Pueblo, Colo.
Dugan, Julia.....	Durango, Colo.
Edwards, Mabel.....	Greeley, Colo.
Filkins, Grace.....	Greeley, Colo.
Gibbs, Elizabeth.....	Monte Vista, Colo.
Graham, Melcena.....	Colorado Springs, Colo.
Hall, Agnes.....	Leadville, Colo.
Hamm, Elsie.....	Longmont, Colo.
Harrington, Ada.....	Ames, Iowa.
Henderson, Alice.....	Greeley, Colo.
Holland, Nena.....	Ault, Colo.
House, Louise (Mrs. Downey).....	Telluride, Colo.
Jones, Katie.....	Castle Rock, Colo.
Kesler, Joseph.....	Denver, Colo.
Keyes, Victor.....	Colorado Springs, Colo.
Kittle, Helen.....	Greeley, Colo.
Knowlton, Charles.....	Colorado Springs, Colo.
Lowe, Anna.....	Denver, Colo.
Lundy, Katie.....	Ft. Morgan, Colo.
McCarthy, Mary.....	Pueblo, Colo.
McCloskey, Viola (Mrs. Waddle).....	Colorado Springs, Colo.
McCoy, Anna.....	Denver, Colo.
McMullin, Edith (Mrs. Collins).....	Manila, P. I.
McKelvey, Katharyn.....	Windsor, Colo.
McPherson, Mattie.....	Boulder, Colo.
McPherson, William.....	Greeley, Colo.
Merchant, Maud (Mrs. Harvey).....	Leadville, Colo.
Morris, Florence.....	Cripple Creek, Colo.
Needham, Charles.....	Boulder, Colo.
Norine, Mayme.....	Grand Junction, Colo.
Norton, Nona (Mrs. Broadbent).....	Ordway, Colo.
O'Brien, Rhoda.....	Denver, Colo.
O'Connor, Charles.....	Boulder, Colo.
Onstine, Eulalia.....	Greeley, Colo.
O'Keefe, Agnes.....	Denver, Colo.
Parrett, Kate.....	Alcott, Colo.

Peterson, Hanna.....	Silver Plume, Colo.
Remington, Mayme.....	Fairplay, Colo.
Robinson, Abbie.....	Basalt, Colo.
Robertson, Jean.....	Chicago, Ill.
Schutz, Tyro.....	Henson, Colo.
Scott, Lucy.....	Eaton, Colo.
Scheffler, Josephine.....	Antonito, Colo.
Sellers, Gilbert.....	Albuquerque, N. M.
Snyder, Laura.....	Greeley, Colo.
Tefft, Ruth.....	Telluride, Colo.
Veverka, Madeline.....	E. Las Vegas, N. M.
Watson, Alice.....	Lamar, Colo.
Welch, Hattie.....	Boulder, Colo.
Welch, Harry.....	Boulder, Colo.
Weller, Mary.....	Colorado Springs, Colo.
Webster, Ella.....	Los Angeles, Calif.
Wolfenden, Anna (Mrs. Allnutt).....	Greeley, Colo.
Wood, Florence (Mrs. Leavitt).....	Los Angeles, Calif.

CLASS OF 1902.

Allen, Alice.....	Las Animas, Colo.
Anthony, Anna.....	Denver, Colo.
Bailey, W. L.....	Holyoke, Colo.
Bowen, Claudia.....	Leadville, Colo.
Bowman, Julia B.....	Pueblo, Colo.
Boylan, Daisey D.....	Hubbard, Ia.
Bracewell, Cora.....	Salida, Colo.
Carter, Ethel I.....	Denver, Colo.
Cheeley, Ella (Mrs. Frink).....	Fort Lupton, Colo.
Coil, Lina D.....	La Salle, Colo.
Crone, John V. (Normal College).....	Marathon, Ia.
Day, Fannie L.....	Masters, Colo.
Enoch, Mary Priscilla.....	Grand Junction, Colo.
Farlow, Floe.....	Leadville, Colo.
Floyd, A. J. (Normal College).....	Trinidad, Colo.
Follett, Celinda G.....	Elkton, Colo.
Fugate, Inda.....	Salida, Colo.
Fugate, Laura E. (Mrs. Bent).....	Castle Rock, Colo.
Gale, Edith V.....	Greeley, Colo.

Garcia, James.....	Boulder, Colo.
Geffs, Bessie (Mrs. Carlson).....	Eaton, Colo.
Gibbons, Marcella.....	Leadville, Colo.
Green, Hilda.....	Ludlow, Colo.
Grove, Rhena M.....	Greeley, Colo.
Harbottle, John.....	Atwood, Colo.
Henderson, Alice.....	Greeley, Colo.
Hiatt, J. Frances.....	Denver, Colo.
Hotchkiss, Esther.....	Boulder, Colo.
Jessup, Leona (Mrs. Kesler).....	Denver, Colo.
Keightley, Anna K.....	Pueblo, Colo.
Kelsey, Sofia (Mrs. Decker).....	Greeley, Colo.
Kennedy, Ethel (Mrs. Rugh).....	Greeley, Colo.
Keplinger, Peter.....	Colorado Springs, Colo.
Knowlton, Richard G.....	Colorado Springs, Colo.
Ladd, Dora.....	Leadville, Colo.
Leonard, Sadie K.....	Denver, Colo.
Lewis, Charlotte.....	Pueblo, Colo.
Llewellyn, Mary J.....	Coaldale, Colo.
Lovering, Esther A.....	Boulder, Colo.
Marshall, Estella D.....	Florence, Colo.
Martin, Teena (Mrs. Willson).....	Greeley, Colo.
McNee, Jessie.....	Blairsburg, Ia.
Mitchell, Bessie.....	Cripple Creek, Colo.
Mooney, William B.....	Spearfish, S. Dak.
Mosher, Abbie.....	Florence, Colo.
Moss, Eva May.....	Colorado Springs, Colo.
Mundee, Helen A.....	Silverton, Colo.
Packer, W. R.....	Platteville, Colo.
Pechin, Zadia.....	Eaton, Colo.
Pendell, Dorcas M.....	Saginaw, Mich.
Porter, Della E.....	Colorado Springs, Colo.
Powers, Myrtle A.....	Windsor, Colo.
Proctor, Ula.....	Canon City, Colo.
Rankin, Bessie (Mrs. Adams).....	Palmer, Neb.
Reid, Lois E.....	Greeley, Colo.
Reynolds, Alma S.....	Denver, Colo.
Rhys, Mary G.....	Denver, Colo.
Richardson, E. Florence.....	Canon City, Colo.

Robinette, Sara J.....	Cripple Creek, Colo.
Scriven, Dee M.....	Granada, Colo.
Sellers, Will.....	Cheyenne Wells, Colo.
Smith, Adda Wilson (Mrs.).....	Los Angeles, Calif.
Smith, Frank B.....	Windsor, Colo.
Thompson, Blanche.....	Salida, Colo.
*Thompson, Jettie (Mrs. McElfresh).....	Starkville, Colo.
Thompson, Nellie.....	Colorado Springs, Colo.
Tilyou, Mabel L.....	Erie, Colo.
Washburn, Lizzie (Mrs. Coffman).....	Greeley, Colo.
Welch, Fred.....	Greeley, Colo.
West, Olive.....	Telluride, Colo.
Wiedmann, D. E.....	Deuel, Colo.
Willcox, Margaret (Mrs. Baltosser).....	Fruita, Colo.
Willie, Anna (Mrs. Malonnee).....	Denver, Colo.
Wood, Florence (Mrs. Leavitt).....	Los Angeles, Calif.

CLASS OF 1903.

Allyn, Emily.....	Windsor, Colo.
Asmus, Karina.....	Cripple Creek, Colo.
Atherly, Varina.....	Fort Collins, Colo.
Ayers, Lucy E.....	Denver, Colo.
Bandy, Pearl.....	White Water, Colo.
Balch, Edith J.....	Manzanola, Colo.
Bay, Minnie.....	Ouray, Colo.
Beardsley, Earl.....	Cortez, Colo.
Bodle, Veda.....	Cripple Creek, Colo.
Carnine, Stella M.....	Ft. Morgan, Colo.
Churchill, Flossie E.....	Colorado Springs, Colo.
Clement, H. Harman.....	Eaton, Colo.
Clement, Aurora W. (Mrs.).....	Eaton, Colo.
Clonch, Nell P.....	Ault, Colo.
Cooley, Ruth.....	Trinidad, Colo.
Day, Etta M.....	Big Bend, Colo.
Eaton, Fern B.....	Grand Junction, Colo.
Fagan, Katie D.....	Leadville, Colo.
Faus, Ada.....	Monte Vista, Colo.

*Deceased.

Farnworth, Mary (Mrs. Hilsabeck)	Ault, Colo.
Fisher, Edna V.	Pueblo, Colo.
Gordon, Carrie	Leadville, Colo.
Gruber, Mayme F.	Leadville, Colo.
Hayward, Lois	LaSalle, Colo.
Henebry, Agatha C.	Las Animas, Colo.
Herrick, Olive M. (Mrs. Wilson)	Greeley, Colo.
Howard, Mildred	Ft. Collins, Colo.
Hogarty, Viola Collins (Mrs.)	Pueblo, Colo.
Hughell, Samuel L.	Platteville, Colo.
Hunter, Maud E.	Greeley, Colo.
Ingram, Grace	Greeley, Colo.
Inman, Minnie J.	Ft. Morgan, Colo.
Jones, Allie	Colorado Springs, Colo.
Keeler, Bessie	Kersey, Colo.
Kemp, Josephine	Yuma, Ariz.
Kendel, Mary	Greeley, Colo.
Kleinsorge, Louise J.	Hotchkiss, Colo.
Lauenstein, Minnie V.	Durango, Colo.
Martin, Beatrice E.	Denver, Colo.
McCoy, Minnie E.	Hazleton, Colo.
McCracken, Katherine	Leadville, Colo.
McCullough, Edith E.	Grover, Colo.
McIntyre, Jennie	Corona, Colo.
McNeal, Chandos L.	Rico, Colo.
Mergelman, Lulu	Iola, Colo.
Middleswarth, Harriet E.	Denver, Colo.
Mitchell, Miriam V.	Greeley, Colo.
Mundie, Isabelle F.	Cripple Creek, Colo.
Nevitt, Eva E.	Del Norte, Colo.
Nauman, Ella	Victor, Colo.
Newcomb, Anna H.	Monte Vista, Colo.
Phillips, Jessie	Delta, Colo.
Poirson, Louise	Ft. Collins, Colo.
Reynolds, Gerda	Eaton, Colo.
Robinson, Goldie W.	Leadville, Colo.
Ross, M. Esther	Evans, Colo.
Scherrer, Josephine L.	Windsor, Colo.
Schweitzer, Katharine	Florence, Colo.

Scofield, Beulah F.....	Cheyenne, Wyo.
Singleton, Helen A. (Mrs.).....	Florence, Colo.
Slavin, Helen A.....	Leadville, Colo.
Sleeper, Sarah E.....	Johnstown, Colo.
Stealy, Elza R.....	Erie, Colo.
Stokes, Katharine E.....	Leadville, Colo.
Stone, Alice I.....	Colorado Springs, Colo.
Taylor, Hope C.....	Fruita, Colo.
Tilyou, Blanche.....	Longmont, Colo.
Tucker, Hazel.....	Denver, Colo.
Van Cleave, Ada M.....	Wilsonville, Neb.
Wakeman, Alleah.....	Denver, Colo.
Watson, Edna (Mrs. Knowlton).....	Colorado Springs, Colo.
Welch, Jeanne.....	Ft. Collins, Colo.
White, Mabel.....	Erie, Colo.
Whitham, Bronte.....	Denver, Colo.
Whitham, Xavia.....	Denver, Colo.
Wilson, Isabelle D.....	Eaton, Colo.
Worth, Katie.....	Sargents, Colo.
Worrell, Blanche.....	Leadville, Colo.
Wood, Texie M.....	Windsor, Colo.
Young, Charles.....	Panora, Ia.
Youngclaus, Emma.....	Del Norte, Colo.
Youngclaus, Katherine.....	Cripple Creek, Colo.

CLASS OF 1904.

POST-GRADUATES.

Clement, Aurora W. (Mrs.).....	White Hall, Mich.
Clement, H. Harman.....	White Hall, Mich.
Crone, John V.....	Marathon, Ia.
Kleinsorge, Eliza.....	Des Moines, Ia.
Mitchell, Miriam V.....	Denver, Colo.
Sibley, Bella B. (Mrs.).....	Denver, Colo.

GRADUATES.

Alexander, Grace L.....	Greeley, Colo.
Alps, George W.....	Loveland, Colo.
Blunt, Carrie E.....	Greeley, Colo.

STATE NORMAL SCHOOL
GREELEY, COLORADO

Buckley, Emma F.....	Greeley, Colo.
Burbank, Myrtle E.....	Longmont, Colo.
Bushyager, Genetta.....	Sheffield, Ia.
*Campbell, Jennie M.....	Loveland, Colo.
Candor, Ethel.....	Evanston, Ill.
Carrell, Mabel.....	Greeley, Colo.
Cartwright, Mabel.....	La Junta, Colo.
Cassidy, Eva.....	Ames, Ia.
Cleave, Clara J.....	Denver, Colo.
Coleman, Cora.....	Grand Junction, Colo.
Cook, Florence.....	La Junta, Colo.
Cope, Minnie M.....	Salida, Colo.
Crawford, Sadie R.....	Bloomfield, Colo.
Curtis, Grace E.....	Ellison, Ia.
Doane, Maude S.....	Fairfax, S. D.
Dale, Dora.....	Greeley, Colo.
Dayton, Georgian I.....	Pueblo, Colo.
Dillman, Caroline.....	Cheyenne, Wyo.
Dolan, Margaret J.....	Leadville, Colo.
Douglas, Edith S.....	Denver, Colo.
Doull, Elizabeth G.....	Denver, Colo.
Dullam, Ethel P.....	Denver, Colo.
Evans, Katharyne M.....	Denver, Colo.
Elliott, Elizabeth.....	Brighton, Colo.
Elliott, Caroline.....	Brighton, Colo.
Frink, Ruby.....	Ft. Lupton, Colo.
Garrigues, Helen.....	Greeley, Colo.
Hughes, Emma E.....	Ferris, Ill.
Ingersoll, Nettie R.....	Delta, Colo.
Johnson, Axel E.....	Greeley, Colo.
Jones, Bessie E.....	Telluride, Colo.
Jones, Katherine.....	Stratton, Neb.
Kauffman, Harriett.....	Greeley, Colo.
Kelley, Edith.....	Greeley, Colo.
Kelsey, Wheeler.....	Ft. Lupton, Colo.
Kendel, Mary.....	Greeley, Colo.
Kerr, Berdie.....	Durango, Colo.
Lakin, Irene R.....	Brighton, Colo.
Lewis, Ella M.....	Loveland, Colo.

*Deceased.

Lincoln, Clara S.....	Greeley, Colo.
Little, Isabel M.....	Red Cliffe, Colo.
MacArthur, Jessie J.....	Denver, Colo.
McDonald, Mollie A.....	Leadville, Colo.
McKeon, Madge L.....	Denver, Colo.
McMurphey, Jessie.....	Pueblo, Colo.
Meddins, Winfred C. P.....	Greeley, Colo.
Menke, Alice.....	Denver, Colo.
Merrill, Ada M.....	Leadville, Colo.
Miller, Mary G.....	Denver, Colo.
Morey, Jessie.....	Brush, Colo.
Nelson, Josephine.....	Denver, Colo.
Nelson, Lena M.....	Canon City, Colo.
Oldham, Ethel J.....	Las Animas, Colo.
Osborne, Mary C.....	Cobb, Wis.
Pendery, Alice E.....	Denver, Colo.
Patterson, Elizabeth V.....	Greeley, Colo.
Perry, Geraldine M.....	Littleton, Colo.
Porter, Frances.....	Longmont, Colo.
Ramsey, L. Fern.....	Denver, Colo.
Reid, Pearl.....	Greeley, Colo.
Russell, Mabel N.....	Aspen, Colo.
Said, Nettie A.....	Pueblo, Colo.
Sanborn, Roma.....	Greeley, Colo.
Savage, Ella G.....	Pueblo, Colo.
Scott, Bertha L.....	Greeley, Colo.
Scott, Ethel.....	Maher, Colo.
Singer, Harriet H.....	Greeley, Colo.
Smith, Lavinia.....	Tuskegee, Ala.
Snyder, E. Tyndall.....	Greeley, Colo.
Stevens, Laura C.....	Denver, Colo.
Sutherland, Mary L.....	Grand Ledge, Mich.
Thedinga, Mary E.....	Colorado Springs, Colo.
Thomas, Lillie.....	Osceola, Ia.
Turner, Mattie.....	Lamar, Colo.
Wetzel, George L.....	Curtis, Neb.
Woodbury, May.....	Greeley, Colo.
Worley, James.....	Akron, Colo.
Worley, Victor E.....	Akron, Colo.

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THE AUDUBON BIRD BOOK.



WESTERN SECTION OF LIBRARY.



EASTERN SECTION OF LIBRARY.

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EMMA BROMAN

GRACE HIATT

BESSIE BEATTIE

GERTRUDE RUPP

CAMMIE KELSEY

ALICE E. YARDLEY

COURSE IN LIBRARY SCIENCE.

This course is designed, not only for those who wish to make library work a profession, but also as an aid in regular school work.

The course presupposes a completion of the regular Normal course, with exceptions as indicated. The following branches may be omitted: Pedagogy, Philosophy of Education, Teaching, Music, Arithmetic and Sloyd. In place of the foregoing, the following branches must be studied, or evidence shown to the teacher of the particular department, that an equivalent has already been studied.

Latin, 1 yr. elementary and 1 yr. Caesar or its equivalent.

German, 1 yr. elementary and 1 year intermediate. (French may be taken as an equivalent of 1 yr. German.)

Elective English, 1 yr. in addition to regular Normal course.

Library handicraft, 24 weeks, 4 hours per week.

Library science, including actual practice, 36 weeks, 4 hours per week.

General Outline of Course.

PRINTING.

Evolution of printing, block, type, illustrating, paper, newspaper work, etc.

BOOKBINDING.

History of bookbinding, studies of different bindings, choice of materials, collating, sewing, casing, rebinding, portfolio, loose leaf cover, magazine cover, scrap book.

DESIGNING.

Original book covers, bulletins, reader's list.

HANDICRAFT, GENERAL.

Card tray, pamphlet boxes, pamphlet covers, picture mounting, passe partout.

HANDWRITING.

Each student must be able to write an approved library hand.

BOOK BUYING.

Selecting, prices, editions, discounts, importations, gifts, out-of-print books, exchanges, serials, checking.

ACCESSIONING.

Recording, stamping, embossing, book plates, labeling, pocketing, leaf cutting, collating, pamphlets.

SERIALS.

