Colorado State Normal School
Bulletins
1900 - 0[illegible]
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STATE NORMAL SCHOOL BULLETIN.
Series I. No. 1.

STATE NORMAL SCHOOL

OF

COLORADO.

1900 - 1901.

Published Quarterly by the Trustees of the State Normal School of Colorado, Greeley, Colo.

Entered at the Postoffice, Greeley, Colorado, as second-class matter.

Eleventh Annual Catalogue of the State Normal School of Colorado

Greeley, Colo., 1900-1901

NORMAL PUBLISHING CO.
1901.

CALENDAR.

1901

SEPTEMBER

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1902

JANUARY

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JUNE

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ANNOUNCEMENTS.

1901-1902.

FIRST SEMESTER—NINETEEN WEEKS.

Opens Tuesday, September 10, 1901.
Closes Friday, January 24, 1902.

SECOND SEMESTER—NINETEEN WEEKS.

Opens Monday, January 27, 1902.
Closes Thursday, June 5, 1902.

HOLIDAY VACATION—TWELVE DAYS.

Begins Friday noon, December 20, 1901.
Closes January 2, 1902.

COMMENCEMENT WEEK.

Baccalaureate Sermon, Sabbath afternoon, June 1, 1902.
Class Day Exercises, Tuesday evening, June 3, 1902.
Alumni Anniversary, Wednesday evening, June 4, 1902.
Commencement, Thursday, June 5, 1902.
Reception to Graduating Class, Thursday evening, June 5, 1902.
Alumni Banquet, December, 1901, Denver, Colo.

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1900-1901.

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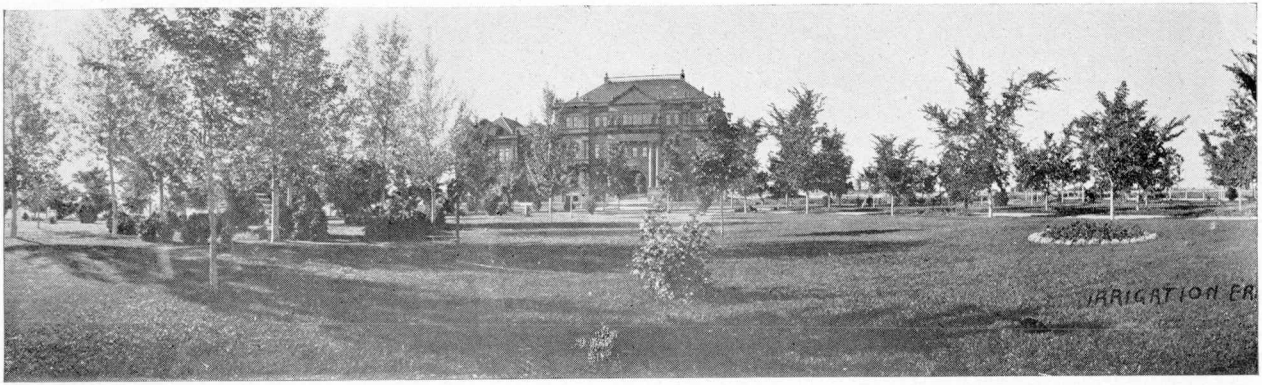
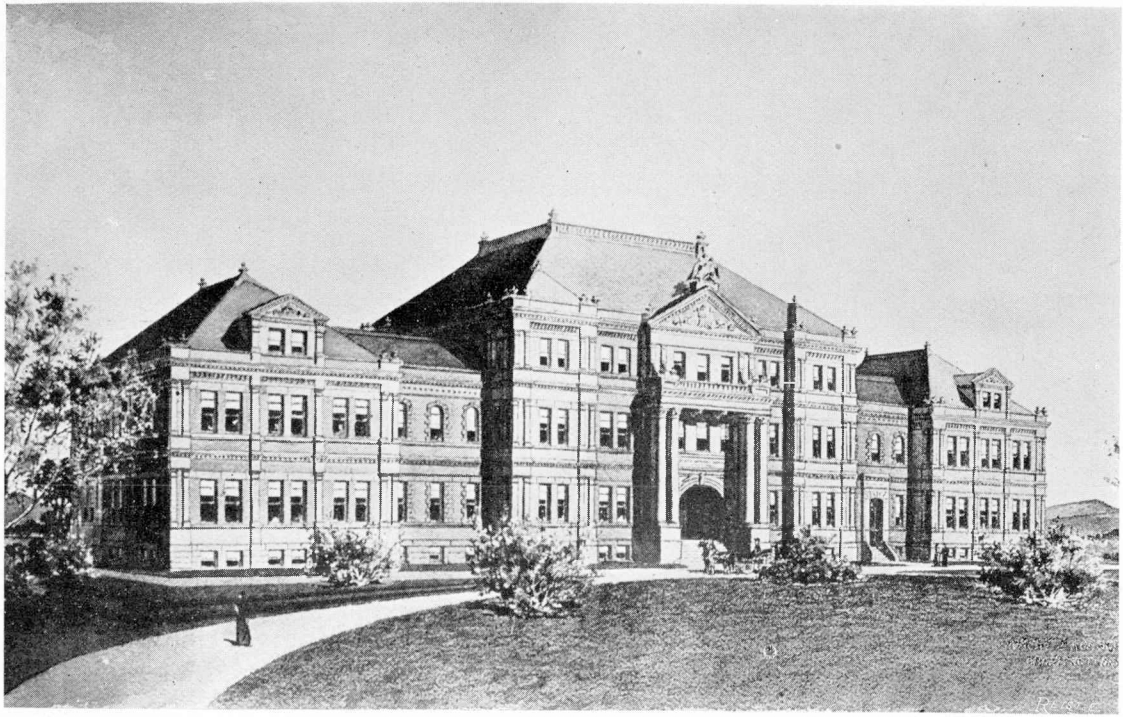


NORMAL CAMPUS.



STATE NORMAL SCHOOL OF COLORADO—GREELEY

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Modern Languages and Athletics.

Mathematics.

Vocal Music.

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ROYAL W. BULLOCK,
Assistant Principal Training School—High School Grades.

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ELIZABETH H. KENDEL, Pd. M.,
Training Teacher—Lower Grammar.

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ELEANOR PHILLIPS,
Training Teacher—Primary Grade.

BELLA B. SIBLEY, Pd. B.,
Training Teacher—Primary Grade.

JOHN V. CRONE,
Taxidermist and Assistant in Science.

* Resigned.

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CHARLES N. NEEDHAM,
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VERNON MCKELVEY, President's Secretary,
Office, Normal Building.
Office hours, 8 to 12:50 and 2 to 5:30.

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ELMER LUTHER,
Assistant.

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Z. X. SNYDER,
President School.

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1901-1902.

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BERTHA M. ANDREWS.

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F. L. ABBOTT. GRACE H. SPROULL.

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A. E. BEARDSLEY.

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BELLA SIBLEY.

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LIZZIE KENDEL. R. W. BULLOCK.

Music.

---------- JAMES H. HAYS. ANNA M. HEILEMAN.
LIZZIE KENDEL. BERTHA M. ANDREWS.
R. W. BULLOCK.

Commencement.

JAMES H. HAYS. GRACE SPROULL. ANNA M. HEILEMAN.
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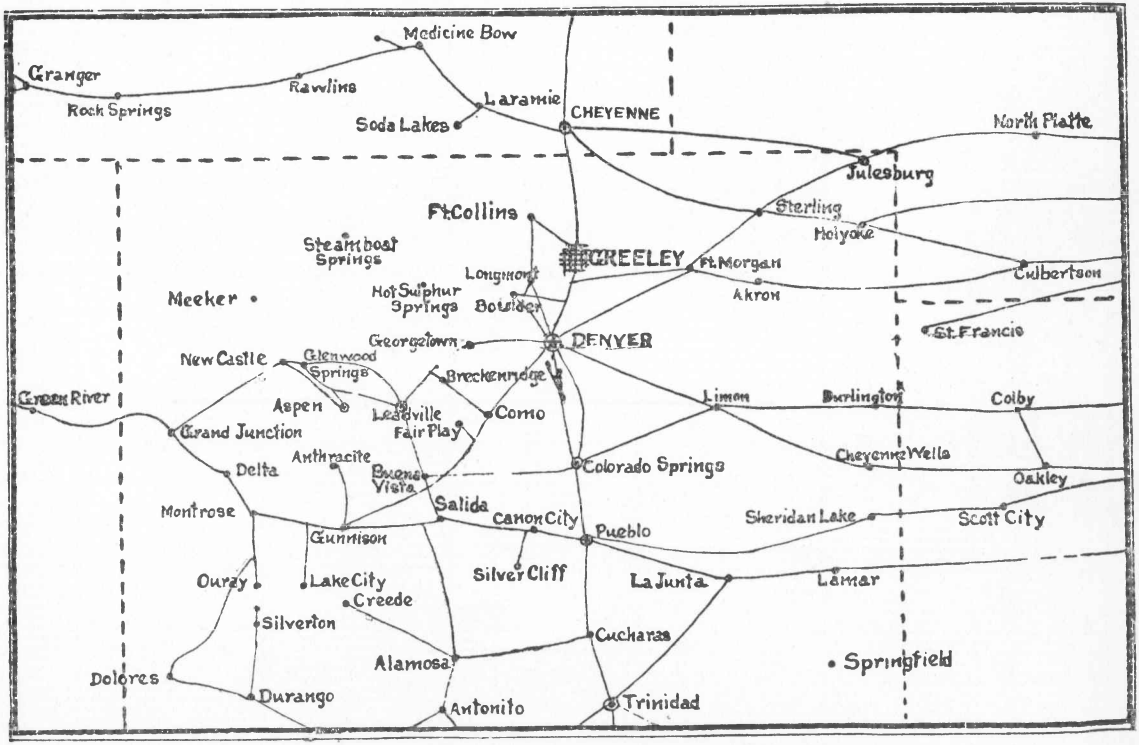
Training School.

---------- R. W. BULLOCK. ----------
BERTHA M. ANDREWS LIZZIE KENDEL.
BELLA B. SIBLEY ELIZA KLEINSORGE.



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 somewhat, and the course extended to four years. This course admitted grammar school graduates to its freshman year, and others to such classes as their ability and attainment would allow.

At a meeting of the board of trustees, June 2, 1897, a resolution was passed admitting only high school graduates or those who have an equivalent preparation, and practical teachers. 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.

BUILDING.

A splendid building of pressed brick, trimmed with red sandstone, is being built, one wing and center of

which are now finished and in use by the school. When finished there will be no finer normal school building in the United States, and none more commodious. 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.

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 present assessment is something over $215,000,000, making about $43,000 annually for the support of the school. Under the new revenue law, the assessment is likely to be materially increased, thereby increasing the maintenance. The last legislature gave the school a special appropriation for building of $25,000.

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 consist 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 qualifications. This is ability to adapt self and subject to the pupil. It is ability to inspire to action. It means one whose whole 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 environment.

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 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.

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.

COURSES OF STUDY.

The child is a composite potential. It is an involution of possibilities. Nature, mind and spirit have, through time, operated to form this potential. Its education is the evolution of the potential. It is its expansion into life, consciousness, social participation and Divine recognition.

From one standpoint the child is a biological unit. It is a biological unit in that its every act has its roots in the nervous matter and its fruit in muscle. It is a mental unit in that it is a conscious being. It is a social unit in that it is an organic part of the social life and mind.

The education of the child in relation to its environment gives rise to the course of study.

A knowledge of these relations embraces:

1. A knowledge of the body as a whole, its organs, their functions, and the laws which regulate physical growth and development.

2. A knowledge of the mind as a whole, its nature, its powers, their functions, and the laws which regulate mental growth, discipline and culture.

3. A knowledge of the soul, its nature, its powers, and the laws which regulate moral growth and spiritual development.

4. A recognition of the child as a product of heredity and that variation from the hereditary type occurs through the influence of environment.

5. The recognition that the mental constitution of an individual is made up of two factors—*character* and *intelligence*, and that the greater of these is character.

6. The recognition that the object of education is found in *self*, the aim in society and the end in Divinity; or that the education of the child should take three directions:

(1) That of *self-preservation;*
(2) That of *self-sacrifice;*
(3) That of *self-consecration.*

In accordance with the above conception comes the following subjects of study:

A teacher should know the relation of food to growth, of exercise to health and strength, and of training to physical culture. This implies an understanding of *Physiology, Hygiene, Gymnastics and Athletics.*

He should know the relation of nerve, mind, and muscle to speech and manual dexterity. This implies a knowledge of *Language, Manual Training and Physiological Psychology.*

He should know the relation of a child's development to nature, or its surroundings. He should recognize that the mind is quickened through the senses, that there is action and reaction of the forces without and within the child. He should be able to lead a child to interpret its surroundings and enter into the spirit of nature. This embraces a knowledge of *Science and Nature.* Out of a study of nature arises the notion of number and space relations—hence a knowledge of *Mathematics.*

He should recognize that the deeds, sayings, feelings, thoughts and aspirations of the race and age quicken the intellectual and moral natures, and, while

they serve no *particular* end, they belong to culture in its universal character by giving the stage on which the drama of the world's life is revealed. This embraces a knowledge of *History* and *Literature.*

He should know the relation of thought, knowledge and expression in the development of a child. This implies a knowledge of *Psychology.*

He should know the relation of example, precept and principle to moral growth, of moral action to moral power and righteous living. This implies a knowledge of *Ethics.*

God touches a human soul through the true, the beautiful and the good—the true for the understanding, the good for the will, and the beautiful for the imagination. Through the imagination we have the world of art, having its foundation in the senses, as in color, form and sound. Color is the unit concept of painting, form of sculpture, and sound of music. To some extent these should form a part of every liberal education; as in modeling and moulding and leading up to work in color. Again, music should have a place in the course of study which aims to prepare teachers. It is the most profound form of expressing the feelings of the depths of the human soul. It inspires us with hope and faith. It should have a place in every course of study involving the education of the young and of those preparing to teach. Art, then, is included in the curriculum of study, embracing *Drawing and Painting, Modeling, Construction and Music.*

A teacher should understand the relation of the home to society and to the government under which he lives. This implies a knowledge of *Anthropology, Sociology, Economics and Civics.*

Summarizing the above it would seem that those who are preparing to teach should receive pedagogical training in the following lines or centers of physical, mental and ethical activity:

MAN IN HIMSELF.

Embracing—

Physiology.
Psychology.
Ethics.
Religion.

MAN IN THE RACE.

Embracing—

Anthropology.
History.
Literature.
Race psychology.

MAN IN NATURE.

Embracing—

Mathematics.
Physiography.
Chemistry.
Physics.
Astronomy.
Biology.

MAN IN SOCIETY.

Embracing—

Home.
Sociology.
Government.
Economics.

MAN IN EXPRESSION.

Embracing—

Language.
Drawing.
Construction.
Music.
Art.

MAN IN SCHOOL.

Embracing—

Philosophy of education.
Science of education.
History of education.
School economy.
Art of teaching.

NORMAL COURSE OF STUDY.

INTRODUCTION AND EXPLANATIONS.

This is an age of specialists. In the professions, in the industries, there is a determined tendency to a differentiation of labor. The underlying stimulus is a more thorough preparation for a more narrow line of work. This stimulus has its potency in the fact that better results follow from such specific training—the greatest product for the least expenditure of energy. With this end in view, the course of study has been revised so that the student has an opportunity to elect some of the work, thus enabling him to specially prepare himself in some particular subject along the line of his tastes.

1. A school year is divided into two *semesters* of eighteen (18) weeks each.

2. A Term Hour, or Point, is one recitation a week for a *semester*, or eighteen (18) recitations.

3. A norm for school work is twenty-five recitations a week. A student who wishes to take more than this must have special permission. Some may be required to take less.

4. Fifty Term Hours, or 900 recitations, are a year's work.

5. A laboratory period must be measured in terms of a recitation period in making Term Hours.

6. The course is divided into Requisites and Electives.

OUTLINE OF WORK.

SOPHOMORE.

Requisites—44 Term Hours.

Algebra	36 weeks	5 periods	10 T. H.*
Geometry	36 weeks	5 periods	10 T. H.
English	36 weeks	4 periods	8 T. H.
Reading and gymnastics	36 weeks	3 periods	6 T. H.
Physics and Biology	36 weeks	5 periods	10 T. H.

JUNIOR.

Requisites—40 Term Hours.

Training School—			
1. Observation	36 weeks	1 period	2 T. H.
2. Seminar	36 weeks	1 period	2 T. H.
3. Arithmetic	36 weeks	1½ period	3 T. H.
4. Nature study	36 weeks	1½ period	3 T. H.
5. Reading and Physical Culture	36 weeks	2 periods	4 T. H.
6. Public School Art	36 weeks	2 periods	4 T. H.
Psychology	36 weeks	3 periods	6 T. H.
English and Literature	36 weeks	4 periods	8 T. H.
Sloyd, Domestic Economy	36 weeks	2 periods	4 T. H.
Biology	36 weeks	2 periods	4 T. H.

* T. H. denotes Term Hours.

SENIOR.

Requisites—40 Term Hours.

Training School—

1. Practice in Teaching ....36 weeks	5 periods	10 T. H.
2. Seminar .....36 weeks	1 period	2 T. H.
3. Geography ....36 weeks	1½ period	3 T. H.
4. History and Literature ...36 weeks	2 periods	4 T. H.
5. Music .....36 weeks	1 period	2 T. H.
Philosophy and History of Education.36 weeks	5 periods	10 T. H.
English and Literature .....36 weeks	3 periods	6 T. H.
Reading and Physical Culture .....36 weeks	1½ period	3 T. H.

ELECTIVES.

Junior—10 Term Hours. Senior—10 Term Hours.

Electives may be selected from the following subjects, or groups. The first numbers following the groups designate the number of recitations per week in each subject, the second designate the T. H.

Group I—Latin, German, French, Spanish, English and Literature.....5	10
Group II—Anthropology, Sociology, History, Government 5	10
Group III—Physiology, Psychology, Pedagogy..5	10
Group IV—Physics, Chemistry, Physiography, Biology 5	10
Group V—Trigonometry, Analytical Geometry...5	10
Group VI—Art 5	10

Group VII—Sloyd, Cooking and Sewing, Library Handicraft 5 10
Group VIII—Reading and Physical Culture.....5 10
Group IX—Kindergarten 5 10

I.—PSYCHOLOGY.

Psychology is the Blackstone of pedagogics. In so far as teaching is a science and an art, it is based upon it. Just as a teacher makes psychology the basis for his educational theory and practice, has he standing among his fellow teachers and in his profession. As a basis for his educational doctrine, he can no longer rely on the old rational psychology. It has had its place in the development of psychological study, and has its place still in the history of this development. It gives a view of mental phenomena from one standpoint only. Because of the insufficiency of the old psychology to give a broad and scientific view of mental phenomena, it has given place, in a large measure, to the experimental, the observational, and the historic (ontogenetic and phylogenetic) study of the subject. The introspective method is not ignored. Whenever it is available it is used with the other methods in the investigation of a subject.

The work in psychology divides itself into the following courses: Experimental, historical and educational.

PHYSIOLOGICAL PSYCHOLOGY, OR EXPERIMENTAL COURSE.

The course in psychology for the junior year is, as far as it is possible to make it so, experimental. It is, in every sense, a course in the "New Psychology." To the present generation belongs the credit of placing this branch among the empirical sciences where it belongs, and di-

vorcing it from its older, speculative affiliations. The course to the juniors is very largely physiological. Since the mind has been proven to be so closely associated with the body, so easily and markedly affected by bodily change, the "New Psychology," takes up the study of the mind, from the standpoint of the body, especially the nervous system.

The first term of the course is identical with the course in physiology, consisting of five recitations or laboratory periods each week.

The following subjects are considered:

The development of the nervous system.
The nervous system in man.
The functions of the nervous system.
The skin and the dermal sense.
The kinæsthetic and static senses.
The tongue, and the gustatory sense.
The nose and the olfactory sense.
The eye and the ocular sense.
The ear and the auditory sense.

The laboratory is well equipped with duplicate sets (24) of all the simpler apparatus for following individually a course of experiments.

All of the data taken by the class are carefully tabulated and preserved, and form a valuable reference library.

Besides the duplicate sets of apparatus for the simpler experiments, the laboratory contains several hundred dollars' worth of more elaborate pieces, making it one of the best equipped psychological laboratories in the West. Among these are a "Fitz" chronoscope, a chronograph, with electrical time-marker and reaction apparatus; a sphygmograph; amyograph; "Galton's" whistle

and "Appun's Reed," for finding the upper and lower limits of pitch; full sets of color-blind testers and blind-spot cards; teter-board and turning table, for work with the static sense, besides many other pieces.

No regular text book is used in this course, but the library contains a psychological alcove of several hundred volumes, and constant use is made by each student of the works of Ladd, Donaldson, Mercier, Bastian, Wundt, Ziehen, Star, Ferrier, Foster, Tichener, Kulpe, etc.

With the winter term, the work in physiology and psychology divides into two separate courses.

The former is outlined under the heading "Physiology." The latter, following roughly the outline made use of by Ziehen, in his "Physiological Psychology," is treated under the following heads:

The sensation, including a study of Weber's law.
The idea.
The association of ideas and apperception.
The emotions.
The judgment.
The reason.
The memory.
The will.

The course closes with a study of morbid mental states and insanity, with some demonstrations in hypnosis.

Early in the year the class in divided into committees for studying definite psychological problems. Much valuable data have in this way been collected and some interesting conclusions drawn.

This course is followed by one in

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 the 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. This work is supplemented by a course of lectures in

CHILD PSYCHOLOGY.

The work in child psychology is going on all the time in the kindergarten and Training school. Besides this observation work, there is specific work assigned in which each student is required to solve problems pertaining to child study. This work is directed and inspired by a teacher meeting ten or fifteen students in conference once or twice a week.

EDUCATIONAL PSYCHOLOGY.

By this course is meant the application of the principles of Psychology in the management of the Training school. It embraces the psychology of teaching, of governing, of the course of study, the management of the school, and, indeed, the management of the community educationally.

II.—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 scientific 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 forces.
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.

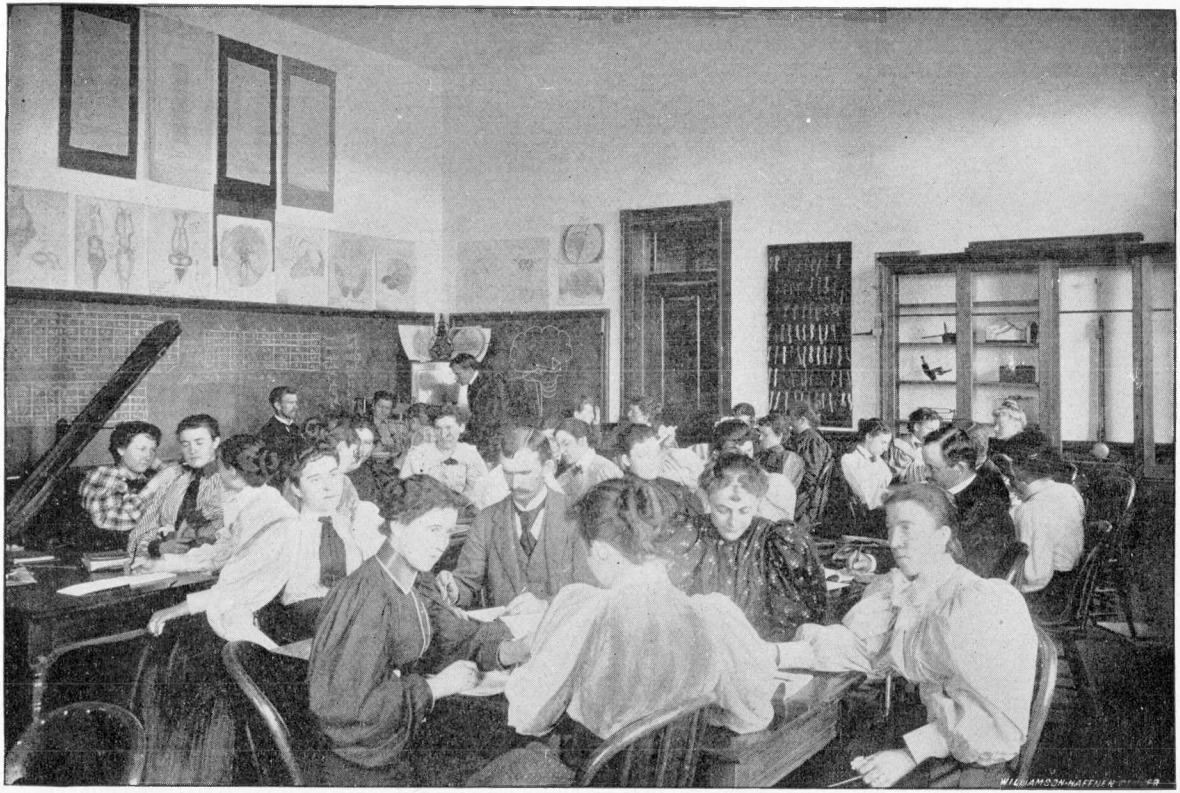
b. Activity results, primarily, from energies acting from without.

c. All the natures of a child are interdependent.

VI.—EDUCATIONAL LAWS.

a. *The law of the apperceiving and the apperceived—*

Formula—What is to be learned becomes a part of the mental economy through affinity.



PSYCHOLOGICAL LABORATORY.

b. The law of propœdeutics—

Formula—The individual's mind should be prepared to receive what is to be learned.

c. The law of concentration—

Formula—What is to be learned is better learned if learned in connection with that for which it has an affinity.

d. The law of individualism—

Formula—What is to be learned should be prepared to suit the mind of the pupil.

e. The law of practice—

Formula—A thing is learned when it is so thoroughly apperceived as to lose its identity, and when used unconsciously.

f. The law of interest—

Formula—Interest grows out of the relation of the apperceiving to the apperceived. It is in proportion to the affinity that exists between the idea groups and what is to be learned.

VII.—EDUCATIONAL PRINCIPLES.

a. The physical body is quickened through the muscles; is trained through them.

b. The mental nature is quickened through the senses, the intellect and the sensibilities.

c. The spiritual nature is quickened through the senses and conscience.

d. The order of thinking, by a child, is from wholes to parts, thence to classes.

e. The order of learning is thinking, knowing, expressing.

f. To know a thing is to think it into its proper place. It is thought into its proper place by the aid of the known.

g. That which is being learned passes from the unknown to the known, or better known. Hence, the content of a word, a phrase or a sentence is variable.

h. Teaching is causing a human being to act—physically, mentally and morally.

i. Education consists in *development and participation.*

III.—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.

c. Harmony.

II.—GOVERNMENT OF SCHOOL.

a. Object—preservation.
b. Aim—discipline.
c. End—freedom.

III.—INSTRUCTION.

a. Processes—

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

b. Results—

1. Knowledge.
2. Discipline.
3. Culture.
4. Expression.

IV.—RESULTS.

a. Development—

1. Knowledge.
2. Power.
3. Culture.

b. Participation—

1. Actualization.
2. Transfiguration.
3. Transformation.

IV.—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 built 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.

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 larger 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 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.

As a supplementary course to psychology there will be offered a course in advanced physiology, open only to those who are taking, or have taken, the course in physiological psychology.

For the first term, the two courses are identical, and for an outline of this part, see physiological psychology.

Commencing with the winter term, two periods each week will be devoted to the study of those physiological

functions not especially associated with the nervous system.

This would include a careful study of the digestive processes and dietetics, making use of an artificial digestive apparatus, to study the action of the digestive juices upon food stuffs.

Respiration and circulation, making use of especially prepared demonstration apparatus, including the sphygmograph.

Excretion, with a discussion of the hygienic laws bearing upon personal cleanliness.

The general anatomy of the human body, using the cat and dog for dissection.

The last few weeks of the course are devoted to the consideration of practical emergency work and school room hygiene.

The laboratory is, for the time being, converted into a demonstration hospital, and methods in bandaging, treatment for asphyxiation and drowning, together with a study of the antidotes for the commoner poisons, will be taken up. Some time will be spent in an attempt to familiarize the student with the earlier symptoms of the diseases of childhood, that they may be easily recognized and the wide-spread contagion now so common prevented.

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.

PHYSICS LABORATORY.

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 pump, a whirling-table, an Atwood's machine, a delicate Troemner balance, a microtome, a steam engine, a thermopile, a Toepler-Holtz electric machine, a dynamo, a motor, induction coils, galvanometer, batteries, heliostat with magic lantern slides, a spectriscope, 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,
Pressure Gauge,
Hydrostatic Press,
Lifting Pump,
Force Pump,
Siphon,
Model of Respiratory Organs,
Magnetic Needle,
Plunge Battery,
Boyle's Law Apparatus,
Capillary Tubes,
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.

CHEMICAL LABORATORY.

(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. Quantitative Analysis—

(1) Twenty or more solutions, containing but one salt.
(2) Solution containing any or all 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. Quantitative 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.

Second Semester, 5 Hours.

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." Œdogonium.
Vaucheria or "green felt." Colochaete.
Brown and red algæ.
Fungi; moulds; downy mildews, rusts; ascomycetes.
Liverworts; mosses.
Ferns; horsetails; club-mosses; quillworts.

BIOLOGICAL LABORATORY.

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.

First Semester (Required).

Morphology—

Study and dissection of typical forms—

Earthworm.
Grasshopper.
A fish.
Frog.
Turtle.
A bird.
A mammal.

Study under the microscope of Amoeba and Paramoecium, and of sections and tissues of animals of the higher groups.

Physiology—

Protoplasm and the cell.
Animals consisting of a single cell.
One-celled plants.

Physiology of the simplest animals.
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 Amoeba 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.

Second Semester (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, microtomes, 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.

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, ruffled 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 prospectice 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 govern-

ment 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 the 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 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.


REISLE.

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 constructional 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 noon 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 in Geography proper (three or four years).

Material of Geographic Studies:

- Anthropic (read down)
  - Races.
  - Industries.
- Astronomical
  - Races.
  - Industries.
  - Society.
  - Political Divisions.
  - ical Geography
- Physical (read up).
  - Natural Divisions.
  - Life Distribution (formal).
  - Life Conditions.
  - Forms.
  - Forces.
  - Materials.

The traditional course, chiefly Areal Geography.

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 students who enter the school, having had training in the elementay mathematics, are well prepared to study and use them in their relation to each other and to other subjects. To this end arithmetic, algebra and geometry are taught correlatively. Much experimental work is done in geometry; arithmetic and algebra are used to express the geometrical relations deduced.

Courses in arithmetic for all grades are developed and worked out together with the devices, method and principles that are used in the different grades. The psychology of number is thoroughly studied in its relation to teaching.

A course in algebra for the grammar grades (seventh and eighth) is worked out, and its feasibility proved in its being practically worked out in the model school. A course in algebra for the high school is also developed. The use of algebra in geometry is fully developed—to such an extent that the student is at home in the subject.

The most fruitful source for all mathematical training is the laboratory work in geometry. Here courses for all grades are developed, from the primary form work to the inventional geometry of the grammar school, thence to the geometry of the high school.

Courses of work are also made out for the grades in which the elementary mathematics are concentrated.

The laboratory contains dividers, protractors, triangles, goniometers, all kinds of geometrical forms, scales, metre sticks, foot and yard measures, measures for liquid and dry measure, compass, level, transit, tapeline, a surveyor's chain, sets of hoops for circle measurement, etc.

Work is done in the field by which data are gotten for the laboratory.

LITERATURE, HISTORY AND ENGLISH.

The general aim of the work of this department is threefold: first, to give the pupil an outline conception of the development of the greater forms of literary expression in their relation to the history of European civilization; second, to introduce the student to as many master pieces as possible in such a way as to cultivate intelligent enjoyment of literature as an art; third, to develop the powers of self-expression side by side with knowledge and interest, so that the pupil may write about what he learns and thinks simply, naturally and clearly. The chief means used throughout the course, with exception of the first semester of the junior year, is constant practice in the discriminating, responsive interpretation of worthy texts. The history of literature is taught for the most part incidentally, in connection with the study of particular authors and works. Rhetoric is studied only so far as it connects itself, on the one hand, with the study of books, furnishing the student with apparatus for analysis and criticism, and, on the other hand, with practice in composition, acquainting the pupil with such elementary principles as can be continually applied in his practice in writing.

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 Shakspeare (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 Shakspeare's chief tragedies and comedies.

SOPHOMORE YEAR.

Careful reading of Macbeth, Milton's Paradise Lost (Books I and II), selections from the Sir Roger de Coverley Papers, Colridge's Rime of the Ancient Mariner, Tennyson's Enoch Arden, Arnold's Sorab and Rustum, one essay from Emerson; elementary study of the form of literature and of the salient features of structure and method represented by each book; constant practice in simple writing, with review of the principles especially applicable to the correction of common errors in syntax and idiom.

JUNIOR YEAR.

First semester: Outlines of early Indo-European literature, with special reference to the natural epic and the development of the drama; decline of Latin and rise of modern languages, with a brief survey of mediæval romance cycles and prominent lyric forms; outline history of the English language, with elementary study of words for mastery of a writing vocabulary; reading of the Antigone of Sophocles and of four books of Pope's translation of the Iliad; practice in narrative and descriptive writing.

Second semester: Introductory survey of the development of English literature to the time of Shakspeare; the reading of Hamlet, the Merchant of Venice, and

Henry V, with study of the nature and structural principles of the drama; detailed study of the paragraph with constant practice in expository writing.

SENIOR YEAR.

First semester: Argumentation and the essay; study of the qualities of prose style with exercises in comparison and criticism; the reading of Burke's Conciliation with America, and of selected essays from Macaulay, Carlyle, Arnold and Emerson.

Second semester: Nineteenth century poetry; study of some of the best work of the poets with reference to the characteristics and tendencies of modern verse and the conditions which have influenced it.

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 meaning. 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.

3. 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.

The work outlined for the school is as follows:

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

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 PHYSICAL CULTURE.

To be a good reader is an accomplishment. To know how to read, to love to read, and to read, is fundamental to an education. The thoughts, the sayings, the aspi-

rations, the wisdom of the race, are a legacy bequeathed us. If we read, it is ours.

The chief object of this work is to help the student to realize there must be symmetrical development of the mind, the voice, and the body before he is able to reach his greatest usefulness.

In voice culture special attention is given to placing, resonance, flexibility, power, and expressiveness. The development is sought by four successive steps in reading: *first*, through mental activity that secures vivid conceptions the student is led to see relative thought values. By exercises in ear-training and formation he is led to express these vocally. This makes reading intelligent as distinguished from mechanical; *second*, the Literature presented in this grade appeals to the emotions, altruistic in character. The student must think and feel while the lines are being uttered. The voice now takes on color and a degree of rhythm becomes apparent; *third*, power is now developed through the action of the will. The author's purpose must be fulfilled. The student must *command* attention. Response to the content in this grade gives dignity and poise to the reader, with the ability to meet opposition with strength; *fourth*, vigor and physique are now the purposes before the student. Selections are read which give occasion for intense thought and feeling, and the united action of the mental and physical in expressing.

Dramatic interpretation is used as a means of gaining expression. Recitals are given throughout the year to give the students opportunities to do finished work.

The Emerson exercises are used as the basis of the work in physical culture. Their physiological and

hygienic values are discovered by the student. Observation has taught us that there is the greatest unity of action where there is a thought or purpose expressed; so the greater physical abandonment is sought by stimulating such thoughts as will arouse an impulse to express. In this way mind and body act in harmony. The vital organs must also be stimulated to perform their functions. Apparatus has been provided for more vigorous action: Wands, bells, clubs, and pulleys; also foils for fencing. Athletics are given credit in physical culture.

Attention is given to methods of teaching. Students have practice teaching in the Model School.

Beside the above is the following elective course of study in Oratory and Physical Culture:

SENIOR YEAR.

Dramatic Interpretation.
Oratory.
Applied Anatomy.
Bodily Expression and Rhythm.
Recitals.
Repertoire.

JUNIOR YEAR.

Reading and Physical Culture.
Life Study and Personations.
Voice Culture (Emerson).
Repertoire.

SOPHOMORE YEAR.

Literary Interpretation.
Voice Culture.
Physical Culture.

Bodily Expression-gesture.
Rhetoricals.

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 the 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. Dis-

tinction 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.

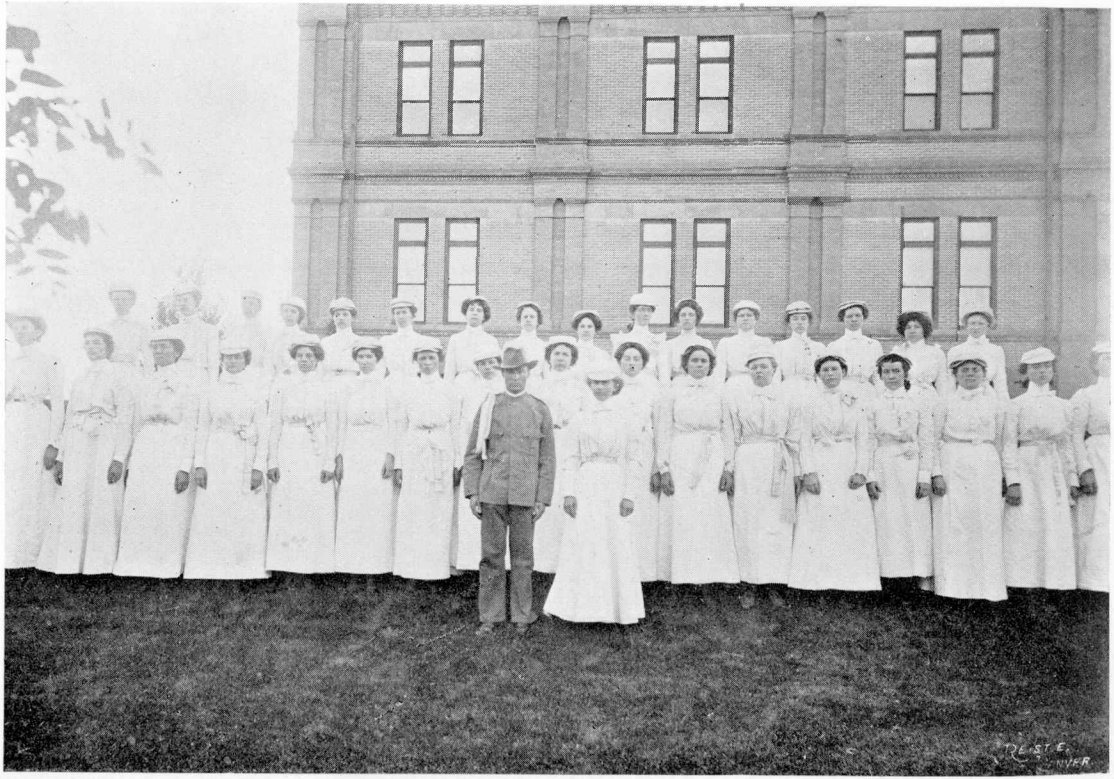
NORMAL ART AND DRAWING COURSE.

The Normal Art and Drawing Course has for its main purpose the training of teachers in drawing for the elementary and secondary schools. The work is divided into three inter-related lines of Art—representative, decorative and constructive.

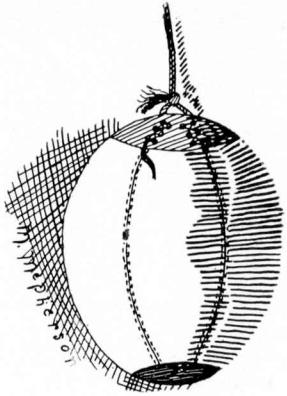
OUTLINE OF WORK.

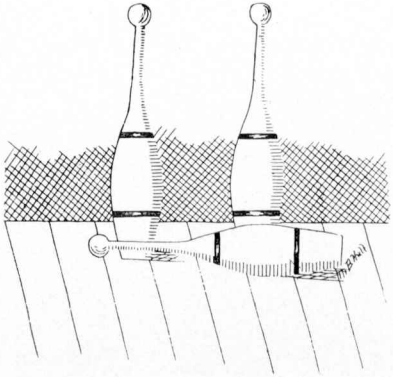
I. *Light and Shade Drawing*—Drawing in pencil and charcoal from still-life, ornament, antique, animal and human figure.

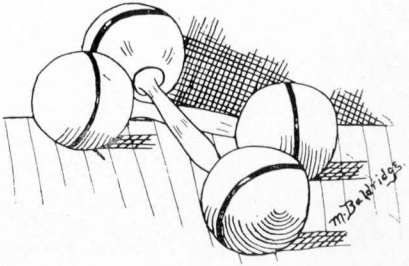
II. *Perspective*—Lessons given on free-hand perspective and sketches required, ilustrating principles.



PHYSICAL CULTURE DRILL—JUNIOR GIRLS.







CORNER OF ART ROOM.

III. *Design—Free-Hand Drawing*—Ornament, color, history of Art; composition; decorative and applied design; technical methods.

IV. *Water Color Painting*—Still-life, landscape, interior, life and sketching.

V. *Clay Modeling*—Model from casts of ornament, bas-relief, antique, and life.

VI. *Blackboard Sketching.*

VII. *Pen and Ink Drawing and Illustration.*

VIII. Line work and brush as a means of picture expression. Line work in the different mediums. The various steps in making line drawings.

SCHOOL OF FINE ARTS—ELECTIVE.

A course for students who desire to do advanced work. The aim is to teach true Art according to the highest ideals of the old masters, with the latest and most improved methods of American and European Schools of Art.

COURSE OF STUDY.

I. *Drawing*—Still-life, casts, antique, head from life and life figure.

II. *Perspective, Composition* and *Anatomy.*

III. *Painting in Oils and Water Colors*—Still-life; landscape, out-door sketching; animal study, costume and life.

IV. *Pastel and Crayon*—In landscape and portrait.

V. *Illustration*—A thorough and practical course. How to make a drawing that will print, silhouettes, out-

lines and shaded drawings. Perspective, composition and various methods of reproduction.

VI. *Sculpture in Clay*—Bas-relief-casts, antique and life.

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.

VOCAL MUSIC.

Art in vocal music has to do with rhythmical tones. It is one of the most general forms of art in this world. It is the most expressive of the profound depths of the heart. It gives utterance to the longing of the human soul. Hence, it should have a place in every school for the above and the following reasons:

1. As a means of physical culture, its usefulness has been shown by many afflicted with throat and lung diseases who have entirely recovered through judicious singing.

2. As a means of mental discipline, no branch of study holds a higher rank than music. The concentra-


REIST-B.
DENVER

tion of mind necessary to sight reading is quite equal to that required to solve the most difficult problem.

3. The refining and elevating influence of good music is almost universally acknowledged. The school room in which singing is a daily exercised is pervaded with an atmosphere of true culture and refinement.

4. The time will soon come when music reading will be efficiently taught in all our schools. We may then reasonably expect the time to follow when all the people can sing and good choir and good congregational singing will be found everywhere.

5. The constantly increasing demand for teachers in the public schools who can teach music as skillfully as they can teach language or number has induced the Colorado State Normal School to place music on an equality with other studies in the course of instruction. It is therefore not optional, but required.

Outline of course in music department:

1. Thorough study of rudiments of music and elementary harmony.

2. Constant practice in sight singing, using both staff and tonic sol-fa notations.

3. Drill in the proper rendering of the best music.

4. Study of the best methods of teaching music in the public schools.

5. Practice in teaching music in training school.

SLOYD.

Sloyd is a system of educative hand work—a means of expression through doing. The materials used depend upon general school conditions, and vary according to the school grade in which the work is done. Paper, cardboard, clay, paraffin, string, wire, raffia, wood, wrought

iron, etc., may all properly find a place in the list. The objects made are real things—useful articles, generally called models, although, strictly speaking, this term applies to the objects that serrve as guides in the work. The list of models will be made sufficiently pliable to allow of, and to encourage, choice and invention. On the theoretic side a certain amount of reading, with reports upon different phases of the subject, will be expected.