Purchase, recording, blanks, indexes, temporary binders, binding, shelving.

CLASSIFICATION.

Work principally in the decimal classification, mnemonics, author marks, letters, shelf list, arrangement, sizes, pamphlets, maps, charts.

CATALOGING.

Reference books for catalogers, anonyms and pseudonyms, a prepared list of books dealing with a variety of subjects to be cataloged, joint authors, editors, compiler, reviser, full name.

CATALOG.

Catalog rules, dictionary catalog, author, subject, title catalog, cards, cabinet, labels, guides, arrangement.

REFERENCE WORK.

Best books for certain lines, reference books for small library, indexes, catalogs, problems, public documents for reference work.

CHARGING SYSTEMS.

Browne system, card system, slip system, fines, book cards, pockets, borrower's cards, guarantor.

BIBLIOGRAPHY.

Bibliography of some special subject, annotated reading list.

READING SEMINAR.

Book reviews, discussion of certain lines of

books, books for children; discussion from standpoint of information, of interest, of difficulty.

LIBRARY BUILDINGS.

Plans, furniture, arrangement, shelving, special needs, text books, documents, reference.

LIBRARY FOUNDING.

Raising funds, legislation, developing interest, relation to the public, to the school.

LIBRARY GOVERNMENT.

Trustees, staff, apprentices, rules, hours.

THESIS.

Each student must submit a thesis on some subject in library science approved by librarian.

Suggestions for Starting a Small Library.

ACCESSIONING.

Get an ordinary square blank book, about ten inches across, for accessioning. Rule it in columns for accession number, author, title, place and publisher, cost, source, remarks. These columns extend over two opposite pages. A line for a book, each line numbered consecutively, and the num-

ber placed in the book accessioned on book plate or slip in front cover, also on some particular page such as the first right hand page after the title page. This accession book should give the life history of every book in the library.

LABELS.

Paste a small slip or label, printed with name of library, rules, etc., as thought best, in the front cover. On this label have space for class number of book and accession number. On the back of book, put a neat label, round preferred, the best are Dennison's A-88. These are already gummed, cost 25 cents a thousand.

STAMPING.

Stamp all books with a rubber stamp. (Violet ink is best, as it does not so easily fade as others.) Stamp on first right hand page after title page, and two particular pages in book, say the first 99 and the last 99 in the book. Also stamp edges of book by bending the leaves a little. This last stamp it is almost impossible to remove. Cost of stamp and pad about 50 cents.

CLASSIFICATION.

Classify all except fiction by using the first three figures of the decimal classification. Abridged form can be purchased of the Library Bureau for \$1.50; follow this by author initial and number taken from the Cutter author tables. In fiction use Cut-

ter author letter and number only. This table can be obtained from the Library Bureau for \$1.25. One can be made by using the numbers 9 to 99 as decimals. Thus,—Abbott A-22; Adams A-31, etc., thinking of their relative dictionary order, this would bring Ayers about A-99. The same order with other letters. Put these numbers on back label, and also on label inside of front cover.

ILLUSTRATIONS.

Psychology by James would be	150 J 23
English History by Clark	942 C 59
David Copperfield by Dickens	D 55 D
Ivanhoe by Scott	S 43 I

BOOK CARDS.

Book cards should be bought or made, about 3 by 5 inches. These can be purchased of Library Bureau for \$2.00 a thousand. On each book card write title of book on top line, author name on second line, (surname first), class number and accession number following.

CHARGING OUT.

File all book cards mentioned above with titles in

strictly dictionary order, in a suitable box, with alphabetical guides. This will be the catalogue for a time, of all books in the library by title. In charging out, place name or number of borrower on book card and mark with date of borrowing. File these cards in another box of "Books taken out." This will be the record of books out of the library. When books are returned, place card again in original list of "Books in library."

The above method will get the books in circulation with very little expense. Let no books out until they are accessioned. Endeavor to start at once a complete catalog by author, title and subject. This can be done whilst books are in circulation. The smaller the library the more complete should be the catalog. In order to get the greatest possible good, it is often advisable to make a card for even a page, when this page treats of a subject upon which matter is hard to find.

This complete catalog should be made on the Library Bureau standard cards number 33. These are about 3 by 5 inches. Boxes in which to file these can easily be made, or picked up at a store, until a good cabinet can be purchased. An excellent little pamphlet on "Cataloging" by Esther Crawford can be obtained from the Library Bureau for 15 cents.

The work done to the books according to the above suggestions will not have to be changed no matter what the future growth of the library may be.

List of Books for Children.

The following list is not intended to be a list of *best* books, neither is it proportioned through the different subjects. It is a list of books which children enjoy reading, and often call for; at the same time they are all *good* books. It may be called a list of good books, most popular with children.

These can almost all be purchased from different publishers at different prices, and in different editions. One only is given here for convenience. The small *italics* preceding titles, indicate, in a general way, to what class of young readers they are best adapted—*c* being for youngest readers, *b* for children from eight to twelve, and *a* for youth from about ten to sixteen.

<i>ab</i>	Adventures of Tom Sawyer, S. L. Clemens	Am. Pub. Co	\$2.75
<i>b</i>	Adventures of Ulysses, Chas. Lamb	Ginn	.30
	The romantic story of the Odyssey.		
<i>bc</i>	Æsop's Fables,	Lothrop	1.25
<i>a</i>	Alhambra, Washington Irving	Putnam	1.00
	Spanish legend and tradition.		
<i>bc</i>	Alice's Adventures in Wonderland, Lewis Carrol (pseud.)	Mac.	1.00
<i>b</i>	Among the Farmyard People, Clara D. Pierson	Dutton	1.25
	Short stories of domestic animals simply written.		

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|-----------|---|-----------|------|
| <i>ab</i> | An Old Fashioned Girl,
L. M. Alcott | Little | 1.50 |
| | A pleasant, sensible country girl visiting the city. | | |
| <i>ab</i> | Arabian Nights Entertainment,
E. E. Hale <i>ed.</i> | Ginn | .45 |
| | The best of the 1000 and 1 tales. | | |
| <i>b</i> | At the Back of the North Wind,
G. MacDonald | Routledge | 1.00 |
| | Dreams of excursions with the north wind. | | |
| <i>b</i> | Aunt Charlotte's Stories of French History,
C. M. Yonge | M. Ward | 1.50 |
| <i>b</i> | Aunt Charlotte's Stories of English History,
C. M. Yonge | M. Ward | 1.50 |
| <i>b</i> | Being a Boy,
C. D. Warner | Hough. | 1.25 |
| | An amusing account of the life of a New England country boy. | | |
| <i>ab</i> | Biography of a Grizzly,
Ernest T. Seton | Cent. | 1.50 |
| <i>ab</i> | Birds Nesting,
E. Ingersoll | Knight | 1.25 |
| | How to find eggs of American birds, preparing them for museum, etc. | | |
| <i>ab</i> | Birds' Ways,
Olive T. Miller | Hough. | 1.25 |
| | Observations of a few of our commoner birds. | | |
| <i>b</i> | Bird's Christmas Carol,
Kate D. Wiggin | Hough. | .50 |
| | About a little girl born on Christmas day and named Carol. | | |

<i>b</i>	Black Beauty, Mrs. A. Sewell	Lothrop	1.00
<i>b</i>	Blue Fairy Book, A. Lang <i>ed.</i> Tales from the literature of all lands.	Longmans	2.00
<i>a</i>	Bob, Son of Battle, A. Ollivant An excellent story of a Scotch sheep dog.	Doubleday	1.50
<i>c</i>	Book of Nursery Rhymes, illustrated, Doubleday	Doubleday	1.50
<i>ab</i>	Boy Travellers in Central Europe, T. W. Knox	Harper	2.00
<i>ab</i>	Boy Travellers in South America, T. W. Knox	Harper	2.00
<i>ab</i>	Boy Travellers in Southern Europe, T. W. Knox	Harper	2.00
<i>a</i>	Boys' Heroes, E. E. Hale Popular accounts of Hector, Hannibal, Alexander and others.	Lothrop	1.00
<i>ab</i>	Boys' King Arthur, Sidney Lanier	Scribner	2.00
<i>ab</i>	Boys of '76 C. C. Coffin	Harper	2.00
<i>a</i>	Boy's Workshop, A By a boy Tells how to use tools, and make many articles of wood.	Lothrop	1.00
<i>b</i>	Brownies and Other Tales, Juliana H. Ewing	Burton	.75

<i>c</i>	Brownies at Home Palmer Cox	Cent.	1.50
<i>b</i>	Campfire and Wigwam E. S. Ellis	Coates	1.00
	Story of two boys captured by Indians.		
<i>b</i>	Captain Bailey's Heir G. A. Henty	Scribner	1.50
	A valorous deed of Frank Norris, his flight to to America, later adventures, etc.		
<i>ab</i>	Captains Courageous R. Kipling	Cent.	1.50
	Story of a rich boy who fell from an ocean liner, was picked up by a fishing boat and put to hard work.		
<i>b</i>	Child Life in Prose J. G. Whittier, <i>ed.</i>	Houghton	2.00
	Stories about children selected from different authors.		
<i>b</i>	Children's Book, H. E. Scudder, <i>ed.</i>	Houghton	2.50
	Collection of the best stories, fables, etc.		
<i>b</i>	Child's History of England, C. Dickens	Macmillan	1.00
	From times of the Romans to 1688.		
<i>b</i>	Christmas Carol, C. Dickens	Houghton	.75
<i>a</i>	Christmas Eve and Christmas Day, E. E. Hale	Little	1.25
	Ten Christmas stories.		
<i>b</i>	Christopher Carson, (Kit Carson) J. S. C. Abbott	Dodd	.75

<i>bc</i>	Cinderella, A. Lang, <i>ed.</i>	Longmans	.20
<i>a</i>	Courtship of Miles Standish, H. W. Longfellow	Houghton	.25
	Semi humorous poems of colonial days.		
<i>a</i>	Cricket on the Hearth, C. Dickens	Houghton	.60
<i>bc</i>	Cross Patch Susan C. Woolsey	Little	1.25
	Stories adapted from Mother Goose.		
<i>a</i>	Crusades, George W. Cox	Scribner	1.00
	Causes, descriptions and results.		
<i>a</i>	David Copperfield, C. Dickens	Macmillan	1.00
	Introduces much of Dickens' own life and experiences.		
<i>a</i>	Dombey and Son, C. Dickens	Macmillan	1.00
<i>a</i>	Dragon and the Raven; or the days of King Alfred, G. A. Henty	Scribner	1.50
	Story of the conflict of the Saxons and Danes for supremacy in England.		
<i>b</i>	Each and All, Jane Andrews	Ginn	.50
<i>ab</i>	Eric the Dane, Matthew White	Street	.75
<i>ab</i>	Family Flight Around Home, E. E. Hale	Lothrop	1.50

<i>ab</i>	Family Flight Through France, Germany, etc., E. E. Hale	Lothrop	1.50
<i>b</i>	Fifty Famous Stories, J. M. Baldwin	A. B. C.	.35
<i>c</i>	Folk-Lore Stories and Proverbs, S. E. Wiltse	Ginn	.40
<i>a</i>	Following the Flag, C. C. Coffin	Estes	1.25
	Operations of the army of the Potomac while commanded by McClellan.		
<i>b</i>	For Name and Fame, or Through Afghan Passes, G. A. Henty	Scribner	1.50
<i>bc</i>	Friends in Feathers and Fur, J. Johonnot	A. B. C.	.30
	Simple facts about familar birds and animals.		
<i>b</i>	German Popular Tales, J. L. C. Grimm	Burton	1.00
	Collected from the German peasants.		
<i>ab</i>	Gulliver's Travels, <i>ed</i> by Chapman, J. Swift	Educational Pub. Co.	1.00
<i>b</i>	Hans Brinker, or The Silver Skates, M. M. Dodge	Scribner	1.50
	Story of Life in Holland. Four boys make a journey on skates from Amsterdam to the Hague.		
<i>b</i>	Harry Blount, P. G. Hamerton	Little	1.25
	Passages in a boy's life on land and sea.		
<i>b</i>	Heroes, The: Greek Fairy Tales, C. Kingsley	Macmillan	1.00

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|-----------|--|-----------|------|
| <i>a</i> | Hereward, the Wake,
C. Kingsley | Macmillan | 1.00 |
| | A Story of the Last of the Saxons. | | |
| <i>b</i> | Hoosier School Boy,
E. Eggleston | Scribner | 1.00 |
| | School boy life in Ohio many years ago. | | |
| <i>b</i> | How Charlie Helped His Mother,
Ruth Buck | Whittaker | .75 |
| | How a 9-year-old boy earned money. | | |
| <i>a</i> | In Freedom's Cause,
G. A. Henty | Scribner | 1.00 |
| | Story of Bruce and Wallace. | | |
| <i>ab</i> | In Nesting Time,
Olive T. Miller | Houghton | 1.25 |
| <i>ab</i> | In the Heart of the Rockies,
G. A. Henty | Scribner | 1.50 |
| | Story of adventure in Colorado. | | |
| <i>a</i> | Ivanhoe,
W. Scott | Macmillan | 1.25 |
| | Story of chivalry, describing feats and tournaments in the time of Richard I. | | |
| <i>b</i> | Jack-of-All-Trades,
D. C. Beard | Scribner | 2.00 |
| <i>bc</i> | Jack, the Giant Killer,
A. Lang, <i>ed.</i> | Longmans | .20 |
| <i>b</i> | Jackanapes,
Juliana H. Ewing | Little | .60 |
| | Story of a mischievous but truehearted boy who dies in battle to save the life of a comrade. | | |

<i>a</i>	Joan of Arc, the Maid of Orleans, W. H. D. Adams	Lippincott	1.25
	About the great war of the English in France. A popularly written biography.		
<i>a</i>	John Halifax, Dina M. Craik	Burton	1.00
	Story of English domestic life.		
<i>ab</i>	Jungle Book, I; II. R. Kipling	Century	1.50
<i>a</i>	Kenilworth, W. Scott	Macmillan	1.25
<i>a</i>	Kidnapped, R. L. Stevenson	Scribner	1.50
	Scene in Scotland in 1751, tells how the hero was kidnapped, his sufferings, etc.		
<i>b</i>	King of the Golden River, J. Ruskin	Ginn	.25
	In which the youngest brother of a family wins a prize by virtue, which his elder brothers lost through greed and wicked- ness.		
<i>a</i>	Last of the Mohicans, J. F. Cooper	Putnam	1.25
	Story of frontier life.		
<i>a</i>	Lays of Ancient Rome, Rolfe, <i>ed.</i> T. B. MacCaulay	Harper	.56
<i>a</i>	Legend of Sleepy Hollow, W. Irving	Harper	.75
<i>bc</i>	Little Daffy-Down-Dilly, N. Hawthorne	Houghton	.25

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|-----------|--|-----------|------|
| <i>b</i> | Little Lame Prince,
Dina M. Craik | Harper | .60 |
| | With his magic travelling cloak the prince
can go wherever he pleases. | | |
| <i>b</i> | Little Lord Fauntleroy,
F. H. Burnett | Scribner | 1.25 |
| <i>ab</i> | Little Men,
L. M. Alcott | Little | 1.50 |
| | About the boys at Aunt Jo's and Mr. Baer's
school. | | |
| <i>bc</i> | Little Red Riding Hood,
A. Lang, <i>ed.</i> | Longmans | .20 |
| <i>a</i> | Lives of the Queens of England,
A. Strickland | A. B. C. | 1.25 |
| | Student's edition. | | |
| <i>b</i> | Lobo, Rag and Vixen,
E. T. Seton | Scribner | .60 |
| <i>ab</i> | Little Women,
L. M. Alcott | Little | 1.50 |
| | About Miss Alcott's three sisters and herself
in their Concord home. | | |
| <i>a</i> | Lorna Doone,
R. B. Blackmore | Harper | 1.25 |
| | Story of outlaws and robbers in Devon, Eng-
land, in earlier days. | | |
| <i>ab</i> | Lovey Mary,
A. H. Rice | Century | 1.00 |
| <i>ab</i> | Madam How, and Lady Why,
C. Kingsley | Macmillan | 1.00 |
| | About earthquakes, volcanoes, and the
changes through which the earth has passed. | | |

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| <i>a</i> | Man Without a Country,
E. E. Hale | Little | .75 |
| | Teaches patriotism through the story of a man's exile and repentance for a contemptuous speech about his country. | | |
| <i>ab</i> | Mrs. Wiggs of the Cabbage Patch,
A. H. Rice | Century | 1.00 |
| <i>a</i> | Mr. Midshipman Easy,
F. Marryat | Macmillan | 1.00 |
| <i>ab</i> | Modern Vikings,
H. H. Boyesen | Scribner | 1.25 |
| | Stories of sport and adventure in northern Europe. | | |
| <i>c</i> | Mother Goose Melodies,
<i>ed.</i> by Wheeler | Houghton | 2.00 |
| <i>c</i> | Mother Goose Nursery Rhymes,
<i>ed.</i> by Wheeler | Dutton | 2.50 |
| <i>a</i> | Nicholas Nickleby,
C. Dickens | Macmillan | 1.00 |
| | Describes graphically a Yorkshire school | | |
| <i>b</i> | Nights with Uncle Remus,
J. C. Harris | Houghton | 1.50 |
| | Tales, legends, etc., of the negroes of the South. | | |
| <i>ab</i> | Norse stories retold from the Eddas,
H. W. Mabie | Little | 1.00 |
| <i>a</i> | Old Curiosity Shop,
C. Dickens | Macmillan | 1.00 |
| | Depicts with great force the vice of gambling. | | |
| <i>ab</i> | Old Deccan Days,
Mary Frere | | 1.25 |
| | Stories of East Indian tradition | | |

<i>ab</i>	Old Times in the Colonies, C. C. Coffin	Harper	2.00
<i>a</i>	Paul and Virginia, Saint-Pierre A fine pastoral; the scene on an enchanted isle.	Houghton	1.00
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<i>ab</i>	St. Nicholas Magazine, bound vols.,	Century	4.00
<i>bc</i>	Sandman, The, His Farm Stories, W. J. Hopkins	Page	1.20
<i>bc</i>	Santa Claus Land, A. D. Douglass	Lee	1.00
<i>ab</i>	School of the Woods, W. J. Long	Ginn	1.50
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	Stories from the lives of Bruce and Wallace.		
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<i>a</i>	Sketch Book, W. Irving	Ginn	.45
<i>a</i>	Spy, The, a tale of neutral ground, J. F. Cooper	Putnam	1.25
<i>ab</i>	Stories of Adventure, E. E. Hale <i>ed.</i>	Little	1.50
	Extracts of works of travel, etc.		
<i>a</i>	Stories from Homer, A. J. Church	Dodd	1.00

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| <i>a</i> | Stories of the Happy Days of Christmas Time,
G. W. Shinn Whitaker 1.00
Christmas stories, with directions for illustrating with tableaux and carols. |
| <i>ab</i> | Stories of the Sea,
E. E. Hale, <i>ed.</i> Little 1.00 |
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Jane Andrews Ginn .50 |
| <i>b</i> | Story of a Bad Boy,
T. B. Aldrich Houghton 1.25
Story of a mischievous but perfectly natural New England boy. |
| <i>b</i> | Story of a Short Life,
Mrs. Ewing Little .50 |
| <i>a</i> | Story of the Golden Age,
J. M. Baldwin Scribner 1.50
Greek legends and myths relating to the causes of the Trojan war, ending where Homer's story begins. |
| <i>ab</i> | Story of Siegfried,
J. M. Baldwin Scribner 1.50 |
| <i>a</i> | Story of the Iliad,
A. J. Church, Macmillan 1.00 |
| <i>b</i> | Sturdy and Strong,
G. A. Henty Scribner 1.00
Tale of chivalry in domestic life. |
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- American Book Co., 521-531 Wabash Ave., Chicago.
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One thousand and fifty-seven volumes were added during the year ending November 30, 1904, as follows:

Philosophy	109
Religion	18
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Sociology (except Education)	50
Philology	34
Natural science	88
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Fine arts	107
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History and Geography	83
Biography	17
Fiction	98
General works, reference, etc	161

Publications of State Normal School, Greeley, Colo.

BIENNIAL REPORTS, 1899-90 to date.

In reports of Superintendent of Public Instruction. Report for 1899-00 also printed separately and called "Annual report of trustees and president."

ANNUAL CATALOGS, 1890-91 to date.

Catalogs 1896-7; 1897-8; were also printed in five parts: Part 1, Normal department; 2, Model department; 3, Kindergarten department; 4, Miscellaneous; 4, announcements.

Catalog for 1900-1 called State Normal School *Bulletin*, Series 1, No. 1; Catalog 1901-2, Series 2, No. 1, and following years, catalog being first number of each series:

BULLETINS.

Beginning with catalog for 1900-1901, all Normal School Publications issued as *Bulletins*, a series for each school year:

Series 1, No. 1, Catalog 1900-1.

2, New developments at the

S. N. S. . . . Ag. 01

3, English in the S. N. S. O. 01

-
- 4, Library of the S. N. S. Ja. 02
 5, Manual training in the S.
 N. S. Ap.02
 6, The training school . . . My.02
- Series 2, No. 1, Catalog, 1901-2.
 2, Report of information, S.
 N. S. Ja. 03
 3, A study in current peda-
 gogy. F. 03
- Series 3, No. 1, Catalog, 1902-3.
 2, Announcement, (leaflet 4
 pp.) n. d.
 3, Preliminary bulletin, sum-
 mer term, (folder 6 pp.)
 n. d.
 4, Bibliography of school gar-
 dens. My.04
 5, Summer term. . . . My.04
- Series 4, No. 1, Catalog 1903-4. . . . Ju. 04
- Prospectus, S N.'S. Ja. 1891, 12 pp.
 First annual circular, 1890-91, (2 eds.) 19 p. 12 mo.
 Summer school of methods, 1892; 1894.
 Model school library, 1895, 7 p. 16 mo.
 Syllabus I: Studies in history, literature and expression,
 by Emma Ruff, 1895-6, 24 p. 12 mo.
 Circular, 1896, 24 mo.
 Financial statement, July 31st, 1896, 4 p.

-
- Physiography: A course for the seniors, 1898-99, by
N. M. Fenneman, 21 p. 22 mo.
- Child study, 16 p. n. d.
- Announcement, Musical department, 1895, 4 p.
- Announcement of S. N. High School, 1903-4, 4 p. 16 mo.
- Crucible (The). Published monthly by the students of
the school. Vol. 1, 1892-3, to date.

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SERIES IV, NO. 3

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State Normal School of Colorado.



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ENGLISH DEPARTMENT.

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ACHSA PARKER, A. M., Associate.

MRS. ANNA HEILEMAN-HUGH, Reading.

Review of Background for
English Work



By MISS L. M. HANNUM, Ph. D.

Dean of Women.

...COLORADO...
STATE NORMAL SCHOOL
GOLDEN, COLORADO

Review of Background for English Work

L. M. HANNUM

January, 1905.

General introduction to the great literary forms: place of literature in the developing life of man; relation of certain large phases of this development to the rise of the great forms (epic, lyric, drama).

LESSON ONE:

Outline conception of man's development towards the stage of expression in literature.

A. Antiquity of man and of civilization (man's life on the globe extending over a period of perhaps 240,000 years).

B. Stages of man's progress before expression in the fine arts began.

I. As variously named from the implements used (stone ages, bronze age, iron age), the occupations followed (hunting and fishing, pastoral, agricultural, handicraft, industrial), etc. (Time covered perhaps 230,000 years.)

II. As including—

Mastery gained over the elements and the wild beasts,

Acquisition of many useful arts.

Organization of primitive societies—**family**,
tribe, state.

Growth of primitive thought—crude world-
conceptions, including religion with the
germ of science, philosophy and poetry.

C. Framework for indicating the approach of man-
kind, as seen in different later (than those of B) epochs
and races, toward the stage of expression in pure liter-
ature. (Time covered lying within 10,000 years of the
present.)

I. Division of man's history with regard to the
more important epochs of civilization.

a. Ancient history. From the earliest civili-
zations to the downfall of the last of
the great group of older civilizations (the Roman
empire in the West) 476 A. D. Architecture
and sculpture, the most developed of the fine
arts. Pure literature (epics and romances) in-
teresting, but deficient in some of the primary
qualities of good art.

Sub periods.

(1) Asia more prominent. From the
earliest times to 492 B. C., when Persia, the
last great Asian monarchy, entered on her un-
successful war with Greece).

(2) Europe more important. From 492
B. C. (beginning of the supremacy of Greece
over Asia) to 476 A. D. (the fall of Rome).
Development (in Greece) of all the fine arts,

including supreme examples of the three greatest forms of literature (epic, lyric, drama).

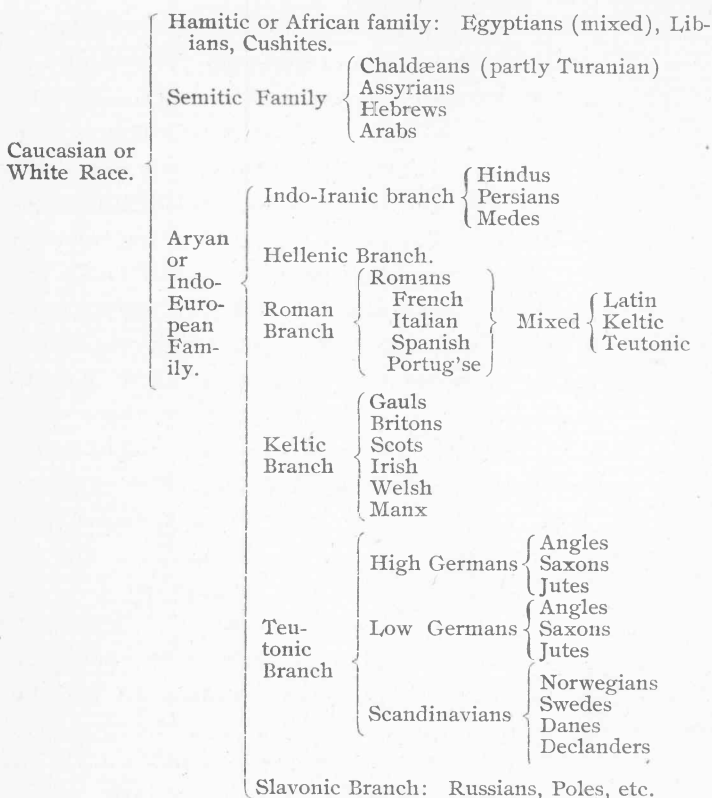
b. Mediaeval history. From 476 A. D., to the fall of Constantinople, the event which resulted in the spread of strong influences for learning among the new kingdoms of Europe—1453 A. D. Ancient culture guarded only in Byzantium (Constantinople). Conditions too tempestuous for the advance of art, but primitive and mixed forms of literature of great value.

c. Modern history. From 1453 A. D., to the present time. Great periods of the drama and of the lyric. Rise of the novel and of many minor and mixed forms.

II. Division of mankind into races for better noting the relation of the various branches to the progress of civilization and its expression in the arts.

a. Races.

Black, Ethiopian, or Negro race	{ Natives of Central and Southern Africa. Papuans. Australians (natives).
Yellow, Turanian or Mongolian Race.	{ Asiatics { Chinese, Burmese, Japanese, of Eastern Asia. Malays of Southeastern Asia. Nomads of Central Asia { Tartars, Mongols, etc. Pacific Islanders.
	{ Europeans: Turks, Magyars (Hungarians) Finns, Lapps, Basques. Americans: Indians, Esquimaux.



b. Relation to civilization.

1. Ethioipian race: no civilization proper--- progress only when in contact with Caucasians; no development of the fine arts.

2. Turanian race: Ancient Turanian civi-

lizations, particularly the Chaldæan, showing marked development in architecture, and in primitive forms of literature (epics, prayers, romances, fables); the Turks, a force in history, the Hungarians, interesting for their struggle to gain liberty, but neither possessed of high art. Condition of the Turanian race for a long time comparatively static, with exception of the Japanese, who have had rapid growth in recent times; languages primitive, of the agglutinative type; attainment in other arts more interesting than in literature.

3. Caucasian race: the most highly civilized and constantly advancing race, expressing itself in all the arts and pre-eminently in noble literature.

(a) The African family—leading branch the Egyptians (mixed): wonderful architecture, great religious doctrines, considerable learning and culture, strong influence on the history of civilization; literature interesting, but primitive, lacking in the higher qualities of thought and art.

(b) The Semitic family: establishment of great empires (Assyrian, Babylonian); inauguration of three great religions; progress, at various periods, in learning and the arts; production of one great literature, almost wholly religious in character.

(c) The Aryan family—the greatest of the human race in all definite achievement; common characteristics, operative to a greater or less degree in the civilization of all the branches, and in its expression in literature.

Political	{	Genius for self-government Passion for individual liberty Capacity for personal allegiance
Religious	{	Nature and hero worship Belief in personal immortality
Religious	{	Nature and hero worship Belief in personal immortality High moral conceptions
Soc	{	Delight in adventure and song

BRANCHES.

Indic (Hindu): early civilization of high character as shown by the literature and philosophy of the Vedas; influence slight until recent times, owing to lack of contact with western nations; epic literature noble and attractive.

Iranic (Persian): civilization of high character, as indicated by the Zend Avesta and other literature, but less philosophical than that of the Indic races; influence slight, but not uninteresting (e. g. on the Hebrews).

Hellenic: civilization perhaps the most remarkable of the world; characterized by high development in many directions and by peculiar harmony of ele-

ments; linguistic influence slight, literary and æsthetic influence supreme and far reaching.

Italic: civilization vitally different from that of the Hellenes in lacking all great ideals except that of liberty; linguistic influence great, political influence very great, literary influence small.

Keltic: civilization fragmentary, though occasionally brilliant; literature fascinating and individual, but not great.

Teutonic: literary and moral influence of Scandinavian poetry marked and valuable; the High and Low Germanic peoples (including the mixed nations, English and American) the present standard-bearers of civilization and aggressive influence; their literature the richest in the world. Slavonic civilization and art as yet inharmonious and undeveloped.

Mixed races (speaking Romance tongues) next to Teutonic in wealth and beauty of literature.

D. Place in the great early civilization of literature as an art compared with that of the other arts.

I. Earlier development of the plastic arts, these working with tangible material and being more directly connected with practical ends; e. g. architecture stimulated by the need of housing for the living and for the dead, and of temples of worship worthy of religious emotions; sculpture and pictorial representation fostered by the desire to decorate buildings and to image objects of worship or reverential fear.

II. Literature, as the most complete expression of the enlarged consciousness of man, requiring higher qualities than those which are found adequate to development of the plastic arts.

The character and intellectual qualities of a race show themselves not only in the contents of its writings, but also in the style in which it expresses itself in literature. For style is an exponent of perception and discrimination, and betrays the presence or the absence of the artistic intelligence which uses effective means and avoids what is superfluous or incongruous. The other creative arts, moreover, are in so far not intellectual as accomplishment therein may result through adventitious circumstances, or from manual skill and that lower form of patience—physical insistence, as it were—whereby manual skill is reached. Only the most intelligent peoples have excelled in the literary art; while in the plastic arts much has been wrought by races lacking in the higher perceptive, reasoning, and proportioning faculties. Taylor: Ancient Ideals.

III. Conditions for the rise of great literature not only required in higher degree, but, in consequence, attained with less frequency, than those which surround the emergence of the plastic arts:

I. A body of traditions common to the people and deeply connected with national experience (cf. development attending the change from tribal to national religion).

2. A class of wealth, leisure, and culture as patrons and listeners.

3. Creative minds of large scope, sustained force, and unifying power.

IV. The last condition, in particular, not, perhaps, attained in the great early civilizations, but found conspicuously for the first time in Greece.

The material accomplishment of the Egyptians and Chaldæans was stupendous; nor did either lack in manifold development of custom and social institution. Not because of any lack in the bulky composite of common life were these two races what they were, primitive always; but through lack of consistently progressive thought respecting the human spirit; and through lack in consequence of the definite formulation of ideals suited to the higher discriminations of man's nature.—Taylor.

LESSON TWO:

The period of "unconscious literature."

A. The nature of the period of "unconscious literature," as both a particular stage in the development of art and a constant factor in human society.

B. Its vast importance as the source from which the great forms of literature are fed.

All the good stories, indeed, seem to have invented themselves in the most obliging manner somewhere in the morning of the world, and to have been camp-followers when the famous march of mind set out from

the farthest East. Lowell: Old English Dramatists.

(Descent from the period of "unconscious literature" in Greece:

Homer's material came from this reservoir.

Eschylus said that his tragedies were scraps from the banquet of Homer, and indeed all Greek literature might be studied as a development or expansion of the Iliad and Odyssey.—Paul Shorey.

Latin literature began with a translation of Homer. Quintilian says, "The true beginning is with Homer, from whom, as from the ocean, all lesser streams and rivulets are derived."

All Greek gentlemen were educated on Homer, all Roman gentlemen on Greek literature, all modern gentlemen on Greek and Roman literature.—Ruskin.)

C. Reasons why the best material of pure literature (i. e. the literature of power as distinguished from the literature of instruction) has come from the period of "unconscious literature."

I. Its escape from bondage to the particular fact; hence its offer of essential human experience to the free creative treatment of the artist.

Great poetry springs out of personal feeling—the sort of feeling that, in the epic, can centre about semi-mythical personages and situations, and pour itself forth in a passion of ideality, a wealth of imagination, founded on the experiences of reality, yet unhampered by them.—Howells.

II. Its presentation of human passion and

action raised to heroic proportions by primitive credulity and by assimilation with the phenomena of nature. Exs. The labors of Hercules originally the movement of the sun through the Zodiac; Brunhilde originally summer put to sleep by Allfather during the long winter and awakened by the sun-god (Sigfried).

III. Human passion more intense and single in a simpler, less complex spiritual period.

IV. This essential human experience, heroic in its proportions and single in its intensity, susceptible of treatment which fuses it with the finer emotions and subtler motives of a later time, whereby the fullness of human nature is more completely rendered.

D. Reasons why "unconscious literature" is the great storehouse for the teacher of children.

Absence of historical setting and of complex relations.

Objectivity of treatment.

Fundamental and typical human experience.

Large and simple outlines of character and event.

Primitive idealizing and personifying of nature,

LESSON THREE:

The great forms of literature as they arose in

Greece, where they first attained a high degree of perfection.

A. Relation of the three greatest forms to three general stages in the development of the human consciousness.

I. Objective or unreflective stage—literary period of naive realism. Man thinking and feeling, but not about his thoughts and feelings. Expression in the natural epic.

II. Subjective or reflective stage: the mind tending to turn inward upon itself, developing individual feeling and opinion. Expression in the lyric.

III. Balance of subjective and objective: motives and feelings seen in their interaction and in their outcome in deeds. Expression in the drama.

B. The Natural Epic.

I. Its general nature: "A great, complex action told with fullness of detail and in the grand style."

II. Its particular inspiration: A great, heroic personality revealed in deeds and in influence on men and nations.

III. Its evolution from heroic lays (See lesson two and Jebb: Introduction to Homer, p. 12, Par. 8; p. 1, Par. 2, (1) and (3)).

IV. Its difference from the literary epic (See Jebb: Introduction to Homer, p. 12, Par. 8; p. 1, Par. 2 (1) and (2)).

V. Its comprehensive character as representative of the life of the people: the mythological element; the heroic element; the immigration element; the war element; the domestic and love element; the larger social element; the nature element.

VI. Its supreme excellence; the Greek natural epic the greatest of its kind in the world.

a. Conditions of this superiority in the Greek people.

1. Their rich inheritance from earlier civilizations.

2. The peculiar natural advantages of their country.

3. Their unexampled genius. Eager mental curiosity. Clear and keen insight. Faculty of sustained reason—of estimating, balancing, generalizing, proportioning all things. Discrimination, with constant selection of the better and the best. Passion for complete and harmonious development. Penetrative love of beauty. Capacity for human delight. Potent and resistless imagination.

b. Marks of high excellence in Homer, particularly in the *Iliad*.

1. Fundamental unity.

2. Exhaustless variety in representation of the life of the people.

3. Great architectural structure,

Discus- sion of	{	Development of central theme.
		Completeness of narrative plan.
		Character of books in which Achilles does not appear.
		Parsimony of conclusion.

4. Grasp of essential human experience.

5. Distinct and permanent types of character.

6. Rapidity of movement.

7. Noble and varied rhythm.

8. Grandeur and beauty of style.

VII. Its relation to Greek drama in subjects, life-questions, elements of treatment.

C. The Lyric.

I. Conditions which affected the rise of subjective poetry.

a. Political changes, bringing strife, reflection, emotion: fall of patriarchal kings; rise of oligarchies (government by the nobles); rise of tyrants (unconstitutional kings); rise of democracies.

b. Widening of men's minds due to contact with other peoples, increase of knowledge, development of the fine arts, birth of science.

c. Rise of the city-state, developing civic pride, individuality, emulation.

d. Expansion and colonization, enriching Hellenic culture with new forms or modifications.

e. Formation of religious bonds, promoting higher ideals and deeper patriotism: common faith in the Delphic oracle; Amphictyonic League (to protect the temple of the god, not to cut off running water from a city, not to destroy any Amphictyonic town); Panhellenic games; religious festivals (Panathenæa, Dionysia, Eleusinia).

II. Forms of more subjective or reflective poetry.

a. Preliminary modes.

1. Elgiac poetry; serious in character, accompanied by the music of the flute; alternate hexameter and pentameter lines (Callinus of Ephesus; Tyrtaeus of Athens).