REQUIRED SLOYD.

The course for those taking sloyd as their required manual work will include class work as follows:

1. Principles of sloyd, considered from the historical, psychological and pedagogical points of view. One period per week during the first half year.

2. Discussions of practical work, including tools, materials, models, and other allied subjects. One period per week during the second half year.

3. Practical work, involving the use of various tools and materials in working out a series of models in accordance with the underlying principles of the system. One period per week throughout the year.

A special division of the class will be organized in (2) and (3) for those who are candidates for the kindergarten and primary diploma, which will discuss and perform work directly related to the primary grades. In (1) the work of this division will be identical with the regular course.

ELECTIVE SLOYD.

This course is designed for students who desire to specialize and to prepare for teaching sloyd. 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

SLOYD LABORATORY.

foundation for specialization. Successful practice in teaching the subject in the training department is requisite to the completion of the special course. The course is as follows:

1. Methods in teaching sloyd. Relation of teacher and pupil to the work, plans, presentation, execution, correlation, invention, etc. One period per week throughout the first half year.

2. Discussions of material means and forms used in sloyd, practical limitations of the work, adaptation to conditions, equipment, cost, etc. One period per week during the second half year.

3. Practical work, including work suitable for both primary and grammar grades. Preparations of materials, care of tools, working out of special problems arising in the work, working drawings, planning of models, etc. Four periods per week throughout the year.

CORRELATED SLOYD WORK.

As the student sees the need of apparatus which he can make in his various lines of work he uses the sloyd laboratory for its construction. This gives rise to considerable correlated work.

LIBRARY CLASS.

Apparatus—T square, triangles, drawing board, sewing bench, card catalogue box.

ART CLASS.

Drawing board, easel, stretcher, palette, modeling 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—

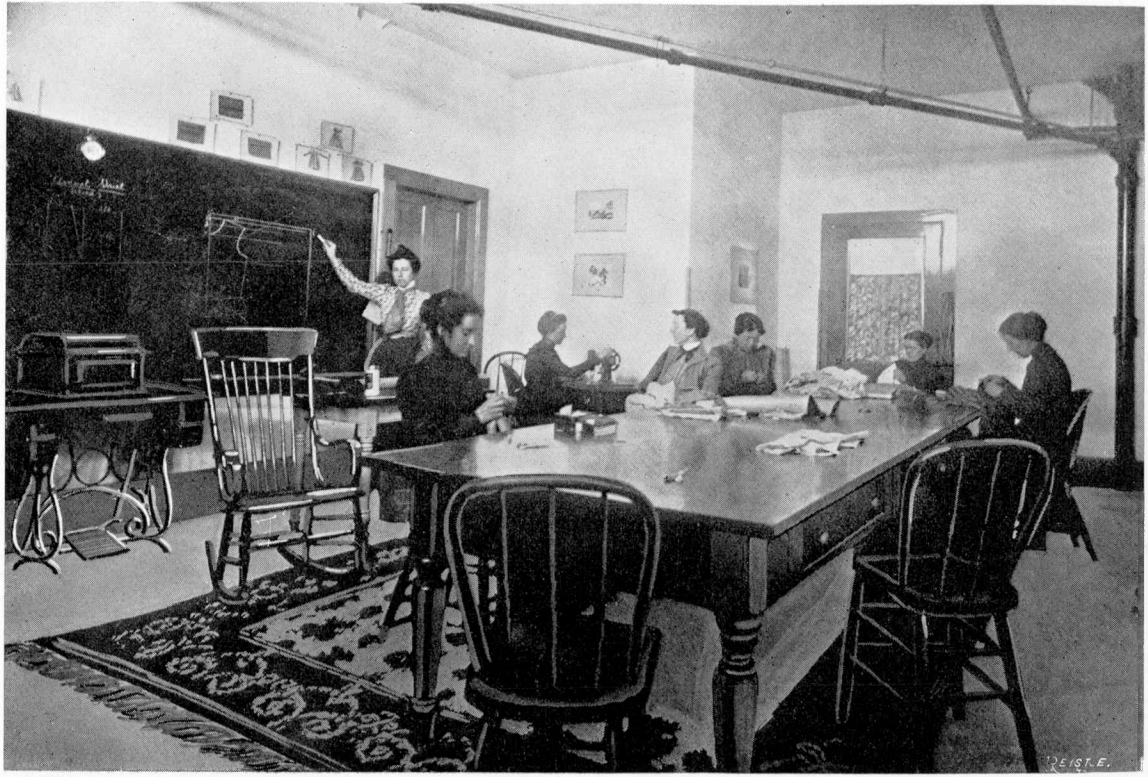
I.—Botany.

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.

COOKING LABORATORY.



SEWING LABORATORY.

EMERGENCY LABORATORY.

II.—Zoölogy.

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

III.—Bacteriology.

1. 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—

1. Physics is required of all taking this work, because it gives a clear understanding of nature'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 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. Stitches or practice on burlap, then on unbleached muslin. As soon as mastered, these stitches are used in making small useful articles, such as marble bags, thimble bags, etc.

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—nurses' 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. Chaffing dish course.
   2. Fancy cookery.
      a. Fancy roasts.
      b. Fancy desserts.
      c. Boning birds, etc.

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

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.

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. Methods of cleaning floors, brooms, windows, etc.
e. Proper care of kitchen and laundry supplies.

MODERN LANGUAGES.

The aim of this department is to give the student a reading knowledge of German, French and Spanish, and an introduction to their literatures. To this end the following courses or their equivalent are offered:

GERMAN.

ELECTIVE.

First Year—First Semester.

Elementary. *Thomas' German Grammar* and *Dreyspring's First German Reader.*

First Year—Second Semester.

Continuation of *Thomas' German Grammar*, translation of *Immensee*, Höher als die Kirche, and Eingeschneit.

Second Year—First Semester.

Der Neffe als Onkel, Jungfran von Orleans, and composition.

Second Year—Second Semester.

Der Rittmeister von Alt-Rosen, Ekkehardt, and composition.

Third Year—First Semester.

Minna von Barnhelm, Wallenstein, and collateral reading.

Third Year—Second Semester.

Goethe's Hermann and *Dorothea* and *Faust.* Collateral reading.

Fourth Year—First Semester.

History of German Literature.

Fourth Year—Second Semester.

Continuation of First Semester.

FRENCH.

ELECTIVE.

First Year—First Semester.

Joynes' French Grammar, and translation of L'Abbé Constantin.

First Year—Second Semester.

Continuation of grammar, reading of *Michel Strogoff* and Colomba, and composition.

Second Year—First Semester.

Seventeenth Century Authors.

Second Year—Second Semester.

Nineteenth Century Authors.

Third Year—First Semester.

History of French Literature.

Third Year—Second Semester.

Continuation of First Semester.

SPANISH.

ELECTIVE.

First Year—First Semester.

Edgren's Spanish Grammar and *Ramsey's Spanish Reader.*

First Year—Second Semester.

Alarcon's Novels, and composition.

Second Year—First Semester.

Cabellero, and Caulderon, and composition.

Second Year—Second Semester.

Don Quixote.

Third Year—First Semester.

History of Spanish Literature.

Third Year—Second Semester.

Continuation of First Semester.

Training School

AND

Child Study Department.

FACULTY.

Z. X. Snyder, Ph. D., President,
Philosophy of Education.

John A. Kleinsorge, Principal,
High School, Pedagogical Seminar, Supervision.

Royal W. Bullock,
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GENERAL STATEMENT.

The province of the training department of a normal school is to make the students practical, successful and growing teachers for the public schools.

In order to do this the training department first builds up in the minds of the students ideals of what instruction in the several branches should be; second, it gives them opportunities for actually instructing in the light of these ideals in a sufficient number of subjects and grades, under circumstances and for a length of time sufficient to warrant the faculty in recommending the student as a practical, successful and growing teacher.

The training department has a right to demand that the students presented as candidates for its work be prepared, from an academic point of view, for teaching the branches usually taught in the grades. The public schools require this. The normal school as an exponent of high standard should be exacting here. A normal school should resent every attempt to make it an institution for working over people of inferior ability and attainments into tolerable teachers. This is a serious duty that it owes to the children in its training department, to the holders of its diploma and to the sacredness of its purpose.

The actual teaching of the student comprises five recitation periods a week for one year, preceded and ac-

companied by directed observation and discussion of actual recitations, and their plans, as well as the writing of plans themselves. The more experienced the student teacher is, the more benefit he derives from the criticisms, and the further it advances the efficiency of the practical school.

PARENTS' MEETINGS.

During the past two years parents' meetings have been held by the Training Department at intervals. It has been the purpose to bring together people who may be interested in practical educational subjects. It has been the effort to make a few points well, rather than to make a great many superficially. To this end the discussions have been based on a small number of carefully stated theses which were taken up and discussed, one at a time. In order to make busy men and women feel that their time would not be extravagantly used, the meetings were strictly limited to one hour in length. As these discussions are led by members of the faculty from the different departments, they serve the further purpose of bringing the heads of departments into closer touch with problems of the training department and the home.

The first meeting of the year had for its purpose a clearer understanding of the advantages offered by the practice school. Other subjects which have been discussed are: How much energy may the child wisely devote to social entertainment, and how prevent him from spending too much? What are the most serious faults in children's school clothing and how remedied? How may boys and girls be interested in nature? What is

the best literature for children and how may they be led to appreciate it? (The parent's side of the question, not the teacher's.)

The following are the theses on the last topic:

1. Aside from the absence in many young people of anything like a constant and eager desire for books, the chief defect in the habits of reading shown by the youth of our schools seems to be lack of power to grasp and appreciate either the large structure or the indwelling idea of great literature.

2. Corresponding to inability to enjoy the best is the aimless practice of reading what comes to hand or what other people read, with almost no attempt at intelligent and discriminating enjoyment.

3. In order to establish better habits, children should be helped as early as possible to read and enjoy the epic and the drama, particularly Homer, Sophocles and Shakespeare.

4. Care should be taken that children be guided to appreciation of the great forms of literature (epic, drama, lyric) in their vital relation to the development of the human consciousness and to national life.

5. Young people should be led, in the case of each piece read, to discuss first the indwelling idea and the large features of structure to which it is organic, then the minor points of beauty and interest in content and form.

6. While the child is too young to grasp and enjoy great literature he should be given, in their most attractive juvenile form, the world-stores of mythology, fable, legend and history which form the raw material of great literature.

GAINING THE IDEAL.

In the beginning of the Junior year the students are formed into small groups, perhaps ten in a group, and assigned to the critic teachers for the observation of one, and in special cases two, recitations each week and its thorough criticism under the direction of the critic teacher.

These discussions involve a criticism of the following points:

I.—The Subject Matter—

1. Its value.
2. Its fitness for the children of this age.

II.—Correlation—

1. Does the teacher utilize points of preceding recitations?
2. Does he utilize points used in other studies?

III.—Method—

1. Aim.
   - *a.* Form.
   - *b.* Content.
2. Preparation of pupils' minds.
   - *a.* Relevant and irrelevant questions.
3. Presentation of the new.
   - *a.* Narrated.
   - *b.* Read.
   - *c.* Developed or questioned.
     - (*a*). Form of questions.
     - (*b*). Content of questions.
     - (*c*). Sequence of questions.
4. Devices.
5. Drills.
6. Summary.

IV.—Results.

V.—Government of Class.

VI.—Manner of the Teacher.

VII.—Summary of the Bad Points.

VIII.—Summary of the Good Points.

These groups observe and criticise the work of the Seniors, which should be good enough to be called "model." The critic teachers and the superintendent conduct "model" recitations in the presence of the different groups. The criticism does not degenerate into an exchange of opinion nor is it purely destructive. Nothing in a recitation is capable of proper defense unless it can be based upon some pedagogical principle; all criticisms should be so based. When a student opposes a point in a recitation he is held to suggest something better in its place.

When it seems advisable, and long before they are allowed to teach, Juniors are required to write detailed plans for recitations. These plans are subjected to the same vigorous criticism as the recitations that they have observed.

It is in this way that the training department seeks to lay the foundation for the student's ideal of a recitation.

REALIZATION OF THE IDEAL.

At the beginning of the Senior year the teaching begins. For each recitation the student prepares a detailed plan, seeking to avoid the errors and to follow the suggestions that he has been led to appreciate in his observations and criticism. The plan shows the leading questions that he expects to ask and the answers they

should bring. He strives as far as possible to ask questions that will call for thought on the part of the pupil. The wording of the questions is important, the sequence equally so.

The following plans illustrate our idea:

BLACKBOARD DRAWING.

Aim of the practician: 1. To see whether the children have formed clear mental pictures. 2. To give another mode of expression.

(Original oral and written expression had been given by the children and the stories are expected to furnish future reading matter.)

Aim to the class: You may tell in a picture on the board this part of the story of Ulysses: (Practician reads) "And once again he lifted a stone, far greater than the first, and with one swing he hurled it, and cast it but a little space behind the dark-prowed ship, and all but struck the end of the rudder. And the sea heaved beneath the fall of the rock."

Preparation: What kind of a coast is this where the Cyclops had his cave? Where was Polyphemus? How tall is the cliff? What rises behind Polyphemus? How large will you draw Polyphemus? You may show how Polyphemus stood as he hurled the stone. Which way was the ship going? (Re-read the passage.)

Presentation: The drawing at the blackboard. (During the drawing individual suggestions may be given to correct misconceptions.)

Summary: What has Albert in his picture which you have not in yours? What do you see in Hester's picture? What have you told in your drawing?

READING.

SECOND GRADE.

Subject matter: "The Little Tree," from Thompson's First Reader, "Fairy Story and Fable."

Aim: We shall read to-day about the pine tree's wish for glass leaves, and what happened to these leaves.

Preparation: *a.* For thought content: Why was the little tree unhappy? What wish was granted? What became of the gold needles? What was its next wish? *b.* For new words: our story says it was night once more, or, instead of "once more," we might say "again." (Write the word on the blackboard.) What leaves did the tree ask for? (Glass.) The tree said it did not (think) any one would (come) for the glass leaves.

What did come? (Point to "come.") The (wind) and the leaves?—(Were broken.)

Presentation: Silent reading to be followed by oral reading. In silent reading words needed will be written on the blackboard, or assistance given individually.

You may read to yourselves the tree's second wish, and how this wish came true. (Three sentences.)

> "'I would like leaves of glass.'
> Again night came, and the little tree went to sleep.
> In the morning it had leaves of glass."

What did the tree say about its new leaves? (Three sentences.)

"Then it cried, 'Oh, how beautiful my leaves
are.
They are not like the leaves of other trees.
They are of beautiful glass.' "

Let us see what else it thought of the glass leaves. (Three sentences.)

They are so much better than needles and
better than leaves of gold.
I do not think the man will come to get them.
No other tree is as beautiful as I am.' "

Were the glass leaves a safe kind to have? (Two sentences.)

"Then the wind came up.
All the beautiful leaves of glass fell from the
tree and were broken."

Questions for expression and enunciation. What kind of leaves? When did it have the leaves of glass?

Did the tree like the glass leaves? How did it tell its joy? Were they like other leaves? How did the tree tell this? Did the tree think that any one would take them? Did it think some other tree as beautiful?

Summary: The selection to be made by several pupils.

The student has charge of his first class for twelve weeks, taking another in a different grade and a different subject for twelve weeks, with a similar change for

the last twelve weeks. This gives him a strong feeling of the universality of the pedagogical principles he has been applying. He has been allowed sufficient independence in the discipline of his class to test and strengthen his ability to govern it. This will give evidence of his ability, or lack of ability, to govern his own school in the future. If he needs strengthening, special opportunity may be furnished. Graduation should be denied until the student shows his ability to govern well. The student should not be given charge of a class until the critic teacher feels reasonably assured that the class will not suffer at his hands. The children are not for his good. One of the advantages of such a school is the control that may be, should be, and in many schools is exercised over inefficient teachers, while the necessary changes need not be more frequent than in schools where promotions are made half-yearly, nor than in most high schools.

During the Senior year a recitation for class criticism is held in the presence of the Seniors, from time to time, by one of their number, by a critic teacher, or by the superintendent. Two Seniors working together prepare a written criticism according to the outline given above. The teacher who holds the recitation—the practician—prepares a written self-criticism. These are read at a subsequent meeting and thoroughly discussed.

COURSE OF STUDY.

FIRST GRADE.

LITERATURE.

List of Stories Used—

Fairy Stories—Simple myths.
The Old Woman and Her Pig.
The Three Bears.
Clytie.
The Anxious Leaf.
The Street Musicians.
The Straw, the Coal of Fire and the Bean.
The Unhappy Pine Tree.
Philemon and Baucis.
The Little Match Girl.
The Fir Tree.
Rhoecus.
The Lion and the Mouse.
The Donkey and the Salt.
The Ugly Duckling.
Phaeton.
The Pea Blossom.
The Proud Apple Branch.
Little Red Riding Hood.
Cinderella.
The Bird with no Name.

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READING.

Cyr's Primer.
The Finch Primer.
Fables and Rhymes for Beginners.
Lights to Literature—Book One.
Selections from Æsop's Fables.
Cyr's First Reader.
Memorizing of selections.

Reading is introduced by means of games. The directions for games are written on the blackboard, and the children play as directed. By this method the children are led to enjoy the work and at the same time they see the need of learning to read.

After a few weeks of such work words in the first part of the children's readers are taught by introducing them into these games and by arranging other games in which these words can be taught.

About the sixth week the transition from script to print is made and the children begin reading from their books.

Many new words are learned during the year by writing songs and poems to be memorized on the blackboard. Also many directions are written on the board in place of giving directions orally.

A few of the simple sounds of letters are taught and the children use these in learning new words. In this way they are becoming independent and can work out new words without help.

NATURE WORK.

There are two kinds of nature work—the study of some one subject as a type and the general observation of nature—its changes and appearance.

In the spring we call the attention of the children to the return of the birds. Let the children report as they see new birds, adding to the list of those that remain during the winter each new bird as it arrives. Birds near the homes or school may be watched and reports given daily of any new habits observed. A few minutes each day may be given to this work. At the same time perhaps some one bird is being studied more closely as a type.

The study of the trees is commenced early in the spring. The teacher with pupils may visit the trees before the buds begin to swell, learn names of different trees, notice their outline, their branching, size, etc. Draw different kinds of trees. The pupils often enjoy a little drill in the characteristics they have noticed belonging to different trees. They may try to give names of trees by seeing only small twigs or buds,—by closing eyes and tasting or smelling the twig. Very helpful games may be played in connection with this work. Pupils should understand that to know the *name* is not to *know the tree*, but even a speaking acquaintance is a very pleasant thing. In a similar way lists of birds and flowers and grasses may be made.

Throughout the year at intervals notice the trees under consideration to see what changes have taken place. In the fall notice preparation for type tree and other trees for winter. Study changes and reasons for changes.

While this general observation is done some one subject is being studied in detail. The social relationships of animals are to have stress laid upon them; that is, their manner of life, building of their houses, securing food, defense, friends, enemies, etc. There should be

a close correlation between function and organ. Such a thorough study of an animal may require two or three weeks, or even longer. Such a study shows the child *how* to look into a subject.

In the thorough study of an animal or plant, the relation between animals, plants, minerals, sunshine, rain, etc., must be noted. This prevents isolation of a subject.

As a principle of sequence animals studied are often taken from the same or a closely related class; for example, the squirrel in the first grade might be followed by a rapid study of the rabbit, the mouse, etc. However, subjects for nature work are often selected because suggested by other studies, e. g., the fish is studied in second grade about the time that "Hiawatha's Fishing" is given in Literature. The duck is studied when children are having the story of the "Ugly Duckling" in their Literature class. The selection is largely determined by the season of the year.

Nature work should not be a study *about* nature, but a study of the real objects. The children or their teachers bring to class the living animal to be studied.

A great deal of outdoor work is done in the fall and in the spring.

Along with all of this investigation the beauty in nature should not be overlooked. The children should be led to enjoy beautiful colors in nature,—light and shade, the sunset, the cloud effects, the mountains, color of flowers, etc. These things affect the child's character.

GENERAL LESSONS.

The following is work for the first, second and third grades, in general exercises, aside from the regular lessons in Nature Work:

Dissemination of seeds.
Recognition of trees.
Pressing autumn leaves; arranging these into beautiful designs and borders.
Preparation of buds for winter.
Migration of birds.
Making charts for recording observations concerning clouds, wind, rain, snow, etc.
Recognition of common minerals and rocks.
Return of birds.
Spring study of trees and flowers.
Swelling and opening of buds.
Germination of seeds.

Topics for First Grade—

The cow.
The horse.
The donkey (by comparison with the horse.)
The squirrel.
The rabbit (by comparison with the squirrel.)
The mouse.
The cat.
The dog.
The hen.
The duck (by comparison with the hen).
Plant sweet peas and watch development. Correlate with "The Pea Blossom."
Buds and blossoms of apple tree. Correlate with "Conceited Apple Branch."

Children draw and mould many of the subjects studied.

LANGUAGE.

Oral language work is done mainly in connection with the Literature work—children reproducing thor-

oughly the stories presented, and the teacher helping them to express themselves correctly.

Games may be played in which the children have special drill on expression.

WRITTEN LANGUAGE.

Sentences which children have formed, based upon Literature and Nature Work, will serve as material for written exercises.

The writing will be on the blackboard and on unruled paper. Writing on paper should be with soft pencils and in large characters. Spelling is taught in connection with written language.

NUMBER WORK.

I. Sense training.

(a) *Touch* and *sight.* Handling of various objects, noting weight, material, size, form and position. Use of colors, ribbons, cards, thread, crayon, water colors, etc.

(b) *Ear* training: Musical sounds, voices, distance and direction of various sounds.

II. Cutting and Drawing: Pupils at first cut and draw what they choose; later, cut outlined objects.

Use of blocks for building.

Blackboard drawing.

Concrete problems correlated with other studies.

DRAWING.

Study of objects pertaining to a child's life.

Teach prismatic colors in their order.

Water color painting from simple still life.
Memory drawings.
Paper cuttings: Clay modeling.
Blackboard drawing and historic design.
Life sketching and animal study.
Illustrations of nursery Rhymes and Literature.

MANUAL EXPRESSION.

Modeling in clay with fingers.

Thin cardboard articles; decoration of these with historic designs in inks, or germantown wool in harmonious colors for rugs, carpets, wall pockets, etc.

Kitchen Garden work.

MUSIC.

Songs for special seasons, special days, morning songs, gesture songs, slumber songs, etc., taught by rote.

Simple vocalizing exercises for correct tone production. Many of the following songs have been learned in the Kindergarten:

Come Little Leaves.
October's Party.
America.
Flag Song.
The North Wind Doth Blow.
Merry Little Snow Flakes.
Jack Frost.
Little Jack Frost.
Shine Out, Oh Blessed Star.
There's a Wonderful Tree.
Once a Little Baby Lay.
Good Morning, Merry Sunshine.
Good Morning, Kind Teacher.

Father, We Thank Thee For the Night.
Father in Heaven, Help Thy Little Children.
The Way to By-lo-Town.
Baby Is a Sailor Boy.
Sleep, Baby, Sleep.
Wynken, Blynken and Nod.
Easter Song.
The Brown Thrush.
The Moon.
The Shoemaker.
Where the Daisies Go.
It Is Lovely May.

PHYSICAL CULTURE.

Games and exercises for recitation are given special attention in these grades. Rhythm of movement and unity of action are emphasized.

SECOND GRADE.

LITERATURE.

Indian myths to prepare for the study of Hiawatha.
"Indian Story of the Mole."
"Indian Story of the Robin."
"How the Spark of Fire Was Saved."
"The Coyote and the Bear."

Suggested Outline for Hiawatha—

I.—Hiawatha's Childhood.

Begin with line 65. (Develop and read.)

1. Nokomis, Hiawatha's Guardian.
2. Hiawatha's Chickens.
3. Hiawatha's Brothers.
4. Hiawatha's Hunting.

II.—Hiawatha and Mudjekeewis.

1. Story of the visit to Mudjekeewis. (Just enough to lead up to the meeting of Minnehaha on his homeward journey.)
2. Journey Homeward, When He Met Minnehaha. (Develop—read.)

III.—Hiawatha's Fasting. (Develop and read.)

1. The Struggle with Mondamin.

IV.—Hiawatha's Friends. (Develop and read.)

1. Magical Influence of Music, as Shown by the Story of Chibiabos.
2. How Kwasind Killed the Beaver.

V.—Hiawatha's Sailing. (Develop and read.)

1. Building of the Canoe.

How Kwasind Cleared the River.

VI.—Hiawatha's Fishing.

1. The Quest. (Develop and read.)
2. The Struggle.
3. Death of the Sturgeon.
4. Release of Hiawatha.
5. Uses made of the Fish.

VII.—Hiawatha and Pearl-Feather. (Develop and read.)

1. Nokomis' Advice.
2. Preparation.
3. How He Killed the Serpents.
4. The Pearl-Feather's Home.
5. The Challenge.
6. The Battle.
7. The Victory.
8. Welcome Home.
9. Division of the Spoils.

VIII.—The Wooing. (Develop and read.)

1. Nokomis' Advice. (Read.)
2. Hiawatha's Choice.
3. The Journey.
4. The Welcome.
5. The Wooing.
6. The Journey Homeward.

IX.—Hiawatha's Wedding Feast. (Develop and read.

1. How the Guests were Entertained.

X.—Sons of the Evening Star. (Develop and read.)

1. Iagoo's Story.
2. Oweenee and Osseo.
3. The Transformations.
4. Welcome Home.

XI.—Blessing the Corn Fields. (Develop and read.)

1. The Raven's Plot.
2. The Harvest.

XII.—Picture Writing.

XIII.—Hiawatha's Lamentation.

XIV.—Paw-Puk-Keewis.

XV.—The Hunting of Paw-Puk-Keewis.

XVI.—The Death of Kwasind.

(Just enough of these chapters to keep the proper connection.)

XVII.—The Famine.

Story of the famine and Minnehaha's death, but not in detail.

XVIII.—The White Man's Foot. (Relate the story.)

1. Story of the White Man's Coming, told by Iagoo.

VIII.—The Wooing. (Develop and read.)
1. Nokomis' Advice. (Read.)
2. Hiawatha's Choice.
3. The Journey.
4. The Welcome.
5. The Wooing.
6. The Journey Homeward.

IX.—Hiawatha's Wedding Feast. (Develop and read.
1. How the Guests were Entertained.

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(Just enough of these chapters to keep the proper connection.)

XVII.—The Famine.
Story of the famine and Minnehaha's death, but not in detail.

XVIII.—The White Man's Foot. (Relate the story.)
1. Story of the White Man's Coming, told by Iagoo.

XIX.—Hiawatha's Departure. (Develop and read.)

1. Hiawatha Welcomes the Pale-Face.
2. Hiawatha's Sailing into the West.

READING.

Continued use of sounds of letters. The children read the stories the content of which they have learned as Literature in first grade.

Æsop's Fables.
Classic Stories.
In Mythland.
Some of Our Friends.
Fables and Fairy Tales No. 2.
Cyr's Second Reader.
Memorizing of Selections.

NATURE WORK.

General Lessons. (See First Grade.)
Subjects for detailed study:
Continue study of sweet peas and apples begun in the spring.
Cabbage and milk-weed caterpillars.
Watermelon and muskmelon.
Potato:
Preparation of potatoes and ground for planting.
Kinds of soil.
How plant.
Irrigation.
The growth.
The parts of the potato.
How dug and when dug.

Shipping time, manner, reason.
Use of potatoes as food—how prepared.
Snow Crystal.
Fish.
Owl.
Heron.
Woodpecker.
Robin.
Blackbird.
} Correlated with Hiawatha.

WRITTEN LANGUAGE.

Continue as in first grade. The written language work is correlated with the literature and nature study lessons. Compositions are developed and written in class. Attention given to simple punctuation, margin, paragraphing, capitalization.

After the teacher has corrected these papers they are copied by the children during the period for penmanship.

NUMBER WORK.

Sense Training continued.

Finding squares, edges, lines, triangles, rectangles.

Dimensions, equality, learning exact measurements.

Drawing, cutting and building with regard to measurements, e. g., 6 inches square, line one foot long. Rectangle 3 x 6, etc.

Finding relations, 2, 3, 4, 5, 1/2, 1/3, 1/4, 2/5, 4/5, etc.

Ratios of lengths.

Ratios of time.

Ratios of solids.

Relation of gallon, quart and pint.

Relation of dime and nickel.
Separating and combining.
Concrete problems correlated with other studies.

DRAWING.

Teach six standard colors and classify colors as lighter and darker than standards.

Illustrative sketching, life drawing, bird, animal and insect study.

MANUAL EXPRESSION.

Continuation of work in First Grade.

MUSIC.

(See First Grade.)

PHYSICAL CULTURE.

(See First Grade.)

THIRD GRADE.

LITERATURE.

The developing method is largely used in the literature lessons. Thought questions are asked of the children, and the answers often give the succeeding steps in the story. Parts of the story are told graphically, and where the language of the text is simple and beautiful the story is read.

Each lesson is reproduced by the children. The reproduction gives the teacher an opportunity to see if they have correct ideas of what has been presented; if not, to correct them. (Clear and accurate impressions are essential in all work.) It also gives pupils an opportunity of expressing themselves. The teacher encour-

TRAINING SCHOOL—UPPER PRIMARY—BIRD DAY.

ages the use of correct English. The reproduction also impresses the stories and the lessons embodied in them.

The teacher does not call attention to the moral lessons, but directs the work so that they will shine through the story.

Most of the work given in these grades stimulates the imagination. A large part of the material deals with gods and goddesses, and people with supernatural power.

Robinson Crusoe, however, deals with facts. It is given because of its value in developing the reasoning power and the *practical imagination;* also its great value in character development. The children deal with the actions and motives of a commonplace man, with no accomplishments; one whose knowledge and power do not go beyond those of the children. This man met with misfortune because of his worthlessness and ungratefulness. After his shipwreck there was a change in his life. He began to realize his condition and depend upon God for help.

The children put themselves in his place, and make plans for overcoming difficulties that arise. He can not do his work as people with abundance of means can, but must make use of the meager materials and advantages that he has on this lonely island. The children think and feel with him as he becomes a faithful and industrious man. They watch him as he learns to be a carpenter, a tailor, a farmer, a cook, etc. They make many of the things he made.

The whole story is a demand upon the *practical imagination.*

The story is given much as it is told in "Robinson Crusoe for Boys and Girls," by Lida B. McMurry and

Mary Hall Husted. However, the teacher is not confined to this adapted form, but makes frequent reference to the original by DeFoe.

1. Legends of Norseland, by Mara L. Pratt.
2. Stories of Ulysses.
3. Robinson Crusoe.

A Partial Outline of Topics for the Study of Robinson Crusoe—

1. Home life—how he spent his time.
   - *a.* His parents' advice.
   - *b.* His promise.
   - *c.* His failure to keep these promises and the result of it.
2. Robinson's voyage.
3. His shipwreck—how he felt—his thoughts when he found that he alone was saved.
4. Robinson's first night on the island.
   - *a.* His fears.
   - *b.* Where he slept.
   - *c.* His consolation—dependence upon God.
5. The first day on the island.
   - *a.* Search for food.
   - *b.* Search for water.
   - *c.* His view from hill-top—sees the wreck.
   - *d.* Ideas of its value to him.
   - *e.* Visiting the wreck.
   - *f.* What he found—plans for removing goods.
   - *g.* Building raft.
6. The second day on the island.
   - *a.* Bringing other goods from ship.
   - *b.* He shelters his goods.

7. Selection of permanent home. Requirements this location must meet.
8. Transportation of goods.
9. Defense (wall or fence).
10. Building the house.
11. His hunting (goats).
12. Calendar. Would he respect Sunday?
13. His diary. Things noted for which to be thankful.
14. Making furniture.

READING.

1. Cyr's Third Reader.
2. The Normal Course in Reading. Third Reader.
3. The Normal Course in Reading. Alternate Third Reader.
4. Selections from Grimm's Fairy Tales.
5. Sea-side and Way-side.
6. Stories of Indian Children.
7. Baldwin's Fairy Stories and Fables.

NATURE STUDY.

1. Toad.
2. Frog (by comparison with toad). These are studied bcause of their abundance in the irrigating ditches.
3. Ant. (Studied because suggested by Robinson Crusoe, and also because of their abundance.)
4. Goat. (Suggested by Robinson Crusoe.)
5. Sheep (by comparison with goat.)
6. Charcoal.
7. Parrot.
8. Orange. Lemon (by comparison with orange).

GEOGRAPHY.

Local Features—

Soil, erosion, drainage, irrigation (physiographic conditions that demand it and those which make it possible).

Maps of school room, school grounds, and Greeley.

Also mould these in sand and clay.

Local Industries—

Agriculture—grazing—dairying, mining.

In study of industries, locate important places on map of Weld county.

Give idea of the earth as a whole.

"Seven Little Sisters," "Each and All," "Around the World," for reference.

WRITTEN LANGUAGE.

Continue as in Second Grade.

Use of nouns and verbs.

Plural and possessive forms.

Kinds of sentences.

Make all written work as independent as possible.

SPELLING.

Words for the spelling lessons are taken from reading, nature study, literature and other lessons. These words are written in spelling blanks and corrected by the teacher. Later the children correct their errors.

NUMBER WORK.

Sense training continued.

All work based on objects.

Ratios of distance, time, value, area, magnitude and corresponding parts, with applied problems, involving all the fundamental operation.

Equations and imaging emphasized.

Roman numerals to one hundred.

DRAWING.

Single still-life studies.

Color review of standards and teach tints and shades.

Arrangement of sprays in form of a design in a frame. Simple applied design ink silhouette.

Illustrative sketching from literature in ink, water colors and pencil.

Clay modeling.

MANUAL TRAINING.

Continuation of First and Second Grades.

MUSIC.

Popular and easy classical melodies and patriotic songs learned by rote. Simple music read by note.

Appearance of the simpler ones of these to be taught by staff notation. Staff notation study of the keys C, G, D, F and B flat, from First Music Reader, and other songs in these keys.

Children compose simple exercises and sing them at sight.

PHYSICAL CULTURE.

Exercises adapted from the Emerson Exercises are now given. Care is given to precision and promptness of action with music; also exercises with the dumb-bells and wands.

FOURTH GRADE.

LITERATURE.

1. Story of Siegfried.
2. Cliff Dwellers.
3. Kit Carson.
4. Fremont.

READING.

1. Cyr's Fourth Reader.
2. Hans Andersen's Stories.
3. Selections from Seven Little Sisters.
4. Legends of Norseland, by Mara L. Pratt. (Used as literature in Third Grade.)
5. Æsop's Fables for sight reading.
6. Selections from Hawthorne's Wonder Book.
7. Sea-side and Way-side.
8. Selections from Heart of Oak, No. III.

Phonic drills and drills in articulation.

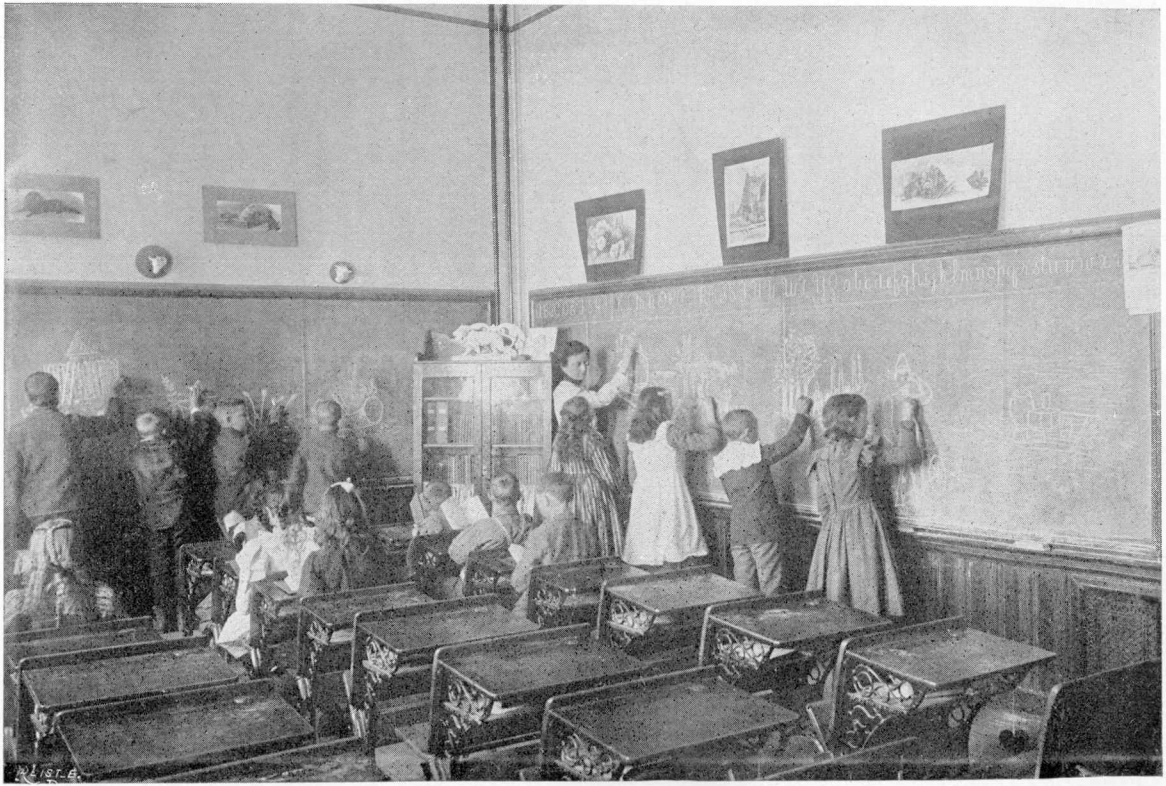
NATURE STUDY.

1. Prairie dog.
2. Bee.
3. Crystals.
4. Physical experiments with water, air and heat.
5. Thermometer and barometer.

GEOGRAPHY.

Careful outline and relief maps of neighborhood, applying scale.

Tracing of commercial lines from Greeley to centers of trade, e. g., Denver, Omaha, Chicago, Kansas City,



TRAINING SCHOOL—UPPER PRIMARY.

Fort Worth, Galveston. Maps of same. Careful and detailed study of these commercial relations, involving Colorado industries, e. g., sheep, cattle, potato, and wheat industries and mining; return industries, e. g., lumbering, woolen industries, etc.

Locating these trade centers and discovering appropriateness of such locations.

Irrigation. Physiographic conditions that demand it and those which make it possible. Maps showing location and relief.

WRITTEN LANGUAGE.

(See Third Grade.)

Develop other parts of speech.

SPELLING.

(See Third Grade.)

NUMBER WORK.

Sense training continued.

Further application of ratios given in Third Grade, increasing in difficulty.

Ratios of volumes and areas.

Decimal fractions.

Continue work in reading and writing numbers.

Continue work in Roman numerals.

Percentage.

DRAWING.

Still-life studies in black and white and color.

Review of six standard colors and tints and shades.

Applied design—simple perspective.

Illustration, life, animal and insect drawing.

SEWING.

Grade Four, for all of the pupils—

1. Canvas, with coarse linen thread or silk, large needles. Ornamental designs used for mats, table covers, etc.
2. Sewing, basting, running and back-stitching on burlap.
3. Stitches learned on burlap reviewed and practiced on unbleached muslin.
4. Same stitches used on small bag of gingham which has little or no dressing in it.
5. Blanket stitch taught in small needle book.

MUSIC.

(See Third Grade.)

PHYSICAL CULTURE.

(See Third Grade.)

FIFTH GRADE.

HISTORY.

Champlain and his expeditions.
Daniel Boone.
Lincoln's early life.
De Soto.
La Salle.
Hennepin.
Joliet and Marquette.
Louis and Clark on the Missouri.

READING.

Memorizing selections.

Read selections from Higginson's American Explorers.

King of the Golden River.

Lays of Ancient Rome.

Heart of Oak No. 3 and 4.

Old Greek Stories. Baldwin.

Stories of Great Americans. Eggleston.

Fifty Famous Stories Retold.

Short Stories of Our Shy Neighbors. Kelley.

Supplementary readers: Monroe's Fourth and Powell's Fourth.

Seat and home reading of the selections not read in class.

SCIENCE.

Fall flowers, asters, etc. Leaves. Collections; designs made from them.

Dog studied as type. Comparative study of coyote, wolf, fox.

Respiration. Air pressure. Salt-mines, springs, lakes, deserts.

GEOGRAPHY.

World as a whole.

Proofs of rotundity of the earth. Phases of the moon. Study of the globe. Locations of continents and oceans. Tracing of commercial relations between United States and foreign countries.

This will emphasize the important ports of the United States; the trunk lines of railroads, mining; return industries, *e. g.*, lumbering, woolen industries, etc.

Locating these trade centers and discovering appropriateness of such locations.

Irrigation. Physiographic conditions that demand it and those which make it possible. Maps showing location and relief.

SPELLING.

Words from nature study, history, reading, geography, etc. Teachers of different subjects hand in lists of words upon which drill is needed.

Teach use of dictionary.

Phonic drills.

Review once a week. Drill on misspelled words.

Dictation exercises from prose and poetry.

LANGUAGE.

Drills reviewing function of parts of speech already learned, possessives and plurals already learned, phrases.

Kinds of adjectives.

Kinds of verbs.

Other uses of nouns.

The children are led to discover the function of these in their composition work. Subject matter of compositions taken from literature, nature study, etc.

No text book.

ARITHMETIC.

Thorough review of tables. Oral and written drills involving fractions and tables of measure studied in lower grades.

Factoring.

Compound numbers.

Common fractions.

Decimal fractions to the extent involved in the United States money.

Percentage.

DRAWING.

Still-life studies involving perspective in black and white and color.

Color, standard, tints, shades and hues.

Historic ornament, applied design.

Illustrative sketching.

PENMANSHIP.

The content of the composition work will be developed in language class and written by the children in note books. After careful correction by the teacher these compositions will be carefully copied with ink during the writing period.

On certain days there will be special drills in penmanship.

MANUAL TRAINING.

Wood Work—Boys: Bench work with tools; working drawings.

Sewing—Girls:

1. Doll's pillow case, made of white muslin, teaching the "Puddingbag" seam, machine stitch and hemming.
2. Damask hem.
3. Duster made with cat's or feather stitching in colored linen thread used on the hem.
4. Doll's apron, white lawn.

MUSIC.

Patriotic songs, popular melodies (folk songs) learned by rote. Simpler ones written by children, staff notation. Text thoroughly memorized. Exercises in sight reading, from music reader, and songs placed upon board. Composition of easy exercises by children.

PHYSICAL CULTURE.

The Emerson Exercises are continued. Special attention is paid to individual needs; grades divided into classes according to development. Dumb-bells and Indian clubs are used.

SIXTH GRADE.

HISTORY.

Believing that history is a thought subject and not a committing of facts and dates, we study motives and actions of men, and their results.

The teacher narrates those facts which can not be thought out by the children and which have not been developed in preceding lessons.

From ten to twelve weeks are spent upon the life of Columbus. During this time we consider the superstitions and ignorance which limited civilization to the eastern hemisphere; the conditions which demanded a new route to India; the character of the man who, after years of waiting to obtain permission against the advice of the wise men of the day, successfully carried through the hazardous undertaking of sailing the great expanse of an unknown sea with a crew of superstitious and mutinous men; the possibilities opened up by the successful accomplishment of the journey; the ensuing struggles, disappointments and injustice.

Some suggestive questions and topics for the study of Columbus:

Is it a remarkable thing to cross the ocean? Should we study about a man for that reason? What, then, made the crossing of the ocean so important an event that we should study about Columbus?

I. Superstitions of the people concerning the sea.
   1. Great hand that drew boats down.
   2. Monsters.
   3. Torrid zone, etc.
   4. Belief that world was flat and that boats would fall off the edge.

II. Ships appeared to be going down hill when sailing out to sea.

III. Clumsiness of vessels. Dangers from sea worms.

IV. No way to keep food and water supply during a long journey.

Why should Columbus wish to brave the unknown terrors of a great ocean?

I. Route to India.
   1. Marco Polo's stories.
   2. Difficulties and disadvantages of present route.
   3. Best routes held by certain cities, whose permission must be obtained to engage in traffic.
   4. A new and shorter route to the wealth of the East would give to the discoverer and his country untold wealth and great distinction among civilized nations.

II. Belief that the earth was round.
   1. Causes for this belief.
   2. Experience as a navigator disproving current fictions concerning the sea.

III. Desire to win the heathen nations to Christ and to retake the Holy Sepulchre from the Arabs.

How Columbus was fitted for this undertaking.

1. Character and personal appearance.
2. Ease with which he made friends.
3. Knowledge of geography, map-making and navigation.
4. Experience as a practical seaman.
5. Ignorance of the size of the earth.

To whom would he go?

I. At the Court of Portugal.
   1. Interest of Portuguese in navigation.
   2. Columbus obtains a hearing and receives some encouragement.
   3. Treachery of King John.
   4. Feelings of Columbus.
   5. Comparison of the fame of the two men.

II. At the Court of Spain.
   1. Unfavorable conditions.
      a. Opinions of learned men.
      b. Wars with Moors.
   2. Before the Council at Salamanca.
      a. What would be the argument used by Columbus?
      b. How answered by the wise men?
   3. The long and weary wait.
      a. At La Rabida.
      b. Surrender of Granada.
      c. Columbus' feelings.
      d. Starts out on his mule for France.
      e. Recalled by influence of friends.
      f. What would be their arguments?
      g. Terms agreed upon.
   4. Preparations for the journey.

5. Difficulties.
   a. Refusal of men and ship owners to assist. Enforced tax. Tumults. Impressment of men. Kind of men enlisted. Desertions.
6. Embarking.
   a. Attitude of people.
   b. Feeling of crew.
   c. Feeling of Columbus.
7. Voyage.
   How Columbus would answer reasonable objections; explain phenomena; effect upon minds of crew; how deal with mutiny; in what ways soothe, encourage, pacify, subdue or cow individuals disheartened or rebellious, as the case might be.
   Character of Columbus as shown by difficulties and dangers overcome in this voyage.
8. Landing.
   a. Feelings of Columbus.
   b. Feelings of men.
   c. Description of landing.
   d. Appearance of Spaniards.
   e. Taking possession for Spain.
   f. Wonder of natives.

Points of interest in explorations and return voyage will be taken up in the same way.

The second, third and fourth voyages are taken in much shorter time. Simply the new points in the development of the misfortunes of Columbus being dwelt

upon. Closing with the boyhood and early life of Columbus, which are interesting to us only on account of his fame as the discoverer of America.

Columbus.
Cortes.
Cabots.
Magellan.
Hudson.
John Smith.
Sir Francis Drake.
Sir Walter Raleigh.
Plymouth and the Pilgrims.
Miles Standish.
Roger Williams.

READING.

Memorizing choice selections.

Read: Cyr's Fourth Reader. Water Babies, by Kingsley. Wake Robin. Birds and Bees. Story of Aeneas, by Clark. Story of Troy, Clark. The Story of the Greeks, Guerber. The Story of the Romans, Guerber. Heart of Oak, No. 5.

Supplementary readers: Appleton's Fourth. Todd and Powell's Fourth. Monroe's Fourth. Children encouraged to read many of these at seat and at home.

SCIENCE.

Butterfly, moth.
Propagation of plants.
Fragrance of plants.
Defence of plants.
Compass. Magnetism.
Cat family.

Sound. Larynx. Ear.

Relation between wild and cultivated plants of same species. Discover causes.

Relation of wild and domesticated animals of same species. Causes.

GEOGRAPHY.

The same general plan is pursued for Europe as for North America in the Fifth Grade.

World as a whole.

Proofs of rotundity of the earth. Phases of the moon. Study of the globe. Locations of continents and oceans. Tracing of the commercial relations between United States and foreign countries.

This will emphasize the important ports of the United States; the trunk lines of railroads and large waterways leading to the same. For example: New York City. Trunk lines leading to it from all directions. Barrier of Alleghany mountains. Passage way through the same by waterway of Hudson, Erie Canal, Great Lakes. The important ports on Great Lakes and on streams and railroads leading to them. Maps for these.

In a similar way, New Orleans, Galveston, San Francisco, etc.

Relative physiographic advantages of these ports.

Naturally, following the same plan, those countries most closely connected with the United States will be considered first and with a thoroughness in correspondence with the closeness of such relationship.

SPELLING.

Daily drill in written spelling.

LANGUAGE.

Same as in Fifth Grade, with addition of gender, person, number, case, mode, tense. Reproduction of readings in geography, history and literature.

ARITHMETIC.

Advanced work in factoring. Mensuration. Making it as concrete as possible. Applying it as much as possible to real life. Rapid concrete and abstract drills. Percentage. Concrete problems through all the work.

DRAWING.

Review of perspective in Fourth and Fifth Grades. Studies from nature in light and shade.

Simple pen and ink drawings.

Applied design and Historic Ornament.

Memory work and illustration.

PENMANSHIP.

(See Fifth Grade.)

MANUAL TRAINING.

Wood Work—Boys: Continuation of Fifth Grade work.

Sewing—Girls:

1. Doll's white skirt, drafting and cutting, and making.
2. Flannel skirt for doll, feather stitching, putting on bands, gathering flannel.
3. Large skirt, from each child's measurements.
4. Patching, hem and over-hand.
5. Darning.

MUSIC.

(See Fifth Grade.)

PHYSICAL CULTURE.

(See Fifth Grade.)

SEVENTH GRADE.

READING AND LITERATURE.

The mechanical or technical elements of reading are necessarily given much attention in the earlier school life of the pupils. This feature of the work is given less time in the grammar grades, and reading becomes a tool or instrument in the acquisition of new knowledge.

The relation of the art of reading to mental cultivation is made more prominent. Although the mechanical element is not neglected, the æsthetic element is given the greater place, and the study of reading passes into the study of literature.

With this in view, increasing attention is paid to the literary quality of the lessons and to the length and unity of the selections.

Particular stress is laid upon the proper preparation of the pupils' minds for the interpretation and appreciation of the reading matter. Proper historical and geographical setting is brought out by the means of questions. Depending on the nature of the selection, the fitting images from the life of man or nature are made as vivid as possible. Whatever will lead the pupil to comprehend the author's thought and give it clear and forcible expression is considered a part of this preparation.

The outcome of this work should be a love for reading and also a discriminating taste that is capable of separating what is worth reading from what is not.

Correlation of Reading with other work—

Pupils in the grammar grades have in their school room a library of well selected books. The supplementary reading and also the reading for amusement is carefully considered. Many books relating to history, literature, travel, science and art, as well as suitable works of fiction, are found on the shelves of the grammar room library. The reading table has the current numbers of magazines suited to the age of the pupils, St. Nicholas, Harper's Round Table, The Great Round World, etc.

In addition, this room, as do all of the rooms, contains bound volumes of art works, pictures, plaster casts, growing plants and other objects of beauty, with the hope that these all work together toward the uplifting of character.

In the belief that the teaching of intelligent patriotism is one of the great aims of the school system, the work of American writers and other literature pertaining to great events in the United States history, furnish the chief subject matter for these grades.

A collection of poems and prose extracts is used in connection with national holidays, birthdays of noted men, and other days of importance to our country. The poetical and prose extracts used to correlate history, geography, literature, and reading are not found in any one collection. The teacher makes her own selection, using whatever is appropriate. A partial list is given, but other selections are added as occasion arises for their use.

Hiawatha.
The Skeleton in Armor.
Columbus.
Evangeline.
Miles Standish.
Independence Bell.
Paul Revere's Ride.
Lexington.
Concord Fight.
The Story of Bunker Hill.
The Ballad of Nathan Hale.
The Old Continentals.
Legend of Sleepy Hollow.
Rip Van Winkle.
Dickens' Christmas Carol.

HISTORY.

The history work of these grades is carried on in the same spirit as the work of the lower grades. The pupil is led to think for himself, to form independent judgments, to enter into living sympathy with the people. The biographies of great central figures, Washington, Jefferson, Lincoln, are studied as types and contemporaneous history is centered around them.

But the development of the masses of people, their homes, customs, social life, industries, inventions, modes of communication, is made more prominent. Beside the many reference books, numerous public documents, speeches, records, etc., are studied in connection with the events that called them forth. (The Declaration of Independence, Washington's Farewell Address, and other material of the same nature.)

Exploration, routes of travel and campaigns are traced on maps. So far as possible the pupils are led to the use of original sources.

The use of poetry, fiction, pictures, charts, to illustrate the epoch of history under consideration is made a special feature of the work.

Material—

American history to the close of the Revolutionary War. Text books. "Studies in American History." Sheldon Barnes. "Leading Facts of American History." Montgomery.

Topics—

1. Physical characteristics of North America.

2. The native races with especial relation to their influence on the character of the settlers and the development of the colonies.

3. Comparison of the colonial policies of leading European nations.

4. Typical colonies studied in detail: Virginia, Massachusetts, New York, Pennsylvania, Maryland.

   a. Geographical conditions.
   b. Character of settlers.
   c. Occupations as determined by the above.
   d. Government, religion, education, social conditions, etc.
   e. Growth of religious toleration.

5. French and Indian wars and their effect upon the colonies.

6. Leaders against English policy.

7. Development of the causes of the Revolution.

8. Revolutionary War.

SCIENCE.

A comparative study of teeth, digestive organs (effects of narcotics), coverings, homes, industries, defence, locomotion, and distribution of animals.

In the winter term a general course in physiology and hygiene by the conversational method is given. Especial attention is given to the study of hygiene, the work in anatomy and physiology being intended as a foundation for the more advanced work of the Eighth Grade.

GEOGRAPHY.

A résumé of the geography of the world. Physical and mathematical geographywill be emphasized. Geography is completed in the Seventh Grade.

GRAMMAR.

With the preparation that the work so far has given, continue as in Sixth Grade.

ARITHMETIC.

Review factoring. Tests for divisibility. Multiples and common divisors. Percentage. Profit and loss. Brokerage.

INVENTIONAL GEOMETRY.

DRAWING.

Studies in light and shade perspective.
Pen and ink drawing. Illustrate.
Applied design. Historic ornament.
Study of harmony of colors.
Simple composition. Figure drawing; animal.

MANUAL TRAINING.

Wood Work—Boys: Continuation of Sixth Grade work. Venetian iron work.

Sewing—Girls:

a. Review of former work.
b. Sewing on tapes, hooks and eyes; making eyelets.
c. Button holes, sewing on the button.
d. Making white skirt from pattern drafted to individual measurements.
e. Costume for cooking.

MUSIC.

Daily chorus drill of ten minutes. Two lessons per week of thirty minutes each in sight reading in all keys.

SPELLING.

Daily written spelling of lists of common words from any source.

PHYSICAL CULTURE.

The Emerson Exercises, continued. Attention is now given especially to vigorous exercises, followed by those *directing* the energy aroused. The pupil is held responsible for good bearing, and a degree of mastery over the physical skill in club swinging is required.

EIGHTH GRADE.

READING AND LITERATURE.

(See remarks under Seventh Grade.)

The American Flag.
The Star Spangled Banner.
The Angels of Buena Vista.
Monterey.
The Kansas Emigrants.

The Slave's Dream.
The African Chief.
Brown of Ossawatomie.
The Soldier Boy.
Cumberland.
Barbara Friechie.
Kentucky Bell.
Burns of Gettysburg.
Dixie.
Maryland! My Maryland.
Stonewall Jackson's Way.
Sheridan's Ride.
Marching Through Georgia.
Battle Hymn of the Republic.
How Are You, Sanitary?
Roll Call.
The Arsenal at Springfield.
O Captain! My Captain!
The Blue and the Gray.
Commemoration Ode.
The Lady of the Lake.
Snow Bound.
Lays of Ancient Rome.

HISTORY.

In the Eighth Grade the text books are the same as those in the Seventh Grade. The material is found in the history of our country from the close of the Revolutionary War to the present time.

In all of the work in these grades, a careful study is made of events as showing tendencies, and not as mere

facts connected with dates. As an example, the preparation for the causes of the civil war is made while studying the first settlements.

In the physical characteristics, the climate, the rivers, the soil, the products, the occupations of the colonists, much is found that will determine the social conditions that will foster slavery or gradually suppress it. This is traced through all subsequent history, finding its culmination in the war between the North and South.

In the study of religion, education, of local government in the typical colonies, or of sectional legislation in the central government, the events that lead to closer union or tend to disintegrate are noted. The tariff question, the balance of power in the admission of states, and other questions causing different views as conditioned by the local welfare of sections, are considered. Material for comparisons, broad views and well-founded judgments may be found in the biographies of great leaders of conflicting thought: Washington and Jefferson; Clay and Calhoun; Grant and Lee, etc. Contemporaneous European history is taught as far as possible. Current events are given especial attention.

Reference Books—

John Fiske's.

a. Discovery of America.
b. Beginnings of New England.
c. The American Revolution.
d. The Critical Period of American History.

History of United States, by (*a*) Eggleston, (*b*) Higginson, (*c*) Bancroft.

Conspiracy of Pontiac. Montcalm and Wolfe, etc., by Parkman.

Stories of the Old Dominion. John Esten Cooke.

a. Irving's Life of Washington.
b. Columbus.
c. Rip Van Winkle.
d. Sleepy Hollow, etc.
e. Knickerbocker's History of New York.

American Statesman. American Commonwealth Series.

Old South Leaflets.

SCIENCE.

A study of the human body, the general plan on which it is built, followed by a careful study of the skeleton, skin, digestive, circulatory, and respiratory organs, special attention being given to hygiene and the effect of narcotics on the various organs.

The nervous system, its description, its function, its evolution (use of microscope), effects of narcotics, preparation of specimens and frequent drawings.

GRAMMAR.

In all written work the children will be held critically for a careful application of all grammatical principles.

ARITHMETIC.

Review percentage. Interest and discount. Ratio. Proportion. Involution. Evolution. Mensuration. Introduction to Algebra.

DRAWING.

Shaded studies. Pen and ink drawings for illustration.

Original applied design. Historic ornament. Memory drawing. Character pose. Insect study. Sketching from nature and simple composition—illustrating poems as Whittier's "Huskers."

MUSIC.

(2) Similar to Seventh Grade.

SPELLING.

(3) (See Seventh Grade.)

PHYSICAL CULTURE.

(4) (See Seventh Grade.)

MANUAL TRAINING.

Wood Work—Boys:

a. Continuation of Seventh Grade work, with simple exercises in turning.

b. Making of complete models, involving the use of turning lathe and the construction of different kinds of joints.

c. Same work as given in the Junior year in the Normal Department.

Domestic Economy—Girls:

Cooking, two hours per week:

1. The principles of simple cooking.
2. Chemistry of foods, elementary.
3. Physics applied to cooking.
4. Planning of simple meals.

HIGH SCHOOL.

The High School is not preparatory to the Normal. It is to enable persons who want to become high school teachers to observe expert work and finally teach classes in this department. It will also offer an opportunity for the study of secondary school problems. This course is planned to give the pupils an opportunity to receive a thorough and practical secondary education and also to enable them to enter higher institutions of learning.

This department is equipped with excellent teachers, laboratories, libraries, gymnasium and athletic apparatus.

NINTH GRADE.

1. Literature and English (4).
2. General History (4).
3. Biology—Botany (3).
4. Algebra (4).
5. Sloyd, Cooking, or Art (3).
6. Latin or German (Elective), (4).
7. Music—Chapel.
8. Physical Culture and Athletics.

TENTH GRADE.

1. Literature and English (3).
2. American History and Civil Government (2).
3. Physics (5).
4. Algebra—Geometry (4).
5. Sloyd, Sewing, or Art (3).
6. Latin or German (Elective), (4).
7. Music—Chapel.
8. Physical Culture and Athletics.

ELEVENTH GRADE.

1. Literature and English (3).
2. English History (2).
3. Physiology—Physiography (4).
4. Geometry—Arithmetic (4).
5. Latin or German (Elective), (4).
6. Biology—Zoology (3).
7. Music—Chapel.
8. Physical Culture and Athletics.

Normal College Department.

NORMAL COLLEGE.

High School graduates, or equivalent, are admitted to this department. The course covers four years. It leads to a diploma, which is equivalent to the batchelor of arts degree. 1. The aim is to prepare men and women for high school teachers. Those who take this course will have an opportunity to observe and teach in the high school four years along the lines of study pursued in the college department. 2. The aim is also to give young men and women an opportunity to prepare well for life by receiving a liberal education and at the same time to learn to do something.

EXPLANATION.

1. A school year is divided into two semesters of eighteen (18) weeks each.

2. A Term Hour, or Point, is a recitation a week for a semester, or eighteen (18) recitations.

3. A norm for school work in the college department is 20 recitations a week.

4. Forty Term Hours, 720 recitations, are a year's work.

5. A full laboratory period is ninety (90) minutes, and is equivalent to one recitation period.

6. The course is divided into Requisites and Electives.

7. The Student elects his major group. He is under the immediate direction of the professor of the department to which the group belongs. Five (5) recitations a week for four years are given to the major.

8. His minor subjects are determined by the professor who directs his major. Three (3) recitations a week are given to the minor.

9. English is required four (4) times a week the first and second years, and three (3) times a week the third and fourth years.

10. The professional group is required of all who intend to teach, being five (5) recitations a week for four years.

11. Three (3) recitations a week for the first and second years are purely elective; and four (4) recitations a week during the third and fourth years are purely elective.

12. The following are groups of subjects which serve as majors, and from which minors are selected and electives chosen:

Group I—College Algebra, Trigonometry, Modern Geometry, Analytical Geometry, Calculus and Theory of Equations.

Group II—Biology, Zoology, Botany and Physiology.

Group III—Physics, Chemistry, Physiography and Geology.

Group IV—German, French and Spanish.

Group V—Greek and Latin.

Group VI—English, Literature and History.

Group VII—History, Government and Political Economy.

Group VIII—Psychology, Anthropology, Sociology.

Group IX—Anthropology, Psychology, Sociology, History and Philosophy of Education, and Practice in Teaching.

Group X—The Industrial and Fine Arts.

Kindergarten Department.

FACULTY.

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

JOHN A. KLEINSORGE, PH. D., Principal,
Pedagogy.

BERTHA M. ANDREWS, Supervisor,
History and Philosophy of the Kindergarten, Mutter und Kose Lieder, Theory and Practice of Gifts and Occupations, Songs and Games, Theory of Kindergarten Practice, Garden Work, Story Telling, Supervision of Practice Work.

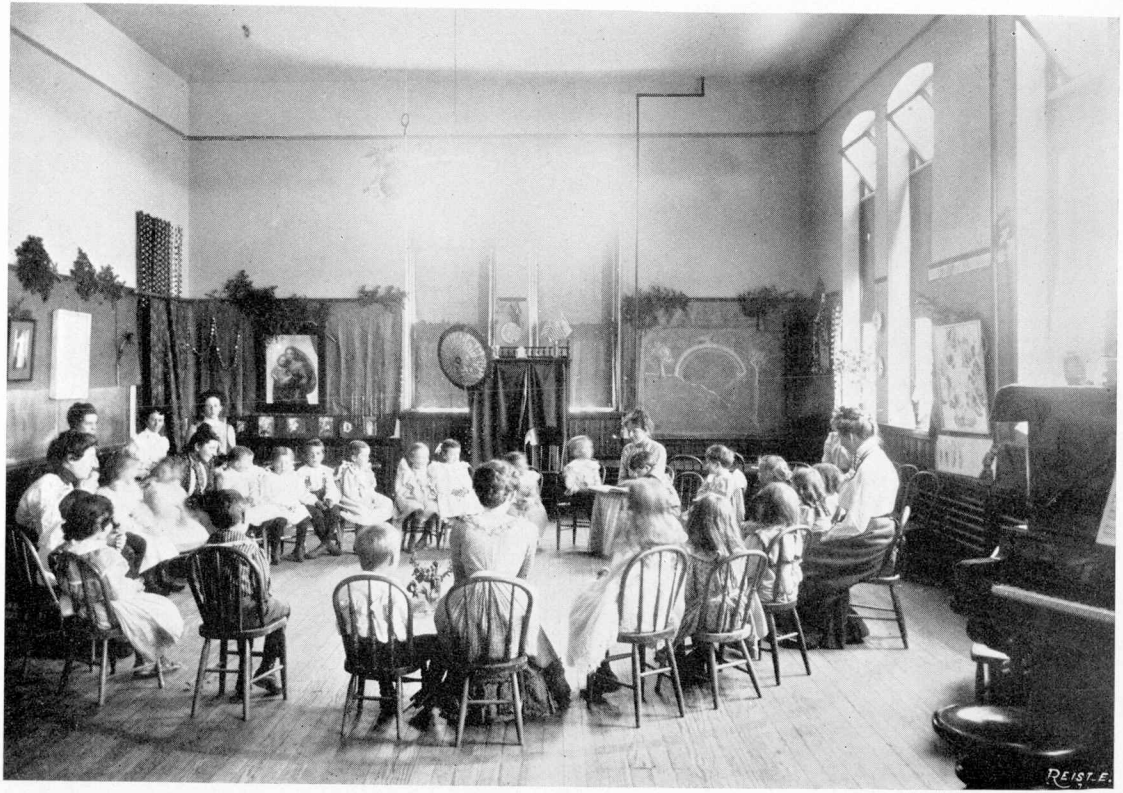
S. M. HADDEN, PD. B.,
Kindergarten Sloyd.

ANNA M. HEILEMAN,
Physical Culture.

HARRIET DAY,
Art.

GERTRUDE SMITH,
Domestic Economy and Kitchen Garden.

KINDERGARTEN ROOM.



KINDERGARTEN CIRCLE.

KINDERGARTEN—OUT DOOR GAMES.

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 admitted 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 THE NORMAL KINDERGARTEN DEPARTMENT.

Junior Year—

1. Kindergarten Theory.

   Discussions of practical child-training questions, based upon the "Study of Child Nature," Froebel's "Mutter and Kose-Lieder." Great emphasis is put upon this work, as it is the foundation of the entire Kindergarten system and embodies Froebel's philosophy of child nature. Abstracts will be written upon each song.

Gifts—Theory of the gifts in general and experimental work for the first six gifts.

Occupations—Theory and practical working out of all the occupations. Broadening Froebel's schools of work into large constructive employment, utilizing nature's materials.

Games—"In the Gifts and Occupation, 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 special emphasis is placed upon developing the play spirit of the students. Study is made of the development of race games, street games, social and individual games; principles and practice of the games. This work will correlate closely with Physical Culture work.

Program—Plans of Kindergarten program for the circle work for the day, week and year will be discussed, that the development and continuity of the whole may be impressed. Also the selection and adaptation of subjects for talks and stories in the Kindergarten with reference to the child's life and interests, his relationships and seasons of the year. Adaptation of nature lessons for children of Kindergarten age.

Kindergarten Observation—At least five hours per week of observation in the morning Kindergarten are required. The lesson observed will be thoroughly discussed by the group of Juniors, the Senior who conducted the lesson of the director.

2. Psychology.
   Same as Normal Junior work.
3. English.
   Same as Normal Junior work.
4. Science.
   Same as Normal Junior work.
5. Physical Culture.
   Dramatic interpretation. Bodily expression and rhythm.
6. Art.
   Same as Normal Junior work.
7. Music.
   Vocal—Voice placing and development of tone and rhythm; phrasing and expression; sight reading; study of children's voices; study of songs adaptable to children's voices; experience in teaching such songs.

   Instrumental—Soft touch, perfect time and rhythm necessary. Selection of instrumental music suitable for Kindergarten. Ability to interpret this music. Study of composures of music especially suited to children of Kindergarten age. 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 one piece from each of three groups of music given below, or three of similar character.

For reverent music, such as:

Handel's Largo.
Schumann's Traumerei.
Massenet's Intermezzo.
Schumann's Rosamonde.
Mendelssohn's Consolation, Confidence.

For quieting music, such as:

Mendelssohn's Spring Song.
Grieg's Spring Song.
Thome's Simple Confession.
Any folk songs.

For marches, such as:

The march from Faust.
The march from Tannhauser.
The march from Raff's Leonore.

Senior Year—

1. Kindergarten Theory.
   Froebel's Mother Play continued.
   Froebel's Education of Man.
   Miss Blow's Symbolic Education.
   Gift—Advanced gift work. Psychology of the gifts and occupations.
   Program—Advanced program work and practical methods, also discussions pertaining to difficulties which arise in daily work in the Kindergarten.
   Games—Same as Junior work. Also connection of Kindergarten work with primary work.
   Stories—Studies of Myths and Fairy stories; adaptation of stories for Kindergarten use. Value stories. Methods in story telling. Original and typical stories.
   Music—Same as Junior year.
   Special lectures on topics pertaining to the work.
   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.
2. Seminar.
   Same as regular Seniors.
   Two and one-half hours per week practice in the primary grades.

3. History and Philosophy of Education.
   Same as Seniors in Normal course.
4. English.
   Same as Seniors in Normal course.
5. History of Art.
   Same as Seniors in Normal course.
6. Domestic Science.
   Hygiene and sanitation.
   a. Aim of study. Health of family and students.
   b. Location of schools and homes. Soil, high or low lands, surroundings.
   c. Ventilation.
   d. Heating.
   e. Lighting.
   f. Water supply.
   g. Plumbing. Kinds and care of it.
   h. Disinfecting in case of disease.

   Emergencies:
   a. Bleeding and cuts.
   b. Burns and scalds.
   c. Sprains and breaks.
   d. Fainting; convulsions, fits, etc.
   e. Poison, drowning.

   Home Nursing.
   a. Care of sick room and patient.
   b. Care of foods and service of them.
   c. Symptoms of diseases and laws of boards of health with regard to diseases.

Cooking:

a. Composition, daily income and outgrowth of foods—growth.
b. Composition of foods; what best for children, and why.
c. Menus for breakfast, dinners, suppers, for children, and why.
d. Cooking; applying principles already given of cooking and serving the simple food.

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.
   Kindergarten observation and practice.
2. Domestic Science.
   Same as Senior Kindergarten.
3. Drawing.
4. Elective work.

It is a necessary part of the pedagogical training that the principles and practice of the Kindergarten be understood by all the graduates from the School. Lectures upon the Philosophy of the Kindergarten, upon Froebel's relations to other philosophers and educators, will be given. Observation in the Kindergarten and practical lessons will be given with the Gifts and Occupations.

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 De-

partment 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.

MOTHERS' 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 desire 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.

MUSIC.

The instrumental music is not connected in any official or financial way with the State Normal School.

Many of the Normal students want to take instrumental music, and this insertion is to inform them of the opportunities they have in connection with their other work.

TEACHERS.

KARL H. K. BRENDEL,
Piano and Organ.

MAY DALEY,
Piano and Organ.

KATHARINE C. LAMB,
Piano and Organ.

WILLIAM G. ESTABROOK,
Orchestral Instruments.

Vocal Music.

MR. BRENDEL'S PIANO AND ORGAN COURSES.

REMARKS.

Instruction is according to the method of the Royal Conservatory at Leipzig.

Special attention is given to technique and expression.

Teachers' course is a specialty.

Missed Lessons—All lessons missed must be paid for same as if taken, except when due notice and reasonable excuse is given (as in case of sickness).

Pupils must procure music and books at their own expense.

All pupils sufficiently advanced are expected to take part in the recitals.

Upon leaving, pupils receive a testimonial in which the time they have passed in this school, the diligence with which they have studied, and the progress they have made are faithfully stated.

GRADED COURSE OF WORK.

PIANO.

First Year—

Preparatory exercises, oral.
Kohler, op. 190.
Practices in major and minor scales (easy forms).
La alphabet studies, op. 17, Couppey.
Studies, op. 500-501, Sidus.
Little preludes and fugues, Bach.
Studies, op. 84, Loeschorn.
Asher Bulow, Leaves and Flowers.
Duvernoy, op. 120.
Easy classical selections.

Second Year—

Oral technical exercises, continued.

Loeschorn, op. 65-66; Heller, op. 47; Krause, op. 2; Czerney, op. 299.

Mozart Sonatas, Mendelssohn's Songs without words.

Bach's inventions, Cramner's etudes, Biehl octave studies.

Third Year—

Mertke technical studies.

Selections from Czerney, op. 740; Moscheles, op. 70.

Sonatas: Slemeti, Beethoven.

Studies: Chopin, Well-Tempered Clavier, Bach.

Studies: Liszt, Bulow; octave studies, Kullak.

Jadassohn's Harmony.

Mathew's History of Music.

A careful selection of pieces throughout the entire course from the best composers of the old and modern schools.

ORGAN.

Pedal studies, Becker.

Trios, op. 20, Richter.

Fugetten, op. 123, Rheinberger.

Selections: Bibl Merkel, Piutti, Pepperitz.

Preludes and Sonatas: Mendelssohn.

Fugues, arrangements from Well-Tempered Clavier, Bach, etc.

WILLIAM C. ESTABROOK'S ORCHESTRAL COURSES.

REMARKS.

ORCHESTRAL INSTRUMENTS.

William C. Estabrook studied violin with Eduard Balc and Richard Schlieven, two of the most eminent representatives of the Joachim school. His studies in piano and orchestration were made under the direction of Mertz and King.

After two years' concertizing with Schumann Quintette, he took charge of the orchestral music at Butler University. He was identified with the Indianapolis Conservatory for seven years.

VIOLIN.

Fundamental work in bowing, followed by Hohman's Book I, II and III. Daily studies in Shradieck's Technic; Vohlfahrt, opus 45; Kayser, opus 20; Maza, etudes speciales; Kreutzer, 40 studies; Maza, etudes brilliantes; Fiorillo, 36 studies; Gavinies, 24 studies; Rode, 24 Caprices; Maza, Ethudes d'Artistes; Vieuxtemp, concert studies; Bach, sonatas. Concerto study ranging from Viotti to Bruch.

Tone and interpretation emphasized.

'CELLO.

Dotzauer's school, with graded studies from Schroder, Davidoff and Golterman.

MANDOLIN.

Technical work chosen from Henlein, Branzeli and Cristofaro. Solo studies from Abt and Siegel.

GUITAR.

Henlein's or Currilo's method, supplemented by solos chosen from standard compositions.

ENSEMBLE WORK.

From the very first an opportunity will be given the pupil for this most broadening feature of music study. Duos, trios, rehearsals in the college club, and string quartette, afford a wide range for ensemble playing.

TEACHERS' COURSE.

A special Normal course is arranged for those expecting to teach any of the above instruments.

Mrs. Katharine Lamb has had excellent opportunities in her preparation for her work.

VOCAL MUSIC.

The Vocal Music department is under the supervision of the State Normal School. This year there will be employed a professor in this department whose entire time will be devoted to the teaching of music to those who intend to teach children, to the end that they may know how to train children to sing and read music. This department will also have charge of the chapel singing, the choruses, the glee clubs and the music in the Training department.

It is the intention of the institution to so develop the Music department as to make it second to no other

department in the institution. Those who go out must know how to teach little children music. They must also know how to teach teachers how to teach little children. The methods pursued will be those that are found to be the best through years of experience in the best schools of this country. No one narrow method conception will dominate the work, but an intelligent view of all methods, together with the selection of the very best and the application of these best methods in the teaching of children.

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 conform 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

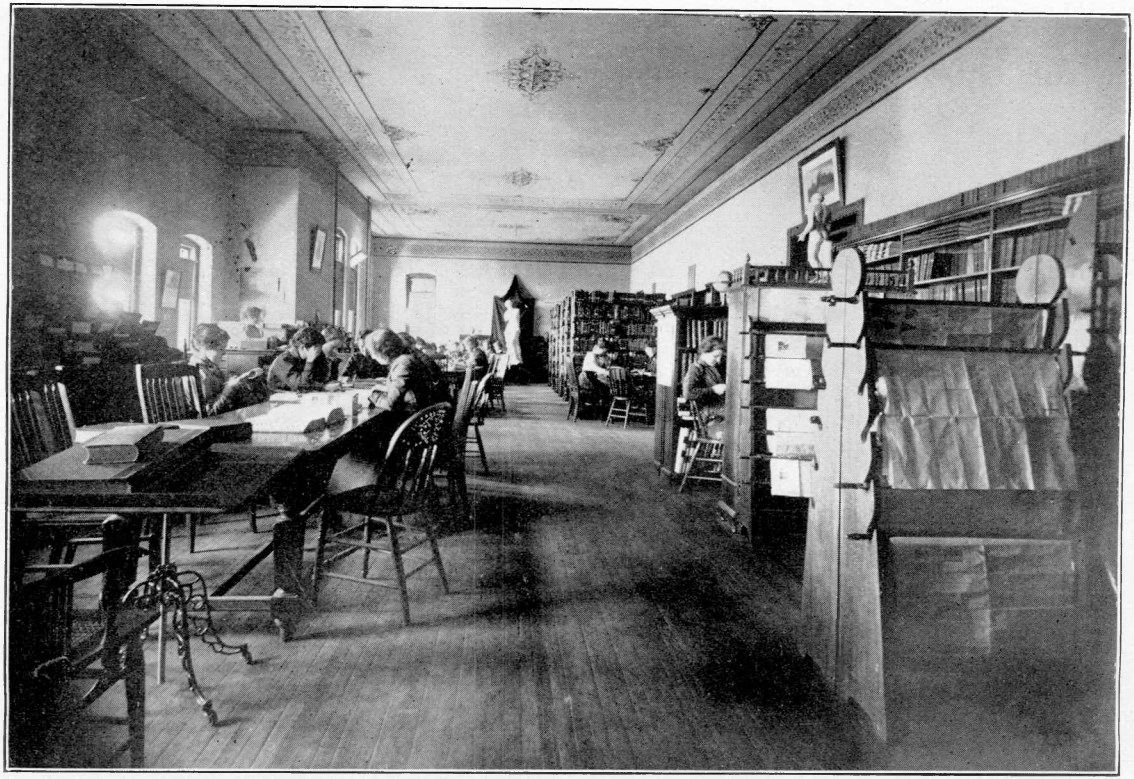
works of a general nature, as history, biography, literature, fiction, poetry and science. There are about ten thousand volumes.

Among the reference books are: The Encyclopædia Britannica, American, Johnson's, People's, Young People's, and a number of smaller 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. Among them are the following:

American Youth.
Athenæum.
Atlantic Monthly.
Art Amateur.
Arena.
Am. Journal of Psychology.
American Teacher.
American Naturalist.
Auk.
Am. Mathematical Journal.
American Agriculturist.
Am. School Board Journal.
Art Education.
Book News.
Babyland.
Books.
Botanical Gazette.
Brain.
Bulletin of the Tory Botanical Club.
Contemporary Review.
Colorado School Journal.
Century.
Chautauquan.
Critic.
Current Literature.
Current History.
Cosmopolitan.
Child Garden.
Colorado Woman.
Eclectic.
Education.



LIBRARY.

Educational Review.
Educational Journal (Canada).
Educational Foundations.
Forum.
Fortnightly Review.
Forest and Stream.
Florida Journal.
Good Housekeeping.
Great Divide.
Garden and Forest.
Harper's Monthly.
Harper's Weekly.
Harper's Bazar.
Harper's Round Table.
Historia.
Independent.
Illustrated American.
International Journal of Microscopy.
Journal of Am. Folk Lore.
Johns Hopkins University Studies.
Journal of Education (New England).
Journal of Pedagogy.
Journal of Geology.
Journal of Education (London).
Kindergarten News.
Kindergarten Magazine.
Literary Digest.
Literary World.
Ladies' Home Journal.
Mind.
Magazine of Art.
Monist.
Music.
Monthly Bulletin.
Nineteenth Century.
North American Review.
New York School Journal.
Nature.
New England Magazine.
Northwestern Journal of Education.
National Geographic Monographs.
Nation.
Outing.
Overland Monthly.
Ornithologist.
Observer.
Outlook.
Our Times.
Popular Science Monthly.
Public Opinion.
Popular Educator.
Pansy.
Public School Journal.
Political Science Quarterly.
Pedagogical Seminary.
Pacific Educational Journal.
Psychological Review.
Philosophical Review.
Popular Science News.
Primary Education.
Review of Reviews.
Reader.
Sports Afield.
Scribner.
St. Nicholas.
Scientific American.
Scientific American (Supplement).
Scientific American (Building Edition).
Sun and Shade.
School Review.
School Bulletin.
School Education.
Science.
Southern School Journal.
Teachers' Institute.
Teachers' World.
The New World.
Virginia School Journal.
Werner's Voice Magazine.
Youth's Companion.
Yale Review.

NEWSPAPERS.

Weekly Inter Ocean.
Pittsburg Weekly Dispatch.
New York World.
Republic.
Denver Daily News.
Denver Evening Post.
Canon City Record.
Ft. Morgan Times.
Ft. Collins Courier.
Greeley Sun.
Weld County Republican.
Greeley Herald.

PEDAGOGICAL MUSEUM.

I. OBJECT.

1. It assists teachers and those preparing to teach by giving them an opportunity to examine text books, supplementary books, charts, apparatus, devices, school work, etc.

2. They learn where to get this material, and at what price.

3. In short, they become acquainted with the implements of education.

4. It will give them an idea of the work done in the different schools of the country.

II. MUSEUM.

It contains publications donated by authors and publishers; school apparatus; charts; devices, school supplies in general; and work done by the different schools of the country.

III. MANAGEMENT.

Whatever is donated to the museum is kept in cases and is not used by the institution. It is simply open to inspection by teachers, those preparing to teach, and by visiting teachers. As an evidence of good faith, anything placed in the museum is subject to the order of the person or house placing it.

IV. DONORS.

1. Publishers of school books, manufacturers of school apparatus, dealers in school supplies, authors of school books, and others having anything in the school line to exhibit, are invited to place articles in this museum.

2. Superintendents of schools and teachers are invited to send specimens of work done by their pupils for deposit in the museum. In accordance with the foregoing, the institution solicits donations from all those who are interested and who think it will be mutually advantageous.

ORGANIZATIONS.

LITERARY SOCIETIES.

Connected with the school are three literary societies —the Platonian, the Chrestomathean and the Clionian. Here is afforded opportunity for students to "*actualize themselves.*" Here is attained a confidence in one's self—a confidence of body and mind, and in expression. In short, there is attained a mastery over self.

These societies are quite an element in the life of the school. Much interest is manifested by the members. Interesting features are the public entertainments given each term. Each student is expected to join one of these. The initiation fee is one dollar. The term dues are twenty-five cents.

ATHLETIC ASSOCIATION.

"*A sound mind in a sound body.*"—JUVENAL.

There is an athletic association, in which is manifested considerable interest. Its object is two-fold: Recreation, or enjoyment, and physical training.

The plays consist of *Foot Ball, Lawn Tennis, Croquet, Alley Ball, Tug of War, Base Ball, Delsarte, Calisthenics, Archery, Golf, Target Shooting.*

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.

THE CRUCIBLE COMPANY.

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.
FOR 1900-1901.

Florence D. Wood, Editor-in-Chief; C. J. O'Connor, Advertising Agent; Victor E. Keyes, Business Manager; Viola B. McCloskey, Circulator; Clinton A. Bent, Literary Editor; N. Margaret Barnard, Pedagogical Editor; Jean Robertson, Kindergarten Editor; Edith McMullin, Exchange Editor; Marcella Gibbons, Assistant Literary Editor; S. M. Hadden, Alumni Editor; Mary Adelaide Weller, General Notes; Alice Henderson, Athletic Editor.

CRUCIBLE STAFF.
1901-1902.
(Beginning September 10.)

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Marcella Gibbons, Editor-in-Chief; Mary Priscilla Enoch, Literary Editor; Mary Keightley, Pedagogical Editor; Olive C. West, Kindergarten Editor; Zadia Pechin, Exchange Editor; Lois Reed, Athletic Editor; John Harbottle, Business Manager; Dee M. Scriven, Advertising Agent; Hilda Green, General Notes; Frances Hiatt, Circulator.

The *Crucible*, one year in advance, 50 cents; one term, in advance, 25 cents; single copy, 10 cents.

All remittances must be made to the Business Manager. If any subscriber should fail to receive the paper at the proper time, he will be doing us a favor by informing us of the fact at once. Apply to the Advertising Agent for advertising rates. Entered at the postoffice at Greeley, Colorado, as second-class matter.

CHRISTIAN UNION.

Realizing the necessity for religious culture in the school, and believing much good would come of Christian association, a number of those interested organized themselves into a union early in 1892. The membership has averaged nearly 150 each year, and has represented the religious thought of the school. Meetings are held every Sabbath afternoon.

The following are the committees of the Christian Union:

MEMBERSHIP COMMITTEE.

Duty—To secure and assist new members.

Chandos McNeal, Stella M. Carnine, Minnie Bay, Frances Hiatt, Dee M. Scriven, Mary P. Enoch, Marcella Gibbons, Eva May Moss, Lillian W. Aude and Frank Smith.

CORRESPONDENCE COMMITTEE.

Duty—To furnish any information regarding the school and its interests to persons desirous of the same.

Marcella Gibbons, No. 566 Twenty-first street, Ogden, Utah; Mary Priscilla Enoch, Grand Junction, Colo.; Margaret Willcox, Fruita, Colo.; Olive West, Greeley, Colo.; Lois Reid, Greeley, Colo.; John V. Crone, Greeley, Colo.; William Sellers, Pueblo, Colo.

NEW STUDENTS AND RECEPTION COMMITTEE.

Duties—To assist new students and form a general reception committee for the year. This committee will meet students at the train. They will wear a badge of the school colors, lavender and lemon, with the letters "C. U."

Mary Priscilla Enoch, Stella M. Carnine, Zadia Pechin, Lois Reid, Frances Hiatt, Helene Slavin, Claudia Bowen, Chandos McNeal, Olive West, Margaret Willcox, Hilda Green, Ethel Brown, Esther M. Ross, Sarah E. Sleeper, William Sellers, D. E. Wiedman, Peter Keplinger, Frank Smith and Dee M. Scriven.

ALUMNI ASSOCIATION.

The Alumni Association is the strong organization for influence connected with the school. There are now 467 members. This means as many centers of influence for better educational work and for their *Alma Mater*, "Old Normal."

PEDAGOGICAL CLUB.

This is a faculty organization. It meets every first and third Monday in the school months. Technical papers are read and discussed, books reviewed, new movements are studied and discussed, policies inaugurated and educational effort directed.

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 a 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 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.

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 persons 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 school is free.

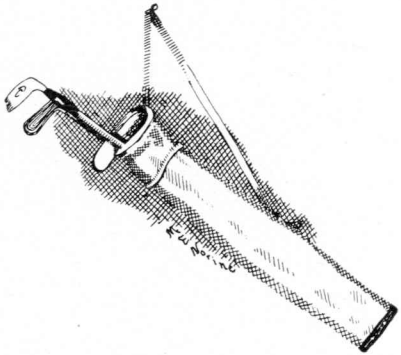
Persons attending who do not so declare their intention, pay tuition at the following rates per term:

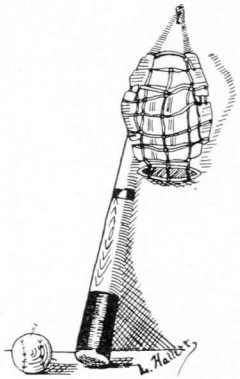
First semester, $10; second semester, $10.