2. Iambic poetry; the verse of wit and satire (Archilochus of Paros).

b. Lyric poetry: the most developed form; sung to the lyre or cithera, to which Terpander gave the compass of an octave. (Alcæas—patriotism and war; Sappho—love; Anacreon—the pleasures of life.)

Form closely related to the drama—the Dorian lyric: public, intended to be sung by a number of voices; hymns and choruses for worship of the gods, accompanied by dances and processional marches; reduced to regular form of strophe, antistrophe, epode, by Alcman, Stesichorus, and Arion; the special cyclic chorus accompanied by dancing, gestures, and mime-

tic features, arranged by Arion for the worship of Dionysius and called the dithyramb (See D II, b).

III. Distinctive inspiration of the lyric; the individual consciousness moving upon itself in reflection or emotion.

D. The drama.

I. Influence of the times that gave it birth (Period of Persian Wars, cf. Elizabethan period in relation to English drama.)

a. Feeling of the intense reality of life.

b. Sense of large movements having powerful effects on human experience.

c. Development of the reflective spirit in contemplation on the fate of nations and the operations of the divine will.

d. Exaltation of the national consciousness in the keen joy of full and triumphant activity.

II. Evolution of its form.

a. The inspiration to growth; life, sufferings, triumphs, service to man, of Dionysius, the god of the vine (cf. the inspiration of the English religious drama and the development of its subjects).

1. Conception of Dionysius.

2. Elements of the cult of Dionysius: economic—the vine the source of subsistence and of the daily comforts of existence; social—culture of the grape an occasion of familiar and happy intercourse; campestral—delight

in out-door life and the changing seasons; vital and intellectual—wine regarded as the enemy of everything that would depress the buoyancy of the body or deaden the activity of the mind; æsthetic—the pleasure of a beauty-loving people in the shapes and colors of the vine and its fruit; religious—the special warmth and intimacy of feeling for the god who presided over interests so closely interwoven with daily life.

3. Festivals of Dionysius.

Greater Dionysia—March—new growth of vine—Athens.

Lesser Dionysia—December—gather of fruit—country.

Lenæa—January—the wine press—Athens.

Authesteria—February—“feast of flowers” (testing wine)—Athens.

b. The steps in development from the village sacrifice to Dionysius.

1. Rude song of chorus round the altar of Dionysius, at which a goat was sacrificed (tragedy—goat song; comedy—village song).

2. The dithyramb given a regular lyric form by Arion (600 B. C.), who trained a chorus of fifty persons (cyclic chorus).

3. Impersonation of satyrs by chorus, who tell the adventures of the god (epic element).

4. Impersonation of Dionysius by coryphæus or leader of the choir, who tells the god's story (epic element) while the chorus responds with bursts of praise, grief, or delight (lyric element).

5. Introduction of hypocrites, or answerer, who held a dialogue with the coryphæus (true dramatic interlocution; Thespis, 536 B. C.)

III. Distinctive inspiration of the Greek drama in its highest development: the relation of fate to the deeds and the lot of men (cf. inspiration of the epic and of the lyric).

a. Ideas of fate which influence the action of the Greek dramas.

1. An arbitrary power
 Cf. the older theology, among us, which meant by the "Will of God" an arbitrary fiat.

{	behind the gods and controlling them. Co-ordinate with the will of the gods. Expressing the will of the gods.
---	---

2. A power acting with unswerving, implacable justice (cf. our law of cause and effect).

3. An avenger working within instead of without (cf. our heredity and atavism).

4. A law of subjective recompense that may turn evil to good when men repent and forsake evil (cf. our atonement).

b. Moments in the development of the relation between fate and the deeds of men.

1. The fact noted of mingled fortune, now good, now bad; this especially impressive in the case of a king or one in high position.

2. The reason for the fact found first naively in the two urns of Zeus (speech of Achilles to Priam, *Iliad*, Bk. 24), then in the idea that men suffered for their fathers' sins directly or indirectly (cf. the question asked Jesus about the blind man, and our modern idea of heredity and atavism).

3. This idea of inherited sin and suffering developed to a point where it becomes substantially the law of subjective recompense, including the possibility of moral restitution (Fullest exemplification in the Oedipus plays of Sophocles, with complimentary conception of the moral law in *Antigone*.)

4. The operation of fate in human life revealed in its highest conception in the great dramas that picture the deepest tragedy of life as seen when a man who has attained high character and reputation, apparently loses all his wisdom, acts arrogantly, violently, or tyrannically, and in consequence suffers fearfully; when this fall from height to depth, though apparently due to a hereditary

curse, (cf. the sins of the fathers' visited upon the children unto the third and fourth generation), is really due to hidden tendencies of evil in the nature which gain the mastery over better elements when pride has grown into arrogance on account of long success;—and in the dramas that show the ruin caused by sin (hereditary curse, in form of latent tendencies of evil) as retrieved by repentance and well-doing (victory of the higher side of the nature as a consequence of the discipline of suffering). The whole conception impressively revealed in *Oedipus Tyrannus* and *Oedipus Colonus*.

IV. Features of the performance of the Greek drama.

- a. Aim of presentation: to purify and exalt through high treatment of the familiar and sacred, not to interest or surprise by novelty.
- b. Conditions of performance.
 1. Place: southeast corner of the Acropolis at Athens.
 2. Time: spring festival (Greater Dionysia), daylight.
 3. Audience: The whole body of Athenian citizens—the priest of Dionysius in the center of the orchestra stalls, with archons, stratigi, and priests on each side.
- c. Effects possible under these conditions of

presentation: simplicity, cumulative intensity, solemnity, excluding complicated situations, many and varied characters, under-plots, and subtle impersonation.

d. Methods of acting adapted to these effects: majestic movements, deep and measured voice, solemn utterance, grand gestures, slow, stately rhythm. (Costume and "make-up": a sweeping robe of religious ceremony, a tragic mask, a high wig, padding, and thick-soled boots or buskins.)

V. Marked features of structure.

a. Two distinct, unlike elements: a dialogue of direct sequence and close concentration; a chorus, the song and evolutions of which link the action to the spectators by giving utterance to the feelings which its progress in each act has awakened. Function of chorus at first that of protagonist (D. II, b. 3); later, that of intelligent and sympathetic, but not spiritually penetrative, spectator; always, that of contributor to the dramatic effect.

LESSON FOUR:

Summary discussion of all the three great forms of literature from the four view-points specially used to outline the drama: Relation to certain large phases of the developing human consciousness; relation to the

times; relation to the evolution of the form; relation to the indwelling idea (inspiration).

LESSON FIVE:

Study of three plays of Sophocles (Oedipus Tyrannus, Oedipus Coloneus, Antigone) as illustrating—

A. The great indwelling idea of the Greek drama,

B. The use of material from the “unconscious period” as a vehicle for later conceptions.

C. The structure of the Greek drama.

D. The relation of the drama to the four viewpoints (Lesson four).

E. The chief points of likeness and unlikeness between Greek and Elizabethan tragedy.

LESSON SIX:

Discussion of the purposes of this outline study.

A. To give a better conception of the growth of both the material and the form of literature in relation to the evolutionary view of man’s life.

B. To emphasize the value of this evolutionary view in interpreting literature, in learning the significance of its sources in the unconscious period, and in appreciating its universal significance.

C. To show that the great forms of literature, which have been slowly wrought out through long

periods of time, are no less organic to the human spirit than is content, and remain the most complete vehicles for the expression of man's inner life.

D. To outline the foundation for a conception of world literature and to show that the teacher may use this conception as an aid in selecting literature for children.

E. To indicate that while the teacher of children may excusably be ignorant of the subjective and complex literatures of the world, he ought to study with zeal and intelligence those literary products that lie nearest the type experiences in the path of the race.

F. To develop a truer idea of the difference between great literature and merely good literature.

G. To assist in combatting certain common but erroneous ideas:

That modern literature is necessarily or probably the best.

That the chief function of literature is to inform the mind (merely) and to teach morals (merely).

That form is of little value, instead of being a highly important means.

That the purpose in teaching literature is to impart a certain piece instead of to use the piece as a vehicle for conveying life-impressions.

H. To provide a foundation for the estimate and

interpretation of later forms (notably, the novel) and of mixed forms of literature.

I. To give special preparation for further reading of one great form---the drama.

LESSON SEVEN:

Discussion of the uses of the dramatic idea and form in teaching literature to children.

A Few References for Reading.

FOR HISTORICAL BACKGROUND.

The World's History and its Makers. Vol. X.
Chapter on anthropology---an excellent summary.

Myers: The Ancient Nations and Greece—a good
brief treatment.

Taylor: Ancient Ideals.

Rollin: Ancient History.

Allen: Ancient History.

Paley: Universal History.

Yonge: Pictorial History of the World's Great
Nations.

Figuier: Earth and Sea.

Felton: Ancient and Modern Greece.

Ihering: Evolution of the Aryan.

Posuett: Comparative Literature.

Draper: Intellectual Development of Europe.

Labberton: Historical Atlas.

Longmans: Geography.

Beeton: Dictionary of Literature and Art.

FOR EPIC AND DRAMA.

Jebb: Classical Greek Poetry.

Mahaffy: A History of Classical Greek Literature.

Murray: A History of Ancient Greek Literature.

Morris: Manual of Classical Literature.

Wright: Introduction to "Masterpieces of Greek Literature."

Jevons: History of Greek Literature.

Mabie: Short Studies in Literature (Compare chapters on the Epic (XXX), the Drama (XXXII, XXXIII), the Lyric (XXXIV), and the Novel (XXXVII, XXXIX)).

FOR THE EPIC.

Jebb: Introduction to Homer---an excellent treatment.

Keller: Homeric Society (a later study, but so factual and unimaginative as to be misleading).

Andrew Lang: Homer and The Epic.

Schliemann: Autobiography prefixed to *Ilios*,

Snider: Homer's Odyssey.

FOR DRAMA.

Campbell: A Guide to Greek Tragedy.

Haigh: Tragic Drama of the Greeks.

Moulton: Ancient Classical Drama. Shakespeare as a Dramatic Artist. Principles of Drama.

Freytag: Technique of the Drama.

Woodbridge: The Drama: Its Law and Its Technique.

FOR ENGLISH DRAMA.

Ten Brink, Saintsbury, and the other historians of literature.

Bates: The English Religious Drama (best for sympathetic general view).

Pollard: English Miracle Plays.

Boas: Shakespeare and His Predecessors.

Lowell: Old English Dramatists (essays on Marlowe, Webster, Chapman, Beaumont and Fletcher, Massinger and Ford: A page of discussion of principles in essay on Webster.

Whipple: Essays and Reviews. Old English Dramatists-

Dodsley's Old English Plays.

Maully: Pre-Shakesperian Drama.

Dowden: Shakespeare: His Mind and Art.

Carson: Introduction to Shakespeare.

Scherer: Essays on English Literature (three on Shakespeare).

Ten Brink: Five Lectures on Shakespeare.

Mabie: William Shakespeare: Poet, Dramatist, and Man.

Lamb: Dramatic Essays.

STATE NORMAL SCHOOL BULLETIN

Series IV. No. 4.

REPORT OF INFORMATION

**STATE
NORMAL SCHOOL**



OF

COLORADO

January, 1905

**Published Quarterly by the Trustees of the State Normal
School of Colorado, Greeley, Colo.**

Entered at the Postoffice in Greeley, Colo., as second-class matter

Bulletin of Information

OF THE

State Normal School

OF

Colorado

FOR THE YEAR ENDING
December 31st, 1904

SUGGESTIONS

1. The statement of expenses is taken from the report to the Governor by the President of the Board of Trustees for year ending July 31, 1904.

2. For information concerning relation of buildings, see plan hereto attached.

3. For information not found in this bulletin, see annual catalogue, report filed with the State Board of Education, or visit the school.

BULLETIN OF INFORMATION.

PREFACE.

The object of this bulletin is to put in concise form the records of the establishment, maintenance and growth of the State Normal School of Colorado. The school has had a remarkable growth, when considered from the standpoint of numbers, grade, influence, efficiency, and in the shaping of the educational policy of the state and directing its educational forces. It is rare for any institution to weave itself into the warp and woof of the educational fabric of the state in so short a time as has the State Normal School of Colorado. The growth and development and work of the State Normal School lie very close to the hearts of the people; and when they recognize its wants, they are prompt in providing for it. The State Normal School is the people's institution. Its influence is felt in every school in the state, whether it be in the city, in the hamlet, on the plains, in the valley or in the mountain. Thus the Normal School touches the life of the people very closely. Everything augurs a still more rapid growth, a higher efficiency, and a wider usefulness of the institution for the future.

It is also the mission of this bulletin to set forth briefly the needs of the institution.

I. The Needs of the School in the Way of Buildings at the Present Time.

The school is not well housed. It has outgrown the present building. In order that we may accommodate the present students, it is necessary for us to use the ends of the halls as rooms and to use the basement, which is a very undesirable one, in order that we may be able to carry on the work. The present conditions also require us to make use of rooms for work which are ill adapted and which infringe upon the room of other departments. There are at present at least two hundred people who have to live most of the day in the basement. Two-thirds of this basement is underground. It is not lighted well; it is poorly ventilated because not intended for this purpose, and the quarters are too small entirely. All our industrial work, in the way of manual training, domestic economy and recitations of the training school have to be carried on in this basement. In order that this may be remedied, a better building provided for this work and that of the institution is needed, and the board of trustees will ask the legislature for an appropriation of \$85,000. This appropriation includes \$50,000 for a building which shall contain an assembly room and a library, \$25,000 for a gymnasium and \$10,000 to furnish them. It is practically impossible for the school to get along without this additional room and do good work. In fact it is not fair to the children of the training school, nor to those who are studying teaching

here, to be subject to these inconveniences when the state is able to remedy them. A library is considered these days as the center of inspiration and opportunity for investigation; to do our best work and to get the best results, the school needs a library room very much. At the present time the library is housed in a room that is very much too small for it. When from one hundred to three hundred and fifty students want to work in the library, it requires a great deal more room than we have in order to hold the books, the equipment and the students, and at the same time have them reasonably comfortable in the way of ventilation and light. In this day and age a gymnasium is also indispensable; the physical training of our young people is an admitted necessity. No well regulated school anywhere pretends to get along without a well constructed gymnasium—a building for these three imperative necessities is very much needed. Until such a building is provided, the work of the school will be crippled.

II. Needs of the School for Maintenance.

The maintenance of the State Normal School is derived from one-fifth of a mill on the assessed valuation of the state. Owing to the growth of the school there was a deficit last year as shown from following table of receipts and expenditures. The school year ending July 31, 1905, has, up to date, an increase of about 20 per cent in attendance over last year and the close of the year will show an

increase of over 30 per cent. The deficit will be more than last year.

Again, we want to run a full quarter during the summer, giving those who are teaching and cannot quit to attend the Normal during their terms of teaching a chance to attend and work out the course. This is a very important item in the preparation of the teachers of the state, and also in the educational interests of the state. This summer term consequently will occasion an extra expense of about \$8,000 for a ten weeks' quarter per year.

The school also needs more professors: namely, a professor of sociology and history, four assistant professors, a superintendent of the grounds who has a training in forestry and gardening, a lady medical woman as matron of the young women of the school; and two more teachers in the training department of the institution. Therefore,

Maintenance needed annually above what has been used from receipts of one-fifth mill:

Deficit as per last year's schedule...	\$ 3,091
Cost of summer term.....	8,000
Additional teachers and help.....	10,500
For building and development	<u>15,000</u>
Total.....	\$36,591

To meet the above that the school may do its best work the Trustees ask the legislature for an additional one-tenth (1-10) of a mill, making the continued annual

millage appropriation three-tenths (3-10) of one mill. The Trustees invite the committee or the legislature to visit the school that the members may see the absolute necessity for the additional millage appropriation.

The annual enrollment at the close of the year will have reached 1,000 students in all departments. When this growth is studied and compared with the past years of the school, it becomes apparent that the above increase in the millage is an educational necessity for the state to meet, that the school may do efficient work.

III. Establishment.

The Colorado State Normal School was established by an Act of the Legislature in 1889. The act shows an intelligent insight into the organization, function and management of a Normal School. The general management is vested in a board of seven trustees, six of whom are appointed by the Governor and the State Superintendent of Public Instruction, *ex officio*. Those appointed by the Governor and confirmed by the senate hold six years—two being appointed each biennial.

PRESENT BOARD OF TRUSTEES.

Dr. R. W. Corwin.....	Pueblo, Colo.
	Term expires 1907.
Hon. James R. Killian.....	Denver, Colo.
	Term expires 1907.

Hon. Jesse Stephenson.....	Monte Vista, Colo.
Term expires 1905.	
Mrs. Frances Belford.....	Denver, Colo.
Term expires 1905.	
Hon. Richard Broad, Jr.....	Golden, Colo.
Term expires 1909.	
Hon. C. H. Wheeler	Greeley, Colo
Term expires 1909.	
Miss Katherine L. Craig.....	Denver, Colo.
State Superintendent of Public Instruction.	

OFFICERS OF BOARD.

Richard Broad, Jr.....	President
A. J. Park.....	Secretary
J. M. B. Petrikin.....	Treasurer

FIRST FACULTY, 1890.

Thomas Gray, President.
Science and Art of Education.

Paul H. Hanus, Vice President.
Science and Pedagogy.

Mary D. Reid.
Mathematics.

Margaret Morris (Mrs. Jessie Gale).
English and Literature.

J. R. Whiteman.
Music.

PRESENT FACULTY.

Zachariah X. Snyder, Ph. D., President.
History and Philosophy of Education.

James H. Hays, A. M., Vice President
Latin and Pedagogics.

Louise M. Hannum, Ph. D., Preceptress
History, Literature and English.

Arthur E. Beardsley, M. S.
Biology and Nature Study.

Douglass D. Hugh, A. M.
Superintendent Training School and Pedagogy.

Anna M. Heileman-Hugh.
Reading and Interpretation

Richard Ernesti.
Art and Public School Art.

F. L. Abbott, B. S.
Physical Science.

David L. Arnold, A. M.
Mathematics.

G. W. Barrett, M. D.
Physical Director.

Achsa Parker, M. A.
English, History and Literature.

S. M. Hadden, Pd. B.
Manual Training.

Eleanor Wilkinson.
Domestic Science.

E. Maud Cannell.
Director Kindergarten.

William K. Stiffey.
Music.

A. Gideon, Ph. D.
Modern Languages.

R. H. Powell Jr., A. B., A. M.
Associate English and Literature.

J. V. Crone, Pd., M.
Nature Study and Curator Museum.

R. W. Bullock.
Principal High School.

Eleanor M. Phillips, Pd. M.
Training Teacher—Primary.

Elizabeth H. Kendel, Pd. M.
Training Teacher—Grammar.

Mrs. Bella B. Sibley, Pd. M.
Training Teacher—Primary.

Mrs. Eliza Kleinsorge, Pd. M.
Training Teacher—Grammar.