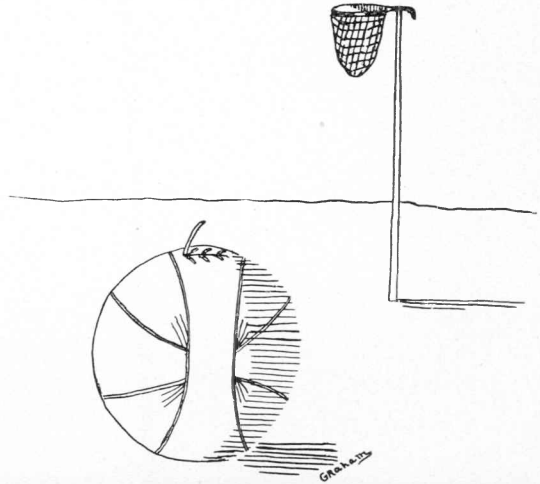
Students can board and room in private families for from $3.00 to $4.50 per week. Club boarding, $1.25 to $2.25. Self-boarding costs from $1.25 to $2.00. Room rent from 50 cents to 75 cents per week.

A fee of $3.00 per semester is charged each student for the use of text books. Also a reading room fee of 50 cents a semester is charged each student for the use of periodicals, magazines and other papers, making $7.00 for the year.

BASKET BALL TEAM.




L. Hallett

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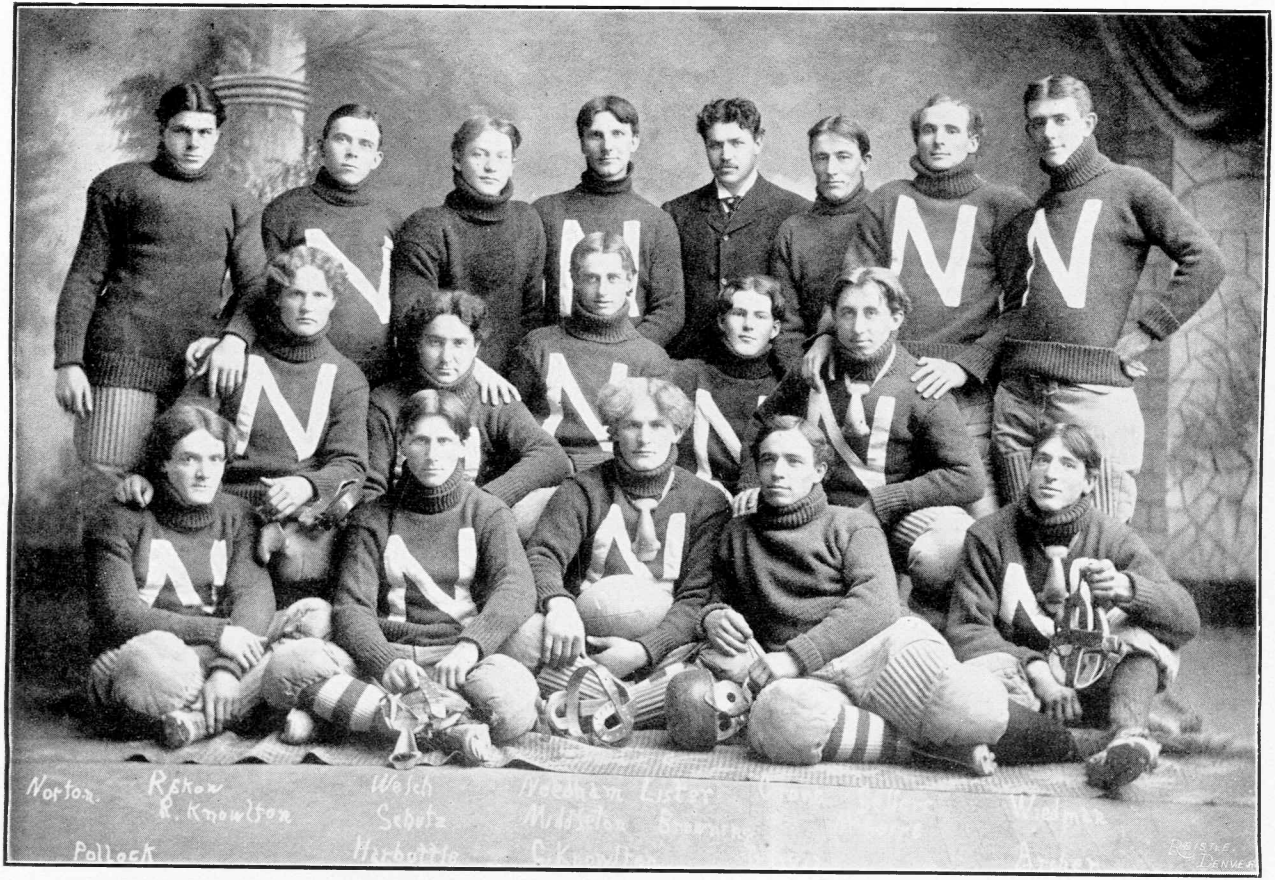
Norton
Pollock
Rekow
R. Knowlton
Welch
Schutz
Herbottle
Woodham
Lister
McIntyre
Summers
Woolman

BASKET BALL.

FIELD DAY—CLUB RACE.

BASKET BALL GAME.

All students are required on entering the school to pay a laboratory fee of $1.00 each.

A fee of $1.00 is charged all Normal students who do required work in the sloyd laboratory, $1.50 for domestic economy.

Each student pays an athletic fee of 50 cents.

ADMISSION.

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

Catalogue of Students.

CATALOGUE OF STUDENTS.

NORMAL DEPARTMENT.

SENIORS—69.

Adams, Mary.....Denver, Colo.
Allnutt, Frederic.....Greeley, Colo.
Andrews, Adell.....Alexander, Colo.
Bailey, Louise.....Bloomington, Ills.
Barnard, Margaret.....Pueblo, Colo.
Bent, Clinton.....Brighton, Colo.
Beswick, Dolphine.....Colorado Springs, Colo.
Breuer, Emma.....Denver, Colo.
Broquet, Prudence.....Manhattan, Kan.
Carter, Carrie.....Paonia, Colo.
Carter, Lina.....Denver, Colo.
Craven, May.....Leadville, Colo.
Crone, John V.....Marathon, Iowa
Day, Reba.....Greeley, Colo.
Delbridge, Lucy.....Greeley, Colo.
Dempsey, Nettie.....Pueblo, Colo.
Dugan, Julia.....Durango, Colo.
Edwards, Mabel.....Carbondale, Pa.
Filkins, Grace.....Brush, Colo.
Gibbs, Elizabeth.....Hooper, Colo.
Graham, Melcena.....Greeley, Colo.
Hall, Agnes.....Gunnison, Colo.
Hamm, Elsie.....Saguache, Colo.
Harrington, Ada.....Hartsel, Colo.
Henderson, Alice.....Greeley, Colo.
Holland, Nena.....Greeley, Colo.

House, Louise.....Greeley, Colo.
Jones, Katie.....Erie, Colo.
Kesler, Joseph.....Durango, Colo.
Keyes, Victor.....Oneonta, N Y.
Kittle, Helen.....Greeley, Colo.
Knowlton, Charles.....Greeley, Colo.
Lowe, Anna.....Denver, Colo.
Lundy, Katie.....Evans, Colo.
McCarthy, Mary.....Pueblo, Colo.
McCloskey, Viola.....Colorado Springs, Colo.
McCoy, Anna.....Thompsonville, Kan.
McMullin, Edith.....Saguache, Colo.
McKelvey, Kathryn.....New Windsor, Colo.
McPherson, Mattie.....Boulder, Colo.
McPherson, William.....Hiawatha, Kan.
Merchant, Maud M.....Denver, Colo.
Morris, Florence.....Cripple Creek, Colo.
Needham, Charles.....Altamont, Ills.
Norine, Mayme.....Grand Junction, Colo.
Norton, Nona.....Tallula, Ills.
O'Brien, Rhoda.....Denver, Colo.
O'Connor, Charles.....Edina, Mo.
Onstine, Eulala.....Denver, Colo.
O'Keefe, Agnes.....Denver, Colo.
Parrett, Kate.....Alcott, Colo.
Peterson, Hanna.....Silver Plume, Colo.
Remington, Mayme.....Fairplay, Colo.
Robinson, Abbie.....Glenwood Springs, Colo.
Robertson, Jean.....Sulphur, Wyo.
Schutz, Tyro.....Granville, Iowa.
Scott, Lucy.....Greeley, Colo.
Scheffler, Josephine.....Central City, Colo.
Sellers, Gilbert.....Littleton, Ill.
Snyder, Laura.....Greeley, Colo.
Tefft, Ruth.....Ophir, Colo.
Veverka, Madeline.....Willard, Colo.

Watson, Alice.....Denver, Colo.
Welch, Hattie.....Greeley, Colo.
Welch, Harry.....Greeley, Colo.
Weller, Mary.....Colorado Springs, Colo.
Webster, Ella.....La Junta, Colo.
Wolfenden, Anna.....Greeley, Colo.
Wood, Florence.....Greeley, Colo.

JUNIOR CLASS—143.

Alby, Mary.....Lincoln, Neb.
Allen, Alice.....Greeley, Colo.
Allen, Josephine.....Loveland, Colo.
Alley, Mary.....Lincoln, Neb.
Amos, Ora.....Loveland, Colo.
Archer, Lois.....Greeley, Colo.
Archer, Ellery.....Greeley, Colo.
Asmus, Karine.....Akron, Colo.
Ball, William.....Denver, Colo.
Bandy, Pearl.....Whitewater, Colo.
Barnes, Emily.....Wellsville, Ohio.
Bowman, Julia.....Pueblo, Colo.
Bowman, Mary P.....Pueblo, Colo.
Bracewell, Cora.....Clio, Iowa.
Brush, Ada.....Greeley, Colo.
Beetham, James.....Greeley, Colo.
*Beardsley, Earl.....Evans, Colo.
Boylan, Daisy.....Hubbard, Iowa.
Browning, Holton.....Los Angeles, Calif.
Bowen, Claudia.....Leadville, Colo.
Butcher, Alice.....Erie, Colo.
Campbell, Amy.....Grand Junction, Colo.
Campbell, Jennie.....Loveland, Colo.
Cunningham, Alice (Mrs.).....Greeley, Colo.
Carine, Stella.....Denver, Colo.
Cheeley, Ella.....Ft. Lupton, Colo.

*Deceased.

Coil, Linnie.....Venice, Mo.
Crawford, Sadie.....Denver, Colo.
Clark, Pearl.....Kit Carson, Colo.
Clonch, Nell.....Aspen, Colo.
Davidson, Nellie.....Lake City, Colo.
Day, Etta.....Masters, Colo.
Day, Fannie.....Masters, Colo.
Darnell, Amy.....Grand Junction, Colo.
Detweiler, Florence.....Breckenridge, Colo.
Dixon, Josephine.....Greeley, Colo.
Dodds, John.....La Junta, Colo.
Dole, Elma.....Montrose, Colo.
Enoch, Mary.....Grand Junction, Colo.
Fuller, Alice.....Williamsport, Pa.
Follett, Lynne.....Green Bay, Wis.
Farnworth, Mary.....Severance, Colo.
Fagan, Katie.....Berthoud, Colo.
Fugate, Laura.....Walsenburg, Colo.
Fugate, Inda.....Walsenburg, Colo.
Garcia, James.....Artman, Colo.
Geffs, Bessie.....Denver, Colo.
Givens, W. B.....Las Vegas, N. M.
Gibbons, Marcella.....Leadville, Colo.
Gordon, Carrie.....Greeley, Colo.
Green, Hilda.....Ludlow, Colo.
Grove, Rhena.....Greeley, Colo.
Griffith, Elsie.....Cheyenne, Wyo.
Hallett, Louise.....Aspen, Colo.
Hiatt, Frances.....Black Hawk, Colo.
Heilman, Clara.....Cedar Falls, Iowa.
Henderson, Grace (Mrs.).....Greeley, Colo.
Harbottle, John.....Atwood, Colo.
Inman, Minnie.....Denver, Colo.
Ingram, Grace.....Greeley, Colo.
Jessup, Leona.....Greeley, Colo.
Jessop, Lizzie.....Coal Creek, Colo.

Johnston, Rhoda.....Hagerman, Ohio.
Kelsey, Sophia.....Ft. Lupton, Colo.
Kitchell, Jennie.....Ft. Collins, Colo.
Kirkendall, Lillie.....Denver, Colo.
Keightley, Anna.....Pueblo, Colo.
Kennedy, Ethel.....New Windsor, Colo.
Keplinger, Peter.....Harper, Kans.
Knowlton, Richard.....Greeley, Colo.
Kolander, Martha.....Monte Vista, Colo.
Ladd, Dora.....Denver, Colo.
Lewis, Charlotte.....Pueblo, Colo.
Lee, Florence.....Greeley, Colo.
Lovering, Esther.....Buena Vista, Colo.
Llewellyn, Mayme.....Greeley, Colo.
Mergelman, Clara.....Iola, Colo.
Mergelman, Lulu.....Iola, Colo.
Meyer, Mabel.....Gunnison, Colo.
Middleton, Clyde.....New Windsor, Colo.
Moss, Eva.....Colorado Springs, Colo.
Murphey, Effie.....Cripple Creek, Colo.
Martin, Teena.....Greeley, Colo.
McIntyre, Jennie.....Ft. Collins, Colo.
McGuire, George.....Cripple Creek, Colo.
McPherson, Anna.....Hiawatha, Kan.
McCoy, Guy.....Loveland, Colo.
McCullough, Edith.....Greeley, Colo.
Mitchell, Bessie.....Walsenburg, Colo.
Mundee, Helen.....Silverton, Colo.
McNeal, Chandos.....Golden, Colo.
Mooney, William.....Pueblo, Colo.
MeNee, Jessie.....Blairsburg, Iowa.
Neumann, Emma.....Elbert, Colo.
Norton, Thomas.....Nevada, Mo.
O'Neal, Lillie.....Greeley, Colo.
Osborn, Lulubel.....Montrose, Colo.
Proctor, Ula.....Canon City, Colo.

Packer, W. R.....Evans, Colo.
Patten, Flora.....Omaha, Nebr.
Pechin, Zadia.....Rushville, Ills.
Powers, Myrtle.....New Windsor, Colo.
Pendell, Dorcas.....Saginaw, Mich.
Porter, Dell.....McComb, Ills.
Pollock, Ralph.....Greeley, Colo.
Peare, Florence.....Canon City, Colo.
Rainbow, Mabel.....Gunnison, Colo.
Rankin, Bessie.....Greeley, Colo.
Rakow, Alee.....Primrose, Iowa.
Rugh, Stella.....Greeley, Colo.
Reynolds, Alma.....Denver, Colo.
Rhys, Mary.....Roggen, Colo.
Reid, Lois.....Greeley, Colo.
Ross, Ed.....Dexter, Iowa
Rhyn, Macie.....Cardiff, Colo.
Ross, Ed.....Dexter, Ia.
Scriven, Dee.....Granada, Colo.
Scott, Daniel.....Greeley, Colo.
Sellers, William.....Doddsville, Ills.
Stevens, Eva (Mrs.).....Pueblo, Colo.
Stinson, Helen.....Denver, Colo.
Singleton, Nellie (Mrs.).....Florence, Colo.
Stone, Alice.....Colorado Springs, Colo.
Smith, Frank.....Coats, Kan.
Smith, Catharine.....Denver, Colo.
Slaven, Helene.....Leadville, Colo.
Smith, Rose.....DeBeque, Colo.
Tilyou, Mabel.....La Salle, Colo.
Vail, Marie.....Salida, Colo.
West, Olive.....Greeley, Colo.
Wood, Ellen.....Cripple Creek, Colo.
Washburn, Lizzie.....Greeley, Colo.
Whealon, Mary.....Bellaire, Ohio.
Weidman, Dueffort.....Ft. Collins, Colo.

Willie, Anna.....Evans, Colo.
Watson, Edna.....Lake City, Colo.
Wilson, Grace.....Greeley, Colo.
Wilson, Isa.....Eaton, Colo.
Wilcox, Margaret.....Fruita, Colo.
Wilson, Myrtle.....Harrisburg, Colo.
Williams, Dee.....Granite, Colo.
Whitham, Xavia.....Denver, Colo.
Williams, Claude.....Kersey, Colo.

SOPHOMORES—45.

Abrams, Mabel.....Denver, Colo.
Alps, George.....Loveland, Colo.
Alexander, Grace.....Hooper, Colo.
Anderson, Dorothea.....Denver, Colo.
Aude, Lillian.....Granite, Colo.
Baker, Alice.....San Francisco, Cal.
Bay, Minnie.....Fowler, Colo.
Bell, Lulu.....Seibert, Colo.
Beach, Alice.....Neenah, Wis.
Brown, Ethel.....Rico, Colo.
Brockway, Maude.....Greeley, Colo.
Cluphf, Gertrude.....Burlington, Colo.
Darnell, Effie.....Grand Junction, Colo.
Daniels, Eva.....Telluride, Colo.
Edmonds, Georgia.....Loveland, Colo.
Felmlee, Ada M.....Greeley, Colo.
Gilbert, Elizabeth.....Fowler, Colo.
Graham, Edith.....Loveland, Colo.
Hale, Dollie.....Greeley, Colo.
Hansen, Mary L.....Globeville, Colo.
Hansen, Laura.....Dix, Nebr.
Herrick, Olive.....Cripple Creek, Colo.
Jones, Lulu.....Platteville, Colo.
Lockwood, Mabel.....Salida, Colo.
McDonald, Lottie.....Kokomo, Colo.

McDonald, Mollie.....Leadville, Colo.
Mosier, Anna.....Lucerne, Colo.
Northway, Mabel.....Gunnison, Colo.
Oney, Roscoe.....Greeley, Colo.
Pfaffenberger, Bertha.....Fruita, Colo.
Pollock, Alice.....Greeley, Colo.
Pollock, Marion.....Greeley, Colo.
Porter, Mildred.....Ft. Lupton, Colo.
Sleeper, Sarah.....Denver, Colo.
Smith, Jennie B. (Mrs.).....Eldora, Colo.
Stallsteimer, Della.....Durango, Colo.
Tadlock, Kate.....Phillipsburg, Kan.
Taylor, Hope.....Fruita, Colo.
Terry, Edna.....Canon City, Colo.
Wakeman, Alleah.....Rico, Colo.
Williams, Albert.....Greeley, Colo.
Williams, Claude.....Kersey, Colo.
Whitham, Bronte.....Denver, Colo.
Youngclaus, Katie.....Rico, Colo.
Youngclaus, Emma.....Rico, Colo.

SPECIALS—14.

Abbott, Edward.....Greeley, Colo.
Abrams, Marie.....Snyder, Colo.
Bullock, Katie.....Bland, N. M.
Colquhoun, Lizzie.....Clachan, Ont.
Downey, E. H.....Greeley, Colo.
Hilton, Frank.....Greeley, Colo.
Imboden, J. W.....Greeley, Colo.
Kendel, Alice.....Greeley, Colo.
Meeker, Maud.....Greeley, Colo.
Potter, Linda (Mrs.).....Greeley, Colo.
Rankin, Nellie.....Greeley, Colo.
Strauss, Rosa (Mrs.).....Greeley, Colo.
Tann, Charles.....Greeley, Colo.
Vose, Warren.....Greeley, Colo.

HIGH SCHOOL DEPARTMENT.

TENTH GRADE—21.

Adams, Lewis.
Armstrong, Margaret.
Baldwin, Fred.
Beardsley, Myrtle.
Benton, John.
Brown, Albert.
Buckley, Emma.
Day, Grace.
Day, William.
Dolan, Maggie.
Ellis, Ruth.
Foster, Bessie.
Kimball, Carrie.
Niemeyer, Blanch.
Patterson, Bessie.
Putnam, Wilton.
Remington, Katie.
Robb, Pearl.
Snyder, Tyndal.
Wearin, Guy.
Wilkinson, Mabel.

NINTH GRADE—33.

Alden, Frankie.
Adams, Roxie.
Alexander, Ray.
Amoss, Reba.
Beardsley, Eugene.
Bolander, Oscar.
Bodfish, Gertrude.
Cummings, Josie.
Day, Emma.
Ellis, Ralph.
Fullerton, Elva.
Foster, Laura.
Hodgson, Albert.
Hicks, Nora.
Ingersoll, Jay.
Jones, Pearl.
Klein, Rose.
Madden, Frank.
McMillen, Ella.
McMillen, Mary.
Norris, Louella.
Norris, Lee.
Pollock, Carl.
Pollock, Marion.
Robertson, Annie.
Reynolds, Enona.
Sibley, Blanche.
Snook, Harry.
Starriett, Etta.
Terry, Louise.
Ward, Olive.
Williams, Nellie.
Wylie, Eva.

GRAMMAR DEPARTMENT.

EIGHTH GRADE—24.

Abbott, Vivian.
Beall, Roy.
Blaney, Laurel.
Cummings, Martin.
Cunningham, Frank.
Elliott, Maynard.
Edgar, John.
Edgar, Ellis.
Finch, Myrtle.
Gross, Allan.
Hicks, Dessie.
Hamilton, Pearl.
Jenneway, Fanny.
Keefe, Thomas.
Lohr, Mary.
Lohr, Charlie.
McHale, Mary.
Newland, Ocie.
Randall, Homer.
Roseman, Emma.
Sibley, Winnie.
Ve Verka, Mary.
Williams, Frances.
Weigl, Johannah.

SEVENTH GRADE—24.

Armstrong, Nellie.
Brown, Grace.
Clark, Myra.
Clark, Julia.
Campbell, Loyd.
Davis, George.
Felmlee, Walter.
Gibbons, John.
Goetter, William.
Hill, Charlie.
Hill, Myrtle.
Heinig, Sadie.
Jessup, Loren.
Jenneway, Bert.
Kimball, Kittie.
Knutson, Timmie.
Miller, Mattie.
Montague, Gladys.
Nelson, Ella.
Nelson, Mary.
Rugh, Dukie.
Waite, Nellie.
Waters, Albert.
Waters, Laura.

SIXTH GRADE—21.

Alexander, Edith.
Archibald, Allie.
Baldwin, Myrtle.
Beardsley, Edith.
Day, Fred.
Elliott, Ivan.
Finch, Lester.
Hobson, Guy.
Hobson, Hattie.
Leininger, Ernest.

Leininger, Evart.
Lohr, Roy.
Luark, James.
McCune, Ethel.
Meller, Wilhelm.
Miller, Logan.
Munce, George.
Morris, Summer.
Pier, Harold.
Puckett, Lewis.
Stephens, Dannie.

FIFTH GRADE—26.

Bradley, Ethel.
Brown, Elmer.
Butters, Harry.
Cahill, Joe.
Clegg, Belva.
Cunningham, Nellie.
Elmer, Marjorie.
Gerry, James.
Gerry, Gertrude.
Houghton, Bera.
Lutes, Raymond.
McCreery, Mildred.
Morris, Clara.
Phillipson, Claude.
Sharitt, Daisy.
Sheeley, Clayton.
Sheeley, Lula.
Tegtman, Carrie.
Tegtman, Maggie.
Thomas, Amy.
Thompson, Irving.
Thompson, Laura.
Wearin, Fern.
Weikert, Hallie.
Winslow, Allan.
Winslow, Elsie.

PRIMARY DEPARTMENT.

FOURTH GRADE—24.

Brockway, Ada.
Benge, Johnnie.
Beardsley, Inez.
Brown, Willie.
Barnes, Ralph.
Day, Rob.
Elliott, Bernett.
Finch, Clarence.
Flager, Pearl.
Gross, Ruth.
Gerry, Ina.
Hobson, Daisy.
Knutson, Gilbert.
Ling, Bessie.
Luark, Addie.
McCune, Elza.
Morris, Ruth.
Miller, Jimmie.
Nelson, Marshall.
Neill, Ralph.
Pier, Stanhope.
Paine, Velma.
Thomas, Victor.
Thompson, Earl.

THIRD GRADE—17.

Archibald, Ray.
Finch, Callie.
Fullerton, Howard.
McCune, Frank.
McClain, Jeane.
Marta, Ella.
Nelson, Willie.
Nelson, Willie E.
Ovesen, Theodore.
Puckett, Gertrude.
Swanson, Leila.
Swanson, Lois.
Swanson, Harry.
Shearer, Harlan.
Tegtman, Mary.
Waters, Harry.
Winslow, Marvin.

SECOND GRADE—25.

Butters, Alfred.
Bradley, Edgar.
Cahill, Nellie.
Cook, Thomas.
Downard, Inez.
Downard, Russell.
Elliott, Harry.
Farr, Gladys.
Grow, Ruth.
Griffin, Lewis.
Gerry, Gladys.
Hobson, Oliver.
Houghton, Evelyn.
Holland, Dale.
Lovelady, Opal.
Luark, Lucile.
Nelson, Burns.
Nelson, Blanche.
Newland, Rollie.
Onstine, Osgood.
Pier, Josephine.
Stevens, Louis.
Swanson, Mae.
Waite, Earl.
Wills, Rosemond.

FIRST GRADE—23.

Anderson, Anna.
Anderson, Fritz.
Butters, Annie.
Brown, Edith.
Brown, Keneth.
Cook, Ruggles.
Cahill, Katie.
Day, George.
Elmer, Kathryn.
Gerry, Pearl.
Henchell, Pauline.
Henchell, Mamie.
Houghton, Jeanette.
Lauderback, Willie.
Meaker, Charlie.
Meaker, Vesta.
Nelson, Sadie.
Newton, Charley.
Sipperly, Irene.
Singleton, Lillian.
Windslow, Dena.
Winslow, Pearl.
Waite, Rosie.

KINDERGARTEN DEPARTMENT—65.

Allen, Rispah.
Anderson, Albert.
Archibald, Silvia.
Arthurs, John.
Baker, Ada.
Bunker, Ada.
Barrager, Grace.
Benge, Leonora.
Crabb, Wilbur.
Canfield, Gladys.
Candlin, Victor.
Candlin, Percy.
Cooper, Hattie.
Daniels, Esther.
Decker, Harold.
Dunbar, Sula.
Elliott, Inez.
Flower, Leo.
Glazier, Alice.
Goodman, Catherine.
Howard, Helen.
Hart, Clarence.
Haynes, Harold.
Hill, Priscilla.
Hobson, Hazel.
Hung, Mary.
Igo, George.
Insinger, John.
Johnson, Lynn.
Johnson, Roy.
Johnson, Bevie.
Johnston, Frances.
Kimball, Phyllis.
Kimrey, Chan.
Loustalet, George.
Mason, Laura.
Meeks, Ethel.
Meeks, Grey.
Moody, Harold.
McCutcheon, Frances.
Norcross, Freddie.
Newton, Frankie.
Neitze, John.
Nims, Valiant.
Onstine, Geraldine.
Page, Helen.
Prater, Irene.
Robie, Jeanette.
Spencer, Blanche.
Spencer, Alden.
Seaman, Roy.
Smith, Mirian.
Smith, Lundy.
Smith, Ethel.
Stephens, Edith.
Stevens, Ouita.
Stevens, Rex.
Spencer, May.
Sieze, Theodore.
Thompson, Will.
Tell, Laurette.
Waters, Edgar.
Westcott, Glen.
Winslow, Bryan.
Van Sickle, Marian.

SUMMARY OF ATTENDANCE.

NORMAL DEPARTMENT.

SENIORS.

Females	57	
Males	12	
		69

JUNIORS.

Females	119	
Males	24	
		143

SOPHOMORES.

Females	42	
Males	3	
		45

SPECIALS.

Females	8		
Males	6		
		14	
Total			271

TRAINING SCHOOL.

High School Department:		
Tenth Grade	21	
Ninth Grade	33	
		54
Grammar Department:		
Eighth Grade	24	
Seventh Grade	24	
Sixth Grade	21	
Fifth Grade	26	
		95

Primary Department:			
Fourth Grade	24		
Third Grade	17		
Second Grade	25		
First Grade	23		
		89	
Kindergarten Department		65	
			303
Grand total			574

ALUMNI.

OFFICERS.

C. V. Collins.....President.
Elizabeth Kendel.....Vice-President.
Helen Kittle.....Secretary and Treasurer.
Vernon McKelvey.....Custodian.

DIRECTORY

CLASS OF 1891.

Berryman, Eliza E.....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.....University Park, Colo.
Lincoln, Generva.....Utah.
*Montgomery, Jessie.....
McNair, Agnes.....Denver, Colo.
Spencer, Clarence F.....Aztec, N. M.
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.....Rico, Colo.
McFie, Mabel (Mrs. Miller).....Florence, Colo.
McFie, Vina (Mrs. LeRoy).....Evans, Colo.

*Deceased.

Meek, Idela.....Colorado Springs, Colo.
Miller, J. A.....Florence, Colo.
Moore, Mamie F.....Denver, Colo.
Mumper, Anna T. (Mrs. Wallace).....La Porte, Colo.
McClelland, Robt. A.....Ruby Hill, Nev.
Putnam, Kate.....Denver, Colo.
Robinson, Fanie F.....Denver, Colo.
*Smith, May L. (Mrs. Batterson).....Erie, Colo.
Wilson, Elma A.....La Salle, Colo.

CLASS OF 1893.

Bybee, Carrie S.....Colorado Springs, Colo.
Dace, Mary (Mrs. Farnsworth).....Fort Morgan, Colo.
Dunn, Rosalie M.....Ft. Collins, Colo.
Heath, Herbert G.....Lake City, Colo.
Hewett, Edgar L.....Las Vegas, N. M.
Hewett, Cora W. (Mrs.).....Las Vegas, N. M.
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.....Longmont, Colo.
McLain, Minnie E.....Ft. Collins, Colo.
Marsh, Mary A.....Canon City, Colo.
Nixon, Alice M. (Mrs. Jacobs).....Greeley, Colo.
Pearce, Stella.....Cripple Creek, Colo.
Priest, Lee.....Cripple Creek, Colo.
Seed, Stella H.....Racine, Wis.
Stockton, J. LeRoy.....Greeley, Colo.
Struble, Lizzie (Mrs. F. A. Cole).....Denver, Colo.
Thomas, Cora B.....Boulder, Colo.
Varney, Julia A.....Idaho Springs, Colo.
Walter, Clara B.....Riverside, Cal.
Wheeler, B. B.....Salmon City, Idaho.

*Deceased.

CLASS OF 1894.

Bond, Dell.....Dennison, Iowa.
Burnett, Ruth.....Mendota, Ills.
Catherwood, Grace A.....Boulder, Colo.
Clark, Charles E.....Greeley, Colo.
*Coffey, Gillian.....Denver, Colo.
Cordes, Carrie (Mrs. Loftiss).....Akron, Ohio.
Creager, Katie (Mrs. Bullock).....Greeley, Colo.
Day, Nellie (Mrs. Tolman).....Cripple Creek, Colo.
Delbridge, Eloise.....Greeley, Colo.
Durkee, Alice (Mrs. Rockafeller).....Canon City, Colo.
Freeman, Maude (Mrs. Felton).....Silver Plume, Colo.
Gardiner, Julia.....South Denver, Colo.
Gass, Maud.....Denver, Colo.
Lewis, Lottie.....Central City, Colo.
Lynch, John.....Ouray, Colo.
Melvin, Pearl (Mrs. Rutledge).....Belleville, Tex.
*McGhee, May (Mrs. Winzer).....Cripple Creek, Colo.
Merrill, Louise A.....Denver, Colo.
Messenger, Edna.....Boulder, Colo.
Nauman, Minnie (Mrs. Sorenson).....Nebraska.
Peters, Anna.....Trinidad, Colo.
Rank, Margaret.....Central City, Colo.
Robinson, Anna.....Evans, Colo.
Severance, Dora.....Severance, Colo.
Shumway, William.....Denver, Colo.
Trehearne, Beatrice.....Denver, Colo.
Turner, Flora B.....Arvada, Colo.
Welch, Irene.....Cripple Creek, Colo.
Williams, Nellie.....Castle Rock, Colo.
Woods, James.....Boulder, Colo.
Work, Anna.....Denver, Colo.
Work, Ella (Mrs. Bailor).....Idaho Springs, Colo.
Wright, Lulu (Mrs. Heilman).....Greeley, Colo.
Wright, Nana.....Greeley, Colo.
Yard, Jessie.....Canon City, Colo.

*Deceased.

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.....Women's Seminary, West Point, Miss.
Downey, Abner.....Colorado Springs, Colo.
Felton, Mark A.....Silver Plume, Colo.
Freeman, Maude (Mrs. Felton).....Silver Plume, Colo.
Gale, Grace M. (Mrs. Clark).....San Francisco, Cal.
Goodard, Susan.....Cripple Creek, Colo.
Hadley, Laurie.....Eagle, Colo.
Hubbard, Nettie L. (Mrs. Lynch).....Durango, 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.....Ordway, Colo.
Marsh, C. T.....Brighton, Colo.
Miller, Edwin.....Timnath, Colo.
Molnar, Louise.....Washington, D. C.
Newman, Emma.....Denver, Colo.
Peck, Vera.....Denver, Colo.
Phillips, Stella.....Cripple Creek, Colo.
Price, J. M.....Eaton, Colo.
Stanton, Kate M.....Boulder, Colo.
Snyder, E. R.....Alameda, Cal.
Stratton, Ella E.....Cripple Creek, Colo.
Sydner, Cecil E.....Las Animas, Colo.
Uhri, Sophia.....Garnett, Colo.
Woodruff, Myrna.....Colorado Springs, Colo.
Wyman, Ree (Mrs. Moyer).....Denver, Colo.

*Deceased.

CLASS OF 1896.

Agnew, Minerva (Mrs. Brotherton).....Cripple Creek, Colo.
Ault, C. B.....Gold Field, Colo.
Bell, J. R.....Boulder, Colo.
Berger, Florence (Mrs. Miller).....Greeley, Colo.
Bliss, Lillian M.....Denver, Colo.
Boyd, Sela M.....Greeley, Colo.
Briggs, Jennie M.....Denver, Colo.
Cameron, Wm. F.....Salida, Colo.
Cameron, Agnes.....Canon City, Colo.
Collom, Mattie.....Denver, Colo.
Dittey, Mollie.....Colorado Springs, Colo.
Donahue, J. Leo.....Denver, Colo.
Graham, Kate (Mrs. Nierns).....Montrose, Colo.
Hamilton, Ida M. (Mrs.).....Colorado Springs, Colo.
Hanks, Alberta.....Salida, Colo.
Hollingshead, C. A.....Denver, Colo.
Howard, Florence.....Boulder, Colo.
Howard, Wellington.....Boulder, Colo.
James, Annie (married).....Manitou, Colo.
Jamison, Grace.....Golden, Colo.
Kendel, Elizabeth.....Greeley, Colo.
Mathews, Minnie V.....Delta, Colo.
Newman, Winnifred.....Platteville, Colo.
Norton, Nell (Mrs. Lawyer).....Victor, Colo.
Paul, Isabel.....Denver, Colo.
Patton, Mabel.....Grand Junction, Colo.
Pollock, Emma.....South Denver, Colo.
Probst, Emma.....Denver, Colo.
Shull, Grace.....Greeley, Colo.
Smith, Luna.....Eaton, Colo.
Stevenson, Audrey.....Manitou, Colo.

CLASS OF 1897.

Adams, Helen.....Denver, Colo.
Benson, Franc V.....Loveland, Colo.
Brownlee, Sylvia.....Rocky Ford, Colo.

Buffington, Lulu.....Breckenridge, Colo.
Burns, T. E.....La Junta, Colo.
Dowell, H. L.....Alma, Colo.
Ellis, Carrie E.....Eaton, Colo.
Guynn, H. G.....Smithton, Pa.
Hadden, S. M.....Greeley, Colo.
Hamilton, Jessie M.....Pueblo, Colo.
Hammond, Eva V. (Mrs. Blood).....Denver, Colo.
Hersey, Rose.....Denver, Colo.
Hinkley, Anna C.....Denver, Colo.
Hock, Lillian E.....Delta, Colo.
Holaday, Minnie.....Ouray, Colo.
Holliday, Maud (Mrs. Bell).....Boulder, Colo.
Ingersol, May.....Pueblo, Colo.
Jones, B. Ida.....Denver, Colo.
Kendel, Juanita.....Greeley, Colo.
King, Alpha E.....Rocky Ford, Colo.
Knapp, Edith A.....Lamar, Colo.
Lockett, Margarette.....Saguache, Colo.
McDonald, R. A.....Lewiston, Idaho
McKinley, Hattie (married).....Idaho Springs, Colo.
McLeod, Carrie.....Canon City, Colo.
Newell, Agnes.....Gunnison, Colo.
Putnam, Jennie.....Orchard, Colo.
Rudolph, Victoria.....Canon City, Colo.
Sanborn, Mabel (Mrs. Marsh).....Greeley, Colo.
Slatore, Nelson.....Cripple Creek, Colo.
Smith, Cora E.....Gunnison, Colo.
Steans, Henry G.....Leadville, Colo.
Stevenson, Eleanor.....Denver, Colo.
Stockton, Guy C.....Erie, Colo.
Thompson, Andrew W.....Gillette, Colo.
Walker, F. A.....Fairplay, Colo.
Wheeler, Gertrude E. (Mrs. Bell).....Bakerfield, Colo.
White, Esther F. (Mrs.).....Canon City, Colo.
Wilkinson, Bessie M.....Pueblo, Colo.

Wilson, Edith.....Silver Plume, Colo.
Witter, Stella (Mrs. Kerlee).....Greeley, Colo.
Work, C. M.....Atwood, Colo.
Wright, Olive.....Canon City, Colo.
Young, Kate (Mrs.).....Fostoria, Ohio

CLASS OF 1898.

Amsden, Elmer E.....Silverton, Colo.
Ashley, Helen M.....Cheney, Wash.
Bartels, Bina.....Pueblo, Colo.
Bryant, Fannie.....Denver, Colo.
Burgess, Edith.....Greeley, Colo.
Butler, May.....Trinidad, Colo.
Butscher, Louis C.....Raton, N. M.
Carlson, George A.....Boulder, Colo.
Clark, Fred W.....Greeley, Colo.
Coover, Carrie E. (Mrs.).....Palo Alto, Cal.
Coover, J. E.....Palo Alto, Cal.
Cronkhite, Theodora.....Fort Lupton, Colo.
Delbridge, Wychie.....Silver Plume, Colo.
Dolan, Alice.....Leadville, Colo.
Downey, Elijah H.....Greeley, Colo.
Farmer, Grace.....Albion, Neb.
*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.....Evans, Colo.
Howard, Sadie.....Denver, Colo.
Howett, Edwin L.....Durango, Colo.
Johnson, Minnie.....Leadville, Colo.
Kridler, Grace.....Cripple Creek, Colo.

*Deceased.

Llewellyn, Sarah (Mrs. Snyder).....Alameda, Cal.
Lorey, Charles A.....Boulder, Colo.
McCracken, Mary (Mrs. Steans).....Denver, Colo.
McKeehan, Cora.....Cripple Creek, Colo.
Montag, Ida C.....Como, Colo.
Morehouse, Geneva.....Denver, Colo.
Nash, Margaret.....Silver Plume, Colo.
O'Brien, Emma L.....Fort Collins, Colo.
Putnam, Nellie.....Fort Morgan, Colo.
Reeder, John M.....Buena Vista, Colo.
Richards, Carrie L.....Pueblo, Colo.
Riddell, Fannie.....Denver, Colo.
Ross, Hettie M.....North Denver, Colo.
Scanlon, Mary.....Lyons, Colo.
Sibley, Bella B. (Mrs.).....Greeley, Colo.
Smith, Helen Fay.....Leadville, Colo.
*Stebbins, Helen H. (Mrs. McLeod).....Leadville, Colo.
Stevenson, Mildred.....Manitou, Colo.
Tate, Ethel H.....Lakin, Kan.
Taylor, Nellie A.....Ft. Collins, Colo.
Thomas, Helen.....Greeley, Colo.
Thomas, Katharyn.....Denver, Colo.
Van Horn, George.....Loveland, Colo.
Waite, Vesta M.....Longmont, Colo.
Watson, Ola.....Denver, Colo.
White, Walter.....Greeley, Colo.
Wilkins, Emma T.....Timnath, Colo.
Williams, Mary E.....Gunnison, Colo.
Wintz, Claudia.....Colorado Springs, Colo.
Zimmerman, George.....Antonito, Colo.

CLASS OF 1899.

Amick, M. Ethel.....Canon City, Colo.
Anderson, Emma L.....Greeley, Colo.
Anderson, Myra M.....Colorado Springs, Colo.

*Deceased.

Bartels, Harriet B.....Kokomo, Colo.
Bashor, Sarah E.....Longmont, Colo.
Braucht, Frank E.....La Jara, Colo.
Burnett, Fannie.....Gunnison, Colo.
Camp, Archibald L.....Greeley, Colo.
Campbell, Florence E.....Granite, Colo.
Clonch, Minnie B.....Crested Butte, Colo.
Curran, Katie.....Canon City, Colo.
Dare, Adele F. (Mrs.).....Telluride, Colo.
*DeWeese, Luella (Mrs.).....Pueblo, Colo.
Dill, Victoria M.....Racine, Wis.
Dingman, Jennie K.....Pueblo, Colo.
Fleming, Guy B.....Rocky Ford, Colo.
Graham, Mary M.....Ft. Collins, Colo.
Gregg, Florence E.....Pueblo, Colo.
Gregg, Maud C.....Pueblo, Colo.
Hammersly, Mabel.....Ft. Collins, Colo.
Harrison, Lucian H.....Rocky Ford, Colo.
Heath, Edith V.....Loveland, Colo.
Hersey, Nellie R.....Denver, Colo.
Huffman, E.....Evans, Colo.
Kellogg, Gertrude F.....Rocky Ford, Colo.
Kendall, Zella A.....Denver, Colo.
Kendel, Arthur I.....Greeley, Colo.
Kimball, Effie M.....Greeley, Colo.
Law, Daisy N.....New Windsor, Colo.
Law, Nona J.....New Windsor, Colo.
Long, Olive.....Silver Plume, Colo.
Lundy, Granville E.....Evans, Colo.
McCord, Emma D. (Mrs. Weaver).....Greeley, Colo.
McIntosh, Edith L.....Ouray, Colo.
McLellon, E. Irene.....Walsenburg, Colo.
McLeod, Mary C.....Leadville, Colo.
Manifold, W. H.....Grand Junction, Colo.
Miller, Mary F. (Mrs.).....Denver, Colo.
Morehouse, Florence A. (Mrs. Barry).....Lamar, Colo.

Newby, Florence.....Longmont, Colo.
Noel, Maud (Mrs. McMillen).....La Salle, Colo.
Patterson, Daisy P.....Santa Fe, N. M.
Poirson, Henrietta (Mrs. Dille).....Greeley, Colo.
Pollock, Rose M.....Greeley, Colo.
Potts, J. George.....Longmont, Colo.
Powell, Frances L.....Colorado City, Colo.
Powell, M. Evelyn.....Colorado City, Colo.
Powelson, Pearl E.....Grand Junction, Colo.
Price, Virginia E.....Orchard, Colo.
Rankin, Pearl B.....Greeley, Colo.
Roberts, Stella E. (Mrs. Naylor).....Canon City, Colo.
Robinson, Angelina B.....Glenwood, Colo.
Robinson, Nellie.....Colorado Springs. Colo.
Rochat, Emma Cecile (Mrs. Weaver).....Greeley, Colo.
Ross, Maud E.....Pueblo, Colo.
St. Cyr, Helen E.....Greeley, Colo.
Scheffler, Bertha S.....Alamosa, Colo.
Seaton, Janet.....Greeley, Colo.
Small, Lavina A.....Denver, Colo.
Smith, Amy A.....Alma, Colo.
Sparlin, Nellie.....Sterling, Colo.
Strayer, Grace A.....Ouray, Colo.
Strickler, C. S.....Crested Butte, Colo.
Swan, Rosa E.....Denver, Colo.
Tharp, B. Ellen.....Greeley, Colo.
Weiland, Adelbert A.....Fowler, Colo.
West, Edna W.....Eaton, Colo.
Wilkinson, Marguerite.....Cripple Creek, Colo.
Williams, Lizzie E.....Saguache, Colo.
Wise, Effie M.....Greeley, Colo.

CLASS OF 1900.

Albee, Emma.....Platteville, Colo.
Ashback, Margaret (Mrs.).....Farmington, N. M.
Bliss, Nellie M.....Aspen, Colo.
Bresee, Minnie.....Matoon, Ills.

Brown, L. E.....Silverton, Colo.
Calder, Henrietta.....Canon City, Colo.
Churchill, Isabella (Mrs.).....Greeley, Colo.
Clonch, May.....Crested Butte, Colo.
Collins, C. B.....Lucerne, Colo.
Cooper, Theda A.....Denver, Colo.
Cooperrider, A. O.....Hooper, Colo.
Cornell, Hattie.....Orchard, Colo.
Danielson, Cora.....Walsenburg, Colo.
DeVine, Elsie F. (Mrs.).....Greeley, Colo.
Doyle, Mabel.....Saguache, Colo.
Evans, Emma.....New Windsor, Colo.
Ellis, Adda.....La Salle, Colo.
Ellis, Esther.....La Salle, Colo.
Fagan, Jennie.....Berthoud, Colo.
Fowler, Ruby.....Leadville, Colo.
Frink, Marguerite R.....Grover, Colo.
Gibson, Mildred.....Greeley, Colo.
Goodale, Nellie.....Denver, Colo.
Grout, Lizzie M.....Abbey, Colo.
Hughes, Adella.....Trinidad, Colo.
Hughes, Ida.....Georgetown, Colo.
Imboden, J. W.....Greeley, Colo.
Jamison, Rea.....Pueblo, Colo.
Jones, Jennie.....Montrose, Colo.
Kendel, Alice.....Leadville, Colo.
Kenwell, Joseph C.....Arvada, Colo.
Kersey, Margaret.....Leadville, Colo.
Ketner, Sarah.....Ft. Collins, Colo.
Latson, Elmer.....La Salle, Colo.
Lewis, W. A.....Silver Plume, Colo.
Lowe, Elizabeth F.....Denver, Colo.
Lowther, Laura.....Canon City, Colo.
Markuson, Martha.....Sterling, 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.....Greeley, Colo.
Nutting, Drusilla.....Canon City, Colo.
O'Boyle, Lila.....Grand Junction, Colo.
O'Connell, Mamie.....Cheyenne, Wyo.
Olson, Mamie.....Georgetown, Colo.
Orr, Irma.....La Salle, Colo.
Poland, Belle.....Las Animas, Colo.
*Probst, Rose.....Denver, Colo.
Resor, Virginia.....Pueblo, Colo.
Riek, Meta.....Rico, Colo.
*Robbins, W. F.....Highland Lake, Colo.
Romans, Ab. H.....Boulder, Colo.
Sarell, Jessie (Mrs. Rudd).....Jamestown, Colo.
Schmidt, Kari.....Silver Plume, Colo.
Searles, Nina.....Eaton, Colo.
Seybold, Bertha.....Denver, Colo.
Stockdale, Martha.....Delta, Colo.
Smith, Frances.....Canon City, Colo.
Smith, Olive.....Denver, Colo.
Taylor, Hazel.....Durango, Colo.
Veniere, Cecilia.....Nighthawk, Colo.
Warning, G. A.....Grand Junction, Colo.
Waters, Eva.....Kersey, Colo.
Williams, S. D.....Silver Plume, Colo.
Williamson, Lucy.....Ft. Collins, Colo.
Wilson, Marie.....Orchard, Colo.
Wood, Carolyn.....Ft. Collins, Colo.

CLASS OF 1901.

Adams, Mary.....Denver, Colo.
Allnutt, Frederic.....Greeley, Colo.
Andrews, Adell.....Alexander, Colo.

*Deceased.

Bailey, Louise.....Bloomington, Ills.
Barnard, Margaret.....Pueblo, Colo.
Bent, Clinton.....Brighton, Colo.
Beswick, Dolphine.....Colorado Springs, Colo.
Breuer, Emma (Mrs. Brownell).....Greeley, Colo.
Broquet, Prudence.....Manhattan, Kan.
Carter, Carrie.....Paonia, Colo.
Carter, Lina.....Denver, Colo.
Craven, May.....Leadville, Colo.
Crone, John V.....Marathon, Iowa
Day, Reba.....Greeley, Colo.
Delbridge, Lucy.....Greeley, Colo.
Dempsey, Nettie.....Pueblo, Colo.
Dugan, Julia.....Durango, Colo.
Edwards, Mabel.....Carbondale, Pa.
Filkins, Grace.....Brush, Colo.
Gibbs, Elizabeth.....Hooper, Colo.
Graham, Melcena.....Greeley, Colo.
Hall, Agnes.....Gunnison, Colo.
Hamm, Elsie.....Saguache, Colo.
Harrington, Ada.....Hartsel, Colo.
Henderson, Alice.....Greeley, Colo.
Holland, Nena.....Greeley, Colo.
House, Louise.....Greeley, Colo.
Jones, Katie.....Erie, Colo.
Kesler, Joseph.....Durango, Colo.
Keyes, Victor.....Oneonta, N. Y.
Kittle, Helen.....Greeley, Colo.
Knowlton, Charles.....Greeley, Colo.
Lowe, Anna.....Denver, Colo.
Lundy, Katie.....Evans, Colo.
McCarthy, Mary.....Pueblo, Colo.
McCloskey, Viola.....Colorado Springs, Colo.
McCoy, Anna.....Thompsonville, Kan.
McMullin, Edith.....Saguache, Colo.
McKelvey, Kathryn.....New Windsor, Colo.

McPherson, William.....Hiawatha, Kan.
McPherson, Mattie.....Boulder, Colo.
Merchant, Maud M.....Denver, Colo.
Morris, Florence.....Cripple Creek, Colo.
Needham, Charles.....Altamont, Ills.
Norine, Mayme.....Grand Junction, Colo.
Norton, Nona.....Tallula, Ills.
O'Brien, Rhoda.....Denver, Colo.
O'Connor, Charles.....Edina, Mo.
Onstine, Eulala.....Denver, Colo.
O'Keefe, Agnes.....Denver, Colo.
Parrett, Kate.....Alcott, Colo.
Peterson, Hanna.....Silver Plume, Colo.
Remington, Mayme.....Fairplay, Colo.
Robinson, Abbie.....Glenwood, Colo.
Robertson, Jean.....Sulphur, Wyo.
Schutz, Tyro.....Granville, Iowa.
Scott, Lucy.....Greeley, Colo.
Scheffler, Josephine.....Central City, Colo.
Sellers, Gilbert.....Littleton, Ills.
Snyder, Laura.....Greeley, Colo.
Tufft, Ruth.....Ophir, Colo.
Veverka, Madeline.....Willard, Colo.
Watson, Alice.....Denver, Colo.
Welch, Hattie.....Greeley, Colo.
Welch, Harry.....Greeley, Colo.
Weller, Mary.....Colorado Springs, Colo.
Webster, Ella.....La Junta, Colo.
Wolfenden, Anna.....Greeley, Colo.
Wood, Florence.....Greeley, Colo.

SUMMARY.

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Class of 1894	35	
Class of 1895	32	
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Class of 1898	58	
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		460
Alumni Master's Degree		7
Total		467

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ILLUSTRATIONS.

STATE NORMAL SCHOOL BULLETIN.

Series I. No. 2.

NEW DEVELOPMENTS AT

STATE NORMAL SCHOOL

OF

COLORADO.

August, 1901.

Pubiished Quarterly by the Trustees of the State Normal School of Colorado, Greeley, Colo.

Entered at the Postoffice, Greeley, Colorado, as second-class matter.

New Developments

AT THE

STATE NORMAL SCHOOL

OF

COLORADO.

I.

INTRODUCTION.

The State Normal School of Colorado is entering upon a new era of prosperity; never in its history have its prospects been brighter. It has always been a success; but it is enjoying particularly a new impetus at the present time.

II.

BUILDING.

The trustees at their last meeting, on June 6th, let a contract for the erection of a new heating plant outside of the building. It will cost about $10,000 to complete it. This is one of the needed improvements. It removes all dangers that sometimes accompany heating plants.

At the October meeting of the Board of Trustees, it is very likely that steps will be taken toward the completion of the west wing of the building. This is a very much needed improvement indeed, since the growth of the school has been quite beyond the capacity of the present building.

III.

GROUNDS.

The State Normal School has a very beautiful campus. It is certainly the most beautful school campus in the State of Colorado. About six acres have been under cultivation for several years. To this there have been added about three acres of lawn during the year. Over 1,000 trees, plants and shrubs were planted during the year. This, together with the old campus, forms a very commodius campus. A handsome fence, constructed out of gas pipe has been erected about the grounds.

From the campus can be seen over 150 miles of snowy range, lying-back of the foot hills. This extends from Pike's Peak, which is clearly visible from the top of the building, into the cliffs of Wyoming. On the south is the Platte valley; on the east, there is a splendid view of the Delta, formed by the confluence of the Platte and Cache la Poudre rivers; this together with the northern view gives one of the finest agricultural landscapes to be seen in Colorado; the entire panorama of scenery as seen fro . the Normal School grounds gives a very interesting variation. Plains, agricultural lands, covered with splendid crops, rivers, foot hills and mountains two miles above the sea level covered with snow all blend to form a splendid picture.

IV.

ATHLETIC.

Considerable work has been done on the athletic field during the year. It is laid off in the form of a rectangle. Within this rectangle is an eliptic race track, exactly a quarter of a mile around; and around the outer curve of the race track and in the corners made by the rectangle and the elipse are planted a half dozen variety of trees, planted in such a manner as to give an artistic touch to the grounds.

There has never been a time when there has been so much interest in athletics as at the present time. It is that kind of athletics which touches all within the school. They are not developed only for the few, but are for the whole. There are tennis

grounds, gymnasium apparatus, basketball grounds, croquet grounds, race track, baseball field, football field, marching grounds, golf-links, quoits, target shooting, archery, etc. Every one finds some form of athletics in which he is interested.

V.

NEW PROFESSORS.

1st. David L. Arnold takes charge of the department of Mathematics. He is a graduate of Leland-Stanford University, having taken his A. B. degree as well as Master of Art degree there; he also instructed in Leland-Stanford University for two years. He then went abroad, and took two years work in the Universities of Leipzig and Christiana, receiving instruction under Dr. Lie, who has been pronounced the greatest mathematician of the nineteenth century. Mr. Arnold since returning from Europe has taught in Normal Schools. He comes to us not only a very fine scholar in Modern mathematics and in modern methods, but also a student of the pedagogy of mathematics. He is a very strong teacher as to subject matter, method and personality He has great influence over the students. He is also very much interested in athletics; he believes in that kind of athletics which gives health and strength to the entire student body.

2nd. Dr. Colin A. Scott, late of Chicago Normal School and the Cook County Normal School has been elected to the principalship of the Training department. Dr. Scott is probably one of the best trained men in the United States for this position. He has been trained in public schools, in Normal Schools, in Universities and has made a special study of the problem for a number of years. He comes to us in the very prime of life. He is a believer in the rational child study movement in this country; has written considerable along this line, as well as along other educational lines. Dr. Scott is a fluent, ready, clear and forceful speaker. He is able to make difficult subjects easy.

3rd. Mrs. Eliza Kleinsorge has been added to the corps of training teachers. Mrs. Kleinsorge has been well trained for her work. She will have charge of the training work of the Seventh and Eighth grades. She taught in the Grammar department of the

Des Moines public schools, as well as in the High School. She has been a student at Chicago University, and previous to taking up her work in the State Normal School spent four years in Europe. On the continent she studied pedagogy and the history of Art at Leipzig, Berlin, Italy and Jena. It would be difficult to find one better trained for the work she has to do. Besides her training work, she will give a course of lectures in the History of Art to the seniors during the school year. These lectures will be illustrated by reproductions of all the masters of the great European schools of Art, both ancient and modern.

4th. Until the present, the school has not found itself able to have a teacher who could devote his entire time to music. With the opening of the fall term, however, Prof. H. M. Bauer, who is a graduate of the conservatory of music, both vocal and instrumental of the University of Leipzig will have charge of the Department of Vocal Music. Prof. Bauer was born at Wiemar, Saxony. When a child, his parents moved to Illinois, where he was educated. He then went to Germany for his music training. He has studied in the best schools of the old country. He is a teacher of little children, being able to readily lead them to sing and read music; he is a teacher of teachers, having that rare art of being able to train teachers to teach children music. He is a very fine pianist and organist. It is a very probable that his ability to sing is equal to his ability to perform on these instruments. Prof. Bauer will have charge of all the music in the school—the music in the training school—the junior and senior work, the glee club work, the chorus work and the chapel exercises. It is the intention of the management of the institution to make the department of music as strong as any other department in the school.

5th. Mr. John V. Crone, from the State Agriculture College of Iowa who graduated from the State Normal School of Colorado last year has been appointed taxidermist and assistant in Science. Mr. Crone is particularly accomplished in the art of taxidermy. During the summer, he has added a great many specimens to the already excellent museum. Mr. Crone studies nature by going to nature. In his collections of birds eggs, he has the photographs of the nests with their eggs and the young and the birds, taken in their environ-

ments. In this way he gives a setting to the specimens he collects that word description can not give.

VI.

TRAINING SCHOOL.

To the already efficient training school department, a number of improvements are made. This year, the school will comprehend all the grades of public school work, from the Kindergarten through the High School. This will give an opportunity to all persons wishing to specialize along any particular line to do so. One may specialize along the line of the Kindergarten, the Elementary or Grade school and the High School. The idea of the High School in connection with the training department is to give an opportunity to those who want to become high school teachers to learn to teach.

VII.

NORMAL COLLEGE COURSE.

There has been established in connection with the Normal School a Normal College Course; the aim of which is to prepare men and women for high school teachers. Those who take this course will have an opportunity to observe and teach in the college department. The aim is also to give young men and women an opportunity to prepare well for life by receiving a liberal education and at the same time to learn to do something. The course covers four years. High School graduates, or equivalent, are admitted to this department.

VIII.

MUSEUM.

The trustees at their last meeting passed a resolution to enlarge and equip for higher usefulness the museum. The purpose is to procure pairs of stuffed specimens of all the large animals of the State of Colorado. A museum has a two-fold function in this institution: 1st: It has a place where specimens of all the animals and plants of Colorado should be kept for preservation. 2nd: It is a great help in instruction. Nothing is so powerful in the teaching of

natural history as to have the animals alive or prepared, in the presence of the students. To this end, it has been determined to enlarge the usefulness of the museum. It contains about 15,000 specimens of plants and animals, as well as rocks and minerals. It is one of the richest general museums in the state. After the additions are made, which are intended by the board of trustees, no better museum will be found anywhere.

If there are any persons who wish to donate specimens to the institution, such specimens will be very cheerfully received. If specimens are deposited for keeping in the museum of the institution, receipts will be given for same, enabling the person to withdraw them at any future time. Everything will be well taken care of while at the institution. Let the Alumni, friends of the institution, friends of education and all send specimens.

IX.

WHAT THE SCHOOL HAS DONE.

It is safe to say that there are very few Normal Schools in the country that have so thoroughly become an organic part of the public school system in so short a time as the State Normal School of Colorado. It is now eleven years old There have been in attendance in the Normal School department about 2,500 students during its existence, 467 of whom have graduated. The larger part of those who have graduated are teaching in the public schools of Colorado, and quite a number of those who have attended and not graduated are also teaching. The institution has added to the standard of scholarship of the teachers of the state; it has added professional spirit; and it has added a dignity to the educational work of the state.

About 70 are graduated each year from the Colorado State Normal School. They all get places at good salaries. The management of the Normal School could get places for as many more if it had them

X.

ORGANIZATIONS.

There are several organizations connected with the State Normal School, for the interests and development of the students. There

are four literary societies: The Chrestomathean, Clionian, Platonian and Shakespearean Societies. These are vigorous, progressive and in a flourishing condition.

The Christian Union which meets every Sunday afternoon in the chapel of Normal School is a religious organization. It has done a great deal of good. Many students look back upon it as the place where they get their first steps in the development of that higher spiritual life. It has determined to make a more aggressive campaign in the way of helping students. It is non-sectarian, but highly spiritual. Persons of all denominations attend, and persons who do not belong to any church attend. It is a place where all may attend.

XI.

VALUE OF MANUAL TRAINING.

No school better prepares the individual for *real* life than the State Normal School. It gets an individual ready *to do* something. It is a place where the individual has an opportunity to realize his ideals. It is a place where the student learns to live. He is mingling with life as a student in the Normal School department; he is mingling with life as a teacher in the training department. Thus the individual when he leaves the Normal School is able to earn a living; he is able to participate with others and thereby enrich them. He is able to see the activities of life in their real relation.

XII.

ENTRANCE.

1. Graduates of High Schools, or persons having an equivalent education enter the junior year of the State Normal School, without examination, thereby graduating in two years in the Normal course.

2. Graduates of High Schools, or those having equivalent education may enter the freshman year of the Normal College course, without examination, and graduate in four years.

3. Graduates of other Normal Schools or Colleges or those who have equivalent education may enter the senior year without examination, and graduate in one year in the Normal course.

4. Persons holding teachers' certificates who have not had High School training, or its equivalent, may enter the Sophomore class of the State Normal School, without examination.

5. Persons not eligible to enter under the above conditions may enter whatever department of the training school they may be prepared to enter.

XIII.

EXPENSES.

1. The tuition is free in the Normal department and in the Normal College department to all persons who intend to teach in the public schools of Colorado; to others, the tuition is $20 a year.

2. The school year is divided into two Semesters; each student in the Normal School department is required to pay $3.50 per Semester for the use of books, both text and general.

3. Every person who enters the Normal School is required to pay a laboratory fee of $1 per year.

4. Those taking either sloyd, cooking or sewing are required to pay a fee of $1.50 per year.

5. All persons entering the High School of the Training Department must pay $2 a Semester for the use of books; persons entering the Seventh and Eighth grades of the Training Department must pay $1 per Semester for the use of books; persons entering the Fifth and Sixth grades of the Training Department must pay 50c a Semester for the use of books.

XIV.

BOARDING.

Students can get boarding at $2; $2.25 and $2.50 per week. They can rent rooms at from 50c to $1 per week. This makes board and room amount to from $100 to $150 per year. There are quite a number of students who do self-boarding. In this way they get through the year for an amount as low as $75. There are also quite a number of students who work their way through. Those who think of working their way through should make application at their earliest convenience, as those who first apply get the first

opportunity. We have heretofore been able to find work for all that have applied. There is no doubt but that any person who wants to get work can do so; we will help to arrange for this.

XIV.

INDUSTRIAL AND FINE ART DEPARTMENT.

1. The industrial department of the institution is quite thoroughly developed. During the summer, the professor in charge of the Sloyd department has been visiting similar schools in Europe He has been studying them particularly from the standpoint of the correlation of the æsthetic and the useful in making articles. In this department, as well as in the other industrial departments, the individual works quite largely along the lines of his interests, thereby pursuing something that he wants and making something that he can use and enjoy. The department is prepared to train individuals for teaching this subject.

2. Those who are desirious of becoming domestic economy teachers would do well to examine into the cooking and sewing departments of the Normal School ; both are very well equipped and do efficient work. Very rigid and comprehensive courses are outlined for those who desire to become teachers.

3. An interest in Fine Art, both from the standpoint of the Historic and from the standpoint of Real work has been growing very rapidly during the last few years. The institution is particularly well equipped along these lines. An expert teacher has charge of the real work in the Art department—oil, water color, pen work sculpture, etc. are all studied. From the historic standpoint, about thirty lessons a year are given setting forth the development of the art schools, both ancient and modern.

For particulars and catalog, address,

Z. X. SNYDER, President, or
VERNON McKELVEY, Secretary,
GREELEY, COLORADO.

STATE NORMAL SCHOOL BULLETIN.

SERIES I. NO. 3.

English in

STATE NORMAL SCHOOL.

OF

COLORADO.

October, 1901.

Published Quarterly by the Trustees of the State Normal School of Colorado, Greeley, Colo.

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Abstract of Formal Discipline*

In English for the use of Pupils

—of the—

State Normal School of Colorado.

LOUISE MORRIS HANNUM.

INTRODUCTORY DISCUSSION.

I. *The Importance of Language:—*

A. The supreme value of language for civilization, that is, for the enlarged consciousness of man.

1. Language the great reservoir of race attainment and the most complete vehicle of worthful personality; the value of language as compared with other means of expression; the function of the literature of instruction, of the literature of power; the language—shaping necessary to the one book in ten thousand that lives.

2. Language the instrument by which each generation gains possession of the experience of the past, and the means through which it makes its most definite contribution to the future; dependence of the result of reading and study upon mastery of the

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*NOTE.—The brevity of the course forbids anything approaching even elementary completeness. Neither rhetoric nor grammar is taught as a science. In both fields such facts only are presented as have a direct bearing on speech and writing, on appreciation of literature in its more obvious features, or on pedagogical principles.

powers and values of language; inefficacy of matter without form in the communication of thought and feeling.

3. Language the common medium of home, shop, and market, its quality reacting constantly upon thought and sentiment and influencing conduct.

4. Clear and well modulated language the chief servant of good intention in preventing misunderstanding and cross-purposes among reformers, teachers, and other social workers, as well as individuals generally.

B. The value of language as a means of personal development.

1. Worth for instruction and for aesthetic enjoyment of the power to read with easy grasp of language values.

2. Worth of the ability to speak freely, when opportunity is afforded, with the few whose conversation is a stimulus and delight.

3. Mastery of speech necessary to adequate and unembarrassed presentation of one's self and one's cause. The effective use of his mother tongue the most important possession of the educated man.

C. Language a trust.

1. The vernacular a heritage which is not ours to spoil or to neglect.

2. The special obligation of students and teachers toward their native tongue.

II. *The disciplines through which language is acquired:*—

A. The reading of good literature, with constant practice in interpretation and criticism.

B. Much practice in composition, oral and written.

C. Instruction in English grammar, *i. e.* a systematic presentation of the essential principles of the language as far as they effect good use.

1. The history of grammar—teaching in elementary edu-

cation.

a. English grammar taught as an aid in acquiring Latin;* then as a science on the model of Latin, without recognition of the distinct origin and characteristics of the English tongue; the result.

b. Grammar discontinued because of its inefficacy; the result.

c. Recognition of the need of an effective way of teaching grammar for practical ends.

2. The difference between grammar regarded as a science to be pursued as a part of general culture, and grammar subordinated to practical usage in speaking and writing; absurdity of the former in elementary education.

3. The necessity of rightly conducted study of grammar for—

a. Intelligent correction of the speech of the individual condition of this need in the fact that a pure idiom does not come by nature and has rarely an opportunity to fix itself by imitation, since even the most fortunately reared persons hear slovenly speech which must be guarded against by knowledge of good use.

b. Cultivation of good taste and discrimination in language values.

c. Preservation of the purity and integrity of the language.

REVIEW OF THE MAIN FACTS OF GRAMMAR.

I. *Classification.*

A. Of words: the principle of classification; meaning of the terms, *part of speech, class of words*; names and number of the

*The first English grammar published was called an introduction to a certain author's Latin grammar.

classes; general function of the principal, modifying, and connecting parts of speech; importance of a knowledge of the function of words for (1) the study of sentence-structure (2) avoidance of the solecism that consists in the use of one part of speech for another—see p 13 V, A.

B. Of phrases and clauses: reason for distinguishing phrases and clauses as sentence-elements; the two principles of classification of the phrase—use in the sentence and internal structure; names and number of the classes; classification of clauses, according to the logical relation of ideas in a sentence, into independent and dependent; classification of dependent clauses, as in the case of phrases and words, according to specific use and meaning in the sentence; importance for sentence-making, including the ordering of ideas, clear-cut structure, and distribution of emphasis, of a thorough comprehension of the logical and syntactical relations of the phrase and clause.

C. Of sentences: the principle of classification; the three types of sentence and the general function of each in expressing thought; use of complex sentences instead of the "run-on" form of speech a test of the educated mind; importance for sentence unity;) of syntactical clearness according to one of three types;) general punctuation of each type of sentence; mixed forms.

II. *Modifications.*

A. The formation of words in general; inflection, derivation composition.

B. Properties of the parts of speech.

1. Names and definitions.

2. Ways of denoting:—

PARTS OF SPEECH.	PROPERTIES.	DENOTATION.
Nouns	Gender	Inflection; Ex. god, goddess Composition: Ex. man-servant, maid-servant Separate words; Ex. ox, cow.
	Person	
	Number	Inflection; regular plurals; plurals formed by adding *es* to the singular, (a) without change, (b) with change; three Old English plurals in *en*; seven plurals made by internal inflection; nouns used only in the plural; nouns used only in the singular (abstract nouns, certain names of substances, arts, sciences, diseases); nouns having the same form for both numbers (nouns of number or measure in stereotyped phrases, names of certain animals, other nouns); plurals of compound nouns, of proper names and titles, of letters and figures; nouns with two plural forms; plurals of foreign nouns.
	Case	Inflection: possessive of singular nouns (a to which *s* preceded by an apostrophe may be added without harshness of sound, (b) used in an expression containing several sibilant sounds; possessive of plural nouns that do not end in *s*, that do end in *s*; of compound nouns; of phrases implying (a) joint possession, (b) separate possession.
Pronouns	Gender	separate words
	Person	" "
	Number	inflection or separate words
	Case	inflection
Adjectives	Comparison	inflection; Ex. blue, bluer loose composition; Ex. less beautiful separate words; Ex. bad, worse.
Verbs	Voice, Mood, Tense, Person, Number	inflection, composition — the conjugation of the verb

III. *Further classification of the parts of speech, with points of usage*

A. Nouns—Classes based on use and meaning in the sentence: 1. proper 2. common (a) collective (b) abstract (c) verbal (see verbals); mode of writing 1; use of 2 (a) and 2 (b) as regards number. Classes based on form: 1. simple 2. derivative (a) by prefix (b) by suffix (c) by both 3. compound. Use of the hyphen in 3; too free use of nouns as verbs; the "noun construction."

B. Pronouns—1. personal 2. relative 3. interrogative 4. adjective 5. indefinite. 1. mode of writing the nominative case of the first personal pronoun; use of the second person plural for both numbers; use of the second person singular; avoidance of the indefinite use of *you* for *one*; use of two possessive forms; illiterate possessives; lack of a singular personal pronoun common to both genders—the substitutes; good and poor idiomatic uses of *it*; uses of the compound personal pronoun; illiterate use of the antecedent with a personal pronoun; 2. reference of each relative to persons, things, or both; double use of the relative as reference word and connective; use of *whose* as the possessive of *which* or *that*; double use of *what*; restrictive significance of *that*; peculiarity of *that* in relation to the preposition; *as* and *but* as relative pronouns; 3. reference of each interrogative pronoun; absence of forms of declension except in the case of *who*; 4. use of *this* and *that*, with their plurals, and of *one* and *other* in referring to their antecedents; use of the compound adjective pronouns, *each other* and *one another*; incorrect use of *some* and *any* as adverbs; effect of the distributive pronouns upon the number of pronouns referring to them; use of the personal pronoun after *one*; 5. use of *none* in the plural; incorrect use of *such* as an adverb; use of the two possessive forms of compounds of *else*.

C. Articles—1. definite 2. indefinite; use of *an* before a word beginning with a vowel sound, before a word beginning with a pronounced *h* and accented on the second syllable; help to the correct

use of the definite and the indefinite article gained from the fact that the former is a weakened form of *that*, and the latter a weakened form of *one*; avoidance of the indefinite use of the definite article.

D. Adjectives.—Classes based on use and meaning: 1. qualifying 2. pronominal (a) demonstrative (b) relative (c) interrogative (d) exclamatory (e) quantitative (f) comparative 3. numeral (a) cardinal (b) ordinal (c) fractional (d) multiplicative. Classes based on syntax: 1. attributive 2. appositive 3. predicate. Too free use of nouns and prepositions as adjectives; use of adjective for adverb in poetry and for forcible brevity; use of adjective instead of adverb after verbs of incomplete predication; order of cardinal and ordinal adjectives when both are used.

E. Verbs.—Classes based on relation to the object: 1. transitive 2. intransitive; verbs of incomplete predication. Classes based on relation to the subject: 1. finite 2. verbals a. infinitives, (root infinitives and participial infinitives) b. participles. Classes based on changes in form (primarily in the conjugated verb proper, that is, the active voice, the present and the past tense): 1. regular, consonant, or weak verbs, 2. irregular, vowel, or strong verbs 3. verb phrases (all combinations of participles and infinitives with the parts of the verbs *be* and *have*); illiterate blunders in forming or using "principal parts," particularly of the strong verbs; incorrect use of transitive for intransitive verbs; objectionable locution with the passive form; care about the the clear syntax of all verbals; importance of use of the possessive case before a verbal noun; imperfect indication of tense in verbals—general meaning of present and perfect; necessity for careful discrimination in using the auxiliaries, especially

*may, can, shall, will;** errors in sequence† of tenses; three special

*Rules for the use of *shall* and *will*, (*would* and *should* following the same principles.)

In principal clauses.	In questions,	In subordinate clause
First person.	*First person.*	when the subject of the principal and that of the subordinate clause are the same.
Shall—simple futurity.	*Shall* in all cases.	The auxiliary that would be used if the subordinate clause were expressed in the form of a quotation. (See next page.)
Will— determination or inclination.	*Second and Third person.*	
Second and third person.	*Shall* or *will* according to the answer expected.	
Shall— determination of speaker.		
Will— futurity (also polite command.)		

Exercise for the application of rules for the use of *shall* and *will:* discuss for possible meanings, and for the correct expression of each by means of *will* and *shall*, the following sentences—Do you consent to go? Are you expected to go? I would go if I were you. I would not think it right even had I that inducement. I will die; nobody shall save me. I would have been glad to came had it been possible. He fears that he will be late. He does not doubt that he shall accomplish the work. I will meet the students this afternoon at two o'clock.

†Rule for the sequence of tenses: Determine principal tenses by the exact time of the action; then reckon subordinate tenses and verbals from the principal tense.

Discuss for the use of tense:—Mr. Black will be happy to accept Mrs. Green's kind invitation to dinner. By this time the afternoons will be cool enough for walking. It has always been a

uses of the present tense; use of the three modes—diminishing importance of the subjunctive—nice distinctions in present use.

F. Adverbs.—Classes based on use and meaning: adverbs of (1) time, including succession (2) place, including motion (3) degree, including number and measure (4) manner (5) affirmation (6) negation (7) doubt (8) reasoning. Classes based on syntax: (1) simple adverbs (which modify only), including interrogative and modal adverbs and the introductory *there* (2) conjunctive and relative adverbs (which modify and connect.) Adverbial phrases; responsives. Classes based on derivation:—(1) by inflection, (a) derived from adjectives (suffixes *ly* and *wise*, prefixes *a* and *be* (b) from nouns (suffix *wise*, prefixes *a* and *be*) (c) from other adverbs (suffix *ward* and *wards*) (2) by composition: preposition joined with (a) its object (b) the adverbs *here, there*, or *where*. Rule for use of adverb or adjective in case of doubt; equivalence of two negatives to an affirmative; position of *only*.

G. Prepositions.—Simple or derivative; preposition-phrases; wide variety of meanings given to the preposition in English—systematic study of these a matter of historical grammar, but close observation a guide to good use; use of prepositions as adverbs; parsimony in the use of prepositions as adjectives; question of avoiding the use of a preposition at the end of a sentence.

*H. Conjunctions.—Classes: *Co-ordinate* (connecting words and

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question with me whether the times or the author's personality had the strongest influence on poetry. I was glad to have read the book. I intended to have gone yesterday. I should like to have attended the lecture had I known of it in time.

*Exercise for discrimination in the classification and use of conjunctions: The trees will soon be bare [if, after, because, since, now that] the frost has come. Thou shalt love thy neighbor as thyself. Such as I have, I give. I should try except that I fear to fail. It is

clauses of equal rank) 1. simple (a) copulative (and, likewise, too, moreover, besides) (b) adversative (but, yet, however, still, only, nevertheless, notwithstanding) (c) alternative (or, else, neither, nor) (d) illative (therefore, hence, there, *for* at the beginning of a sentence); 2. correlative. *Subordinate* (connecting clauses of unlike rank (a) conjunctions of time (after, as, as long as, before, ere, since, until) (b) conjunctions of comparison (as, than) (c) conjunctions of condition (if, except, unless, provided) (d) conjunctions of concession (though, although, notwithstanding, albeit) (e) conjunctions of cause or reason (because, for, since, as, whereas) (f) conjunctions of purpose or result (that, in order that, so that, lest) (g) conjunctions of conclusion (therefore, hence); conjunctive phrases; correlative conjunctives; close relation of conjunctions, adverbs, and prepositions; *but* and *that* as conjunctions; importance, for clear expression of relations, of abundant and accurate use of conjunctions; care about the number of the verb used with alternative conjunctions; vulgar use of the adjective *like* for the conjunctive adverb *as;* of *but that* or *but what* for *that;* of *whether or no* for *whether or not.*

I. Interjections.—Interjections a "class of words," but not strictly a "part of speech"; the classes of interjections based on particular meaning, not on use or syntax, except in case of the interrogative use; interjection clauses and phrases—variety of noun and pronoun constructions used in these; use of *O* with words of address; punctuation of *O* and *Oh.*

IV. *Syntax.*

A. Parts of the sentence: subject and predicate.

B. The simplest form of the sentence: grammatical subject and

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seldom that we learn how great a man is until he dies. I don't know but I shall go. It never rains but it pours. None but the brave deserve the fair. Who knows but that his doom is already sealed.

grammatical predicate.

C. Modifiers and complements of the grammatical subject: (1) the attributive adjective (2) the appositive adjective (3) the appositive noun (4) the possessive noun or pronoun (5) the adjective phrase, infinitive, prepositional, or participial (6) the relative clause.

D. Modifiers and complements of the grammatical predicate: (1) the direct object (2) the indirect object (3) the predicate nominative (4) the predicate adjective (5) the noun objective (6) the adjective objective (7) the noun adverbial in three constructions (modifying a verb, an adjective or an adverb) (8) the adverbial modifier, word, phrase, or clause.

E. Some noticeable constructions.

1. Not included in C and D: nominative of address; nominative absolute.

2. Of the root infinitive: subject of a verb; attributive or appositive adjective; predicate nominative; object complement; objective; adverbial use, to indicate intent, purpose. etc.; object of prepositions *about* and *but.*

3. Of the participial infinitive (infinitive in *ing*): subject of verb; predicate nominative; object complement; object of preposition.

4. Of the participle: attributive adjective; appositive adjective; predicate adjective; adjective objective; in the absolute construction.

V. *Solecisms, including some barbarisms and improprieties: examples.*

Constant attention is the price of good English.—New York Sun.

A. One part of speech for another:—

1. An adjective for an adverb.

Most for *almost*, e. g., My money is most gone. She

most always comes to society.

Real for *really*, e. g., He's a real fine student.

Such for *so*, e. g., I never met such a nice girl in that company before.

Some for *somewhat*, e. g., She feels some better. I have studied the lesson some, but not enough.

Good for *well*, e. g., Your drawing is done very good, but not so well as his.

Near for *nearly*, e. g., I am not near through my work.

Any for *at all*, e. g., He isn't any better.

2. An adverb for an adjective:—

Then and *now* for *former* and *present*, e. g., Nathaniel Green was born in the then colony, the now state of Rhode Island.

Nicely for *well*, e. g., I'm nicely, thank you. (And is not, "I do nicely," i. e. "Nicely," in response to "How do you do?" an unconsciously boastful assertion?)

After the verbs *look, feel, smell, taste, be, seem*, e. g., She looked so queerly, I fear I had offended her. The flowers smell so sweetly that I covet them.

3. An adjective for a conjunctive adverb:—

Like for *as* or *as though*, e. g., I wish I could write like he can. Nobody will miss Mother like I shall. It seems like I never can learn to apply that principle.

4. A preposition for a conjunction:—

Without for *unless*, e. g., He can't go without there is a holiday.

5. A verb for a noun:—

Raise for *rise*, e. g., He has had a raise in salary. There is a raise of ground just behind the building.

6. A noun for a verb:—

Loan for *lend*, e. g., Did you loan him the sum he wanted?

7. A noun for an adjective:—

Plenty for *plentiful*, e. g., Apples are plenty [plentiful] and reasonable in price.

B. Faults of concord.

1. A plural pronoun with a distributive antecedent:—

Their after *everybody*, e. g., Let everybody cast their vote in one way or another.

They after *anyone*, e. g., Anyone can go if they desire.

(Each, either, neither, every, no, many a, anyone, everybody, are always singular.)

2. A singular subject with a plural verb, e. g., Each of us know; neither of us were ignorant.

3. Lack of agreement between adjectives which imply number and the substantives which they modify, e. g.—

I never liked these kind as well as the other. These sort of collars are uncomfortable. You have been sleeping this two hours. The third and fourth page are to be learned. Those kind of trees are evergreen. It is five foot seven inches high.

C. Errors in verb forms.

1. Illiterate blunders in using the "principal parts:"—

a. The perfect participle for the past tense, and

b. The past tense for the perfect participle, e. g.,—

She done the best she knew how. Coal must have went up since last week. When I come in this morning, the windows were open. The train run at terrific speed. He drunk the cup of hemlock.

2. Errors in tense:—

a. The future for the present, e. g., I shall be glad to

accept your kind invitation.

b. The past tense for the present in expressing a truth, general or regarded as such, e. g., He said that great poetry had always depended on national life for inspiration. He said that honesty was the best policy.

c. The perfect instead of the present participle when the time expressed by the participle is the same as, or later than, that denoted by the principle verb, e. g.— It was my intention to have collected many views on this disputed point.

Double error: I should like to have gone to Collins had the day been pleasant.

d. The past for the present perfect when the time is not limited, e. g., I never saw a more determined purpose than that shown by this youth—instead of *have seen.*

Use of two verbs in the past when one indicates the time, e. g., These were virtues which she might have been supposed to have acquired.

3. Misuse of auxiliaries:—

a. *Will* and *would* for *shall* and *should*, e. g.—If we look, we will see that the structure is as was described. I insist that those present will be orderly and attentive. I would like to know who she is. We will be obliged to take the more difficult course if we expect to succeed. He fears that he will be unable to come.

b. *Can* for *may*, e. g., Can I see you a moment after class?

c. *Ought* as if it were a perfect participle, e. g., He'd

ought to go, but he refuses. You hadn't ought to do that.

D. Negatives that do not deny.

I don't know nothing about that, but I do know about this. She says she doesn't never use corn starch in her ice cream. Neither you nor nobody else ever saw what he described. I havn't had hardly a minute's time since morning. He can't have but one week's vacation.

E. Illiterate abbreviations.

Don't (do not) for doesn't (does not), e. g.,—It don't seem possible that we have been here two months. Our teacher don't have to work hard.

Aint for *aren't* or *isn't*, e. g.—It ain't right to neglect the right use of our noble language.

Gents for *gentlemen*. *Pants* for *pantaloons* (correct word, trousers.)

F. Faulty comparisons.

Don't you think this is the best of the two? Our new minister is more eloquent than any preacher we ever had. The climate of Colorado is said to be the most healthful of any other in the United States. Which is most desirable, afternoon or forenoon work?

G. Abstract for concrete nouns.

Celebrity (fame, renown) for *celebrated person*, e. g.—I am to meet this celebrity at dinner.

Relation for *relative*, e. g.—Though I must travel alone, I shall be met by a relative at the end of the journey.

Action (put in the plural) for *acts*, e. g.,—His actions were not such as to recommend him.

H. An abstract noun for a verbal noun that expresses doing,

The men received compensation for the resignation of [resigning] their claims. [This is a very common error.]

I. Use of abstract nouns in the plural.

I have intentions of going next week, for, I have the intention of going next week. I have thoughts of accepting the place, for, I have some thought of accepting the place.

J. Barbarisms that should be banished.

Confliction for *conflict*, e. g., My schedule still shows a confliction between sloyd and physics.

Suspicion (noun) for *suspect* (verb), e. g., He suspicioned that his friend had not been altogether honest.

Enthuse for *make or become keen or enthusiastic*, e. g., He is so enthused for tennis that he enthuses everybody else.

Onto for *on or upon*, e. g., If I could once get onto that plane, I think work would be easier.

Specie for *species*, e. g., One specie of this plant grows abundantly on the hills.

—Complected for *has a—complexion*, e. g., He is dark complected, but his sister is light complected.

Underhanded for *underhand.*

Illy for *ill.*

K. Improprieties that indicate imperfect education.

Balance for *remainder*, e. g., I mean to read Scott for the balance of the evening.

Bulk for *most* or *greater part*, e. g., The bulk of the inhabitants are uncivilized.

Claim for *maintain* or *contend*, e. g., He claims that his view does not involve this contradiction.

Party for *person*, e. g., I was told by a trustworthy party

that the report is true.

Locate as an intransitive verb, e. g., He has just located in Denver.

Guest for *think* or *suppose*, e. g., I guess that it is true, though I should rather not believe it.

Have got for *have*, e. g., I have got the very book here in my hand.

Propose for *purpose*, e. g., I propose to go to England next summer.

Transpire for *occur*, *happen*, *take place*, e. g., These strange events transpired in the early part of the fifteenth century.

Receipt for *recipe*, e. g., Mary gave me a better receipt for caramels.

Allude for *refer*, *mention*, e. g., He calmly alluded to the disgraceful act.

Antagonize for *alienate*, e. g., He antagonized the mere politicians by his balanced and discriminating address.

Funny for *odd*, e. g., She is so funny that I am not surprised at anything she does.

Posted for *informed*, e. g., Though imperfectly educated, he is well posted on current events.

Quite, for *very*, *rather*, *somewhat*, etc., e. g., It was quite good, though not so fine as I expected.

Female for *woman* or *woman's*, e. g., She prefers a female college to Amherst. The female turned the corner and walked rapidly away.

Lady for *woman*.

Expect for *suppose* or *believe* or *suspect*, e. g., I expect I am keeping you from work. I expect he went to Denver yesterday.

Stop for *stay*, e. g., I am told he is stopping at the "Brown Palace."

Champion for *support*, e. g.. Though he champions the cause with vigor, he injures rather than aids it.

Healthy for *wholesome*, e. g., She gives her children nothing but healthy food.

Aggravate for *vex* or *exasperate*, e. g., His obstinacy aggravated me to the verge of anger.

Anticipate for *look forward to*, *expect*, *foresee*, e. g., It is anticipated that the government will be forced to give promises of greater freedom. [Ex. of correct use: The speaker anticipated objections by a full discus sion of the main difficulties.]

Anxious for *desirous*, *concerned*, *solicitous*, e. g., Mrs Brown was anxious to retain so good a servant [de-. sirous.]

Financial for *pecuniary* or *monetary*, e. g., He has not the kind of ability that leads to financial [pecuniary] success.

Hurry for *haste*. [Dignified people make haste, but they do not hurry.]

Capable for *susceptible*. Capable implies power of acting; susceptible, readiness to be acted upon. Ex. of correct use: He is capable of grasping a profound meaning; the words are susceptible of another interpretation.

Proposition (an idea to be considered) for *proposed* (an idea to be acted on) e. g., I hope you will accept this proposition rather than the other.

Generally (opposed to restrictedly) for *commonly* or *ordinarily* e. g., The American eagle is generally

(commonly or ordinarily) a fish-eating bird.