W. B. Mooney, Pd. B.
Assistant Training Teacher.

C. Bruce Collins.
Assistant in Mathematics.

Helen Garrigues.
Assistant in Reading.

Marcella Gibbons.
Assistant in Primary.

W. C. P. Meddins.
Assistant in Grammar Grades.

Albert F. Carter, M. S.
Librarian and Library Handicraft.

Lillian G. Ingram.
Assistant Librarian.

OTHER EMPLOYEES.

A. J. Park, Secretary Board of Trustees.

J. M. B. Petrikin, Treasurer Board of Trustees.

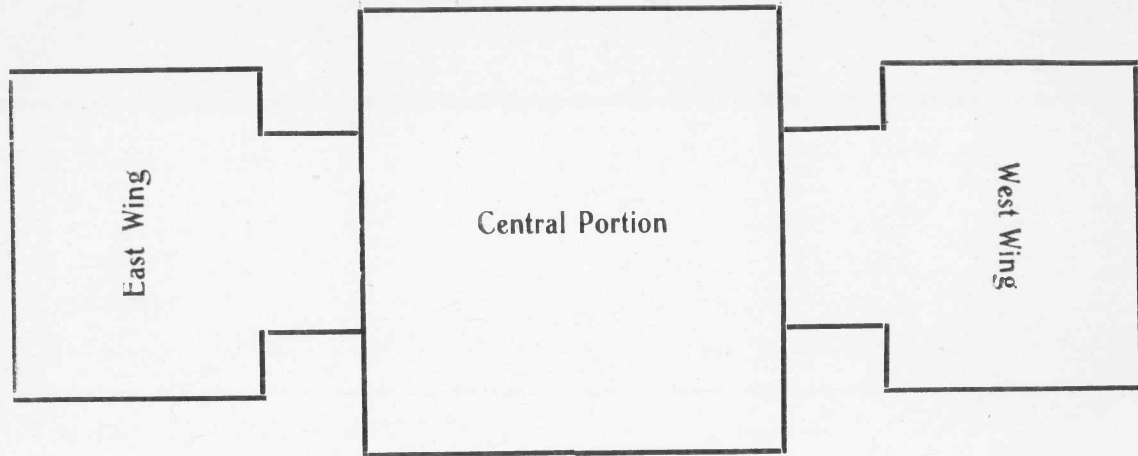
Heating Plant

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graph TD; HeatingPlant[Heating Plant] --- Gymnasium[Gymnasium]; Gymnasium --- AssemblyRoom[Assembly Room]; Gymnasium --- Library[Library];
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Gymnasium

**Assembly
Room**

Library



1. Solid lines show parts finished and in use: _____
2. Dotted lines show part needed and wanted:

Vernon McKelvey, Secretary to President of School.
 A. L. Evans, Superintendent Grounds.
 Benjamin H. Stephens, Engineer.
 Charles Stephens, Janitor.
 G. H. Orr, Janitor.
 Adolph Lawson, Assistant on Grounds.

IV. *Students.*

Since the school has been organized 3,800 students in the Normal department alone have attended. Many of those who could not stay until they finished the course are teaching in the state. Students in attendance during the year ending July 31, 1904:

Males	46	
Females	349	
Total Normal Dept.....		395
Training School	316	
Kindergarten	66	
Summer Term.....	141	523
		918
Less number counted twice.....		52
Total for year		866

ALUMNI OF SCHOOL.

Seven hundred three, as seen below, have finished the course and graduated from the school. Barring death, they are at work in the state. Every county in the state

has Normal graduates at work in its schools. Nearly every village and town and city have graduates of the Normal at work in them; a number are county superintendents, superintendents and principals of city and town schools; some special teachers of manual training, cooking and sewing; some kindergartners, and some teachers of art. If it is true that education is fundamental in the making of a prosperous, intelligent and happy people for the state, the work of the Normal School becomes apparent. The following is a class list of the graduates:

Class of 1891	12
Class of 1892	16
Class of 1893	23
Class of 1894	35
Class of 1895	32
Class of 1896	31
Class of 1897	44
Class of 1898	58
Class of 1899	70
Class of 1900	70
Class of 1901	69
Class of 1902	74
Class of 1903	82
Class of 1904	87
Total	<u>703</u>

Financial Statement.

Statement of Receipts and Expenses of the Colorado State Normal School, at Greeley, Colorado.

RECEIPTS.

One-fifth mill on \$335,000,000, the assessment	\$67,000.00
Five per cent off for non-collection ..	3,350.00
Net receipts for year	<u>\$63,650.00</u>

DISBURSEMENTS.

The following were the expenses for the year, ending July 31, 1904, taken from the report of the Secretary of the Colorado State Normal School sent to Governor:

Salaries of 35 employes,—teachers, janitors and workmen on the grounds	\$47,341.66
Laboratories—Biological }	78.69
Laboratories—Chemical }	
Laboratories—Domestic Economy	253.03
Laboratories—Sloyd	633.13
Library	2,146.15
Art	1,445.17
Furniture	1,919.30
Model school and kindergarten	202.07
Museum	566.57
Athletics	24.00
Improvement on grounds	443.73

STATE NORMAL SCHOOL

EXPENSE ACCOUNT.

Fuel.....	1,162.29
Light	425.85
Postage.....	218.94
Freight and express.....	876.30
Advertising	263.95
Printing and stationery.....	304.87
Repairs.....	427.62
Labor	1,636.85
Institutes	745.87
Trustees	538.95
Catalogue	531.69
Diplomas	130.17
Insurance	1,155.00
Interest	142.92
Commencement account.....	217.79
Summer school.....	153.50
Feed	22.59
Water tax	780.66
Hardware (general).....	513.96
Merchandise (general).....	62.30
Grounds	120.72
Office expense	81.42
Laundry	15.00
Telephone.....	66.75
Livery.....	26.50
Lumber.....	65.72
Painting	21.50
Athletics.....	28.18
Art	5.50
Plants and seeds.....	28.00

Hose	16.50
Tuning pianos.....	45.00
Alumni Association.....	143.50
Toilet paper.....	24.28
Brushes.....	57.51
Grading Eighth avenue.....	160.00
Floor oil.....	96.85
Black boards and crayon.....	41.52
Reception expenses.....	33.40
Lectures Prof. Hewett.....	150.00
Supplies	12.77
General expense items.....	104.86
	<hr/>
Total disbursements.....	\$66,711.05
Receipts (as shown above).....	63,650.00
	<hr/>
Deficiency for maintenance during year ending July 31, 1904..	\$ 3,061.05

Summary of Reasons for an Increase in a Millage Appropriation.

1. The utter lack of room for running the school.
2. The impossibility of ventilating and making the basement which we are compelled to use sanitary, healthy and comfortable.
3. Additional room for training school children. There are 120 seniors and 500 training school children—

an average of about four children to each senior. These seniors have to teach. There are not enough children. There is no room for any more. A building is necessary that these people who are preparing to teach in the schools of the state may have a chance to teach here.

4. A department of Gardening, Forestry and Horticulture is needed very much—especially in a state like Colorado. Every teacher who goes out should be trained in these lines in order to stimulate the entire community in these directions.

5. No means for the support of the natural growth of the school. The school is trying to run on the same income as it did eight or ten years ago, yet the school has more than doubled in numbers and tripled in work.

6. Every teacher in the institution is over-worked and under-paid, when we make a comparison with other institutions of the country, and other lines of work.

7. The Normal School directly concerns all classes of citizens. The graduates are those who teach on the plains, on the mountains, in the valleys, in the cities and in the villages, hence the people of the state are in sympathy with the well developed and equipped institution.

8. Education is the foundation for the intelligence, the culture and the industry in the building up of a great commonwealth. The function of the State Normal School is largely this work, because it meets all classes and conditions.

9. There are needed in the institution, a teacher in History, Economics and Sociology; a Matron who has had medical training who shall have the immediate charge of the girls of the school, one with whom they may counsel in regard to very many matters that arise in their own condition and health; a Superintendent of the Grounds who has been trained for the purpose that he may have charge of the department of Gardening, Forestry and Horticulture; four assistants in the Training School, so that we may be able to increase the efficiency of these departments, and two other assistants in the Normal proper.

10. An assembly room that the school may have a place to have its public meetings, such as lectures and commencement exercises. It has to pay \$200 or \$300 per year for rent for the opera house in the town for this purpose.

11. The school needs a gymnasium whereby the health and physical condition of the students may be better taken care of.

12. One has only to come to the institution when it is in operation to be convinced that it needs a library building where the students may work with a degree of comfort. There is not room enough for those who want to be in the library at work. They have to watch their chance to get in.

13. The school should own its own electric light

plant. It would be very much more economical than to have to pay for light from other sources; it would also be very much more convenient. The Normal School is the only institution in the state that does not have its own electric lighting plant.

PRELIMINARY BULLETIN

Summer Term

OF THE

Colorado
State Normal
School

GREELEY, COLO.



SERIES IV. NO. 5

Announcements

I.

The Summer Term of The Colorado State Normal School opens June 20, 1905.

The work done during the summer will be: (1) The regular Normal work arranged in courses for which credit will be given when completed, enabling teachers who cannot attend any other time than during the summer term to complete the Normal Course, get the diploma, which is a license to teach in the state for life, and receive the professional degree of Bachelor of Pedagogy. (2) The work will be arranged to enable graduates of the Colorado Normal, and others prepared to do so, to take up graduate work, whereby they may, during the summer terms, earn the master's diploma. (3) The work will be so arranged that persons who wish to pursue special lines may have the opportunity to

do so. (4) It will give High School teachers an opportunity to study the subjects they are to teach from a pedagogical standpoint. (5) It will give principals and superintendents an opportunity to study the educational problems which confront them in their daily work. (6) It will give regular Normal students who, through sickness or otherwise have not been able to complete their work satisfactorily during the regular year, an opportunity to make it up.

Courses of Work

II.

Work in Training School; Pedagogy, general and special; Science and Art of Education; Sociology and Education; Mathematics, elementary and higher; Physics, Chemistry, Geography; Latin; German and French; English; Literature; Biology, Botany, Zoology,

Physiology, Nature Study; Physical Education, Hygiene, Gymnastics, Athletics, Field Day Sports; Reading; Art, Drawing and Painting; Manual Training, Wood Work, Basketry, Weaving, etc.; Music, vocal, instrumental and history of; Kindergarten, Domestic Science, Cooking and Sewing.

Surroundings

III.

Greeley is a city of 5,500 inhabitants. It has beautiful streets lined with trees, comfortable homes, in which the students live. There is a feeling of comfort and a spirit of culture; there is a true social democratic spirit pervading the institution and the community. Two hundred miles of snowy range are seen from the Normal campus.

Campus

The campus is the most beautiful in the state, and as beautiful as

any in the country; forty acres of it, with thousands of trees, shrubs and flowers artistically arranged and well kept.

Buildings

The buildings are beautiful, commodious and well arranged for the purpose intended. They are situated on an eminence overlooking the city, in the midst of a well-kept campus.

Advantages

IV.

There is a strong faculty especially trained, both by education and experience. A library of 25,000 volumes. Well equipped biological, physical, chemical, sloyd and physical education laboratories. First class athletic field, gymnasium, etc., all under the direction of specialists. Art department; field and garden work in nature study; Model and Train-

ing school; Kindergarten; and all other departments belonging to an ideal school.

Expenses

V.

1. Boarding and room from \$3.25 to \$4.50, two in a room.

2. **Tuition Free** to all citizens of Colorado. \$5.00 book and laboratory fee to citizens of Colorado. Citizens of other states, in addition to the above, \$5.00 tuition fee for the summer term.

3. All students who take Manual Training will pay a fee of \$2.00 to pay for material.

4. All students who take Cooking will pay a fee of \$3.00 to pay for material.

5. Students who take Sewing will pay a fee of \$2.00.

For further particulars, address
Z. X. SNYDER, Pres.,
Greeley, Colo.

BULLETIN

Colorado
State Normal
School

GREELEY, COLO.



SERIES IV, NO. 6

Announcements

Fall term open September 12, 1905; tuition free to citizens of Colorado; boarding \$2.50 to \$4.00 per week; rooms 75 cents to \$1.25 per week; room and board \$3.25 to \$4.25 per week; light house-keeping from \$2.00 to \$3.00 per week.

Advantages

Teachers who have taken the Normal course are in demand; a faculty of thirty specialists; first class buildings; a most excellent Training School with an attendance of 450; here is where the Normal students do their observation and teaching; besides the Training School the Normal department has 300 earnest high school graduates and college graduates who are learning to teach; a library of 25,000 volumes; well equipped laboratories; first class athletic field; gymnasium and

different students have attended the school; graduates receiving from \$500 to \$2,500 per annum; eight superintendents of schools; fifty high school principals and teachers; four city superintendents; twenty ward school principals; thirty village principals; ten Normal Training School teachers; eight directors and teachers of manual training; several music and art teachers, and several hundred teaching in graded schools.

For catalogue and particulars, address

Z. X. SNYDER, Pres.,
Greeley, Colo.



physical education laboratory under the direction of trained men; strong art department; field and garden work in nature study; all other departments belonging to an ideal school.

Surroundings

The campus is the most beautiful in the state and as beautiful as any in the country—40 acres of it, with thousands of trees, shrubs and flowers artistically arranged and well kept. Greeley is a beautiful city of 5,500 inhabitants; comfortable homes, in which the students live; a feeling of comfort and a spirit of culture; a true social spirit; 200 miles of snowy range seen from the Normal. It is all ideal. Come.

Results

Seved hundred and three graduates holding diplomas which are licenses to teach for life; 3,800

State Normal School Bulletin

SERIES IV., NO. 7

History Department

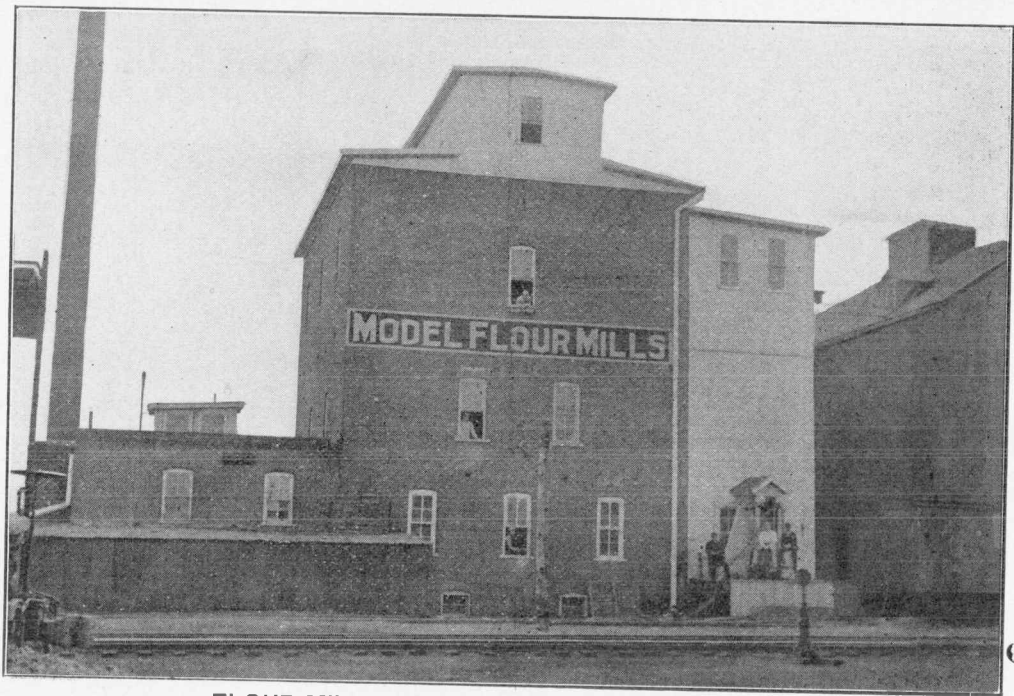
STATE NORMAL SCHOOL OF COLORADO



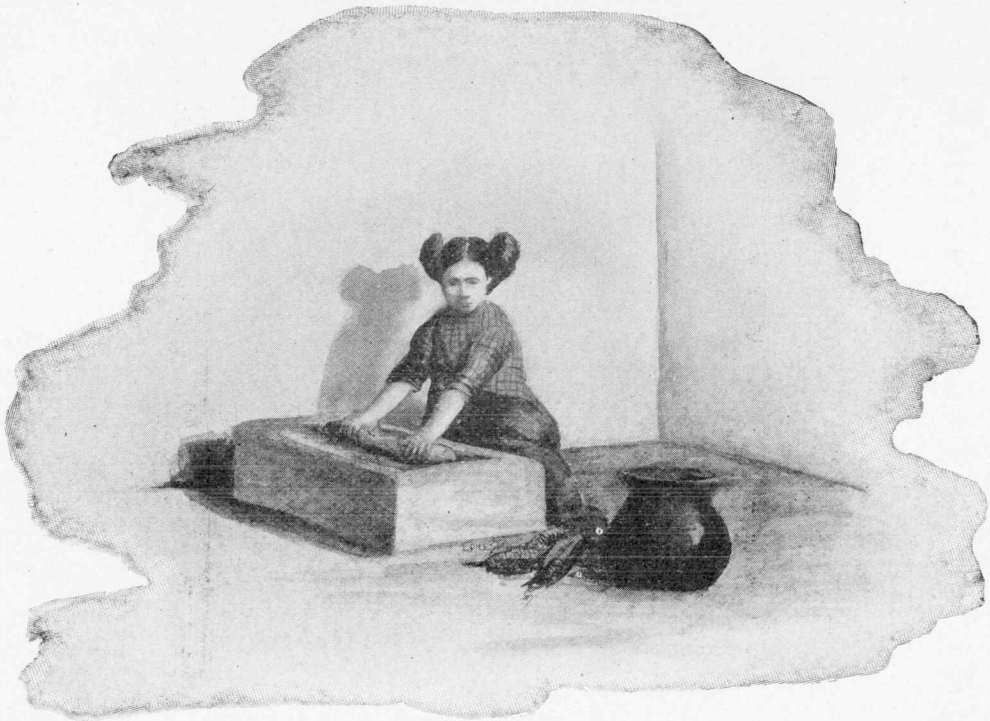
APRIL, 1905

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INDUSTRIAL HISTORY

IN

SECONDARY SCHOOLS

Its justification, its
values, a course of
study, and methods

By

ROYAL WESLEY BULLOCK

Principal High School
of Training Department



Industrial History in Secondary Schools

ITS JUSTIFICATION; ITS VALUES; A COURSE OF STUDY;
AND METHODS

The study of history is now so generally accepted as an essential in any well organized curriculum, and its intrinsic worth is so well established that no defense of so popular a subject is needed in this discussion. It is probably safe to assume that school people are reasonably agreed upon the following values to be derived from the proper study of history: First, it develops judgment in matters of practical concern by the study of cause and effect as shown in human activities. Second, it affords excellent training in the organization of material in an orderly way, thus giving the pupil command of all his mental resources. Third, it develops scientific habits of thought so far as this may be done by the search for material, the weighing of evidence, the suspension of judgment in cases of doubt, and the general candor and honesty that should attend all historical study. Fourth, it trains the imagination by calling upon it to reconstruct the large setting of world history, and to picture the world's most important events.

Granting these values of historical study, or any other values sufficient to guarantee the subject a place

in the curriculum, the question arises as to the proper selection of historical material. The subject of history has long since felt the tendency of the times toward a more practical application of school work to the affairs of life. All through the course of study subjects are examined with a view to relating them more closely to the experience of the students. All along the line the watchword is vitalize, humanize, make these dry bones live. In English and foreign languages, in mathematics, in geography, as in biology, the emphasis is now upon function rather than upon form. The question concerning a word or a river, as concerning a bug, is, not how is it made, but what does it do? Applied to history, the question is changed only in tense. Given a certain historical fact, we ask, what did it do? What reaction occurred? How did this circumstance affect the lives and the institutions of succeeding generations?

Naturally the historians themselves are the leaders in this modern movement for a different selection of historical material, and are writing now histories of people rather than chronicles of kings and governments. John Richard Green was one of the pioneers of this movement with his "History of the English People"; and since his day few historians have failed to profit by his example in giving a fundamentally social treatment of the subject. In our own country Mac-Master's splendid work is called "A History of the People of the United States," and the recent five volume

history by Woodrow Wilson is known as "A History of the American People." In all these cases the text justifies the title, being, indeed, a consideration of the life of the people, and of their thoughts and feelings as these have found expression in their various institutions. Not only is this view of history indicated indirectly in the work of these modern writers, but many of them state definitely their devotion to this new conception of historical treatment, and consequently of historical study. For example, on the first page of McMaster's five volume work mentioned above, he states his position as follows:

"It shall be my purpose to describe the dress, the occupations, the amusements, the literary canons of the times; to note the changes of manners and morals; to trace the growth of that humane spirit which abolished punishment for debt, which reformed the discipline of prisons and of jails, and which has, in our own time, destroyed slavery and lessened the miseries of dumb brutes. Nor shall it be less my aim to recount the manifold improvements which, in a thousand ways, have multiplied the conveniences of life and ministered to the happiness of our race; to describe the rise and progress of that long series of mechanical inventions and discoveries which is now the admiration of the world, and our just pride and boast; to tell how, under the benign influence of liberty and peace, there sprang up, in the course of a single century, a prosperity unparalleled in the annals of human affairs; how, from a state

of great poverty and feebleness our country grew rapidly to one of opulence and power; how her agriculture and her manufactures flourished together; how, by a wise system of free education and a free press, knowledge was disseminated, and the arts and sciences advanced; how the ingenuity of her people became fruitful of wonders far more astonishing than any of which the alchemists had ever dreamed."

Prof. Charles M. Andrews, in the preface to his "History of England," states the general situation forcibly and clearly in the following words:

"History today is not expected to allure the student by tales of conflict, glitter of courts, gossip of diplomats, and adventures of heroes. It has got rid of much of the stage thunder that passed current for history in older narratives, and shows that the true progress of a nation is not to be found in the glamour of a Hundred Year's War, the sham of a Field of the Cloth of Gold, or the rivalries of court favorites and corrupt party leaders. It points to the industry that underlies wealth, and to the wealth that makes military success possible. It lays stress upon the national or social conditions that render the great statute or legislative act necessary, and upon the pressure of food or population and the spurring of religious conviction that urge men to brave the sea and undertake colonization. It calls attention to the deep significance of peasants' rebellions, religious revivals, and industrial revolutions in preparing the way for the rise of democracy and the

transformation of the social life of a nation. It proves that the private extravagances of kings and the corruption of men in office are not typical of the moral standards of an age; and it encourages confidence in the sobriety and sanity of those who make up the mass of a nation."

This same tendency toward a closer union of school interests with life interests finds expression in the remarkable movement toward industrial work in the schools of today. It seems generally conceded that throughout the grades of the elementary school the child should be given some manual or constructive work to do. By means of such occupation the child gains some idea of the problems that confront real industry, and attains a certain empirical knowledge of the technique of some trades, but he is not in a position to take a comprehensive view of the industrial development of a country while still in the elementary school.

On the basis of these facts, and in view of the tendency mentioned, I wish to propose that a place should be found, or made, in the high school curriculum for a special study of industrial and economic history.

The values claimed particularly for this phase of historical study are as follows:

1. It affords an opportunity for correlating and unifying other school work.
2. It enlists the interest of the family at home.
3. It establishes a more appreciative and sympathetic understanding of our complex modern life.

4. It leads to a more intelligent choice of a life work.

5. It prepares a pupil for a more intelligent and effective participation in the duties of citizenship.

Let us examine these claims somewhat in detail.

I.

The first claim made for the study of industrial history is that it affords opportunity for correlating and unifying other school work. I am aware that nearly all the standard subjects have had their enthusiastic supporters who have claimed for each subject the right to constitute an "educational core." I recognize that correlation is an overworked hobby that has borne many a zealous rider to educational oblivion. The "core" idea is unfortunate in its suggestion that any subject is important enough to warrant us in tacking to it all available information. The correlation theory has met the difficulty that subjects which are not closely related to the interest of the child do not become appreciably more interesting or profitable by relating them to each other. If, however, the life and experience of the child is made the educational center, subjects grouped around this center will be effectively correlated.

Industrial history, studied in a concrete way, does relate closely to most of the legitimate interests of the school and of the home. Physics, chemistry, electrical engineering, mechanics, all applied sciences, have

formed the very basis of our remarkable industrial life. Any consideration of the source of raw material takes us at once into the fields of botany, zoology, geography, or meteorology. Reading, and that of the best sort, is stimulated by the perusal of the wonderful story of our material progress, and its effect upon our standard of living. Composition, both oral and written, is called for under circumstances most favorable to good work, that is, under the pressure of a real need for expressing clearly and forcibly to others something of real value to all. Mathematics in its simpler forms, and mathematical reasoning in its higher forms, find ample opportunity for exercise in this subject. Averages, percentages, and drawing to scale are the means by which most of the comparisons are made in this study, and problems for solution arise at every step. There used to be a popular, hoary-headed problem concerning three men who owned a grindstone in partnership, and it was proposed to find out how long each man should turn it to get his money's worth, or something of that sort. A modern problem is, if three men unite to produce a suit of clothes, one furnishing the raw material, one furnishing the capital, and one furnishing the labor, how shall the selling price be determined and how divided. The latter problem is harder, I will confess, but it concerns pupils more closely than does the hypothetical grindstone. Even the fine arts are closely related to industrial development by the wonderful instruments which mechanical skill has put at the dis-

posal of artists. Purely mechanical results and machine products themselves are often genuine works of art. Carving and sculpturing machines, pottery modeling machines, photography, and various reproduction processes, even the despised and calumniated mechanical piano-player, all these have come to be recognized factors in the field of fine art. These form a connecting interest between pure art and mechanical industry.

II.

Our second claim is that a study of industrial history enlists the interest of the home. Busy fathers and tired mothers are not likely to take a lively interest in Latin verb forms, or in any silly problem about filling a cistern with two pipes while some one else tries to empty it with three pipes. If, however, the high school boy considers the conditions under which the family purse is filled or emptied; if he investigates causes affecting prices of current commodities—the economic conditions under which his father's work is done, or the source of supply of the conveniences and necessities for a comfortable living,—he will receive assistance and sympathetic interest from all members of the home. Too great a chasm exists between the interests of children whose attention is fixed upon book lore, and parents who are fully occupied in providing opportunities for their children which they themselves did not enjoy. Children are inclined selfishly to exact

tribute from parents whose sacrifice they little understand. Parents are inclined to belittle their own employment, and to teach their children to despise the occupation which supplies their food and clothing. All this is unfortunate. Children should attempt to understand the problems that absorb their parents' energies, while the home and the school should unite in an effort to inculcate in the minds of the young a genuine respect for the dignity of labor and an admiration for the skill of the workman. The study of industrial history offers opportunity for the pursuit of these desirable aims.

III.

In making the third claim for industrial history, that it establishes a more appreciative and sympathetic understanding of complex modern life, I wish to emphasize, not so much the higher spiritual significance of this expression, as the simple, common-sense understanding of our relations with those concerned with us in supplying the ordinary comforts and conveniences of life. For example, it is not uncommon for women to censure a street car conductor for not allowing them time to get off the car comfortably, while the male passengers storm at the unpardonable delay, neither sex apparently realizing that the conductor is a part of a great system. It is possible for a society woman to telephone in an order for goods that must be delivered immediately; then, when the goods are delivered, to

call up an officer of the S. P. C. A. and report inhuman treatment of the horse that delivered the goods. Such inconsistencies are perpetrated constantly because of ignorance of the system which controls ordinary business operations. Most of the petty vexations of life by which we lose our equanimity and make ourselves ridiculous arise from our own ignorance of business conditions. The tailor and dressmaker, the butcher and baker, even the plumber and wrath-provoking railroad man, all have their justifications in the order of society—all have some excuse in the conditions under which they work. It is reasonableness in these ordinary affairs of life that I wish to emphasize, and that will be promoted by a study of commercial and industrial life.

Appreciation of the skill, the knowledge, and the worth of our fellow-workers comes with observation and understanding. In mediæval times the possessor of useless knowledge was distinguished from the possessor of useful knowledge by the garb he wore. The cloak of the scholar and the frock of the artisan emphasized the class distinction that existed. In these days it is more proper that the seeker for knowledge should mingle with those who have laboriously acquired working knowledge and skill, that he may be inspired and instructed by such association. Excursions to local industrial institutions do impress pupils profoundly with the skill and capacity of the workers and managers observed. The average high school

student is duly humbled and effectively inspired by a personal observation of the intricacies of modern industrialism. The possession of plain, every-day knowledge most tends toward ideal socialization.

IV.

The fourth claim is that a study of industrial history leads to a more intelligent choice of a life work. It is a well recognized fact that the majority of people drift into their life work rather than choose it with deliberate attention. Many of us could say of our work, as did Mr. Bryan of his political career, that "he got in by accident and stayed in by design." Yet, how we live depends very largely upon how we make our living. Our social and moral standards are determined largely by the circumstances of our daily occupation. If the problem of how to live is the greatest of all moral questions, why should the youth be left so poorly prepared to choose the manner of making a living?

Now industrial history is primarily a study of how people have made, and are making, a living. It is a study of social evolution, of the forces that have operated to produce the complex civilization in which we must participate. Our economic life follows very closely the biological laws of the struggle for existence and survival of the fittest. From the prehistoric struggle of tribe with tribe we have the modern international struggle for supremacy and expansion. From the early struggles among social classes of priests, soldiers, and

slaves, we have a modern conflict between capital, labor, and the great middle class of long-suffering humanity, called vaguely, "the consumer." Lastly, we have the old struggle within each class for individual supremacy, beginning when the first man born into the world killed the second one, and continuing in modern times under the polite title of business competition. It is in the industrial field, under a competitive system, that the young man of today must make his first attempt to apply the general knowledge and power that he is supposed to have acquired in the secondary school. The multiplicity of technical schools springing up all over the country indicate a recognition of the demand for specially trained men, but are the secondary schools preparing their pupils to choose wisely the technical training they will most profit by? I would not intimate that the secondary school should plan its work at the dictation of the technical school, as it has so long done at the dictation of the college, but I would urge that, as the technical schools are fitting for special lines of work, so the high school should do more toward enabling the student to choose deliberately the work which he will undertake.

For such a choice at least two factors are essential: the student must know himself, and he must know the demands of his proposed occupation. The first of these factors is being supplied by the enriched curriculum with its broad range of electives, including art and industrial work. In this curriculum the student

developes his tastes and discovers his latent powers. By the elective system he is compelled to study his own mental tendencies, and is enabled to enjoy the satisfaction that results from application to congenial employment. Thus by the enriched curriculum and the elective system, the student is enabled to know himself. The second essential, a knowledge of the demands of the proposed occupation, may be found in a study of industrial history, and, to some extent, in commercial geography, political economy, and sociology. These studies will familiarize the student with the demands made by modern business life, and will indicate in a general way the advantages and disadvantages of large classes of occupations. By a study of industrial history the student will come to recognize large economic groups, such as extractors, transformers, transporters, transferrers and dependents. He will observe and compare the attractions of independence, wealth, fame, social position, educational opportunity, and the like offered in these various fields of activity, and, consciously or unconsciously, he will estimate his own fitness for the several lines of work which he observes.

V.

The fifth claim is that a study of industrial history prepares for a more intelligent and effective participation in the duties of citizenship. If this claim can be substantiated, it alone will win universal recognition for the subject under discussion. Our search for a

study that will promote good citizenship has led us back and forth across the field of civil government, round and round the field of United States history, with frequent excursions into the promised lands of student self-government, patriotic orations, and rythmical flag-waving and saluting. Without disparagement of these well-meant and innocuous efforts, I suggest that their results have been disappointing. These things do not seem to lie near to the springs of human action; they are not of the nature of human motives; they deal with externals rather than with fundamentals; they consider existing forms rather than underlying motives. The study of civil government is a study of the institution that has been devised by man to protect himself in the enjoyment of his inalienable rights. Under modern circumstances the dangers threatening these rights originate almost wholly in industrial conditions. The rights of "life, liberty, and the pursuit of happiness" comprehend the rights of getting a living, freedom of contract, and the maintenance of a standard of living that provides for the satisfaction of reasonable physical needs. The political problems of today are not largely problems of theory and doctrine to be settled by abstract discussions; rather are they problems of industrial policy, demanding observation of industrial phenomena. Regulation of tariff, of currency, of commerce, of taxes, of corporations; preservation of individual rights against corporate greed in municipalities; relief for the congested

manufacturing centers, and extension of municipal advantages to rural populations; such are the questions the citizen of today is called upon to solve.

Furthermore, these problems have a history; they have been met in various ways by other people in other days, and we may profit by their experience. The student of today and the citizen of tomorrow must come to see our modern complex life as a gradual evolution from a simpler and more primitive condition. He must recognize that we have surrendered much individual freedom in the attainment of great social advantage. He must know that social and industrial systems are changed by evolution, not by revolution; that economic laws, more effective and comprehensive than the laws of the statute books, affect his material welfare; that social participation is forced upon him whether he is willing or unwilling; and that a degree of material prosperity is a necessary condition for the attainment of the highest ethical and spiritual good. Knowing and feeling these things as a positive reality, the citizen of tomorrow will contribute his share to the mass of public sentiment which, crystallized in the form of legislation, both local and national, will gradually remedy our economic evils as public sentiment so expressed has gradually ameliorated industrial conditions through the past two centuries. Such knowledge will, I believe, contribute directly to good citizenship.

In summarizing the arguments advanced for the

study of industrial history, it will be seen that they all group around the central thought of a study of existing activity. The work proposed is dynamic rather than static. Society in the process of making is the point of departure and the final goal of all the suggested investigations. Records of past achievement are useful means for the interpretation of the present; they are not intrinsically a worthy end. Industrial history is, in short, an effort toward an examination of the past, an understanding of the present, and a preparation for a useful and successful future.

THE
COURSE OF STUDY
IN
INDUSTRIAL HISTORY

PART I. Introduction and General Survey.

CHAPTER I.—INTRODUCTION.

- 1.—*Definition of Subject.* Scope of subject. Limits of time, space, and subject. Selection of industrial factors.
- 2.—*Values of Subject.* Relation to life work. Relation to good citizenship; to other subjects, as Economics, Sociology, etc.; to pleasures and satisfaction in life.
- 3.—*Sources of Information.* Observations; conferences with people; books; periodicals.

CHAPTER II.—GENERAL SURVEY.

- 1.—*Evolution of Industry.* Hunting and fishing stage. Pastoral stage. Agricultural stage. Handicraft stage. Industrial stage. (This should be illustrated by a study of the evolution of a typical industry, as the textile arts.)
- 2.—*Classification of Occupations.* Extractors; Transformers; Transporters; Transferrers;

Servants; Dependants. (Study fully the history of our own town or community, noting the gradual differentiation of occupations, and increase of socialization.) Classify as an agricultural, manufacturing, or commercial community.

- 3.—*Relative Advantages of Occupations.* Tenure of position; chance for promotion; degree of independence; effect on health; moral effect; responsibility and anxiety; financial risk; holidays and vacations; amount of wages and manner of payment.

PART II. History of Typical Industries.

CHAPTER III.—EXTRACTIVE INDUSTRIES.

- 1.—*Agriculture.* The manorial system in England. Land enclosures, the causes and results. Agricultural bounties and corn laws. Improved methods of agriculture in England. Agriculture in the American Colonies. Acquisition and disposition of United States government lands. Agriculture in the North and South prior to the Civil war. Opening of the agricultural West. Irrigation, its methods and results. Government projects. Modern methods of specialized intensive farming. Extensive capitalistic farming.

Comparative study of value of farm products by states, by decades, and by localities.

- 2.—*Fishing.* Early New England fisheries; extent and economic importance. Whale fishing. Government interest in fish protection and culture. Modern methods of fishing. The salmon fisheries of the northwest.
- 3.—*Mining.* Early iron works in England; use of coal in smelting. Development of iron works in the colonies; opening of the coal fields. Early gold and silver mining in the West. Modern methods and processes. Value and importance of various minerals. (A statistical comparison expressed graphically.)

CHAPTER IV.—TRANSFORMING INDUSTRIES.

- 1.—*General Periods of Development.* The domestic period in England. The guild period in England. The factory system in England. The domestic system in America. The factory system in America.
- 2.—*Types of Organized Manufacturing.* (Study first the manufactures of your own community, especially preparation of the necessities of life.) Flour milling. The boot and shoe industry. Clothing manufacture. Meat packing. Sugar manufacture. Lumber industry. Iron and steel industry.

CHAPTER V.—MECHANICAL INVENTIONS.

- 1.—*Printing.* Early printing in England. Printing in the colonies. Modern methods and machinery. Magazine illustration. Advertising. Organized literary work of periodicals.
- 2.—*Telegraph and Telephone.* Invention and introduction. Effect on business methods. Modern improvements.

CHAPTER VI.—TRANSFERRING INDUSTRIES.

- 1.—*Retail Trade.* Early systems of barter. Fairs. General stores, special stores, and the modern department store. (An example of highly organized industry.) Mail order business.

CHAPTER VII.—TRANSPORTATION.

- 1.—*Natural Waterways.* Shipbuilding in the American colonies. Commerce on the Great Lakes; its growth and present importance. River navigation; its history and present methods. Modern ocean transportation.
- 2.—*Canals.* Early canals in England. Early canals in the United States. Recent canals of great commercial importance. The Panama canal.
- 3.—*Railways.* Early railways in England. Beginnings of railroading in the United States.