Individual (properly used only in contradiction to a collective term) for *person, anyone, man*, etc., e. g., Does any individual wish to accept this offer?

Mutual for *common*. [Two persons may have a *common* but not a *mutual* friend.]

Crowd for *group, company, assembly*, e. g., She always goes with that crowd.

SPELLING.

Importance of correct spelling; possible disproportion between the effect of illiteracy due to bad spelling and the real implication of a blunder; helps in acquiring the ability to spell; rules.

SYLLABICATION.

The two bases of syllabication, etymology and pronounciation; combination of the two in ordinary cases; difference between American and English usage.

CAPITALIZATION.

Rules:—

A capital should begin a proper noun or word regarded as such; a word derived from a proper noun; the name of a day in the week or of a month in the year; a title of honor or office when used to mark out a particular person; every noun, pronoun, verb, adjective, and adverb in a title; the first word of a sentence, of a direct quotation, of a direct question, of a line of poetry. (Discuss the capitalization of the terms *east, summer, the middle ages, mother, scriptures.*)

PUNCTUATION.

I. *Introductory:—*

Definition; utility; relation to syntax; general function of the different marks.

II. *Rules:—*

The period is used after a declarative sentence; an abbreviation;

a Roman or Arabic figure used as a numeral; a heading; a signature.

The interrogation point is used after a direct quotation; in braces, to express doubt.

The exclamation point is used after expressions that are strongly exclamatory, including interjections, invocations, and clauses or sentences which express sudden or intense emotion.

The quotation marks are used to enclose the exact language of another person, and such terms as the names of books, magazines, ships, engines, when these are not written in italics.

Single quotation marks are used to mark a quotation within a quotation; to mark a term used in a special sense.

The hyphen is used to separate the parts of some compound words and the syllables of a word written on different lines.

The braces are used to enclose an explanation, reference, translation, mention of authority, or other matter not strictly belonging to the sentence.

The brackets are used chiefly to enclose matter inserted by an editor or some person other than the writer.

The dash is used when the construction of the sentence is suddenly changed or suspended; when the break made by a parenthetical phrase or clause is too great for the use of commas; when words or letters are omitted.

The colon is used to mark specification; to introduce formally a quo'ation.

The semicolon is used to separate the co-ordinate clauses of a compound sentence when these are not so short or so closely connected as to form a series; to separate clauses, and sometiemes phrases, which have a common dependence upon another term; (notice the way in which the independent clause is separated when it comes before, and when it comes after, the dependent series) to precede the word *as* when it introduces an example.

The comma is used to set off, adjective and adverbal clauses and phrases when these are not restrictive; phrases or clauses used parenthetically when the writer wishes to call attention to the parenthetical nature; intermediate expressions which come between two important parts of the sentence, as between subject and predicate; words in apposition, with their modifiers; nouns or phrases which are independent by direct address; an expression containing the case absolute; a title or degree following the name of a person; a short quotation; the terms of a series of words or phrases in the same construction; words or phrases in pairs or contrasted with each other; also to mark the omission of a noun or verb for the sake of brevity or emphasis.

TYPES OF COMPOSITION.

I. *Introductory.*

The types modes of writing distinct but not separate in literature; importance in any discourse of predominance of the type adapted to the aim of the piece; differentiation of narration, description, exposition, argumentation, by reference to (a) subject-matter,(b) aim; application of the fundamental principles of composition, namely, unity, coherence, and mass (emphasis), to all the types.

II. *Description.*

A. More specific character: description in later literature an accessory, rarely an independent interest; the purpose of literary description to convey an impression, not to give an accurate mental photograph or a scientific analysis; false implication of the term "word-painting"—description not properly representation but suggestion through the most distinctive elements of an impression; the art of description not that of accumulating details; use of the imagination in description; imagining quite different from fabricating; the imagination a necessary agent in (1) supplying the details needful to a consistent whole, (2) selecting and arranging the details neces-

sary to the aspect presented, (3) fusing the details and seizing upon their meaning so as to make clear and vivid the essential impression.

B. Normal order of parts: (1) view of the whole, (2) salient or characteristic features, (3) return to the main impression;—discussion of examples; variations from the normal order; effect of omitting (1), (2), or (3.)

C. Elementary laws: selection of the point of view, keeping to the point of view, necessity for a clear indication of any change in the point of view; selection of salient or of characteristic details; grouping and order of the details; arrangement of the details as determined by the point of view; the principle of proportion—its demands; relation of keenness of perception to the art of description; importance, in individualizing a scene, of truth to evanescent features, e. g. weather, time of day, kind of light; range of appeal in description as including sound, motion, and odor; necessity of concreteness in the vocabulary of description; return at the end to the distinctive impression.

D. Particular methods: "objective" and "subjective" description—all literary description in a measure subjective; description by simple enumeration—its defects (see also A); more artistic application of the method of enumeration—enumeration with suggestion of the whole, enumeration with grouping on special plan; description by narration; description with suppression of most details—its extreme limit in the method called "impressionism;" "epithet description;" dramatic method or description by mental effects—its value in the portrait-sketch, its limitation, in description of nature, by the "pathetic fallacy;" the mingling of the several methods in literature.

E. Common faults: exaggerated fervor or "sensationalism;" use of trite words and modes of expression; poverty in particularizing terms; over-dependence on nouns and adjectives.

III. *Narration.*

A. More specific character: narration the most primitive and spontaneous form of discourse; narration, more than description, in accord with the serial nature of language; artistic production in narrative form not the less difficult; the proper subject-matter of narration not merely any succession of events, but a series shaped toward a definite and significant culmination; necessity for imagination in (1) holding fast the controlling idea of a narrative, (2) conceiving the underlying causes of action, (3) securing close sequence in the movement, (4) marshalling all details to the common end.

B. Normal order of parts: (1) setting, (2) preliminary situation, (3) happening, (4) development of happening in series of situations, (5) culmination (climax), (6) conclusion; variations from this order; omission of (1); omission of (2), the story beginning with a minor situation in the development of the happening—methods of bringing up what precedes; concurrence of (5) and (6.)

C. Elementary laws: maintenance of a chain of events which shall support and conduct all the other elements; meaning of the "movement" of a narrative—its exacting continuity—the order of time necessarily supplemented by, sometimes transgressed by, the order of dependence or logical order; the rate of movement—its dependence on the relative importance of events—effect of accelerating, of retarding; means of securing suspense, especially through phrasal and clausal arrangement and suppression of predication; the chain of events not a mere puzzle to be worked out, but a constructive series guided by a controlling idea which shapes all details to the end in view and determines the importance given to each element; the end or purpose of a narration thus two-fold—externally, the *denoument*, or point toward which the chain of events leads, internally, the meaning of which the chain of events with its *denoument* is the embodiment; selection of subsidiary ends or situations

—its dependence on the controlling idea; adjustment to the end or purpose of the different elements of narrative method—plot, character, dialogue, description; use of contrast, of climax, of surprise; structural features of more elaborate narration—use of subsidiary stories, of episodes; interwoven plots, historical perspective, synchronism of events.

IV. *Exposition.*

A. Definition: derivation of the term; essential character of the subject-matter set forth always meaning, significance, or relation; the aim of exposition distinguished from that of other forms dealing with ideas (argumentation, persuasion.)

B. Methods: examination of terms; definition—its logical form; iteration; comparison; exemplification; anology; cause and effect; details; extensive exposition or division,—the principle of classification, completeness and distinctness of good classification, difference between division of an idea or classification and mere partition of a subject; function and relative worth of the different methods; constant combination of the methods in literature.

C. Common forms: the treatise; the didactic essay; the literary essay—criticism; main characteristics of each form; function of exposition in literature.

V. *Argumentation.*

A. Definition: see IV, A: differentia of the subject-matter of argumentation the truth or falsity of an idea or fact.

B. Forms of proof.

1. Constructive proof.

a. facts (1) taken on testimony (2) inferred from known facts or from laws (3) observed or discovered; limitations of certainty; order of value of facts acquired in different ways.

b. truths.

(1) derived from precedents, sacred books, etc.

(2) taken on testimony; distinction between testimony as to fact and testimony as to truth (generalization or interpretation.)

(3) inferred.

(a) by induction: forms of induction; *a priori* and *a posteriori* arguments; circumstantial evidence; inference from example—the *a fortiori* argument; from analogy; the use of example and analogy properly expository rather than argumentative.

(b) by deduction; the basis of deduction in the syllogism; modifications of the syllogism in literary usage; the chain of reasoning.

2. Destructive proof.

a. *reductio ad absurdum*—reduction to alternatives, one untenable.

b. dilemma—reduction to alternatives, both untenable.

c. method of residues (elimination)—reduction to aspects, all untenable but one.

d. refutation by (1) analysis of the opposed position (2) attack on the premises (3) showing a *non sequitur* (4) exposing fallacies in the opponent's chain of reasoning, (5) parity of reasoning on the scheme of a, b, or the chain of reasoning.

C. Assurance of proof: limitations of logic; misleading nature of emotion; reduction of testimony and authority to a comparison of personal worth, intellectual and moral; the evidence of history on the value of argument; degrees of probability from the impossible (contradictory) to the extremely probable (certain.)

D. Common forms of discourse in which argument predominates.

1. Debate.

a. Nature of debate; see IV, A. and V, A.; differentia of debate truth without special regard to pleasure or edification (see

D, 2.)

b. Conduct of debate.

(1) Preparation of the question.

(a) Explication and construction of the theme (a clear-cut proposition put as an affirmative resolution); the service of exposition here.

(b) General tactics: placing the burden of proof; fairness in stating and estimating the opponent's argument; points to be conceded, points to be waived.

(2) Marshalling of arguments.

(a) As regards kind: value and effect of *a priori a posteriori*, and deductive arguments; place and function of arguments from example and analogy.

(b) As regards strength: importance of exposition and summary; need of clear arguments at the outset; place of relatively weak arguments; strength gained by tactful juxtaposition of arguments; dependence of the place and prominence given to refutation upon the strength of the opposing position.

2. Oratory: a form of argumentation concerned with truth as delighting or edifying; its essential attributes as regards subject-matter, style, and relation to audience; its greater elevation, freedom, emancipation from set rules; eloquence a subtle product of subject, occasion, character of speaker, and response of audience.

THE PARAGRAPH.

I. *Defintiion.*

Relation of the paragraph to the lesser and to the greater unit of discourse: A paragraph in a group of related sentences which serve to develop one point of a theme.

II. *External appearance.*

Sign of the paragraph: The subordinate relation of paragraph to theme is indicated by indenting the first line. The true relation must be preserved by taking care 1) not to separate by indentation

sentences that belong together; 2) not to run together into one group sentences that should form separate paragraphs.

III. *Structure.*

The internal structure of the paragraph: The sentences of a paragraph not only belong together, they belong together in a peculiar way, in a particular order. The principles which govern the relation of the sentences within a paragraph are named unity, coherence, mass (emphasis.)

A. Unity.—The fundamental idea of the paragraph is oneness of aim. All the sentences must unite to develop the topic on which the paragraph is written. Unity, therefore, forbids digressions and irrelevant matter. If any such matter occur to the writer, it must be 1) thought into relation to the point 2) put into a separate paragraph, or, 3) dropped altogether.

B. Coherence.—A paragraph has coherence when the logical relation of each sentence to the preceding and to the following sentence is unmistakable. The general principle underlying coherence is, Matters closely connected in thought should be kept together; matters distinct in thought should be kept apart. In carrying out this principle, the pupil will be aided by the following suggestions, which, however, are not to be unvaryingly applied.

1 Place next the sentence just written that part of the following sentence which is most closely connected with it.

Ex. Try the effect of writing in normal order the last sentence of the quotation given below, and say what is the effect on coherence. His eye for a fine, telling phrase that will carry true is like that of a backwoodsman for a rifle; and he will dredge you up a choice word from the mud of Cotton Mather himself. A diction at once so rich and so homely as his I know not where to match in these days of writing by the page; it is like homespun cloth of gold. —Lowell.

2. When the effect is not thereby rendered monotonous, express parallel thoughts by parallel structure. Ex. For his sake the Almighty had proclaimed his will by the pen of the Evangelist and the harp of the prophet. For his sake empires had risen and flourished and decayed.—Macauley.

3. Use words of reference. A large proportion of the sentences of a paragraph should contain some word or phrase which directly refers to the preceding sentence. This reference should be definite enough to single out the exact idea intended. Ex. The great thing for us is to feel and enjoy the true poet's work as deeply as ever we can, and to appreciate the wide difference between it and all work which has not the same high character. This is what is salutary; this is the great benefit to be got from the study of poetry. —Arnold.

4. Use suitable connectives. Our uninflected English is rich in particles, and these should be used with prevision. Be sparing of *ands* and *buts* at the beginning of a sentence; comparatively few sentences stand to the preceding in strictly co-ordinate or strictly disjunctive relations. Concessions should often be introduced by such expressions as, *it is true, to be sure, although*, looking forward to a sentence or clause beginning with *still, yet, however, none the less*, and the like. Conditions usually need an introductory *if, unless*. Degrees of modification are indicated by such words as *at least, perhaps, for the most part, possibly, probably*. Words and phrases like *moreover, consequently, therefore, too, further, likewise, finally, the truth is, even then, as it is*, must often be used to make the connection between sentences, and to show the relation of the sentence of which they are a part to the main idea of the paragraph.

C. Mass. The chief ideas of a paragraph should be so placed as readily to catch the attention. Mass concerns 1) position: The beginning and the end of a sentence are the fittest places for its

chief ideas and so for its most important words; 2) proportion: Subordinate matter should occupy less, principal matter proportionately more, space. Two rules for mass are useful—a) See that due proportion in space is kept between principal and subordinate matters; b) End with words that deserve distinction.

IV. *Tests for the principles of paragraph structure.*

1. Unity.—The substance of any paragraph that possesses unity can be summed up in a single sentence without essential loss of meaning.

2. Coherence.—A paragraph is coherent when the relation of each sentence to the foregoing sentence can be easily and clearly stated.

3. Mass.—A paragraph is theoretically well massed when it can be summed up in a sentence whose subject shall be a summary of its opening sentence and whose predicate shall be a summary of its closing sentence. The reason for this test can be clearly made out, but the rule cannot be so generally applied as can the other tests because it is more mechanical.

V. *Method of applying knowledge of paragraph structure:*

In the case of sentences, we best apply our rhetorical principles in revision; but in writing paragraphs, we should apply them in previsision. A theme should be written paragraph by paragraph, not sentence by sentence, and the relation of paragraphs should be determined provisionally before the pupil begins to write at all.

LETTER WRITING.

I should recommend anyone who wants to learn the art of composing English to write simply and unaffectedly, and to take all the pains he can even with a common letter.—Jowett.

I. *Materials and chirography,*

A. Materials for business letters:—White or cream tinted paper,

letter or commercial note size, of plain (not satin) finish; preferably, for convenience, the larger size of oblong envelopes, white or cream-tinted to correspond with the paper; black ink.

B. Material for personal letters: White, cream tinted, or very faintly colored paper, commercial note or octavo, unruled; preferably square envelopes; black ink.

C. Handwriting.—Mechanically, a neat, legible hand is of the first importance. Flourishes are vulgar. Interlineations, blots, and obvious erasures, cross-lining, and abbreviations of common words, are not respectful, suggesting as they do that the writer does not consider the person addressed of sufficient importance to warrant the exercise of common politeness.

D. Cautions.—Good taste does not permit the use of ordinary colored paper, and few even of the palest shades are safe. Blue is the oldest and safest tint, and gray is admissible. If but two pages are used, it is allowable to write on pages one and three. But if more than two pages are to be occupied, the order should be one, two, three, four, and not one, three, two, four,—a confusing and disorderly arrangement. If any color is introduced, the greatest pains must be taken to avoid disharmony. Paper, monograms and sealing-wax, if they are used, and even postage stamps, should be considered in relation to one another,

II. *Mechanical plan.*

Parts of a letter:—

A. Heading.
- Contents: the address of the writer; the month, day of the month, and the year, of writing;
- Position: in business letters, at the right of the page, an inch and a half from the top; in friendly letters, at the left of the page, an inch and a half below the signature.
- Space occupied: Two or three lines, according to the length of the heading.

B. Address.
- Contents: the name of the person to whom the letter is written; the place to which the letter is to be sent.
- Position: In business letters: at the left of the page, below the heading.
- In personal letters: at the left of the page, below the signature.

C. Salutation.
- Contents.
  - In business letters: Sir, Dear Sirs, Gentlemen, etc.
  - In personal letters: My dear Madam, Dear Mrs. Blank, My dear Mrs. Blank.
- Position.
  - At the left of the page, below the heading, or below the address in business letters.

D. Body.—Place of beginning: on the line below the salutation if there is no address above; on the same line with the salutation, after which is placed a comma and dash, if the address is written above.

E. Complimentary Close.
- Contents.
  - In business letters.
    - Yours truly,
    - Yours respectfully,
    - Very truly yours, etc.
  - In personal letters.
    - Yours sincerely, cordially, etc.
- Position.
  - Below the body of the letter at the right of the page.

F. Signature: The full name, or the family name with initials, always without pre-title or post-title. If needful, this may be supplemented by the name with pre-

title written at the left.

G. Superscription.	Contents.	The full name of the person addressed, with pre-title and suitable post-titles, if such there are.
	Position.	As far to the right of the envelope as may be without crowding.

III. *General requirements and cautions.*

1. Write the heading as far to the right, the address and salutation as far to the left, as may be without crowding.

2. Punctuate the heading and address by a comma after each complete item except the last (where of course the period is used) and by a period after each abbreviation.

2. Dates, together with designations by number, are written in Arabic figures, though it is sometimes a "fad" to write them out in words. Ordinary numbers and quantities are expressed in words. The number of a house is indicated in figures, but the number of the street is, in refined personal letters, written out in full; as, No. 16 East Twenty-seventh Street, instead of East 27th St.

4. Pre-titles, with the exception of Mr., Dr., Rev., and Hon. are to be written out in full, and the last three of these may follow this rule. The abbreviations, Col., Gen., Cap't., Pres., etc., are undesirable. Clergymen are preferably addressed as "The Reverend;" a Jewish rabbi as "The Reverend Rabbi;" women who are entitled to the distinction as "The Reverend Mother Superior," "The Rev-

erend Lady Abbess." Gentlemen without professional titles are properly addressed as "Mr."; "Esquire" ("Esq.") is un-American and wirhout meaning in this country; but if "Esq." after the name is preferred, "Mr." must not be used before the name. The proper address for boys is Master, and the plural of both Mr. and Master is Messrs. In addressing a married lady use the husband's full name, but not his title. Forms like Mrs. Senator Brown, the Reverend Mrs. Smith, Mrs. General Jones are relinquished by refined persons to the use of the snobbish. Neither Miss nor Mrs. can be used as a salutation like the vocative "Sir:" In each case we must write "Madam" or "Dear Madam."

5. Post-titles must not repeat pre-titles. The tendency is to be sparing in the use of post-titles, except in catalogues.

6. The salutation and complimentary close of a letter should correspond as regards the degree of familiarity or formality which they indicate, but one should never repeat the other; as, "My dear Friend"—"Cordially your friend." Avoid the use of nouns (e. g., friend) in the complimentary close, except in very formal letters, where the word servant is still employed; as, "I have the honor to subscribe myself your most obedient servant," in writing to the President of the United States or other high official personage.

7. Pre-titles alone are not used in the salutation of a letter except in the case of the President of the United States who is properly addressed as "Mr. President." The governor of a state may be addressed as "Your Excellency," the mayor of a city as "Your Honor;" but in all these cases plain "Sir" (not "Dear Sir") is at least equally appropriate.

8. Initials should always be given. "Rev. Brown," "Hon. Jones" are improper in writing, as in speech.

9. Abbreviations must not ordinarily be used in the body of a letter, and abbreviation of the salutation or the complimen-

tary close is inexcusable. Life is not so short that we need write such insults as this: D'r. Sir,—Y'rs. Rec'd. and contents noted. Have sent the order. Shall see you again. Y'rs. resp'y.

10. A request should never be made nor an order given without the accompaniment of some courteous expression.

11. One's own time should never be saved at the expense of one's correspondent's.

12. Apologies should be made sparingly—that is, excuses for not having written earlier or oftener. When an apology is made, the loss involved in the neglect for which pardon is asked should be attributed to one's self, not to one's correspondent.

13. Never write a personal letter which has not at least some touch of individuality and some appearance of ease and simplicity.

WORDS.

I. *Introductory:*

Definition of diction; importance; relation to other elements of discourse.

II. *Quality of our vocabulary:*

Kinds of words as dependent on the principles of time, place and purity—meaning of the canon that words should be reputable, national, present; barbarisms, improprieties.

A. Violation of present use: obsolete or obsolescent words; neologisms.

B. Violation of national use: foreign words; provincialisms; localisms.

C. Violation of reputable use: hybrid or mongrel words; one class of words (part of speech) in place of another; technical and commercial jargon; colloquialisms; vulgarisms; slang; tests in case of divided use—specific sense, analogy, conservatism, simplicity harmony.

III. *Richness of our vocabulary:*

A. Mixed origin of English: languages which have contributed something to the English tongue (in chronological order)—

1. Keltic: spoken by the natives until the Saxon conquest (449); traces in modern English slight, being found chiefly in the names of prominent natural features. Other words: bard, glen, boast, cradle, bran, gruel, mop, tackle, gown, curd.

2. Latin: first Latin terms introduced by Cæsar and his Roman successors in the military government of the island; persistence of words derived from *castra, strata, colonia, fossa, vellum, portus, milia.*

3. Saxon: Keltic completely displaced by different branches of the Teutonic tongue (spoken by the Angles, Saxons, Jutes); these finally mingling in Old English.

4. Latin—second avenue of entrance into the language of England: conversion of the English to Christianity (597 A. D.) by Roman missionaries who conducted church services in Latin; consequent introduction of churchly terms. Exs. *apostolus*, from which comes *postol* (Old English) and *clericus*, from which clerc (clerk);altar, bishop, priest, church, psalm.

6 Danish: viking conquests during several centuries, especially the ninth and tenth, leaving proper names ending in *thorp* (Oglethorp) and *by* (Whitby, Derby), and a few common words, especially onomatopoetic verbs. Exs. fling, rap, whisk, whirl, whim, gust, bait.

*6. Norman French: conquest of 1066, resulting in an amalgamation of the low Dutch tongue of the English with Norman-

*NOTE.—We can usually tell whether a word comes directly from the Latin or indirectly through the French by noticeing its form. If the spelling (as distinguished from the ending) is changed, we are

French, a Latin language corrupted by the Keltic speech of the Gauls and by the Teutonic dialect of the Franks, possibly modified by the Norse speech; the grammar of the language simplified and its vocabulary enriched.

7. Latin, the Norman French constituting another channel for the influence of the classical tongue.

B. Habit of borrowing words: borrowings from other races—words intrduced through the influence of travel and commerce; words due to advance in science, discovery, invention, and the rise of new ideas. Examples—

Words of commerce: *damask* from Damascus, *calico* from Calicut in India, *sardine* from Sardinia.

Technical words: history, syntax, chronology, arithmetic, morphology, teleology, all compounds of the Greek endings *logy*, *mony*, *graphy*, *metry*, *ics*

Words indicating new ideas: evolution, differentiation, anarchist, agnostic, dude, realistic, impressionist.

Arabic words: algebra, almanac, magazine, cotton, alcohol.

Persian words: caravan, scarlet, chess, lilac, shawl, paradise.

Chinese words: tea, china, junk, Nankeen.

Turkish words: divan, scimitar, tulip, ottoman.

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usually safe in concluding that it comes through the French.

Latin.	*English directly from Latin.*	*English through French.*
populus	popular	people
fructus	fructify	fruit
deceptum	deception	deceit
fidelis	fidelity	fealty
regis	regal	royal
fragilis	fragile	frail

Italian words: gazette, canto, opera, piano, umbrella, concert, volcano.

Portuguese words: palaver, caste, molasses, fetish, albatross.

Dutch words: yacht, sloop, schooner, skates, smuggle.

Egyptian words: ammonia, the characters used to designate grains and drams, papyrus (paper.)

Hebrew words: Satan, jubilee, amen, cinnamon.

Hindu words: chintz, jungle, shampoo.

Polynesian words: taboo, tattoo, boomerang.

West Indian words: tobacco, maize, canoe, hurricane.

North American words: squaw, wigwam, tomato, mush, chocolate (Mexican.)

South American words: mahogany, hammock, potato, tapioca.

C. Distinct function of Latin and Saxon words.

1. Basis for comparison.

a. As to proportion of total number of words found in an unabridged dictionary: five sevenths of classical derivation; two-sevenths of Germanic origin; from two to three thousand words from all other sources.

b. As to frequency of words: words which occur most frequently Anglo-Saxon, these including nouns which name striking natural objects, such as sun, moon, land, water, hill, dale; the articles; the pronouns; the adjectives oftenest used, especially such as are irregularly compared; the commonest adverbs of one syllable, such as how, now, then; nearly all our irregular verbs as well as the auxiliaries such as have, be, shall, will; prepositions and conjunctions almost without exception.

c. As to kinds of words.

(a) Latin—abstract words*; learned words; scientific terms.

(b) Saxon—specific words*; common business words—language of farm, shop and market (sell, buy, cheap, dear, work, weight, reap, sow, baker, shoemaker, wunt, wedge, wages); words expressing the earliest associations and simplest feelings (home, friend, hearth, fireside. fear, pride, mirth, sorrow, hungry, thirsty, glad, tired, naughty, lonesome, homesick); names of common things, as parts of the body, kinds of weather, divisions of time, common animals; most colloquialisms (sham, trash, gawky, shiftless.)

Exercises:—

(1) Study the effect of the Saxon words in the following selection from Sidney Lanier, and try the effect of substituting Latin for Saxon words as far as you can without making the stanza ridiculous—

"As the marsh-hen secretly builds on the watery sod,
Behold, I will build me a nest on the greatness of God;
I will fly in the greatness of God, as the marsh-hen flies
In the freedom that fills all the space twixt the marsh and the skies;
By so many roots as the marsh-grass sends in the sod,
I will heartily lay me ahold on the greatness of God."

(2) Note the effect of the Saxon words in this stanza from Tennyson—

*Example of abstract (Latin) and the corresponding specific (Saxon) words.

Latin.	*Anglo Saxon.**
color.....	white, black, blue, yellow.
motion.....	walk, crawl, creep, spring, glide, leap.
sound.....	speak, buzz, whistle, roar.
emotion.....	fear, smile, tear, sigh, groan, weep, laugh.
relative.....	.....mother, wife, son, daugther.

"This truth came born with bier and pall,
I felt it when I sorrowed most,
'Tis better to have loved and lost
Than never to have loved at all."

(3) From the following selection from the Prayer Book of 1552, decide whether the choice of words was intended to suit the untaught or the more learned classes—

"Dearly beloved brethren, the scripture moveth us in sundry places to acknowledge and confess our manifold sins and wickedness * * * and that we should not dissemble nor cloak them; * * * yet ought we chiefly so to do, when we assemble and meet together."

2. Summary of comparison: fitness of Saxon for arousing plain, simple ideas and strong, primitive feeling; fitness of Latin for expressing accurate, discriminating thought and for awakening complex, finely shaded emotion.

IV. *Aspects of word-meanings.*

A. Denotation; accuracy—degree of meaning, shade of meaning; relation of etymology to determination of present meaning; idiomatic use.

C. Connotation: importance for the literary ends of language; see III, C, 2 and *Figures*, III, b.

V. *Choice of words.*

A. Its dependence on good use—correctness of diction.

B. Its dependence on the effect required—aptness or felicity of diction; general relation to style of Latin and Saxon, long and short, literal and figurative, general and specific, many and few, words.

C. Common faults of diction: vulgarity; slovenliness; diffseness, prolixity, inadequacy, poverty, "fine writing."

D. Suggestions for improving one's use of words.

1. Increase your vocabulary by conscious effort.
2. You constantly violate the canons of good use without

knowing that you do so; gain every day a little more knowledge. Try never to be guilty of a common barbarism or impropriety.

3. Use specific words.

4. Do not use too many words for the thought. An apt word is better than several trite or fumbling terms.

5. Use intensives sparingly or not at all.

FIGURES.

I. *Nature:*

The frequent departure of language from literal, matter-of-fact meaning; primitive and spontaneous character of figurative speech; the entire vocabulary of ideas (as distinguished from things) figurative in a loose sense; not all imaginative or picturesque language called figurative—figures forms of expression that depart in certain definite ways from literal speech; the laws of association on which figures are based.

II. *Classification:*

A Figures based on resemblance: simile—resemblance stated; metaphor—resemblance implied; personification—resemblance assumed; allegory—resemblance carried out in detail.

B. Figures based on contrast: antithesis—contrast expressed; climax and anti-climax—contrast through intermediates; interrogation—contrast implied between affirmative and negative; irony—contrast implied between truth and the contrary assumption; paradox—contrast between superficial and real meaning; meiosis and litotes—contrast between the importance of the truth and the weakness of the language.

C. Figures based on contiguity: synecdoche—association of a whole with its parts, of parts with the whole, of definite with indefinite numbers; metonymy—association of cause with effect, of sign with thing signified, of place with inhabitant, of container with thing contained, of instrument with agent, of subject with attribute

of an author with his work, of progenitor with posterity, of material with thing made; apostrophe—association of the absent with the present; vision—association of the past or future with the present; hyperbole—association of facts with co-existent emotion; exclamation—association of verbal forms with strong emotion.

D. Frequent occurrence in prose and especially in poetry of figures of etymology, of syntax, of sound: a list of figures which may be used in identifying puzzling forms—

1. Figures of etymology: prosthesis, epenthesis, paragoge, aphaeresis, syncope, metathesis, tmesis.

2. Figures of syntax: ellipsis, pleonasm, epizeuxis, anaphora, epistrophe, antistrophe, enallage, hyperbaton, hysteron proteron (hypallage.)

3. Figures of sound: alliteration, onomatopoeia, meiosis.

III. *Purposes:*

A. Of figures proper: (1) to add to clearness by association with a simpler or more familiar idea (2) to add to force by association with a more striking idea or by expression of more meaning in a given space (3) to enlist imagination and emotion.

B. Of less figurative (connotative) language: to give richness and shading to thought—effect of allusion to characteristic traits, deeds, achievements, incidents of history, mythology, fiction, and to significant expressions in literature; use of words colored by association with a different field of thought; adaptation of sound to the idea or feeling to be conveyed; delicate employment of trope, euphemism, innuendo, covert irony, gentle satire, sly humor; increasing tendency of literature to awaken response by indirect rather than by overt means.

IV. *Principles:*

Economy (nothing for mere ornament); fitness (adaptation to the subject and to the kind of thought and shade of feeling to be

aroused); purity (freedom from confused images); force (association close, clear, but not obvious); the weakness of exuberant, far-fetched, obscure, obvious, trite, bombastic, or belittling figures.

SENTENCES.

I. *Classification*:

A. Grammatical; general use in discourse of each of the three sentence types (see section on grammar, I, C.)

B. Rhetorical: definition of the loose and of the periodic sentence; the balanced sentence; marked difference in effect produced by loose style and by periodic; psychological and logical grounds for this difference; limitation to use of the periodic sentence imposed by the uninflected character of English; the artificial but often excellent effect of the balanced sentence—limit of the principle of balance in use.

II. *Sentence length:*

The function of long and of short sentences; the relation of decreasing sentence length to later prose style; data showing the tendency of English toward the short sentence—

WRITER.	WORK.	SENTENCE-LENGTH (APPROXIMATE.)
Pecock	Repressour, etc	61
Ascham	Toxophilus	43
Hooker	Ecclesiastical Polity	41
Sidney	Defense of Poesie	39
Bacon	Advancement of Learning	60
Burton	Anatomy of Melancholy	40
Milton	Areopagitica	57
Browne	Hydriotaphia	33
Hobbes	Leviathan	39
Walton	Life of Hooker	64

Taylor.....Liberty of Prophesying.....53
Dryden.....Prefaces.....38
Bunyan.....Pilgrim's Progress.....31
Addison.....Freeholder.....38
Swift.....Gulliver's Travels.....40
Johnson.....Rasselas.....38
Burke.....Conciliation.....26
De Quincey.....Opium Eater.....38
Lamb.....Essays.....27
Macaulay.....Essays.....23
Carlyle.....French Revolution.....24
Arnold.....Essays.....34
Emerson.....Essays.....21
Lincoln.....18

III. *Laws*:

Application of the principles of composition to the scale of the sentence; reason for the "subtile effect of vulgarity" produced by absence of sentence unity (Cf. use of abstract nouns in the plural); claims of the beginning and of the end of a sentence in securing good mass; means for securing coherence (1) order of words—words closely related in thought should be kept together, words distinct in thought kept apart (2) parallel structure—sentence members that are similar in function should have the same construction and the same phrasal and clausal form (3) words of reference or of connection—when the order of words and the form of constructions are insufficient to define the relation of a sentence member to the context, that relation should be expressed by connectives or by reference words; tests of unity, coherence, and mass in the sentence

IV. *Faults:*

Specific warning against errors that spoil or mar the sentences of beginners—say whether the fault indicated by each letter

below is a violation of unity, of coherence, of mass, or of good use—

A. Shun with untiring persistence the slovenly sentence. Do not be guilty of the "run-on" type or the use of iP (see marks for correction). Guard against the too co-ordinate manner.

B. Do not change the subject of a sentence unless for a special reason.

C. Place modifying clauses and phrases as near as possible to the words they modify.

D. Let the antecedent of every pronoun be unmistakable.

E. Beware of the hanging participle.

F. Do not weaken the sentence by using many pronouns, even though the antecedent of each is clear. Instead of, He is concerned, and justly so, for its effect on them, say, The leader (or Mr. Brown) is concerned, and justly concerned, for the effect of the strike on the workingmen.

G. Remember the distinction, in use and punctuation, between the restrictive and the non-restrictive clause. Use *that* as the restrictive relative, *who* and *which* as the co-ordinate relatives.

H. Do not use the correlative *and* for the *to* of purpose.

I. Do not use the article *the* with an indefinite force, e. g. The inundation of the Nile, following the changing cycle of stars, was the chief cause which led to *the* observation of the heavens.

J. Remember to follow a negative with *so*, not with *as*, e. g. This arrangement is not so good (instead of as good) as that.

K. Avoid separating *to*, the sign of the infinitive, from its verb.

L. "End with words that deserve distinction."

M. Do not underrate the need of accurate punctuation.

THE WHOLE THEME.

I. *Principles:*

Application of the three requisites of compcsition to the larger scale; subordination of the interpretation of each principle to the

literary purpose in hand; methods of planning—the necessary labor of the preliminary placing of parts; tests of unity; the chief means of securing coherence (1) orderly arrangement of parts (2) carefully placed summaries (3) definitely marked transitions; importance of good mass; interference of mass and coherence in larger wholes—adjustment of the claims of the two prinples.

II. *Specific cautions:*

A. Do not make the mistake of supposing that form may be disregarded in favor of thought. It is through form alone that thought can be expressed; and absence of structure and coherence always indicates lack of fundamental brain work.

B. Remember that unity, coherence, and mass are primarily matters of reason and logical sense, and are simply the essential means for affecting the mind of the reader.

C. Beware of any infringement of the law of unity. A digression must possess marked significance or beauty in order to compensate for the loss to force which it entails.

D. Remember that good mass implies *progress* in thought.

E. Do not forget that the transition from one paragraph to another must be as easy and natural, and the thought connection as clear, as are demanded in passing from one sentence to the next.

F. Avoid the mechanical transition; a thought connection is usually more forcible as well as more agreeable.

G. In striving to bring out your meaning, remember that the general without the particular is empty, the particular without the general, blind.

VERSIFICATION.

I. *Nature:*

Versification not mechanical, but organic; meaning of rhythm; difference between the rhythm of prose and that of poetry; the latter characterized by a regular and uniform basis; acquaintance with

versification a pre-requisite to study of the relation between form and content in poetry.

II. *The elements of verse form:*

A. Rhythm—musical arrangement of the lesser units of poetic expression.

1. Kinds: based on quantity (classic); based on accent (modern)—misleading aspect of the common terms, long syllable and short syllable.

2. Measure (metre): definition of terms *foot* and *verse*; designation of metre by kind and number of feet in a verse; the chief dissyllabic and trisyllabic feet; the general effect of the different metrical types; the idea of rhythm properly applicable to stanzas and even more extended portions.

3. Pauses: the caesura, final pause, and minor stops; their relation to the art of phrasing in reading.

B. Rhyme: consonantal rhyme—characteristics of a perfect rhyme (1) accented syllables (2) sameness of vowel sounds (3) sameness of sound in the letters following the vowel (4) difference of sound in letters preceding the vowel; assonantal rhyme; alliteration; relation of rhyme scheme to the stanza.

C. The stanza: relation to the metre and the rhyme scheme; common forms, blank verse—basal form, end-stopt and run-on verse, light and weak endings, double endings.

D. Exercise:—Compare Homer's verse form with that of Pope's translation as regards basis of rhythm, kind of feet, length of line, possibilities of variation, end-stopt and run-on lines, use of rhyme, and general effect.

MARKS WHICH MAY AT ANY TIME BE USED IN CORRECTING PUPILS' EXERCISES.

1.] Indent.
2. [Place to the left.

3. ( ) Substitute.
4. [ ] Omit.
5. Cap Use capital letter.
6. l c Use small letter.
7. sp Fault in spelling.
8. syl Fault in syllabication.
9. l–l Hyphen omitted.
10. P Fault in punctuation.
11. iP Illiterate punctuation (running together with the comma clauses that should be separated by the semicolon or the period.)
12. q Fault in writing a quotation.
13. Sx Fault in syntax.
14. S Any solecism.
15. t Solecism in the use of tenses.
16. ts Fault in tense sequence.
17. SW Fault in use of *shall* and *will*.
18. ¶ Begin a new paragraph.
19. No ¶ Do not begin a new paragraph.
20. Ip An impropriety.
21. B A barbarism.
22. D Consult the dictionary.
23. R Reference not sufficiently distinct.
24. Sq A case of "squinting construction."
25. T A case of tautology.
26. V Vagueness of idea or expression.
27. W A weak expression or passage.
28. K An awkward expression or passage.
29. I An unidiomatic expression.
30. H A heterogeneous mixture of ideas.
31. F A faulty or inappropriate figure.
32. Cli Faulty use of climax or anticlimax.

33. MR Mechanical repetition of word or phrase.

34. Cl Faulty use of cleft infinitive.

35. Force? What is the exact meaning of this word in this place?

36. Cf Compare.

37. Il Illogical conjunction of ideas.

38. Ucl Unclear.

39. Uin Unintelligible.

40. Ms Monotonous sentence structure.

41. U Violation of unity.

42. C Violation of coherence.

43. E Poor mass or emphasis.

44. m=m A violation of the rule that sentence members having the same function should have the same construction and the same form.

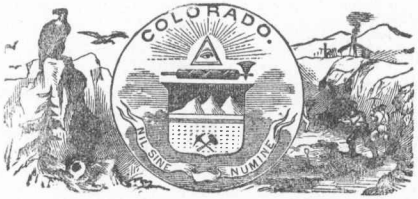
INDEX OF SECTIONS.

STATE NORMAL SCHOOL BULLETIN.

Series I. No. 4.

THE LIBRARY OF

STATE NORMAL SCHOOL



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HISTORY AND SCOPE OF LIBRARY.

The growth of the library of the State Normal School has been an interesting one. The first library room was eight by sixteen feet, with about one hundred volumes, most of which were reference works. This little room was on the second floor of the east wing, being intended for a cloak room. In this little room, during the fall of 1891, some real, earnest work was done. In the spring of 1892 the library was moved to the room now occupied by the first and second grades, on the first floor of the east wing. Books were added, cases purchased, a librarian secured, and much interest was centered in this new room, twenty-four by forty feet. It here became the den of every earnest student. In 1893 it was moved to the room occupied by the seventh and eighth grades. This room is twenty-six by fifty feet. Here it remained until 1894, when it was removed to its present quarters. The present room is thirty by ninety feet. It is here the library has made its growth. It is here where from fifty to one hundred and fifty students are constantly seen at work. It is a real delight to see these young people at work—quiet, earnest and intelligent in movement and effort. Fifteen thousand choice works, selected for the express purpose of Normal School work; a directory catalog, containing about seventy-five thousand cards, analyzing these volumes and arranging the subjects in an orderly form, indexes to the magazines, dictionaries, encyclopædias—all combine to make the library one of the most usable ones of the kind in the country. Besides all these aids, there is the one aid above all others that is valuable in a library, and that is the librarian. When all other means fail in finding what is wanted, the librarian is the last resort. Failure is not met here. If what is wanted is in the library, instantly he directs the student where it is found. The librarian is the most used individual about the institution. Training school children, Normal students and members of the faculty all call upon him. Indeed, the only use of the librarian is to be used by those who

want to make the best use of the library; but, for the best interests of the student in understanding how to use it, and to save his own time, he trains all how to use it. Instruction in the art of library-using is given.

The State Normal School Library is particularly rich along several lines. All the best works in nature study and science are found in it. It contains a number of classics along these lines: Buffon, Linnaeus, Lamarck, Cuvier, Nuttal's Ornithology and also his Sylva, Audubon, the Bridgewater treatises, Say's Entomology, and many others. It also contains all the best modern works in natural history and science. It is also particularly rich along the lines of American History, Pedagogy, Psychology, Philosophy, English and Literature, Art, Music, and current magazine literature.

The juvenile library is a very interesting and essential part of the work. There are many volumes of juvenile literature, ranging from what interests children in first grade to the high school, inclusive. Many of the books are found in the rooms of the different grades. Thus the children are led to read such literature as will form correct notions of life, and cultivate in them a taste for what is good and wholesome in the formation of character.

CLASSIFICATION.

The system of classification used in the Normal School Library is, with few changes, the one known as the Dewey or Decimal System. This is now very generally used throughout the United States, and has many advantages. By this system

All books upon any one subject stand together upon the shelves.

Books upon closely allied subjects precede and follow.

Fiction is arranged alphabetically by authors, all works by the same author being arranged alphabetically by titles.

(From the Introduction to the Decimal classification.)

The field of knowledge is divided into nine main classes, and these are numbered by the digits 1 to 9. Cyclopedias, Periodicals, etc., so general in character as to belong to no one of these classes, are marked 0, and form a tenth class, as follows:

000 General Works.
100 Philosophy.
200 Religion.
300 Sociology.
400 Philology.
500 Natural Science.
600 Useful Arts.
700 Fine Arts.
800 Literature.
900 History.

Thus all books on Religion begin with 2—that is, two hundred. All Histories begin with 9, or nine hundred, as 973, history of United States; 220, Bible.

Each class is similarly separated into nine divisions, general works belonging to no division always having 0 in place of the division number. This decimal division is repeated as often as necessary.

Classification.

000 GENERAL WORKS.
- 010 Bibliography.
- 020 Library Economy.
- 030 Cyclopedias. (General.)
- 040 General Collections.
- 050 General Periodicals.
- 060 General Societies.
- 070 Newspapers.
- 080 Special Libraries.
- 090 Book Rarities.

100 PHILOSOPHY.
- 110 Metaphysics.
- 120 Special Meta. Topics.
- 130 Mind and Body.
- 140 Systems.
- 150 Psychology.
- 160 Logic.
- 170 Ethics.
- 180 Ancient Philosophers.
- 190 Modern Philosophers.

200 RELIGION.

- 210 Natural Theology.
- 220 Bible.
- 230 Doctrinal.
- 240 Devotional and Practical.
- 250 Homiletic. Pastoral.
- 260 Church.
- 270 Religious History.
- 280 Christian Churches and Sects.
- 290 Non-Christian Religions.