Railway building after the Civil war. Present railway systems as to organization, management, service rendered, rates, effect on industrial development of the country. Recent railway inventions.

- 4.—*Other Transportation Systems.* Elevated roads. Electric lines. Sub-ways, etc.
- 5.—*Public Highways.* State and national roads. The modern good-roads movement.

CHAPTER VIII. COMMERCIAL INSTITUTIONS.

- 1.—*Banks.* Italian banks and goldsmiths. Banks of Amsterdam and England. Origin and growth of American banking system. Modern banking methods. Clearing houses.
- 2.—*Currency.* Historical sketch of English currency. Development of currency in colonial times. Growth of currency standards.
- 3.—*Stock Exchanges.* Origin and growth of the business. Effect on markets. Ethical considerations.

PART III. Industrial Problems.

CHAPTER IX.—INDUSTRIAL ORGANIZATION.

- 1.—*Reasons for Organization.* Need of larger capital. Economy of production. Control of markets.

- 2.—*Forms of Organization.* Partnership. Joint stock company. Corporation. Trust. Growth from free competition to concentration, and to integration.

CHAPTER X.—THE LABOR MOVEMENT.

- 1.—*Labor Organizations.* First labor unions in England. Growth of unionism in America. Classes of organizations and statement of principles. (Study local organizations.)
- 2.—*Means and Methods Used.* Definition of strikes, boycotts, and lock-outs. History of early strikes in England and America. Recent strikes of historical importance. (Study causes and results.) Theory of the boycott and its ethical aspects. Lock-outs.
- 3.—*Labor Legislation.* The demands of labor. Sketch of English labor legislation. Gains of labor by legislation in America. The present outlook.

CHAPTER XI.—REMEDIES PROPOSED FOR LABOR DIFFICULTIES.

- 1.—*Arbitration and Conciliation.* Recent examples of arbitration and conciliation. Practical and theoretical difficulties.
- 2.—*Profit Sharing and Co-operation.* Co-operation in England. Important examples of co-opera-

tion in America, Recent experiments in profit sharing.

- 3.—*Socialism*. Different theories of socialism. Examples of socialistic communities.

CHAPTER XII.—SOCIALIZATION OF PUBLIC UTILITIES.

1. *Municipal Ownership*. Examples of municipal ownership at home and abroad. Estimate of results. Present tendencies.
2. *Government Ownership*. Experience of foreign countries. Comparison with American conditions. Present tendencies.
3. *Government Control*. Inter-state commercial laws, etc. The work of government commissioners. Present tendencies and prospects for the future.

CHAPTER XIII. SUMMARY.

A social and economic interpretation of history.
Some principles of industrial evolution.

Each division of the subject has its special bibliography, both in books and periodicals, but a list of some of the books of a general nature that have been found useful is given below as a suggestion of the kind of material that may be found.

Evolution of Industrial Society ---- Richard T. Ely.

The Place of Industrial in Elementary Education

---- Katherine Dopp,

Economics and Industrial History ---- Henry W. Thurston.

Industrial Evolution of the United States ---- Carroll D. Wright.

Industrial History of the United States ---- A. S. Bolles.

Modern Industrialism ---- Frank L. McVey.

American Industrial Problems ---- W. B. Lawson.

Industrial Evolution ---- Bucher.

Economic and Social History of New England ---- W. B. Weedon.

Economic History of Virginia ---- P. A. Bruce.

Modern Industrial Progress ---- Charles H. Cochran.

Six Centuries of Work and Wages ---- J. E. Rogers.

Men of Invention and Industry ---- Samuel Smiles.

Captains of Industry ---- James Parton.

History of American Manufactures ---- Bishop.

The Origin of Inventions ---- O. T. Mason.

Progress of Invention in the Nineteenth Century ---- E. W. Byrne,

Our Wonderful Progress ---- Trumbull White.

The World's Book of Knowledge (a compilation).

Organized Labor ---- John Mitchell.

Economic Interpretation of History ---- Edwin Seligman.

Economic Interpretation of History ---- J. E. Rogers.

Industrial and Commercial Geography ---- J. U. Barnard.

- Industrial and Commercial History of England
----J. E. T. Rogers.
Social England, 6 vol.----H. D. Traill.
Industry in England----H. DeB. Gibbins.
English Commerce and Industry----L. L. Price.
Industrial and Social History of England----Ed-
ward P. Cheyney.
English Economic History----W. J. Ashley.
Outlines of English Industrial History----Cun-
ningham and McArthur.
A Short History of the English Colonies in Amer-
ica----Henry C. Lodge.
The United States of America----N. S. Shaler,
2 vol.
Reports Issued by Departments of State Govern-
ment.
United States Government Reports, Census, Labor
Bulletins, etc.
The Evolution of Modern Capitalism----John A.
Hobson.
General History of Commerce----William C.
Webster.
Introduction to the Study of Economics----C. J.
Bullock.
Business Geography----Mead.
The Labor Movement in America----Richard
T. Ely.
Speculation on Stock and Produce Exchanges of
the United States----Emery.

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- Rural Wealth and Welfare----Fairchild.
 Monopolies and Trusts----Ely.
 History, Principles and Practice of Banking----
 Gilbart.
 Strikes and Social Problems----Nicholson.
 The Railway Question----James.
 American Railway Transportation----E. R.
 Johnson.
 The Control of Trusts----J. B. Clark.
 Co-operation in New England----Bemis.
 Three Phases of Co-operation in the West----
 Warner,
 Gain-Sharing----Towne.
 Irrigation Institutions----Mead.

This list may be extended indefinitely from any good book catalogue, but these titles are sufficient to show what kind of books are used freely in this study.

About the only book on industrial history published at present as a text for high schools is Henry W. Thurston's "Economics and Industrial History." It is a very suggestive book, emphasizing the economic side of the subject.

Suggested Methods in Industrial History

The methods suggested for the study of industrial history are not peculiar to this subject alone, but are the generally recognized modern methods, combining the use of library, laboratory, and field work, as in nature study. I shall refer to three principles, or directions for work, which, I believe, should be observed in the study of industrial history.

1. Study local material so far as possible, in order to arouse interest in the subject, and to illustrate concretely the larger phases of the subject.

2. Combine first hand information with evidence taken from books, in order to confirm, illustrate, and emphasize each class of information by the other.

3. So far as possible, choose problems of immediate and personal interest for study, rather than distant abstractions, though the latter may appear larger and more important.

A few illustrations of these principles, taken from work recently done, may make them more definite.

I.

In the study of local material the following plans are among those that have been tried with reasonable success:

*DIRECTIONS FOR A STUDY OF
LOCAL HISTORY.*

Talk with as many as possible of the pioneers of your own town, read what is written of its history, then write a paper covering somewhat the following points:

When was your town first settled? What led to its settlement? By what class of people, and from what place did they come? What were the early industries of the town? What changes have taken place in its industries up to the present time? What prominent forces or causes have made the town what it is? What important men have been connected with its history? What have they done? What is the prospect for future development of the town? Why?

The papers of a class that recently took this exercise were extremely interesting. Pupils who live in Greeley studied the organization of Union Colony and the founding of the present town, the efforts of its pioneers in establishing their institutions in a new land, the hardships that were endured, and the work of prominent pioneers, including the part that Horace Greeley played, and the tragic history of Nathan Meeker. Other pupils who wrote of Denver, Colorado Springs, Central City, Cripple Creek, Leadville, Rico, Colorado City, and many other places, had no less interesting material.

A part of another exercise was as follows:

MANUFACTURING INTERESTS. (Study some special plant in your town.)

What is the value of the plant? Does it pay taxes? Is it owned by local capital? Is it detrimental in any way? Is it permanent or temporary? Does it affect the value of farm land? Of town property? Of rent? Does it supply local conveniences or cheapen the necessities of life? What is the value of the annual output? What proportion of this money is spent locally? How many and what class of persons are employed? What is their nationality? What is their standard of living? How favorably is this plant generally regarded by the community? Summarize the advantages and disadvantages of having this plant in the neighborhood.

(In connection with the labor movement a similar series of questions directed a study of labor conditions in the establishment.)

II.

As an illustration of how conveniently observation and reading may be combined in the study of industrial history, reference may be made to the way in which the subject of "Banks and Banking" was recently studied by a class in the Normal High School.

The following reading list was assigned and made the basis of class discussion:

Money and Banking; Horace White.

Banking Systems of the World; W. M. Handy.

- The Modern Bank; A. K. Fiske.
 Evolution of Modern Banking; Political Science Quarterly, 14:569.
 Methods of Banking; Cosmopolitan, 22:475.
 Working of a Bank; Scribner's, 21:575.
 Bank of England; Chautauquan, 23:606.
 Bank of England; Harper's, 68:885.
 National Banks; Nation, 45:273.
 Making of a Bank Cashier; Everybody's, 9:536.
 Government Control of Banks and Trust Companies; American Academician, 24:17.
 Reform in Banks; Nation, 63:416.
 Branch Banking; Journal of Economics, 17:476.
 State Banks and Banking Laws, Nation, 74:481.
 Concentration of Banking Interests in the United States; Atlantic Monthly, 92:182.
 Manufacture of Bank Notes; Harper's, 24:306.
 Bank Tax; Nation, 72:83.
 Proposed Banking Among the Poor; Academy Political Science, 18:286.
 Elasticity and Sound Banking; North American, 178:388.
- After two recitation periods spent in considering the general subject of banks and banking, an excursion was taken to one of the banks of the city. According to arrangements previously made, the cashier of the bank met the class and teacher in the bank parlors and gave a clear-cut, business-like explanation of the points covered by the following outline:

BANKS.

1. Organization and capitalization.
2. Charter—how secured.
3. National, state, and private banks distinguished.
4. Officers, their duties and responsibilities.
5. Kinds of business done and sources of profit.
6. Provisions for safety and sound business.
7. Bank paper; checks, drafts, exchange, etc.
8. Issue of currency.

After this lecture and the answering of all questions asked by pupils, the class was conducted behind the counters, where full explanations and demonstrations were given of the working apparatus of a bank; books, trays, stamps, perforators, adding machines, vault, safe, time-lock, burglar alarm, etc.

At subsequent recitations the work of the excursion was reviewed, and the subject was then summarized by a paper from each member of the class, prepared according to the instructions of the English teacher, and submitted to the English teacher for correction as a regular exercise in that class.

It is believed that this is a feasible way of studying most local industries. The class referred to above has studied the working of a sugar factory, a flour mill, an ice plant, a gas plant, and a printing office in much the same way.

The chief difficulty in this sort of study is found in the lack of magazine literature in many schools.

This disadvantage may be partly overcome by the purchase of a few well selected books on the subjects, by the use of all magazines in the homes of the pupils, and by a persistent effort to secure magazines for the school which have been shown to be valuable.

III.

As an illustration of one way in which problems of immediate interest may be studied, and interest aroused in the home, a study of agriculture is submitted. Greeley is the center of an agricultural section, the principal products of which are potatoes, sugar beets, and wheat. This year the original contracts which the farmers had made with the sugar company expired, and the farmers were carefully considering the advisability of renewing or extending these contracts. This necessitated on their part a careful estimate of the relative profits from their three principal crops. By organized effort their own children were able to collect information which was of real value in the solution of an economic problem. The following report of this study is self explanatory. The subject matter was collected by the pupils and presented to the class by them. The teacher is responsible only for the arrangement in form.

A Brief Study of Intensive Farming in the Poudre Valley.

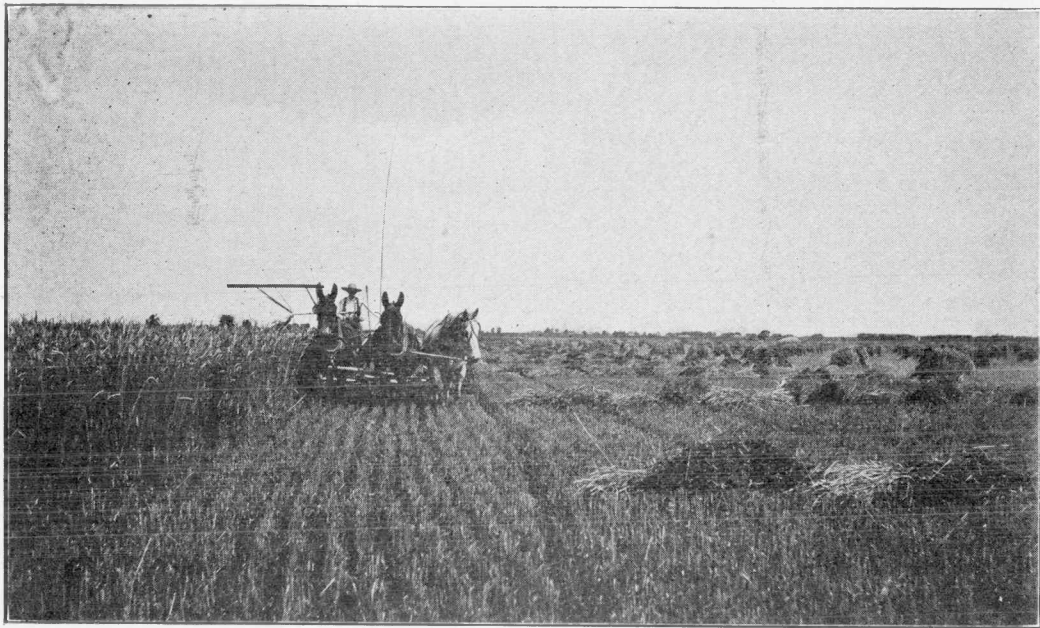
The fertile river valleys of Weld county afford an excellent example of the rapid development of an agricultural section from extensive and wasteful ranching to intensive scientific farming. Thirty years ago the plains and valleys of Weld county were occupied by droves of half-wild cattle herded on the unfenced plains. A single decade saw vast areas of this land fenced, irrigated, and brought under cultivation. The decade just past has seen the tendency toward intensive cultivation of small farms most rapidly increased. The modern farmer is not the last to appreciate the necessity for close calculation, scientific methods, and careful organization of industry. The simple plan of reducing expenses to a minimum, pushing the line of greatest profit, and utilizing capital by its constant employment is as applicable on the farm as in the department store or in the factory.

In order to compare the advantages of raising various crops in the vicinity of Greeley, and of comparing agriculture in general with other lines of work, this study was undertaken by the senior class of the Normal High School in connection with their study of industrial history.

After a preliminary discussion of the conditions so far as known by the students, and a consideration of

the facts that might be useful in class work, a question blank was made out and distributed to many prominent farmers of this vicinity by means of the mail and by personal visits by students. The latter method, it is needless to say, was vastly more profitable. The questions covered the three principal crops of this neighborhood—wheat, sugar beets, and potatoes. Farmers were asked for their personal estimate of the cost of producing these crops, and of the gross yield from each of them, basing their figures on the average for the past three years.

If a longer period of time had been considered a fairer average would have been shown, but this advantage would have been overbalanced by the difficulty farmers would have had in recollecting figures for more than three years in the absence of any written record of their yields and prices. Furthermore, three years covers the practical experience in beet raising in this section of country. Again, it was desired that this data should represent present conditions rather than conditions that are now changed by recent fluctuations in values of land or by modern methods of cultivation. Thirty-five farmers replied to the questions, but of these reports a few were hardly complete, or the questions were somewhat misunderstood. About twenty-eight papers were serviceable in compiling tables for averages. These tables were made and the averages compiled by students of the class previously mentioned, and a discussion and analysis of the results were given by them. The table illustrative of wheat culture is as follows:



HARVESTING WHEAT NEAR GREELEY.

Wheat	Name of farmer reporting	Cost of seed per acre	Planting and cultivating	Harvesting and marketing	Yield in bu.	Price per bu.	Total cost per acre	Total receipts per acre	Apparent profit per acre
	
	G. W. S.	\$1.57	\$2.70	\$3.80	30	\$.63	\$ 8.07	\$18.90	\$10.83
	W. F. W.	.60	.75	2.30	40	.75	3.65	30.00	26.35
	C. B. N..	1.00	2.25	3.80	30	.72	7.05	21.60	14.55
	T. E. R...	.80	1.40	3.56	52	.72	5.76	37.44	31.68
	C. J. F...	1.00	2.50	1.00	20	.70	4.50	14.00	9.50
	A. N. L..	1.15	2.00	4.50	45	.60	7.65	27.00	19.35
	E. M. C..	1.15	2.25	6.00	40	.63	9.40	25.20	15.80
	F. R....	1.00	1.50	2.80	40	.60	5.30	24.00	18.70
	J. T.	2.00	5.00	5.00	30	.57	12.00	17.10	5.10
	J. G. H..	1.50	2.50	2.50	30	.60	6.50	18.00	11.50
	E. B....	.90	2.00	4.50	35	.75	7.40	26.25	18.85
	H. W. B..	1.00	.50	5.00	30	.60	6.50	18.00	11.50
	Mr. A...	.90	1.75	2.50	35	.60	5.15	21.00	15.85
	O. W....	.80	2.30	4.90	40	.57	8.00	22.80	14.80
	H. M. M.	1.25	1.50	5.00	35	.54	7.75	18.90	11.15
	J. C....	1.00	3.60	5.00	35	.60	9.60	21.00	10.40
	W. W. B.	.50	1.00	6.00	55	.54	7.50	29.70	22.20
	J. F. R. ..	.60	2.25	4.25	35	.66	7.10	23.10	16.00
	E. W. J..	1.00	3.50	5.05	35	.60	9.55	21.00	10.45
	J. L.	1.00	4.90	4.70	35	.65	10.60	22.75	12.15
	J. W. K..	1.20	1.50	2.80	30	.72	5.50	21.60	16.10
	L. F....	1.25	2.25	4.00	40	.66	7.50	26.40	18.90
	Mr. B...	1.00	1.80	4.50	35	.60	7.30	21.00	13.70
	Mr. M..	1.00	2.50	4.00	35	.80	7.50	28.00	20.50
	W. M. L.	.80	2.25	4.00	45	.60	7.05	27.00	19.95
	Mr. M..	1.00	3.00	5.00	50	.60	9.00	30.00	21.00
	N. S....	1.00	1.00	5.00	40	.66	7.00	26.40	19.40
	Gen. av.	1.04	2.24	4.12	37	.64	7.40	23.63	16.16

The first column, representing the cost per acre for seed, shows but slight variation, such as there is being due apparently to the varying quantities of seed sown on different soils, and to the different sources of seed, whether home grown or imported. The second column, representing cost of preparing soil, planting, labor of irrigating, and bringing the crop to maturity, shows a variation from 50 cents to \$4.90, the average being \$2.24. This variation is due probably to the varying amount of labor required for preparing and irrigating different soils. In the third column the cost of harvesting and marketing varies with the yield per acre and the distance from market.

The fourth column indicates an estimated average yield of 37 bushels per acre for the past three years. With the light crop of the present year as one of the three crops considered, this is a gratifying average. Especially is this true when it is remembered that the average yield of wheat for the United States for the past three years is but 14 bushels per acre, and that the average yield for Washington, the first state in the Union in yield, is but 24 bushels per acre. The fifth column may not correctly indicate the estimate intended by the farmers, since it was impossible in a few cases to determine whether the price given was for a bushel or for a hundred pounds. According to the evident intention of the persons reporting, the average price per bushel is 64 cents. A little further computation indicates that the average cost per acre of production for this crop is

\$7.40, the average gross receipt \$23.63, and the net receipt, or apparent profit, \$16.16 per acre.

In this connection it is interesting to compare these figures with data from other sections. According to reports made by the United States Government Industrial commission in 1901 the cost of producing an acre of wheat in Bigstone county, Minnesota, was \$5, the average yield per acre for 11 years was 10 bushels, and the average price for No. 1 Northern was 60¼ cents. Land here was worth \$20 per acre. The same report gives an average cost of production in South Dakota as \$3.77 per acre. The average price in the same state is estimated at 60 cents.

Later figures for the United States as a whole may be found in the Statistical Abstract of the United States for 1903, prepared under the direction of the Secretary of Commerce and Labor. Taking the figures for 1901, 1902, and 1903, it is found that the average yield per acre of wheat for the United States is 14.1 bushels, the average price is 65 cents and the average gross receipt per acre is \$9.16.

The next table is arranged in the same manner as the preceding one, the estimate being on the potato crop for the past three years. The figures are as follows:

POTATOES

Name of farmer reporting	Cost of seed.....	Planting and cultivating.....	Harvesting and marketing.....	Yield in cwt, per acre.....	Price per cwt.	Total cost per acre.	Total receipts per acre.....	Apparent profit per acre.....
G. W. S....	\$ 5.40	\$ 5.75	\$ 19.50	130	\$.66	\$30.65	\$ 86.66	\$ 56.01
F. D:.....	6.00	8.00	23.00	120	1.00	37.00	120.00	83.00
W. F. W....	7.50	7.75	19.50	120	.65	34.75	78.00	43.25
C. B. N....	6.00	7.50	24.00	180	.60	37.50	108.00	70.50
T. E. R....	9.27	4.55	15.53	120	1.30	29.35	156.00	126.65
C. J. F.	4.50	3.50	8.00	200	.50	16.00	100.00	84.00
J. W. S....	6.00	12.00	10.00	120	.75	28.00	90.00	62.00
A. N. L....	8.75	6.50	7.50	120	.70	22.75	84.00	61.25
E. M. C....	8.50	4.50	19.00	125	.65	32.00	81.25	49.25
F. R.....	8.00	3.25	45.00	180	.75	56.25	135.00	78.75
J. T.....	9.00	10.00	10.00	120	.70	29.00	84.00	55.00
E. B.....	8.00	24.00	8.00	132	.75	40.00	99.00	59.00
H. W. B....	8.00	12.00	24.00	180	.70	44.00	126.00	82.00
Mr. A.....	10.00	4.50	16.50	120	.55	31.00	66.00	25.00
O. W.....	8.20	8.55	20.00	120	.67	36.75	80.40	43.65
H. M. M....	7.00	7.50	12.00	120	.75	26.50	90.00	63.50
J. C.....	6.00	9.00	17.50	120	.70	32.50	84.00	51.50
G. A. R....	7.50	10.25	15.00	120	.75	32.75	90.00	57.25
J. F. R....	7.50	10.75	20.00	120	.75	38.25	90.00	51.75
E. W. J....	6.00	9.00	14.25	120	.70	29.25	70.40	41.15
J. L.....	7.50	8.70	16.50	120	.67	32.70	80.40	47.70
J. W. K....	5.00	4.00	6.00	85	.60	15.00	51.00	36.00
L. F.....	6.00	4.25	20.00	150	.60	30.25	90.00	59.75
Mr. B.....	6.00	4.90	16.25	150	.60	27.15	90.00	62.85
Mr. M.....	10.00	5.00	16.00	160	.70	30.00	112.00	82.00
W. M. L....	6.50	3.00	8.00	150	.60	17.50	90.00	72.50
Mr. M.....	10.00	1.50	14.00	250	.60	25.50	150.00	124.50
E. M. P....	6.36	7.00	22.50	180	.80	35.86	144.00	108.14
N. S.....	4.50	6.00	20.00	120	.70	30.50	84.00	53.50
Gen. av.	7.21	7.35	16.81	140	.70	31.34	96.90	65.22



SUGAR BEET FIELD



POTATO FIELD

As in the case of the wheat crop, the varying estimates given by the different farmers is evidence, not so much of a difference of opinion as of the variety of soils, the amount of cultivation given, the difficulty of irrigation, the distance from market, and other factors that vary with the customs of different producers. The averages seem reasonable, and are as follows: Cost of seed \$7.21, planting and cultivating \$7.35, harvesting and marketing \$16.81, making a total cost of production of \$31.34 per acre. An average yield is found to be 140 cwt., an average price 70 cents, and the average gross receipts \$96.90, these results being found by taking the average of each perpendicular column, not by multiplying the average yield by the average price.

In the case of this crop also comparisons may be made with figures from the Statistical Abstract quoted above. According to this authority the average yield per acre of potatoes in Colorado for the year 1903 was 145 bushels, or 87 cwt., this average for the state being noticeably lower than for the Poudre valley. The average price was 60 cents per bushel or \$1 a cwt. The total value of the potato crop of the state for that year was \$4,415,946. In this total money value of the crop for the year Colorado ranked tenth in the Union, the rank of the leading states being, in order, New York, Pennsylvania, Michigan, Maine, Wisconsin, Ohio, Illinois, Iowa, Minnesota, and Colorado. In yield per acre the leading states rank in this order: Maine, Utah, Montana, Wyoming, Idaho, Colorado.

The figures collected on beet culture show a rather greater variation than those for either of the other crops, and seem to indicate that this industry is still in the experimental stage. The table is as follows:

BEETS

Name of farmer reporting	Cost of seed per a..	Planting and cultivating.....	Harvesting and marketing.....	Yield in tons per acre.....	Price per ton.....	Total cost of production.....	Gross Receipts....	Net receipts, or apparent profits...
G. W. S....	\$ 1.50	\$18.50	\$15.00	15	\$5.00	\$35.00	\$ 75.00	\$ 40.00
C. B. N....	2.25	17.00	23.50	16	4.75	42.75	76.00	33.25
J. W. S....	2.25	9.50	16.00	18	5.00	27.75	90.00	62.25
J. T.....	2.25	8.00	14.00	13	5.00	24.25	65.00	40.75
J. G. H....	2.25	17.00	17.00	10	5.00	36.25	50.00	13.75
E. B.....	2.40	16.00	22.00	20	4.75	40.40	95.00	54.60
Mr. A.....	2.00	22.00	13.00	12	4.75	37.00	57.00	20.00
O. W.....	2.25	17.30	25.00	20	4.70	44.55	94.00	49.45
H. M.....	2.25	17.50	15.00	18	5.00	34.75	90.00	55.25
J. C.....	2.25	18.25	27.00	20	4.66	48.50	93.20	44.70
W. W. B....	2.80	8.50	15.00	15	5.00	26.30	75.00	48.70
G. A. R....	2.25	16.50	18.00	16	4.85	36.75	77.60	40.85
J. F. R....	2.25	19.50	22.50	17½	4.85	54.25	84.87	30.62
J. L.....	2.25	30.80	11.50	15	4.75	44.55	71.25	26.70
Mr. B.....	2.25	16.00	18.00	17	5.00	36.25	85.00	48.75
J. W. K....	2.25	15.00	15.00	10	4.50	32.25	45.00	12.75
Mr. M.....	2.25	15.00	10.00	25	5.00	27.25	125.00	97.75
W. W. L....	2.25	12.00	14.00	15	5.00	28.25	75.00	46.75
Mr. M.....	2.25	15.00	14.00	25	5.00	31.25	125.00	93.75
N. S.....	2.25	20.00	20.00	12	5.00	42.25	60.00	17.75
Gev. av.	2.23	16.52	17.27	16.47 100	4.88	36.53	80.45	43.92

From this table it appears that the average cost of production of beets is \$36.53 per acre. The estimate

of the Agricultural College is that the cost of production is about \$30 per acre. It seems probable that the cost of production may, in time, be reduced even below this latter figure by the invention of labor-saving machines for cultivating and harvesting, by cheaper methods of transportation, and by some economical method of planting that will reduce the amount of seed necessary to secure a stand and at the same time lessen the labor of thinning. Inventive genius is already busily at work on these problems with fair prospects of success.

The Agricultural College and other experimenters estimate the average yield per acre at 20 tons. This is considerably above the average of 16.47 tons secured thus far by the farmers reporting. The fact that a few of these men have been able to raise 20 tons per acre indicates that the yield is not impossible in this section. If further experience should enable Poudre valley farmers to raise twenty tons of beets per acre at a cost of \$30 for production, this crop would pay as well as the far-famed Greeley potatoes. In the case of wheat and potatoes there seems little prospect of either lowering the cost of production or raising the yield per acre.

Any comparison of the desirability of these various crops would be incomplete without a consideration of the greater immunity of potatoes from loss by hail than has either of the other crops. This argument alone has great weight. Measured by apparent profits as shown in the tables it seems that beets yield about 67 per cent

of the profit that potatoes give, and wheat scarcely 25 per cent.

The relative exhaustion of the soil by beets and potatoes, the possibilities of commercial fertilizers, and the best order of rotation of these crops are still largely matters of speculation and experiment.

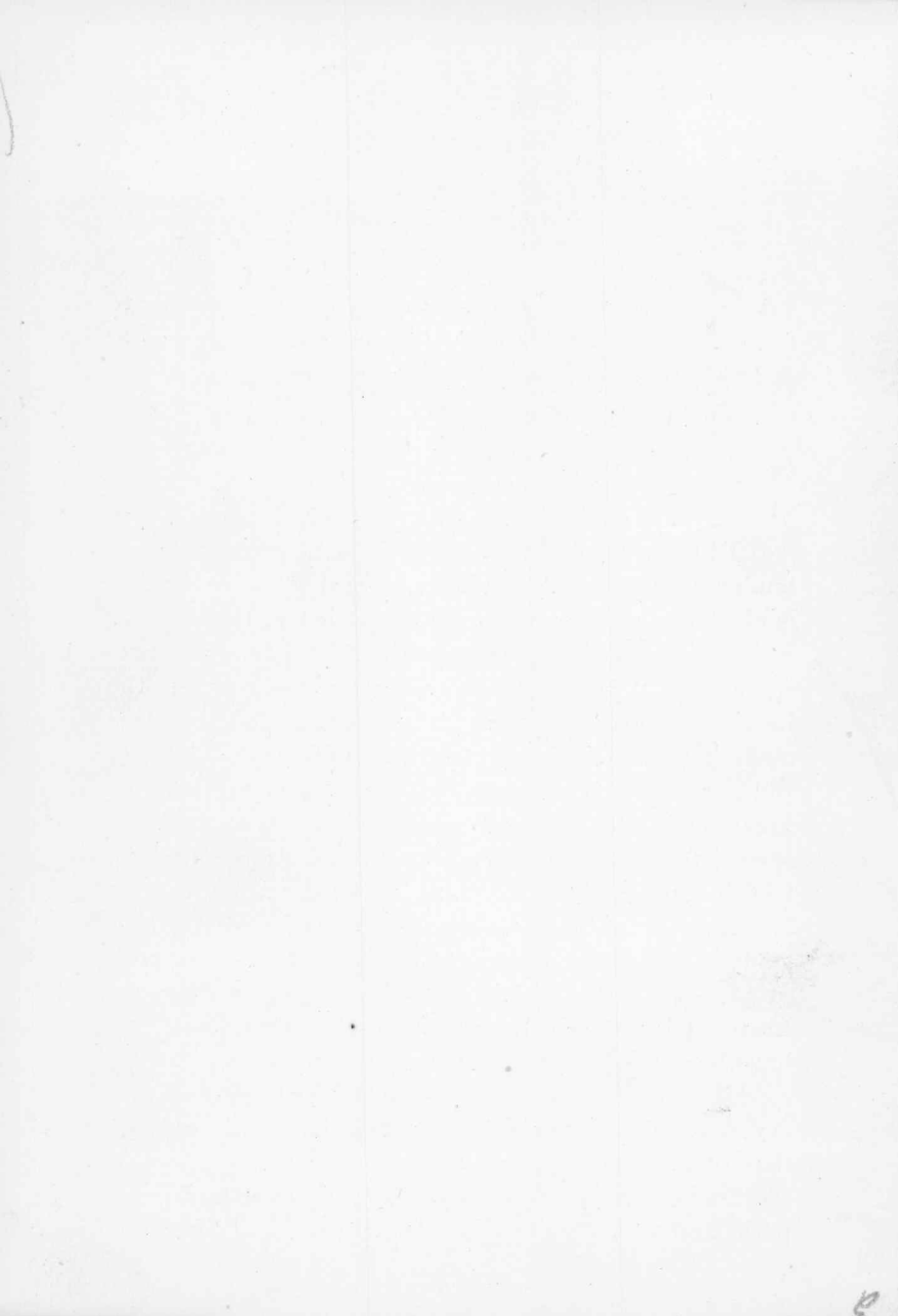
Lest the demand for Poudre valley real estate should be unduly stimulated, it must be emphasized in conclusion, that the last column in the table represents apparent profits or net receipts. In securing these results no account has been taken of interest on money invested, of deterioration of tools and equipment, of taxes and water assessments, nor of various risks. The average value of the land returning these figures is, with water rights, in the neighborhood of \$100.00 per acre. A reasonable interest on money invested would be at least \$7.00 per acre. Taxes and water assessments would add about \$2.00 an acre to this, thus reducing the actual profits \$9.00 per acre in the case of each of the crops studied. Thus corrected, the net proceeds of wheat would be \$7.16 per acre, of beets \$34.92 per acre, and of potatoes \$56.22 per acre of actual profit. These figures must still seem fabulous to farmers of less favored regions and should be sufficient to inspire the discouraged farmer with courage for the present and hope for the future.

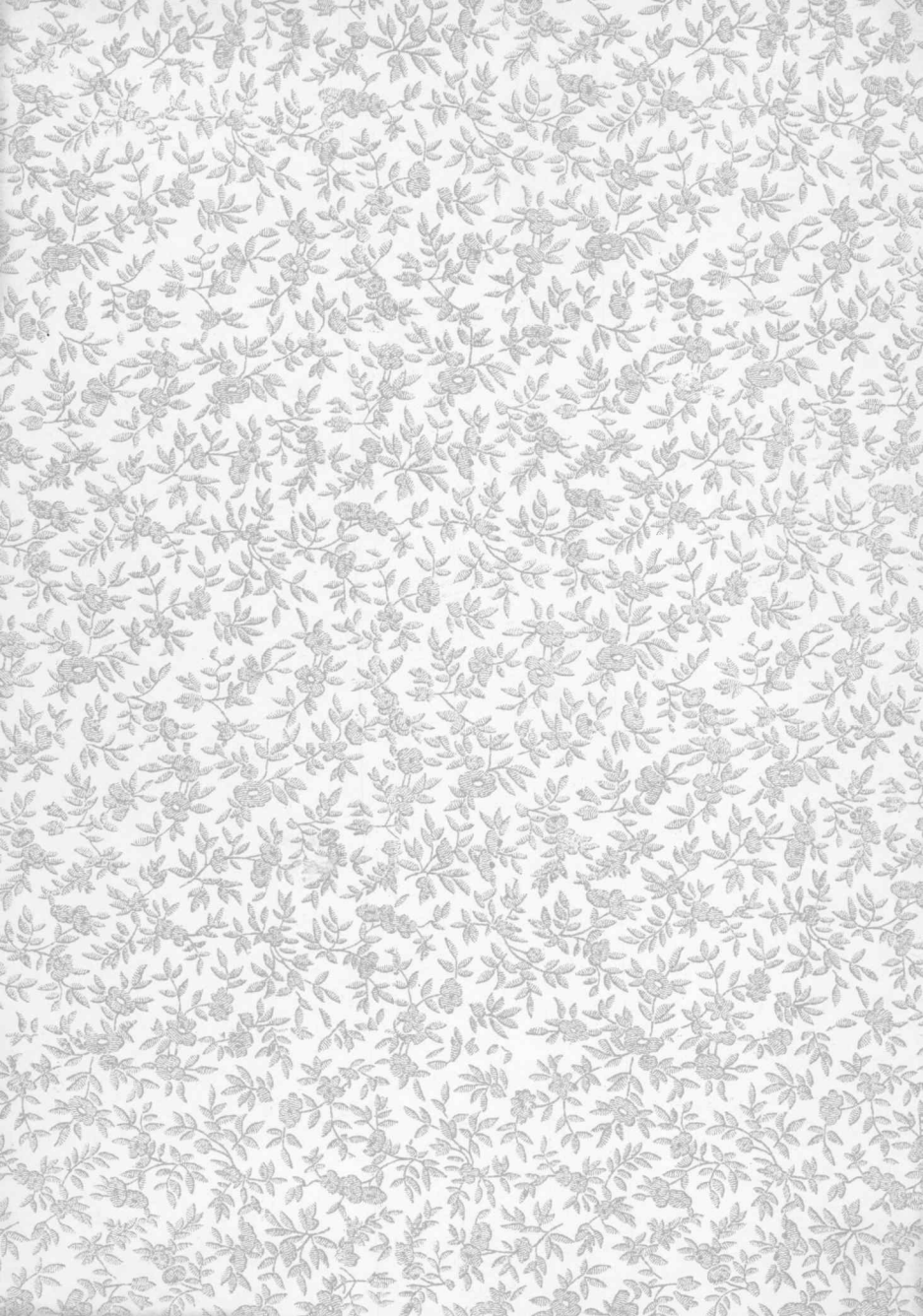
The exercises described above are offered, not as model lessons, but as examples of some of the ways of studying industrial history that have been tried with

reasonably satisfactory results. It is believed that this subject offers boundless opportunities for any teacher to outline work with his own class in such a way as to fit local conditions and at the same time to meet the educational needs of the pupils.

I have proposed that there is a strongly marked tendency in educational circles toward school work that is closely related to the child's experience; that history is one of the subjects that has felt this tendency and responded to it by greater attention being given to the industrial and social side. I have suggested that this modern view of history, together with the industrial work now being so freely introduced, is resulting in great good, but that conditions are such that there are special reasons for making a connected study of industrial history in the High school. I have urged that at least five distinct values result peculiarly from such a study. I have outlined some of the material that may properly be considered in connection with this subject. Lastly, I have offered a few examples of methods that have been tried with some success.

It is hoped that what has been here suggested may encourage others to develop more fully a line of work that offers rare opportunities and great attractions to those who are willing to depart slightly from traditional paths and seek a more abundant educational life.





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