300 SOCIOLOGY.

- 310 Statistics.
- 320 Political Science.
- 330 Political Economy.
- 340 Law.
- 350 Administration.
- 360 Associations.
- 370 Education.
- 380 Commerce.
- 390 Customs. Costumes. Folk-Lore.

400 PHILOLOGY.

- 410 Comparative.
- 420 English.
- 430 German.
- 440 French.
- 450 Italian.
- 460 Spanish.
- 470 Latin.
- 480 Greek.
- 490 Minor Languages.

500 NATURAL SCIENCE.

- 510 Mathematics.
- 520 Astronomy.
- 530 Physics.
- 540 Chemistry.
- 550 Geology.
- 560 Paleontology.
- 570 Biology.
- 580 Botany.
- 590 Zoölogy.

600 USEFUL ARTS.

- 610 Medicine.
- 620 Engineering.
- 630 Agriculture.
- 640 Domestic Economy.
- 650 Communication.
- 660 Chemical Technology.
- 670 Manufactures.
- 680 Mechanic Trades.
- 690 Building.

700 FINE ARTS.

- 710 Landscape Gardening.
- 720 Architecture.
- 730 Sculpture.
- 740 Drawing. Design.
- 750 Painting.
- 760 Engraving.
- 770 Photography.
- 780 Music.
- 790 Amusements.

800 LITERATURE.

- 810 American.
- 820 English.
- 830 German.
- 840 French.
- 850 Italian.
- 860 Spanish.
- 870 Latin.
- 880 Greek.
- 890 Minor Languages.

900 HISTORY.

- 910 Geography and Description.
- 920 Biography.
- 930 Ancient History.
- 940 Europe.
- 950 Asia.
- 960 Africa.
- 970 North America.
- 980 South America.
- 990 Oceanica, etc.

The books on the shelves and the cards in the shelf list are arranged in simple numerical order, all class numbers being decimals. Since each subject has a definite number, it follows, that all books on any one subject must stand together. The tables show the order in which subjects follow one another. Thus, 512 Algebra precedes 513 Geometry, and follows 511 Arithmetic.

THE CARD CATALOG.

Near the charging desk is the card catalog, with about seventy-five thousand cards arranged alphabetically in two large cabinets. In one by subject and title, and in the other by authors. An average of about five cards are made for each book, in order to cover all topics included. There will be a card found in author catalog beginning with author's name. One with exact title on a blue card in subject and title catalog, and as many other white cards as there are important subjects through the book, each card beginning with that subject, as Electricity, Light, Medicine, etc., followed on second line by author.

In addition, each and every card gives the author, title, shelf number, and in most cases an analysis of the contents of the book, with size and number of pages.

The number at the left-hand top corner, called the shelf or call number, indicates the class to which the book belongs, and the book may be found by referring to the shelf upon which such class stands.

In addition to the catalog already mentioned, there is also the shelf list, in which the cards are arranged just as the books stand upon the shelves. This, however, is not for general use, but is for the use of the librarians in checking up the library.

INDEXES.

Besides the card catalog, there are a number of indexes of different kinds, as Poole's Index to Periodicals by years and comprehensive 1800-1899, the latter gives all the more important topics during that period, while the yearly volumes give more in detail.

The Cumulative Index to Periodicals by months and years. This indexes the principal magazines down to the current month.

The Annual Literary Index of General Literature.

The A. L. A. Index to General Literature is a very thorough index to essays, lectures, speeches, etc., in publications where the title does not indicate complete contents.

There are also a number of indexes to be found with the magazines, such as Harper's, Popular Science Monthly, St. Nicholas, etc. These are very complete.

For other indexes, see Dictionary Catalog of Periodicals.

FINDING BOOKS.

Books can be found by first finding the *class number* in either the author or subject-title catalog, then referring to the number boards at end of each book stack. These give the class and division of that stack. The books are arranged on the shelves in groups, each group including the books devoted to a single subject. The books in each group are arranged alpha-

betically by their authors' names. Closely allied subjects precede and follow.

Do not mix up the books. Remember that others want to find them. Students should assist the librarians as far as possible by returning any books they have used to their proper places on the shelves. If unable to find the proper place, the books should be left on the table, rather than put in a wrong place.

PERIODICALS, NEWSPAPERS, ETC.

The current numbers of 145 popular and technical monthly magazines and fifteen weeklies are kept on file in the reading room, near the charging desk. A list of these will be found in the Dictionary Catalog following. There are also subject headings in heavy-faced type, under which will be found the best magazines treating on that subject.

Newspapers. About thirty county newspapers are placed in the reading room. Three dailies are subscribed for; aside from these, all other newspapers are given by the publishers. A list is found following Dictionary Catalog.

Bound Magazines. Of bound magazines, the library has about 1,800 volumes, chiefly the standard monthlies. These do not go out of the library, except under special circumstances, but are used entirely as reference books.

Indexes. Under indexes can be found those devoted to indexing magazines, and an alphabetical list of catalogs, bulletins, etc., useful for reference work.

Poole's Index. Poole's Index is an index to the contents of the principal magazines of this century. An abridged form is in one volume for the years 1800-1899. Annual volumes give contents more in detail and bring it up to the present year.

General Literary Index. The A. L. A. Index to General Literature indexes biographical, historical and literary essays, etc.,

other than magazine articles. It has an annual supplement, found at the end of the Annual Literary Index.

Subject Lists. The subject lists are not in any way exhaustive, but aim to give the principal periodicals devoted to the subject. Much additional matter on the same subject can always be found in many others.

Academy.
American Anthropologist.
American Geologist.
American Historical Review.
American Journal of Psychology.
American Kitchen Magazine.
American Mathematical Monthly.
American Microscopical Journal.
American Naturalist.
American Physical Education Review.
American Primary Teacher.
American School Board Journal.
Annals American Academy Political Science.
Annual Index to Periodicals.
Annual Literary Index.

ANTHROPOLOGY—
American Anthropologist.
American Journal of Archæology.

ARCHITECTURE—
Progress.
Scientific American.
Scientific American Supplement.

Arena.

ART—
Academy.
Art Amateur.
Art Interchange.
Art Education.

Art Study.
Athenæum.
Brush and Pencil.
Critic.
Eclectic.
International Studio.
Magazine of Art.
Progress.
Art Amateur.
Art Education.
Art Interchange.
Art Study.
Athenæum.
Atlantic Monthly.
Auk.

BIBLIOGRAPHY—
Annual Literary Index.
Book Buyer.
Book Lover.
Book News.
Bookman.
Bookseller, Newsdealer, Stationer.
Boston Public Library Bulletin.
Columbia University Bulletins.
Cumulative Book Index.
Current History.
Current Literature.
Dial.
Index to Periodical Literature.
Journal of Education (London).
Library.
Library Journal.
Literary World.
Literary News.
Literature.

Monists.
Natural Science.
New York State Library Bulletins.
Pedagogical Seminary.
Philosophical Review.
Physical Review.
Political Science Quarterly.
Popular Science Monthly.
Publisher's Weekly.
Review of Reviews.
School Review.
Stechert's Monthly List.
See also Indexes.

BIOLOGY—
American Microscopical Journal.
American Naturalist.
International Journal of Microscopy.
Nature.
Popular Science Monthly.
Science.
See also Botany, Natural Science, Science, Zoölogy.

BIRDS—
Auk.
Birds and All Nature.
Oologist.
See also Biology, Science, Zoölogy.

Birds and All Nature.
Book Buyer.
Book Lover.
Book News.
Book Reviews.
Bookman.
Bookseller, Newsdealer, Stationer.
Botanical Gazette.

BOTANY—
Botanical Gazette.
Bryologist.
Bulletin Torrey Botanical Club.
Plant World.
Country Life.
Brain.
Brush and Pencil.

BUILDING—
Art Amateur.
Art Interchange.
Scientific American.
Bulletin Torrey Botanical Club.

Canadian Magazine.
Canadian Teacher.
Century.
Chautauquan.
Child Garden.
Child Study.

CHRISTIAN SCIENCE—
Mind (Monthly).

CIVICS—
Municipal Affairs.
Public Opinion.
See also Economics, Politics, Sociology.

COLLEGE PUBLICATIONS—
See Crucible Exchanges.
Colorado School Journal.
Columbia University Quarterly.
Contemporary Review.

COOKING—
American Kitchen Magazine.
Good Housekeeping.
Household.

Ladies' Home Journal.
Table Talk.
Cosmopolitan.
Country Life.
Critic.
Crucible Exchanges, various college and school publications.
Cumulative Book Index.
Cumulative Index to Periodicals.
Current History.
Current Literature.

CRITICISM—

Academy.
Athenæum.
Book Buyer.
Book Lover.
Book News.
Bookman.
Bookseller, Newsdealer, Stationer.
Critic.
Current Literature.
Dial.
Literature.
Literary News.
Literary World.
Poet Lore.

CURRENT TOPICS—

Canadian Magazine.
Great Round World.
Literary Digest.
Nation.
Public Opinion.
Review of Reviews.
Week's Current.

DAILY PAPERS—

See list at end.

DESIGN—
Art Amateur.
Art Interchange.
Brush and Pencil.
International Studio.
Magazine of Art.
Progress.
See also Art.

Dial.

DOMESTIC ECONOMY—
See Cooking and House Decoration.

DRAMA—
Academy.
Athenæum.

Eclectic Magazine.

ECONOMICS—
Annals American Academy Political Science.
John Hopkins University Studies.
Municipal Affairs.
Political Science Quarterly.
Social Science.
Yale Review.

EDUCATION—
American Educational Review.
American Journal of Education.
American Primary Teacher.
American School Board Journal.
Art Study.
Canadian Teacher.
Chautauquan.
Child Garden.
Child Study Monthly.
Colorado School Journal.
Columbia University Quarterly.

Education.
Educational Foundations.
Educational Review.
Elementary School Journal.
Inland Educator.
Intelligence.
Journal of Education (Boston).
Journal of Education (London).
Journal of Pedagogy.
Kindergarten Magazine.
Kindergarten News.
New Education.
Normal Instructor.
Paidology.
Pedagogical Seminary.
Popular Educator.
Pratt Institute Monthly.
Primary Education.
Primary School.
Public School Journal.
School Bulletin.
School Education.
School and Home.
School Journal (New York).
School Music Review.
School Review.
Teacher.
Teacher's College Bulletin.
Teacher's College Record.
Teacher's Institute.
Teacher's World.
Virginia School Journal.
Educational Foundations.
Educational News.
Educational Review.

Elementary School Teacher.
Emerson College Magazine.
Expression.

ETHICS—
- New World.
- Social Science.

FANCY WORK—
- Harper's Bazar.
- Household.
- Ladies' Home Journal.

FASHIONS—
- Harper's Bazar.
- Household.
- Ladies' Home Journal.

Forest and Stream.
Fortnightly Review.
Forum.
Frank Leslie's Monthly.

GENERAL PUBLICATIONS—
- Arena.
- Atlantic.
- Canadian Magazine.
- Century.
- Chautauquan.
- Contemporary Review.
- Cosmopolitan.
- Fortnightly Review.
- Forum.
- Frank Leslie's Monthly.
- Harper's Monthly.
- Harper's Weekly.
- Independent.
- International Monthly.
- Ladies' Home Journal.

Literary Digest.
McClure's Magazine.
Munsey.
Nation.
New England Magazine.
Nineteenth Century.
North American Review.
Orient.
Outlook.
Overland Monthly.
Public Opinion.
Puritan.
Review of Reviews.
Scribner's Magazine.

GEOGRAPHY—
Geographical Journal.
Journal of School Geography.
National Geographical Magazine.
Peterman's Mitteilungen. (German.)
Scottish Geographical Magazine.

GEOLOGY—
American Geologist.
Journal of Geology.
See also Natural Science and Science.

Good Housekeeping.
Great Round World.

Harper's Bazar.
Harper's Monthly.
Harper's Weekly.
Health Magazine.

HISTORY—
American Historical Review.
Archaeologist.
Canadian Magazine.
Current History.

Great Round World.
Johns Hopkins University Studies.
New England Magazine.
Progress.
Trans. and Reprints of European History.
Yale Review.

HOUSE DECORATION—
American Kitchen Magazine.
Art Amateur.
Art Interchange.
Good Housekeeping.
Harper's Bazar.
Household.
Ladies' Home Journal.

Household.
Independent.
Index and Review.

INDEXES—

I.

Annual Index to Periodicals.
Annual Literary Index.
Atlantic.
Cumulative Index to Periodicals.
Periodical Literature (Poole).
Popular Science Monthly.
St. Nicholas.

II.

A. L. A. Index to General Literature.
Best Reading.
Books for the Young.
Cumulative Book Index.

Monthly Bulletin (U. S.).
Publishers' Library Catalogues. (Various.)
See also Bibliography.
Inland Educator.
Intelligence.
International Journal of Microscopy.
International Monthly.
International Studio.

JAPAN—
Orient. (Hansei Zasshi.)
Johns Hopkins University Studies.
Journal of American Folk-Lore.
Journal of Education. (Boston.)
Journal of Education. (London.)
Journal of Geology.
Journal of Pedagogy.
Journal of Royal Microscopical Society.
Journal of School Geography.

KINDERGARTEN—
American Primary Teacher.
Child Garden.
Child Study Monthly.
Kindergarten Magazine.
Kindergarten News.
Kindergarten Review.
Little Folks.
Primary Education.
Primary School.
Kindergarten Magazine.
Kindergarten News.
Kindergarten Review.

Ladies' Home Journal.
League of Social Service.

LIBRARY—
Boston Public Library Bulletin.
Library.
Library Journal.
Public Libraries.
And numerous catalogues.

Life.
Literary Digest.
Literary News.
Literary World.
Literature.

LITERATURE—
Academy.
Athenaeum.
Correct English.
Critic.
Current Literature.
Eclectic.
Literature. (London.)
Poet-Lore.
See also Bibliography and Criticism.

Little Folks.
Little Journeys.

McClure's Magazine.
Magazine of Art.

MANUAL TRAINING—
Art Education.
Art Interchange.
International Studio.
Manual Training Magazine.

MATHEMATICS—
American Mathematical Monthly.

MICROSCOPY—
American Microscopical Journal.
International Journal of Microscopy.
See also Science.

Mind (Monthly).
Mind (Quarterly).
Mind and Body.
Monist.
Monthly Bulletin Boston Public Library.
Monthly Catalog of Public Documents.
Munsey.

MUSIC—
Little Journeys.
Music.
Musical Record and Review.
School Music Review.

Nation.
National Geographical Magazine.
Natural Science.
Nature.

NATURAL SCIENCE—
American Microscopical Journal.
American Naturalist.
International Journal of Microscopy.
Natural Science.
Nature.
Physical Review.
See also Biology, Science.

New Education.
New England Magazine.
New York Times.
New York Tribune.

NEWSPAPERS—

See List at End of Catalog.

Nineteenth Century.
Normal Instructor.
North American Review.

Open Court.
Orient. (Hansei Zasshi.)
Outing.
Outlook.
Overland Monthly.

Pedagogical Seminary.
Peterman's Mitteilungen.
Philosophical Review.

PHILOSOPHY—

Mind.
Monist.
Philosophical Review.

See also Psychology.

PHYSICAL EDUCATION—

Emerson College Magazine.
Expression.
Health Magazine.
Mind and Body.
Physical Education Review.
Werner's Magazine.

PHYSIOLOGY—

Brain.
Mind and Body.
Physical Education Review.
School Physiology Review.

Poet Lore.
Political Science Quarterly.

POLITICS—
- Arena.
- Literary Digest.
- Nation.
- Nineteenth Century.
- North American Review.
- Public Opinion.

Popular Educator.
Popular Science Monthly.
Pratt Institute Monthly.
Primary Education.
Primary School.
Progress.
Psychological Review.

PSYCHOLOGY—
- American Journal of Psychology.
- Brain.
- Child Study Monthly.
- Mind.
- Psychological Review.

See also Philosophy.

Public Libraries.
Public Opinion.
Publishers' Weekly.
Puritan.

RELIGION—
- Independent.
- Mind.
- New World.
- Outlook.
- Open Court.

Review of Reviews.

St. Nicholas.
School Bulletin.

School Education.
School and Home.
School Journal.
School Physiology Journal.
School Review.
Science.

SCIENCE—

Academy.
American Geologist.
Athenaeum.
Auk.
Birds and All Nature.
Journal of Geology.
Journal of School Geography.
Literary Digest.
Monist.
National Geographical Magazine.
Natural Science.
Nature.
Open Court.
Popular Science Monthly.
Science.
Science Progress.
Scottish Geographical Magazine.

See also Biology, Botany, Natural Science.

Science Progress.
Scientific American.
Scientific American Supplement.
Scottish Geographical Magazine.
Scribner's Magazine.
SLOYD, see Manual Training.

SOCIOLOGY—

Annals American Academy Political Science.
Monist.
Municipal Affairs.
Social Service.

SPORTS—
Country Life.
Forest and Stream.
Outing.
Sports Afield.
Sports Afield.
Springfield Republican. (Weekly.)

Table Talk.
The Teacher.
Teacher's College Bulletin.
Teacher's Institute.
Teacher's World.
Trans. and Reprints of European History.

Virginia School Journal.
VOICE CULTURE—
Emerson College Magazine.
Expression.
Werner's Voice Magazine.
See also Physical Culture and Music.

WEEKLY PAPERS, see list at end of catalog.
Weeks Current.
Werner's Voice Magazine.
Yale Review.
Youth's Companion.
ZOOLOGY, see Biology.

NEWSPAPERS.

Boulder Tribune.
Canon City Times.
Central City Weekly Register Call.
Colorado Springs Telegraph.
Colorado Telegraph.

Denver Republican.
Denver Rocky Mountain News.
Denver Times.
Evans Courier.
Fort Collins Argus.
Fort Collins Express.
Fort Collins Weekly Courier.
Georgetown Courier.
Glenwood Post.
Greeley Sun.
Greeley Tribune.
Greeley (Weld County) Republican.
Gunnison Tribune.
Idaho Springs News.
La Junta Tribune.
Lamar Sparks.
Montrose Enterprise.
New York Times.
New York Tribune.
Pueblo Chieftain.
Ridgway Populist.
Saguache Crescent.
Salida Mail.
Silver Plume Silver Standard.
Springfield Republican.
Summit County Journal.
Telluride Journal.

BOUND VOLUMES OF MAGAZINES.

As soon as convenient after a volume is completed, it is bound and placed upon the shelves. At present the library has about 1,800 volumes. These are chiefly of the standard monthlies, art and educational journals. These, as a rule, do not go out of the library, but are accessible at all times. With them will be found the indexes in common use. Valuable matter upon almost

any subject can be found in these volumes, and students would do well to consult them freely. "The best things, by the best men, on the most worth-while topics, are in the magazines."

A *finding list* is posted up near the volumes, giving section and shelf, thus: Century F5 would indicate that the Century could be found in section F on the fifth shelf.

A list of notable articles in the magazines for the current month, arranged by subjects, is posted on the bulletin board about the first of the month.

ACCESSIONS.

The library has now about 15,000 volumes and 1,200 pamphlets. The latter are all cataloged and placed in cases under their class number. Pamphlets are bound as soon as a convenient number bearing upon related subjects are collected. There are also about 3,000 mounted photographs and pictures, many of especial interest and 300 maps and charts.

One thousand and fifty volumes were added during the three months beginning September 1, as follows:

Philosophy	70	Fine Arts	80
Religion	60	Literature	110
Sociology	225	History	120
Philology	40	Fiction	20
Natural Science	120	General Works	105
Useful Arts	100		

A good selection of public documents is on hand. This is especially rich in the departments of Science and Education. These documents are now being classified and cataloged, and we hope soon to have them well arranged.

SELECTION OF BOOKS.

In the selection and purchase of books there has been a purpose to make the development of the library even and well rounded. Each teacher has been on the alert for new and good books in his particular department. Recommendations have been made and purchases proportioned through the several departments as funds would permit.

SHELF ROOM.

Additional shelf room has for some time been needed, and is now supplied by the purchase of more steel stacks, having an additional shelf length of about 400 feet. Oaken cases have also been added around the walls, so that all books can now be given their proper positions.

BOOKS OF REFERENCE.

All the standard Cyclopedias, Gazetteers, Year Books, Reference Books, Dictionaries, etc., are at the west end of the main room, near the Document room. Here are to be found such as Encyclopedias—Britannica, International, Johnson's, Americana, Universal, Iconographic, Student's, People's, Spofford's, etc., etc.; Dictionaries—Century, Standard, New English, Biographical, Webster's, Worcester's, Encyclopædic, etc.; also the principal Dictionaries of modern languages, Spanish, German, French, etc., included in a very complete collection of the standard works of reference; Greek and Latin Dictionaries; Encyclopedias of Horticulture, Philosophy, and Music.

LIBRARY HANDICRAFT.

Instruction in Library Economy is given almost altogether by short talks and laboratory methods. Each student is expected to do a certain amount of practical work in the Normal School

Library, amounting to not less than two hours a week for the school year. "Learn to do by doing" is our method. Before completing the work, each student must have had actual experience in every department of the library. The instruction is intended to cover the complete history of a book through all processes in its construction, its reception into the library, and until it is rebound.

OUTLINE OF WORK.

Accessioning—Selecting books, selection and care of periodicals, stamping, labeling, pocketing, accessioning, etc.

Classification—The Dewey Decimal System is studied, and a certain number of books and pamphlets are given to each student to classify.

Catalog—Supplies, dictionary and author catalog, principal forms of catalog cards, ten selected books cataloged, preparation of lists of magazine articles, finding lists.

Shelf Arrangement—Shelf labels, arrangement of books, pamphlets, shelf list and inventory.

Loaning Books—Work at desk in giving out and taking in books, systems of book cards, etc.

Binding—Materials, tools, making of portfolio, transfer and charging boxes; preparation of books, magazines, etc., for the bindery; checking off returns, repairing, binding, etc.

Reference—Talks on the use of reference books, encyclopedias, indexes, hand books, ready reference, etc.

Bibliographies—General work; students prepare bibliography on some selected subject; prepare list of books.

General Library Topics—Buildings, regulations, copyright, etc.

Artistic Hand Work—Carved sides and illuminated books. Pyrographed sides and backs.

Under the last heading is included an artistic form of work, in which are correlated the sloyd, the art and the library departments. The sides of some of the bindings are made of hard

wood, having appropriate designs carved upon them. The backs of these same bindings are illuminated in the art department. Again, the sides of some bindings are pyrographed in beautiful designs and the backs illuminated.

CARE OF BOOKS.

The following is taken from *Modern Bookbinding:* "To open a new book, hold the book with its back on a smooth or covered table; let the front board down, then the other, holding the leaves in one hand while you open a few leaves at the back, then a few at the front, and so on, alternately opening back and front, gently pressing open these sections till you reach the center of the volume. Do this two or three times and you will obtain the best results. Open the volume violently or carelessly in any one place and you will likely break the back and cause a start in the leaves. Never force the back of a book."

One of the most valuable things a library can do for students is to give them an opportunity to learn the use and care of books. With our system of open shelves, abundant opportunity is given to everyone to develop habits, or to show those already formed, for their care.

Books should never be crowded tightly on the shelves. They should be so arranged as to gently support one another. In removing a book from its place on the shelf, tip the book from you at the top and with the finger placed under the bottom, gently draw it out. They are generally taken out by pulling at the top. Many books are completely broken from the covers by being pulled out carelessly in this manner. Do not pile books flatways upon those standing upright upon the shelves; it injures those upon which they rest. Books of moderate size should be always kept upright upon the shelves. Large ones should be laid flat on the side. Never allow books to lean, or the covers soon become warped and the backs break away.

Always allow them plenty of air, but keep them from direct sunlight, or the colors of many of the richest bindings will soon fade. They should not be placed near the ceiling, as the great amount of heat there will work great injury to them.

Treat a book as a good friend, then ordinary wear and tear, in honest handling, will only increase its value. Do not be in such a hurry that you can not put a book properly in place, or you will lose more time looking for it when next you need it. Others will need the book you are now using; put it where they will naturally look for it—in its place. Pass it on to them neat and clean, hoping that they will do the same for you.

Don't mark books.
Don't let them fall.
Don't get them damp.
Don't leave them in the sun.
Don't double back the covers.
Don't pile them up too high.
Don't hold a book by one of its covers.
Don't turn down the pages.
Don't put them where it is very warm.
Don't wedge them tightly on the shelves.
Don't lay books open face down on the table.
Don't put pencils, erasers or anything thicker than paper in them.

READING.

"Of the making of books there is no end." Probably about 25,000 new books appear annually. Yet the average reader can not read profitably more than about twenty-five books annually, or one in a thousand of those produced. The busiest reader must leave unread all but a mere fraction of the good books in the world. In the words of Bishop Potter, "To *know* a good book *well* is better than to know something *about* a hundred books at second hand. Be not alarmed because so many good

books are recommended. Do not attempt to read much or fast, but dare to be ignorant of many things."

The vast proportion of books we shall never be able to read. A great many of them are not worth reading. As a rule, they can not be better than the men who write them. Emerson says: "Never read a book that is not a year old. Never read any but famed books. Never read any but what you like." We can not, all, quite agree with the first or last rule, as it is well to know a little about the newer books, and often it is well to try to cultivate a taste for what we do not quite like.

Books, as a rule, are more profitable reading than the average newspaper or magazine, but one's scheme of reading is very defective if it takes no account of the news of the day.

The objects of reading are many. One reads for pleasure or pastime; to solve some present problem; to gather knowledge for future use; to ascertain facts of past history; to learn the character or style of a writer and to get style or form for one's own use. Whatever the object may be, reading should be performed with deliberation. The thought of the writer should be grasped and made one's own. No general rule can be given, as one reader might more thoroughly master a book in one week than another could possibly master in six months. A single book read with intention would be worth scores run over. The end and aim of all good reading should be the proper development of a good personal character, and the utilizing of our knowledge for the best interest of our fellow men.

LIST OF BOOKS FOR SMALL SCHOOL LIBRARY.

(In the following list the retail price is given. Most of these books, however, can be bought at a less rate for schools.)

Reference.

Bartlett, J., Edition—Familiar Quotations; Little.....$ 3.00
Brewer, E. C.—Dictionary of Phrase and Fable; Cassell... 2.50
Champlin, J. D—Young Folks' Cyclopedia of Persons and

Places; Holt..... 2.50
Harper's Book of Facts; Harper..... 8.00
Lossing, B. J—Popular Cyclopedia of United States History; Harper (2 vols., Mor.)..... 15.00
Standard Dictionary of the English Language; Funk; (2 vols., half Russia, indexed)..... 17.00
World Almanac and Encyclopedia; New York World; (paper) ..... .25

History.

Dickens—Child's History of England; Porter & Coates....$ .30
Eggleston—First Book in American History; Am. Book Co. .60
Church—Stories of the Old World; Ginn & Co..... .40
Coffin—Boys of '76; Harper..... 2.40
Coffin—Old Times in the Colonies; Harper..... 2.40
Higginson—Young Folks' History of the United States; Longmans 1.00
Pratt—American History Stories; Ed. Pub. Co. (4 vols.); each ..... .35
Yonge, C. M.—Young Folks' Histories (6 vols.); each..... .90

Biography.

Bolton—Poor Boys Who Became Famous; Crowell.....$ 1.00
Farmer—Boy's Book of Famous Rulers; Crowell..... 1.00
Farmer—Girl's Book of Famous Queens; Crowell..... 1.00
Frost—Lives of the Presidents; Lee & Shepard..... .90
Hughes, T.—Alfred the Great; Macmillan Co..... 41.00
Irving—Life of Washington; Crowell..... 1.00
Morse—Abraham Lincoln; Houghton (2 vols.)..... 2.50
Pratt—Story of Columbus; Educational Pub. Co..... .40
White—Plutarch for Boys and Girls; Putnam..... 1.75

Natural Science.

Andrews—Seven Little Sisters; Ginn & Co.....$ .50
Andrews—Stories Mother Nature Told; Ginn & Co..... .50

Burroughs—Birds and Bees, Sharp Eyes; Houghton Co.... .40
Gray—How Plants Grow; Amer. Book Co..... .80
Gibson—Sharp Eyes; Harper..... 2.50
Miller, O. T.—First Book of Birds; Houghton..... 1.00
Morley, M. W.—Bee People; McClurg..... 1.25
Scudder, S. H.—Butterflies..... .....
Thompson—Wild Animals I Have Known; Scribner..... 2.00

Travel.

Butterworth, H.—Zig Zag Journeys in Europe; Estes & Lauriat .....$ 1.50
Irving—Sketch Book; Ginn & Co..... .25
Knox—Boy Travelers in Central Africa; Harper..... 2.00
Knox—Boy Travelers in South America; Harper..... 2.00
Towle, G. M.—Marco Polo; Lee & Shepard..... 1.00

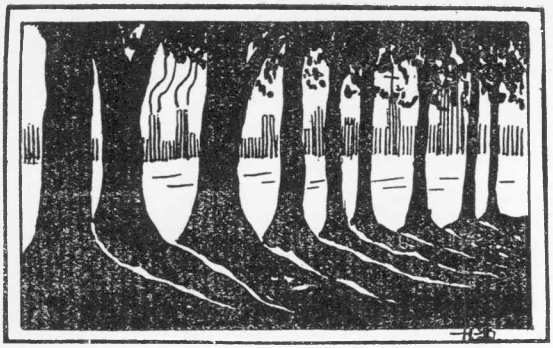
Mythology, Etc.

Andersen Fairy Stories; Houghton.....$ .40
Æsop's Fables; Ed. Pub. Co..... .30
Baldwin—Fairy Stories and Fables; Am. Book Co..... .35
Baldwin—Old Greek Stories; Am. Book Co..... .45
Church—Stories from Homer; Macmillan Co..... .50
Church—Stories from the Odyssey; Macmillan Co..... .50
Hale, E. E.—Arabian Nights.....
Holbrook—Round the Year in Myth and Song; Am. Book Co. .60
Ruskin—King of the Golden River; Putnam..... .75
Scudder—Book of Folk Stories; Houghton-Mifflin Co..... .40
Scudder—Fables and Folk Stories; Houghton-Mifflin Co.... .40

General Literature.

Alcott, L.—Little Women.....$ .50
Alcott, L.—Little Men..... .50
Clemens—Tom Sawyer.....
Cox—The Brownie Book; Century Co..... 1.50
DeFoe—Robinson Crusoe; Crowell..... .75

Eggleston—Hoosier School Boy; Scribner..... 1.00
Harris—Uncle Remus; Appleton..... 2.00
Hawthorne—Wonder Book; Houghton-Mifflin Co..... .40
Hawthorne—Tanglewood Tales; Houghton-Mifflin Co..... .40
Hawthorne—Twice Told Tales; Houghton-Mifflin Co..... .30
Homer's Iliad—Bryant's Edition.....
Homer's Odyssey—Bryant's Edition.....
Hughes, T.—Tom Brown at Rugby; Porter & Coates..... .30
Kingsley—Water Babies; Crowell..... 1.00
Kingsley—Westward Ho; Crowell..... 1.00
Lanier—Boy's King Arthur; Scribner..... 1.00
Lamb—Tales from Shakespeare; Ginn & Co..... .40
Longfellow—Evangeline; Houghton-Mifflin Co..... .25
Lytton; Last Days of Pompeii; Porter & Coates..... .30
Scott; Ivanhoe; Porter & Coates..... .30
Stowe—Uncle Tom's Cabin; Porter & Coates..... .30
Sewell—Black Beauty; Rand-McNally..... .75
Shakespeare—Hudson's Edition; Ginn & Co.....
Wallace—Ben Hur; Harper..... 1.20
Whittier—Snowbound; Houghton-Mifflin Co..... .25
Whittier—Child Life in Poetry; Houghton-Mifflin Co..... 1.60



MANUAL TRAINING IN THE STATE NORMAL SCHOOL of COLORADO

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MANUAL TRAINING BULLETIN.

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 aesthetic in tool work should be correlated with the work the child does, in so far as it corresponds with his develop-

ment and interests. Excellent results will grow out of a proper correlation of the tool work department with the art department.

OBJECT.

It is not intended in this Bulletin to map out a course fitted for any set of schools, or for any pupils, but to present some general notions that will aid somewhat in the presentation of manual training lessons.

To get the most good out of manual work, to obtain a full, clear expression of the individual, it is necessary to change the plan that has been followed in the presentation of manual training lessons. The old ideas of having set courses that all pupils must follow in their work are not the best; but an opportunity should be given the pupils to grow along the lines of self-expression. There is no reason why the best approved methods used in the presentation of other subjects should not be equally good in the development of manual training lessons.

A great deal of so-called manual training is not good manual training, for the results of good manual training should be the expression of the individual, or individual manual expression, and not manual copying, copying things made by others; but the realizing of their own ideas in objective form—the development of their own thought and not the copying of the thoughts of others.

DEMANDS.

Manual training demands that energy should be put forth for a long time, one act of willing succeeding another, engendering constant and stubborn resolution, intensifying the powers of observation, teaching how to deal with real number and magnitude and developing physical strength, dexterity and will. It reveals to the child new plans of things and relations which, before unknown, are brought nearer to him; step by step he

gains new insight, developing a desire for the real and actual, adding real experience to theoretical knowledge and assisting in the development of practical intelligence along with theoretical.

SELF-EXPRESSION.

It should give an opportunity for self-expression in the individual. The pupil is not to be turned loose in the manual training rooms to exercise his own whim and fancy in the construction of objects, neither is he expected to develop the entire plan or design for any one object. The same supervision and suggestion should be given in a manual training lesson that is necessary in any well-conducted recitation.

Self-expression means that the appreciation of the pupil will go hand in hand with accuracy in developing plans and skill in construction; it means the adaptation of the work to each locality; and, again, the adaptation of the work in that locality to each pupil. It means greater flexibility in Manual Training courses, that the manual work may come into closer touch with the rest of the school work and into harmonious relation with the child's life. It means that in the child's development his possibilities to grow in manual training are bounded only by his ability to do.

ORDER OF PRESENTATION.

The order of presentation should be based upon the child's powers and not upon any sequence in the use of tools; that is, suggest ideas whose outgrowth in the model will not be beyond the child's ability in construction.

The instructor may select a model from a number of model forms chosen by the class, or one which seems of most interest to the greater number. First, there should be a discussion by the class of the model selected as to its use and materials necessary in construction, etc. Its design, to best accomplish the de-

sired end, should then be thought out by each pupil, or the class as a whole may work out the design. This method is especially good in class work with the primary grades. Following this they will make a finished working drawing according to their own ideas, receiving suggestions from the instructor as to faults, if there be any, in the design. Care must be taken that all operations are within the powers of the child, and, though they work crudely, they will develop something which will accomplish that for which it was intended; from beginning to end it is their own creation. Next will be suggested ideas concerning models which are a little more complex, which bring in a little more deliberation in planning and more difficult processes in construction. In this way the pupils gain greater power than through the construction of models prepared by someone else.

Objects made should be of immediate use to the child. Often a lack of interest is caused by the object being of no value after completion. Make a kite that will fly, a sled that will be useful in play or work; in fact, each object made should fill a place in the child's life.

VARIETY IN MATERIAL.

There must be variety in materials, to deal with out-of-school interests, as well as in-school interests, in finding out the true inclination of each child. No plan in selection of materials can apply to all conditions, but the work in each case must be mapped out to suit the conditions in that particular place.

RELATION OF MATERIALS.

The different articles made may bear a certain relation to each other, and may, taken together, form a unity, as in the development of the playhouse in connection with the study of the home. The use of one material in a manual training lesson may be preparatory, or rather necessary, before the development of a series of lessons with another material.

INTEREST.

The course of work must be of interest to the pupil, not from any standpoint of the teacher, but because it is the child's own notion of what will aid him in actual living. Models may have the name "useful articles," but they are absolutely of no value from the standpoint of the pupil or any one else, unless they express some real, immediate interest of the worker. Interest in flower sticks, thread winders and triangles must, of necessity, be of a forced nature, or, rather, of no interest at all. The work becomes mere drudgery because the articles made are of no interest in the child's life, and, for that matter, in any one's life. The windows at home and in the school room have no need of window sticks. The child can find no one who has any use for a thread winder, flower stick, flower pin or flower pot stand. As a result, articles of this nature, if made, are of no value to the pupils after being completed and do not interest him. They accumulate in the store room, being eventually carted to the boiler room to swell the supply of kindling.

REASONS FOR INTEREST.

That the pupil may get the most good out of the lesson, it is necessary that there be some reason for interest in the article being made—some reason why the pupil should execute the work assigned, other than the mere fact it is to be done. There are various reasons why the work assigned stimulates interest. It may be an aid in his play. What boy would not want to make a sled in coasting season? What little girl would not be anxious to make a doll cradle? They see many possibilities for pleasure associated with those articles after completion. They are of real interest, have a real meaning, and fill an actual place in the child's life. The article made may be of interest because it is a suitable article to present to father, mother, brother, sister or friend.

What boy would not return to his work with renewed zeal after having received the warm and approving congratulations of his mother, after presenting her an object of real value, made doubly so because made by her son. The article may be of interest because it will be of assistance in keeping some of his belongings in a safe place, or add beauty and comfort to his room at home; as a pencil box for the desk, a picture frame, or stool for the room at home, or some other useful and interesting article.

CORRELATION.

Pupils are sometimes interested in making articles that will be of assistance in some other branch of work in the school. Manual training may be easily correlated with arithmetic, geometry, geography, literature and science. This correlation will make these branches appear more real and substantial to the individual. He will, of necessity, measure, compare, divide and calculate angles. Rulers and compasses are in constant use. The calculation of areas is learned, the eye is trained to see, and a knowledge of dimensional space cultivated. Articles made by or belonging to children are cherished as much by them as anything older people may possess, and they aid in building up the actual conditions of their lives. The pupils are generally very much interested in industrial and home development. In the lower grades we place a great deal of stress upon the development of the home and the industries that aid in the making of home and home life more enjoyable. In the higher grades other industries that have been great factors and aids in civilization are presented before the classes. In many cases pupils are able to work out for themselves good, simple working-models of primitive industrial machines.

KINDERGARTEN.

In the kindergarten, one of the principal objects is to train the child's powers of observation, directing, by suggestion, the child's mind along useful and instructive channels. A great deal of the work done in the kindergarten may be rightly classified as manual training work, for they "learn to do by doing" in the placing, building, cardboard work, weaving, stick laying, etc. These are all valuable means of training the imagination and developing lessons along the lines of form, number and magnitude. The manual work must of necessity grow out of the wants in the daily thought and work of the children.

The few suggestions given below have been worked out in the kindergarten:

A house was built during the study and play of the carpenter, which was of the simplest possible form. An ordinary packing case, with a few very simple changes, would possibly answer the purpose best. Various tools used by the carpenter, furniture for the house, as chairs, table, cupboard, bed, ladder, fence, bench, tub, rolling-pin, kneading board, tools for the kindergarten garden, rake, hoe, spade, etc., may be suggested by the teacher. Games, as carts, hoop and stick, etc., may be made of materials suggested by the teachers or children.

PRIMARY GRADES.

A great deal of work done in the first four grades is carried on in the regular class room, avoiding the necessity of fitting up a room especially for the manual training work. The following cuts illustrate work done by the children in the grades.

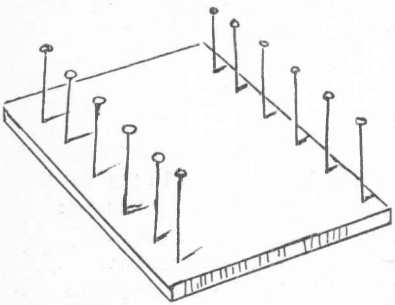
FIRST GRADE.

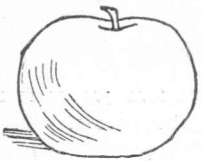
Time: Five twenty-minute periods per week.

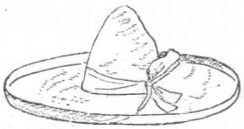
The work done in the first grade is entirely suggested by the subjects developed in the regular lesson along the lines of nature study, home, literature, industries, etc.

Below are a few of the notions that have been worked out in the first grade manual training:

The weaving of a doll's blanket for a doll's bed, on a simple loom, consisting of a small frame with ten nails driven at each end. This work is done in the nature work in connection with the study of the sheep. Cutting and pasting of the pilgrims during the Thanksgiving season. The clay work consists of the modeling of birds, bird nests, people, houses, animals of various kinds, as dogs, horses, cows, sheep, etc. Molding of peaches, pears, apples, etc., in connection with the study of fruits. Sewing: the gathering of seeds to fill a cushion for the doll house. Basketry: the making of baskets of raphia, during the study of fiber, home work or Indian basketry.



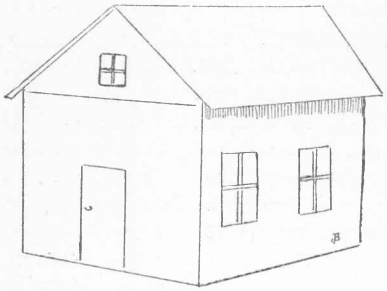




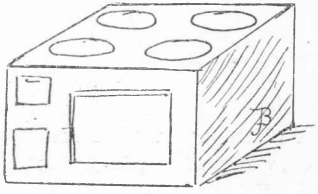
SECOND GRADE.

Time: Five twenty-minute periods per week.

Preparatory pasteboard cutting and pasting preparatory to the developing of the playhouse, as a small village made by entire class, consisting of houses of various sizes, bridges, rivers, etc.

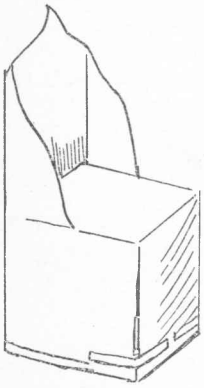


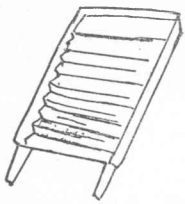
Building Indian village while studying Hiawatha. Log house, brick house or one of any other material suggested by the children. The house may be built in connection with the study of the Puritan, as in the case of the log house, or the kinds of material used for building purposes. Building and furnishing of a pasteboard house in connection with the study of the home. The house should have four rooms, or the number thought necessary by the children for the carrying on of actual housekeeping. The houses may vary in size from year to year, but usually we find one that will fit on the top of the pupil's desk a very good size.

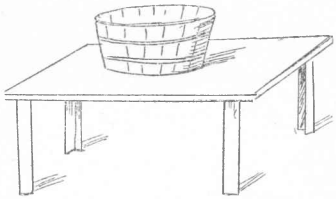


Below are a few suggestions as to furniture and fixtures for the house:

These should vary according to the notions the children have as to what constitute essentials in the way of furniture for the house. Kitchen: tub, washboard, washstand, bucket, stove, chairs, table, designed and colored oilcloth for the floor may be made of pasteboard. The servants' pots, kettles, pans, etc., may be made of clay. Dining room chairs, table, sideboard, etc., of pasteboard. Loom: designing of rugs for floors to be woven on simple looms. Bed room: bed and chairs of raphia, dresser of pasteboard, bowl and pitcher of clay. Parlor: chairs of various kinds, stand made of pasteboard, carpet of silkaline strips woven on loom, curtains of thin paper or cloth, people of pasteboard, dresses of cloth or tissue paper, hats of raphia.

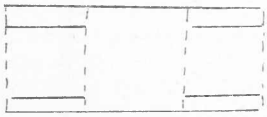


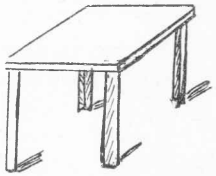




After the house is put up, a fence should be made of bent iron or wire.

In the nature study work a comparison is carried on in the child's mind between his own home and the primitive people

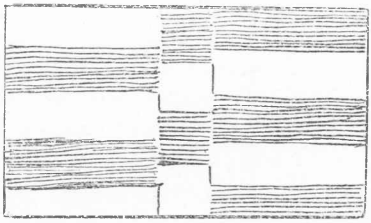




whom he is studying. This furnishes material for oral, written and drawn expression.

THIRD GRADE.

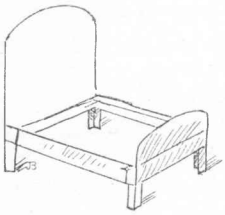
Children in the third grade are old enough to use the simple tools found on the ordinary manual training bench, as, the knife, rip and crosscut saws, ruler, chisels and plane.

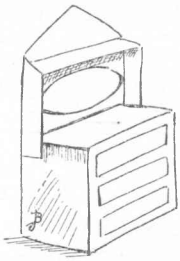


Pupils should be encouraged to make any objects that will assist them in their play; as, small toy carts, furniture for doll

houses, etc. During holiday seasons presents for parents, brothers, sisters or friends may be constructed of wood, raphia, or

cardboard. Many objects will be presented by the children as the ones they wish to make during the season. During the development of a series of lessons upon an industry the different machines used in carrying on that industry should be explained. If a loom, in connection with the study of textiles; looms of different kinds should be described, and, if possible, the children





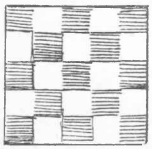
should be shown a loom in operation. After a general notion of a loom, its use, etc., the entire class may make simple looms upon which they can weave simple patterns. In the development of basketry, explain the different materials of which baskets are made, their uses, etc. Afterwards a few simple baskets, or mats, of raphia, hemp or any other suitable material may be made.

FOURTH GRADE.

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

Simple working drawings of objects to be made.

A series of objects that will be of use to the children and will form a set of objects useful for some purpose or purposes,

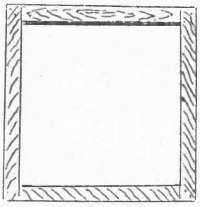


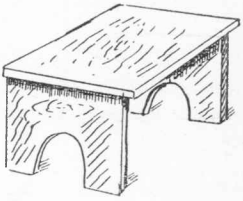
as a writing set, consisting of a rolling blotter of soft wood, book penwiper made with two board covers, bent iron penrack, stamp box woven of raphia, mat of raphia for ink bottle, letter box of wood to hold the mail; many other useful series will be suggested during the year's work. During holiday seasons, presents of different materials may be made.

FIFTH GRADE.

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

A working drawing, showing the different steps in the construction of the object to be made, should be marked out before the pupil is allowed to begin the construction. Below are the names of a few objects that seem to be very good for boys in this grade:





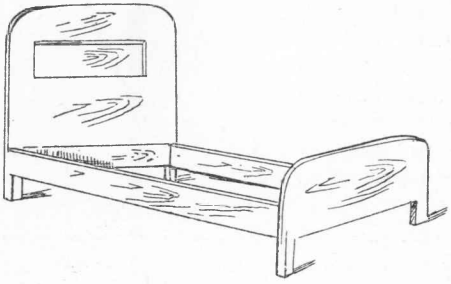
Footstool, out-door seat, book rack, wall shelf, pencil box, plant stand, bird house, rabbit hutch, pin tray, doll chair, doll bed, doll cradle, checkerboard.

Short talks on lumber, kinds, methods of preparing, including the cutting, sawing and drying of lumber before it is ready for use will be very interesting and instructive.

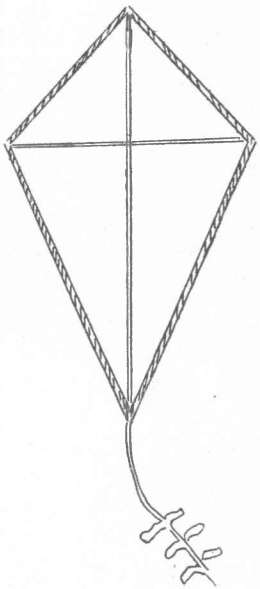
SIXTH GRADE.

Time: Two forty-five-minute periods per week. Working drawings.

Practice and skill in the use of tools in the lower grades has been acquired so that the pupils begin to realize that they can execute well and rapidly. With gain in mechanical skill will come more care in working out the details of plans to be followed. Encourage the making of apparatus useful in games, as boats, sleds and



kites. During the study of the industries, water wheels, undershot and overshot may be made.



They will aid the children in getting a correct notion of the possibilities of water power as an aid in industrial development. A windmill during the study of winds and wind power. Windmills and water wheels may be set up and used to do light play work; as running a saw, pulling a car and various other attachments, according to the ingenuity of the pupil. Other suggestive models are camp stool, doll bed, bread boards, etc.

SEVENTH GRADE.

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

Working drawings, together with a development of design, with practice in the decoration of objects completed, including pyrography, marquetry and simple wood carving. A few suggestive models are mineral cabinet, bookcase, footstool and door seat, inlaid checkerboard. Bent-iron work, as candle stands, penrack, picture frame and box.

EIGHTH GRADE.

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

More advanced work along the same lines as those followed in the seventh grades, with more stress placed on the decoration and finishing, as stains, polishes, etc.

HIGH SCHOOL.

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

The work in the high school is entirely individual, each pupil being expected to work out his own design, preparatory to the constructive work. The course in general will consist of constructive work, picture frames, chairs, tabourets, stools, bookcases, tables, etc. Decorative practice in designing, uses of ornament with a view to suiting the decoration to the object to be decorated. Wood carving, pyrographic decoration, marquetry, staining and finishing.

NORMAL DEPARTMENT.

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 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 manual 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, bookcases, 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 catalog 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, 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.

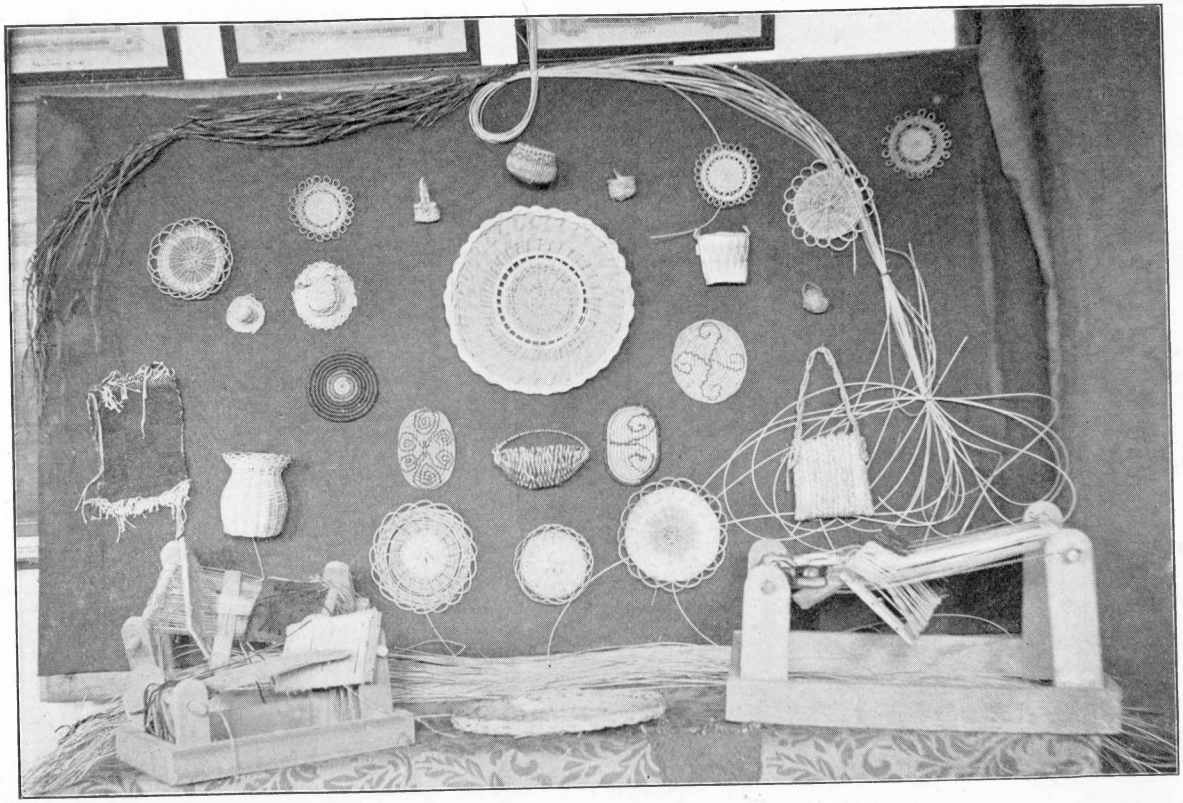
a. Solid: Cube, rectangular prism, rectangular pyramid.

b. Dissected: Parallelogram, triangle, circle, pythagorean block.

LIST OF BOOKS HELPFUL IN TOOL WORK.

Training of a Craftsman.....*Miller*
Color in Kindergarten.....*Milton Bradley Co.*
Manual Training in School.....*C. M. Woodward*
Manual Training and Card Board Construction.....*Frylorn*
Constructive Work.....*E. W. Worst*
Manual Training School.....*C. M. Woodward*
Manual of Hand Lathe.....*C. P. Watson*
Discussion in Education.....*F. A. Walker*
Useful Arts and Handicraft.....*L. Todd*
New Methods in Education.....*L. J. Tadd*
Method of Teaching.....*J. Swelt*
Handicraft..... *J. Sutcliffe*
Theory of Sloyd.....*O. Soloman*
Exercises in Woodcarving.....*J. Sickles*
Essays and Lectures on Kindergarten Principles....*E. Shirriff*
Industrial Instruction.....*R. Serdel*
Manual Training Program of San Francisco, 1900.....
Manual Training for Eight Years.....*G. Roosvelt*
Penn. Industrial Education.....
Graded Schools in America.....*M. H. Page*
Speed Lathe.....*A. Compton*
Delin Course of Easy Wood Work.....*W. G. Field*
Educational Aims and Methods.....*J. Fitch*
Manual Training Made Serviceable to School.....*W. Goetze*
Systematic Science Teaching.....*E. G. Howze*
Knife Work in Room.....*G. B. Kellon*
European Schools.....*Keerum*
Industrial Education.....*S. G. Love*
Evolution of Mass. Pub. School System.....*Martin*
Education of Head and Hand.....*G. Baumberger*
Woodword, English Sloyd.....*S. Porter*

Manual Training.....*A. Bond*
Education in United States.....*R. G. Boone*
Report of Committee on Manual Training in Boston.....
Froebel and Education by Self-Activity.....*Bowen*
Manual Training for Eight Years.....*Charles M. Carter*
Pyrography by Ball and Fowler.....
Manual Training Made Serviceable to the School.....*Dr. Goetze*
Education in Its Relation to Manual Industry.....*McArthur*
Wood Carving.....*C. G. Leland*
Venetian Iron: Metropolitan Handy Series.....
A Hand Book of Pyrography.....*Mrs. Maud Mande*

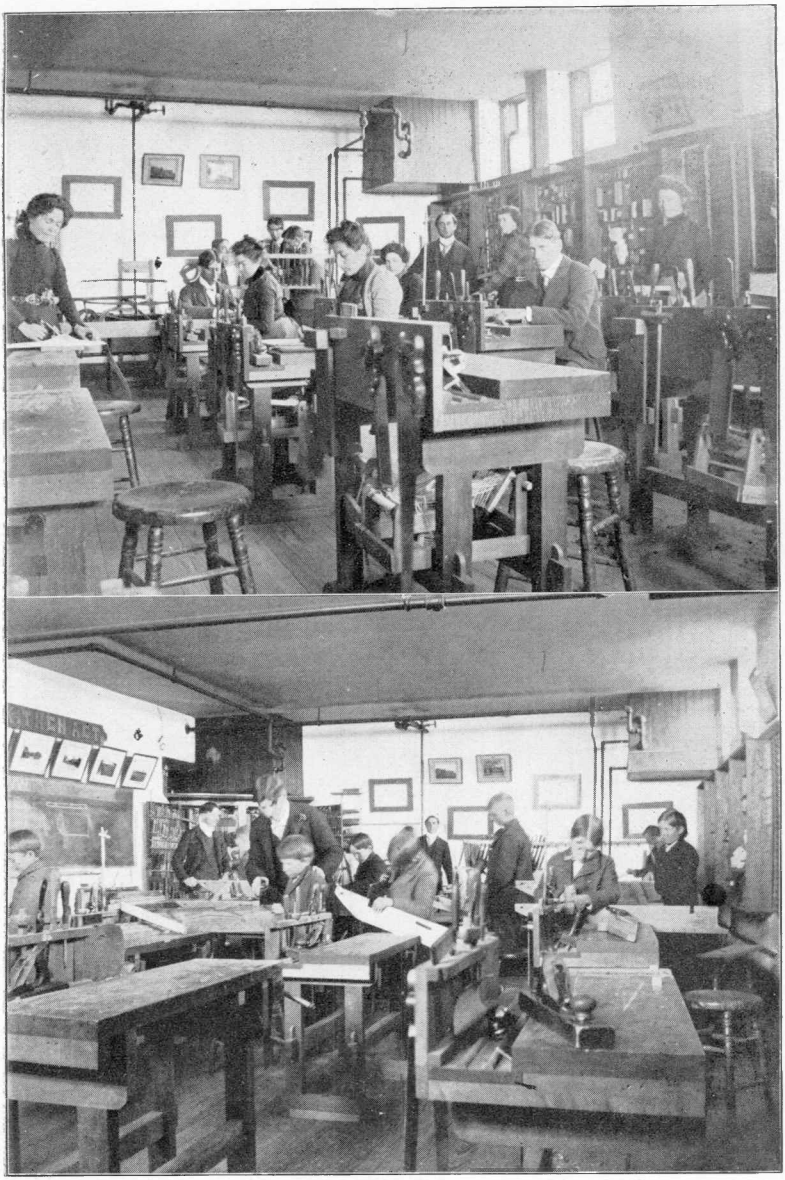


TEXTILE WORK.

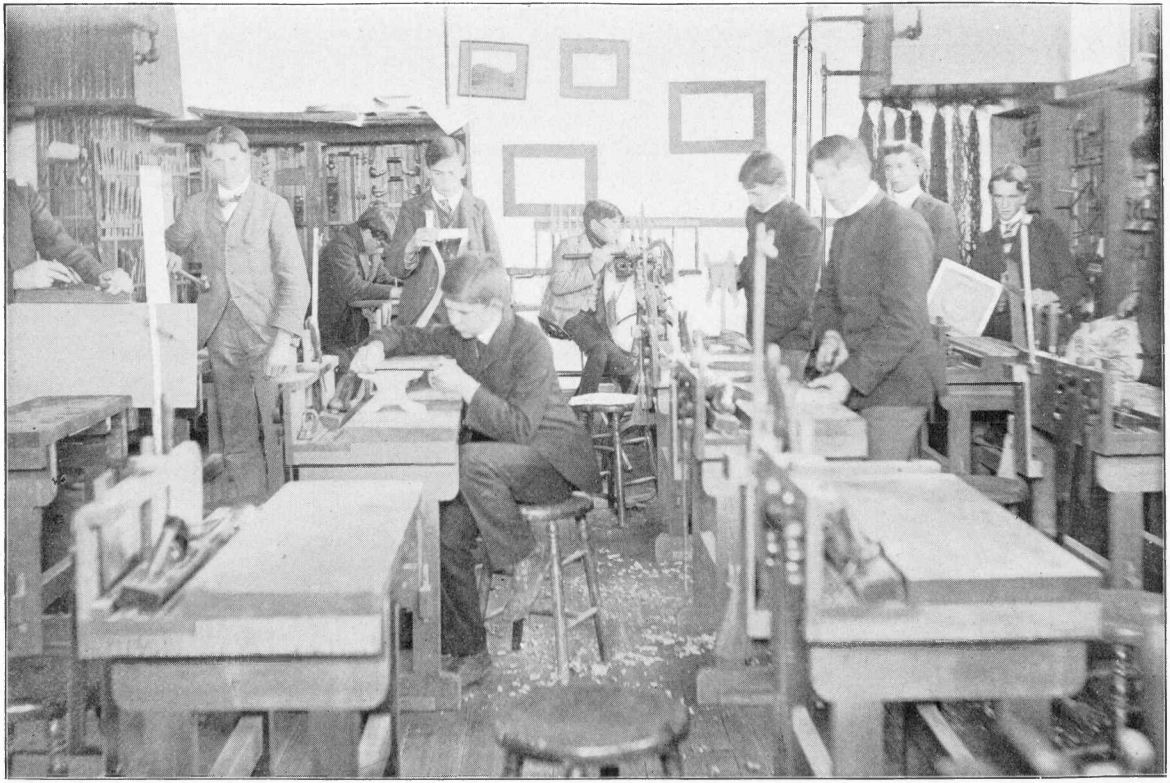
SECOND GRADE.

THIRD GRADE.

HOUSE BUILT BY THIRD AND FOURTH GRADES.
(By Permission of Miss Eleanor Phillips.)



UPPER—NORMAL JUNIORS.
LOWER—FIFTH GRADE.

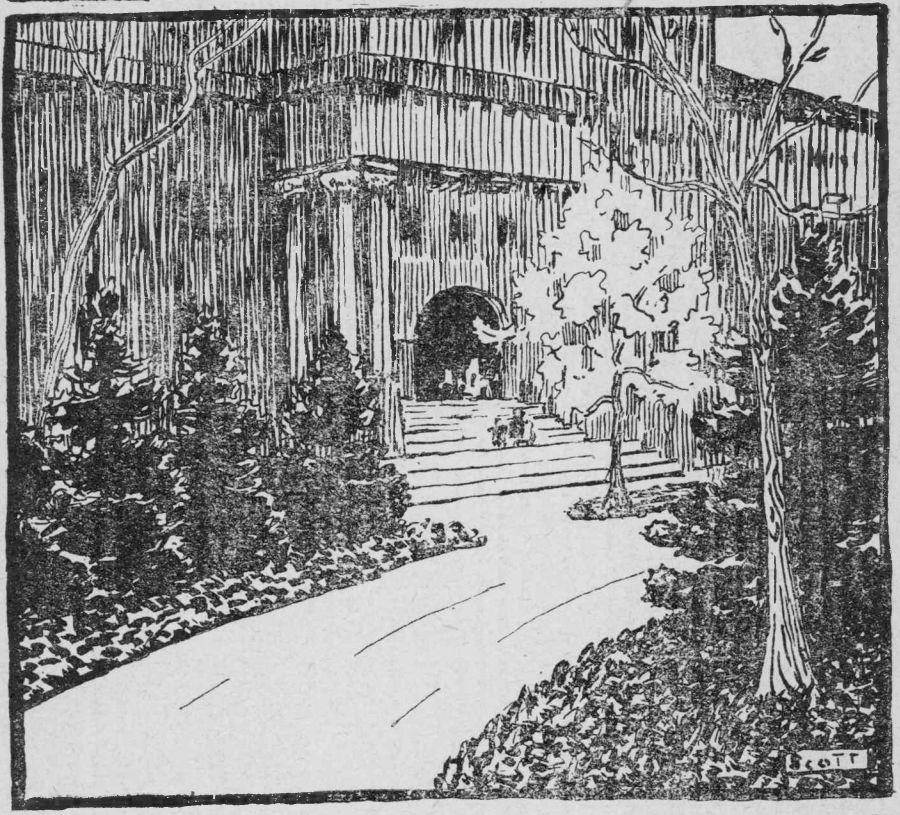


NINTH GRADE.

SLOYD LABORATORY.

Bulletin No. 6 Series 1

The Training School of the



State Normal School of COLORADO

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Training School

...of...

Colorado State Normal School

Drawings by
Colin A. Scott

FACULTY OF TRAINING SCHOOL.

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Colin A. Scott, 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 M. Phillips, Pd.M., Supervisor Primary Grade.

Bella B. Sibley, Pd. B., Supervisor Primary Grade.

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INTRODUCTION.

By Colin A. Scott, Superintendent of Training School.

"Freedom Consists in Binding Oneself."

IN the present bulletin the attempt has been made to offer to its readers, as briefly as possible, not merely a working outline, but a glimpse of the inner life and spirit of the Training School. As President Snyder has already well held (in his paper to the N. E. A.), "The Training School is the center of life and interest in a Modern Normal School." As the teacher exists for the child so do the departments of the Normal School primarily exist for the sake of the independent culture of the teacher in training, however desirable that may be, but to equip her to play her part to the best advantage in the Training School.

Like all altruistic positions this means a widening, rather than a narrowing of the teacher's possibilities. Her aim becomes not merely to develop the human in her own breast, but to develop the large and universal humanity as she finds it in the hearts of many. The reflex effects of this objective attitude on her own character is, perhaps, more powerful than are the results of any mere subjective aspiration.

The keynote of such a school is thus one of co-operation among both teachers and pupils. A mutual aim is set

up and a combined production results, in which each contributes to the extent of his ability. Not the equality of assigned tasks, but a construction, whether mental, social, or material, which calls for differences of effort, and natural degrees of appreciation. The increasing socialization of the school does not tend to any leveling up or leveling down. The rule is rather—whosoever is strong among us, let him help the others.

The various ways in which this is carried out are indicated in the different signed articles by members of the Training School staff. Owing to unavoidable limits of space, emphasis is laid on certain features, which, not always because they are better, but rather because they are not so familiar, have seemed to require greater elaboration. In order to make up for this to some degree, there have been appended brief outlines in the form of courses of study. As, however, will be readily gathered, the school does not proceed from the standpoint of a course of study to which the children and teachers constantly subject themselves, but rather from the standpoint of the persons composing the school, by whom the course of study is being constantly formed and reconstructed, as blood is constantly being changed within the tissues of a living animal. It is only in the case of children without initiative, and in the case of teachers without initiative or constructive capacity, that the course of study is injected in a less plastic form. A course of study is a plan of life, and those who are to live the life should at least share in the making of the plan.

While the first function of the Training School is to enable the teacher in training to work out successful results in the actual present conditions of the school, and not to imagine that she is in some other school whether better or worse, the next most important function is to enable her to see the problems which lie before her when she leaves her present environment and gets, as the phrase goes, "a school of her own." The conditions she will there meet are necessarily different from those she finds in the Training School, conditions too which it would be idle to attempt to imitate. What remains the same is always the spirit, which if she has divined it under the more transparent letters of the present aided and protected life, she will be strong to apply in whatever future she may be placed.

At the same time efforts are not spared in the seminars and in private conferences to present in a comparative manner the conditions the teacher will need to meet, and to advise her as to hopeful methods of procedure. Once a week, too, there are invited to the school successful educators, school superintendents, High School principals, in whose addresses the students are able to see reflected the educational ideas and conditions to be found in every region of the State. Such efforts are, however, subordinate to the main notion, which never regards the teacher as a cog in a wheel, unfitted for any machine for which she may have one cog too many or too few, but which conceives her rather as a self-active, fraternal personality, organic, vital, capable of self-adjustment, but still more capable of progress and of growth.

THE TEACHER IN TRAINING.

By Colin A. Scott.

FROM one point of view the Normal School exists for the sake of the teacher in training. Her needs as a teacher are, however, not opposite, but simply the complement of the needs of the children.

The supreme aim of the ideal Training School is to show the teacher the organic unity that exists between herself and her pupils, so that she may feel and realize the feeling, that her life is theirs, and theirs in no less degree is hers; and that whatsoever she does, whether she eat or drink, she does all to the glory of development.

The road to such a result begins on somewhat stony ground. By the beginner all teaching is divided into two parts—authority, and other things. In this respect she repeats the history of the race of teachers, and for that part, of civilized humanity itself. That she should be found at this stage of development is naturally to be expected.

The training school does not aim to disabuse her mind of this initial importance of authority. It rather emphasizes and reinforces it. Good or at least fair results have been obtained when everything in the school life of the child has been mapped out for him by presumably wiser heads than his, when obedience is regarded as the crowning

virtue of the school, if not of life, and where liberty and its organization is left to the play-ground and the home.

Where, however, the school essays a large life, the problem is not simply to throw authority overboard, but to find its most advantageous limitations, to discover how in a kingdom of grace the law may be fulfilled as well as superseded. Helpful in this respect is the formula so well exploited by Bosanquet: "Use authority only to prevent hindrances." Honestly applied this means hindrances not only in the mind of the teacher but also in the minds of as many as possible of the pupils. They must therefore feel that there is something that is worth while going on in every recitation. The individual who hinders this may not feel at the moment its worth to himself, but the facts should be so that the teacher could easily show him that others of his comrades realize its worth, and sympathize with the teacher's effort to protect their best interests.

When no pupil feels that what is going on is really worth while, the disturber becomes a sort of revolutionary savior not agreeable to the teacher but perhaps not without benefit to the school. A desirable feeling is easily obtained in a school that is normal; in a reform school or penitentiary it might be different in which case the hindrance to be stopped or prevented is to be regarded as applying to what is going on outside of the school in the normal processes of society.

If something is to go on that is felt to be worth while by the children, the aim or end as far as it exists or can be got to exist in their minds is the first consideration.

This is both more practical and more difficult than any statement of aim as it exists in the mind of the teacher. Such an aim may be ever so soaring but yet entirely fail to work. A thought by which the teacher is asked to test herself is this: "At any time during the course of the recitation whatever the pupil may be doing if I could get a complete answer or look into his heart, would it yield me the aim as I have it written in my plan?" How often to the question, "What are you doing this for?" would one get the answer, "I don't know?"

If, however, the teacher in training believes, to such a question the answer would be, "Because I have to," "Because the teacher told me to," "Because I want to pass," she is encouraged to put these aims down in her plan, as the real aims which the children are working for. Generally, in such cases it is not long before the teacher is able to invent an aim which is more satisfactory both to herself and to the children. Work of this kind is described at length in the articles in this Bulletin by Mrs. Kleinsorge and Mrs. Sibley.

From this standpoint it is but a step to the further one where the children are regarded as capable of inventing aims for themselves. This is no doubt possible to a limited extent in work which is outlined by the teacher, in which the children may invent details. But there is something liberating in the consciousness of what is thought or felt to be a whole activity—something that is up to the full level of the planning and organizing power of the individual, and which if he has any capacity for will at all he must in-

vent for himself. This is not a power for which a genius is necessary, but something which should be the possession of every citizen of America. Volition and the constructive function is too much neglected even in our schools, better as they are in this respect than those of Germany or France at least. The work described by Miss Phillips focuses attention on this feature of the Training School.

Further than the immediate work and observation in the training school the teacher has the more mediate function of preparing and improving herself by reading and reflection, and by comparison and co-operation with others who work with the children. In the first place the teachers in every grade are not held to be severally responsible for merely their own individual work, but each is responsible for the whole grade. To this end she must find out, by observation and in meetings held for that purpose, what is being done in the whole grade. Team-work, as on the football field, is thought to be the most effective both for teacher and for pupils. If one person fumbles the ball another carries it on.

In order that this may be carried out with the fullest degree of voluntary responsibility an interesting resolution has been adopted by all but a very small minority of the teachers in training. They have agreed that their standing in the department of pedagogy shall be partly determined by their own judgment of each other's work. To this end a written test is called for at such times as they think best, in which each teacher writes out an account of her progress in as far as she can ascribe it in any significant way to her

fellow teachers. These recommendations or appreciations are to be collected and classified by a committee elected from their own number, with the Superintendent of the Training School, and a report to be made upon the standing, necessarily not of a mathematical character, of each teacher. Each teacher thus feels that the work of helping other teachers, co-operating with her, is part of her duty in the school.

It is also part of her opportunity. As a piece of training it provides not only that she shall be equipped for some subordinate position in the school, able to get along with her children, although always under the direction of someone else, but that she shall get some chance of training for the higher positions also, where a responsibility will devolve upon her as principal or superintendent, not only to judge as to the merits of her assistants but to tactfully yet effectively help them to improve. An increase of judgment, mercy, and faith, is not undesirable in such a relationship.

As a consequence of this attitude the pedagogical seminars are partly given over to the individuals either singly, or as is more common, in groups, who believe they have something to say or to discuss, gained either from reading or experience, which will be new and helpful to other members of the class.

A bit of real life, an act or a thing has probably in it more principles than are able to be taken out of it or be defined. And yet it is found helpful by most thinkers and workers to formulate what seems of a general character. It is with this view that I append as a summary the following

propositions, the last of which is no less important than the first. These, although dogmatically stated may help to throw some further light not only upon this article, but upon others in the Bulletin.

PEDAGOGICAL SUGGESTIONS.

1. Every child is an end in itself; it does not exist for the sake of gaining knowledge, power or skill, these things exist for it.

2. Planning with the children is better than planning for them.

3. Other people than those actually in the school room make plans for the life of the school, the parents, the trustees, the taxpayers, great educators in this country and abroad. They have a right to do this in proportion as they are willing to participate in or in proportion as their lives are affected materially or spiritually by the life of the school, but those whose lives are affected most should be permitted to have the first opportunity in the making of the plans. In as far as there is real life in the school room those who live the life should make the plans.

4. Present Need—That the children be given an opportunity to feel that they are the causes of a larger number of the events which fill their lives.

5. The children should ask a large if not the larger part of the questions. Applied to science this means that the children should invent many of the experiments. A real experiment is a question asked of nature. The person

who makes it expects to discover something. In your last science lesson how many experiments did your children invent?

6. The individual who "recites" or speaks or acts in the presence of a class or group, in a large number of cases should feel that he is a social organ. This is not attained when the individual feels that he is merely "expressing" himself without reference to others. Such self expression tends to conceit and rivalry, or timidity or backwardness on the part of those who do not assert themselves. It trains "showing off," "self consciousness," and pride of knowledge. In your last lesson how often did you find any child addressing any one but yourself? Was he telling you anything which he supposed you did not know? If not, what good did he suppose he was doing you? What good did he suppose he was doing any one else?

7. In a recitation a child feels that he is a social organ when he finds that he is speaking or acting for other people. This may arise when he says something which he has reason to believe other people want or need to hear, or when he says for others something that they wish to have said. The game of "Find the Button" when the children clap softly or loudly as one of their number draws nearer the object of his search, illustrates the feeling of being a social organ. The whole class is interested in the action of the individual whom they have chosen to find the button because they feel that they are largely the cause of his failure or success. All recitations should have in them an element of "Find the Button."

8. A child needs to be associated with other children in a group in order to feel his influence and in order to obtain natural influences from others. The size of the group should be proportioned to the child's ability to exert influences or feel himself a cause in the social field. This is necessary from the standpoint of fatigue as well as from that of effective work. The size of this group will be best obtained by allowing the children to form it for themselves. Such a group will last only as long as will be necessary to carry out the work for which it was organized.

9. In order to feel themselves causes, the children must make the whole of, or part of the plans.

10. In as far as the children make the plans, the teacher's business is to help, both in the designing of them and the carrying of them out. The teacher who stands off for fear of destroying the originality of the children, is really destroying their effectiveness.

11. The feasibility of the plan is the first consideration. This must be measured by actual conditions as found in the lives of the children. When proposed by the children the teacher may judge the plan not worthy of being carried out. She may not think the work proposed sufficiently educative. She should express this view freely to the children, yet not so dogmatically as to crush expression on their part. In the discussion the children may convince her that the work is worth while. If not, however, she should be free to exercise the right of veto. A broadly educated teacher will probably find it rarely necessary to exercise this right.

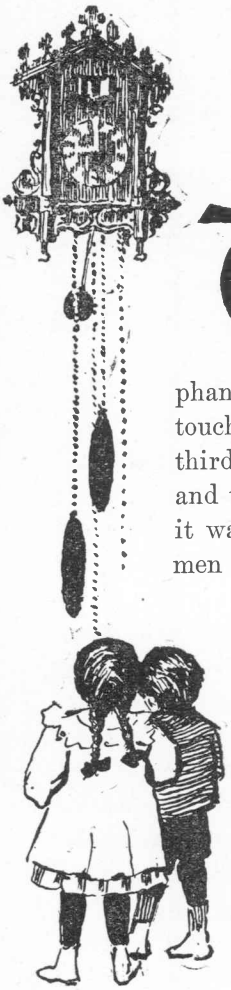
12. It is better, and felt to be better by the children, when something is accomplished, even under compulsion, gentle or otherwise, than when nothing or even nothing of consequence is accomplished.

PARENTS' MEETINGS.

COLIN A. SCOTT.

THE connection of the home is from many standpoints one of the most desirable features of a modern school. A gradute of a Normal School of nine years' training, once said to me: "I do not now teach as well as I know how, but only as well as they'll let me." This antagonism between the school and the community of which it is a part is most unfortunate and devitalizing for both sides. If the teacher is to organize her school socially or even for the benefit of society, she must carry along contemporaneously a social organization of the community in so far as it touches the school. She must awaken the desires of the fathers and mothers, and of others interested in education, for better things in the school. It is a law of life that one has more interest in persons or even in inanimate things in proportion as he does something for them. The teacher should encourage even small aids, and these should be from the start of a moral and psychological character rather than always confined to the material side. The teacher might well meet the hurtful meddling on the part of some parents and trustees by previously inviting their helpful criticism of, and co-operation in, her working plans. Such a teacher might well say, "I teach as well as I am encouraged by all my friends."

For the purpose of awakening an interest in the Training School, parents' meetings are held several times a year at which a program is offered. Stereopticon slides are shown, explaining and illustrating the work of the school, and a reception is held, during which the parents meet the teachers in training, and discuss the progress of the children under their charge. These meetings have proved helpful, not only in interesting the parents, but have served as a sort of review, in which the school finds itself portrayed, and thus rises to a higher consciousness of its value and its work.



THE KINDERGARTEN.

By Bertha Matson Andrews.

THERE is an old story from India of four blind men who were led one at a time, up to an elephant and asked to tell what they felt. The first one touched the elephant's ear and said it was a great fan; another touched his leg and said it was a strong pillar; the third felt of his trunk and said it was a palm tree; and the fourth felt of the elephant's side and said it was a great wall. They then told these blind men that they had each felt different parts of the same thing and had judged according to their limited perceptions.

When the High School professor, the chemistry specialist, the Fourth Grade teacher and the kindergartner consider their own department as a unit, with no thought of its relation to the organic whole, we have fair prototypes of these blind men of India. But while specialists abound in these days, both outside and inside school houses, there never has been a time when there was such universal peek-

ing into one another's educational back yards. University professors are devoting their most earnest study to babies and kindergarten, and primary teachers are struggling with anthropology and bacteriology. That still further co-operation is necessary is conceded by all.

The heart of the public school system should be the Normal School. The heart of the Normal School should be the Training School and the heart of the Training School should be the Kindergarten.

That kindergarten training schools are established in 62 of the 176 Normal Schools of the country is the most prophetic sign of the kindergarten progress, that we have in America. Someone has said, "The day has happily now passed when the kindergarten dare take its stand on the sympathetic, charitable or sociological foundation alone. It may be all or any of these but to be worthy a place of true dignity in the educational world it must be pedagogical."

There is no denying the poignancy of that criticism, which has been hurled at kindergartners, concerning their self-satisfaction and tendency to consider themselves specially ordained and set apart from the great mass of teachers. Kindergartners are considered by even their most bitter opponents to have unusual enthusiasm for their work. While they are to be congratulated upon that quality, is there not the danger that they conceive of the kindergarten as the entire elephant, whereas it is but the legs? The proper adjustment of the kindergarten in its relation to all education, I believe, will be approximated by the establish-

ment of kindergarten training school in vital connection with training schools for other teachers, and at the same time, this establishment will tend to place the kindergarten upon a firmer pedagogical foundation. This alliance is true of other professional training schools; schools of medicine, dentistry and law are becoming closely connected with great universities. Greater power is possible from such relationship.

The kindergarten students in this school have in their Junior year, English, Nature Study, Psychology, Pedagogy, Art and Physical Culture in classes with the regular Normal students; hence in no way are these subjects seen from the kindergarten standpoint alone. To adjust kindergarten spectacles to all studies cannot help being narrow, but by looking at the kindergarten from the different subjects point of view a broader, more rational interpretation is possible.

It matters not if the student is to teach literature to high school youths, to lads of four summers or to eleven-year old boys, the fundamental study should be the same and each should know how the other is going to deal with the same subject, in order to cognate intelligently. For example in the study of Iliad, the preparation, in the form of mythical stories, began in the kindergarten and primary grades; the eighth grade teacher realizing this sense of the setting which the children have gained, is ready to begin work with the complete story.

The junior kindergarten students have some observation in all the grades and discuss the lessons observed

with the practitioner and the special training teacher in order to actually see and understand, in a degree, each part of the great whole.

During their senior year these young women have Philosophy and History of Education, English and Pedagogy, also with the rest of the seniors and half a year's practice in the primary grade. This practice work we believe to be of inestimable value to a well-prepared kindergartner. By such experience she cannot only better appreciate the standpoint, problems and scope of the work of the primary teacher but is better able to realize what the preparation of the kindergarten child for the first grade should be and how to correlate her work, more effectively with the primary.

The time will come when no primary teacher will be considered thoroughly prepared for her work, unless she is cognizant of kindergarten principles and practice and it is equally necessary that the kindergartner should know of primary methods and problems.

Not only is this broader aspect of education possible in a Normal School with its opportunities to realize the relation the kindergarten bears to the whole, but advantage is gained here by the presence of specialists who realize the entire scope of the work and at the same time can adapt the work to the kindergarten's peculiar requirements. It is possible to attempt to cover too much ground and we deem it advisable to look at some subjects purely from the kindergarten focus. For example, there is a half-year's course in Sloyd, which the Sloyd Professor has prepared specially

for the kindergartners. In this course they become familiar with the various tools and their use and they make simple furniture, garden tools, games and playthings, such as children from four to six years of age might be able to make.

The music specialist also gives work to the kindergartners with the kindergarten child in mind. The range and quality of the very young voices, suitable songs for this stage, treatment of monotones, the importance of the correct foundation of the musical education are necessarily worked out, as well as the training of the student's own voice, which is most advantageous in the small class.

Especially helpful to the kindergartners is the course in Domestic Science. By having access to the well equipped laboratory of the Normal the young women have actual experience in analyzing and cooking children's foods. This course includes the study of children's diseases and emergencies, sanitation and hygiene, the relative nutritive value of foods and wholesome menus, in fact, the whole question of children's dietetics. The children of the Normal kindergarten, also have advantage of these laboratories. While we were talking of the baker, we first all bundled into our kindergarten coach and drove down to visit the rather ideal bake-shop of Greeley-town, where the baker showed us his great oven and all his utensils, treated us to some delicious ginger-cookies and told us just how he made them. On the way home we decided to make some cookies ourselves and send the baker cookie for cookie. We should certainly need bread boards to roll them out on, so

one tableful of children went the next day, to the Sloyd room, to make them. The necessity of the Sloyd course was brought forcibly to the seniors in that experiment, for the young woman who prepared the cleats for the boards sawed them the wrong way of the grain and twenty new cleats had to be made. But at last they were finished and a group of the oldest children mixed "the sugar and spice and all that's nice" with utmost care and rolled them out on the somewhat wobbly boards and proceeded down to the kitchen where they baked their cookies to all stages of brownness. We decided the baker excelled us in the cookie line and perhaps he would enjoy a valentine more than our burned results, but I doubt if the forty children ever tasted a sugar cookie which compared to those of that first tables' make.

That the New Education owes much of its impetus and success to the realization of the principles underlying the kindergarten is generally conceded. The permeation of the kindergarten spirit throughout all grades and branches of school life cannot help but give a new zest and enthusiasm to the erstwhile routine conditions.

This spirit is principally dispersed throughout our Normal School by the young women of the regular kindergarten course. There is also an elective class who are fitting themselves for primary grades and devote five hours a week to observation and theoretical work in the kindergarten. The other students slip in between classes and get a glimpse of the young child's world. A stray vacant period in their program, during the morning often finds them observing the games or a gift lesson. There is no

compulsion whatever in this observation work, and the fact that there is scarcely a moment that someone is not visiting the kindergarten, indicates the interest felt.

Lectures upon Froebel's philosophy and principles, of course have their place, but I believe the silent influence of a kindergarten in their midst, from which the body of students may catch a whiff of the beauty, spirit and value of its life, will do more actual good in the subsequent educational work of those students than any amount of theory possible. What are some of these influences which might help the Normal student in his practical work?

The freedom, lack of constraint, in fact, the homey atmosphere of a good Kindergarten is generally the first noticeable feature. The child wishes a drink of water, he quietly gets up from the table or leaves the games, without disturbing the children or the teacher with the ever present raising of hands and asking permission, goes over to the low table, covered with an oil cloth mat, which the children wove for the water-pitcher to stand upon, and helps himself. If another child comes up at the same time, the opportunity to pour out the water and hand the cup to the new-comer, is felt to be an honor.

If the children need another box of blocks, a pair of scissors or a stick, for the tongue of their tablet carts, they are sent to the cupboard, to find it themselves. A stranger might think there was great confusion to see different children walking, even skipping about, but they are learning to wait upon themselves and surely the pedagogical principle that each child should feel himself the cause of as many

events as possible, must begin in the minutest details, if later we can hope to have him truly feel self-reliance.

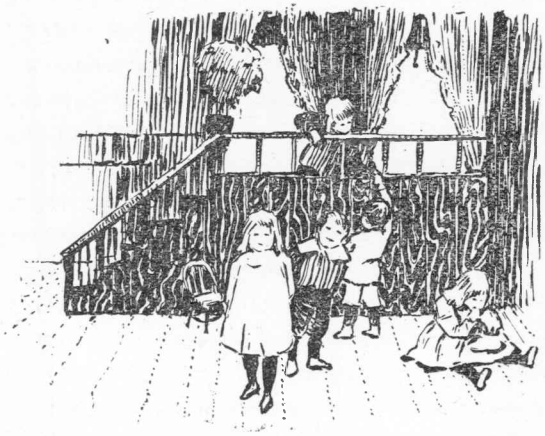
The small groups of children about the tables, building on the floor, playing at the sand-table, drawing at the black-board either co-operatively carrying out some thought or individually expressing themselves, gives the thoughtful observer the suggestion of even older children enjoying, two or three being gathered together with the cord of similar interests, rather than the idea of age being the chief point in common between the large group of children.

The student observer may see practical results of child study when he finds upon opening the kindergarten door, not only such groups as I have indicated, but one small blue-aproned girl playing by herself on the floor, with a doll and the kindergarten bedstead; a curly-headed lad is up on the balcony with a picture book, but he spends most of the time looking out of the window at the snowflakes fluttering down; another child is sleeping on the couch in the little adjoining quiet-room, which, by the way, every school-room should have; in another corner of this quiet-room curled up in the big rocker, is the latest comer from the home into this garden, eating an apple.

All this is, of course, the result of close observation of the children, and when signs of fatigue and nervousness are shown, they are sent off by themselves. Records of the children's birth, home conditions, nutrition, physical defects and characteristics, with photographs of each child are kept, from the entrance into kindergarten, and when the children pass on from grade to grade, these records are

added to and handed on from one teacher to the next, and it is hoped the individual treatment which is begun in the kindergarten may be carried on through each grade.

The balcony, of which I spoke, fills several long-felt wants. In the first place the windows of the kindergarten room were so high that only by tip-toeing on a chair could the trees be seen; then we needed cupboards low enough to



easily take out and put away the material; we also wished a place to send a child who had finished his work or was tired; and most of all the fun of having an up-stairs with some tiny banisters to slide down, a balcony from which to wave to returning soldiers, and a bed-room for our precious doll, Bluebell White! At present we hygienically have the kitchen upstairs, as one of the hardware men of the town, whose daughter is in the kindergarten, presented us with

a perfect cook stove, in which real fires have been made and water has actually boiled thereon.

One of the most potent influences which is felt in the kindergarten is undoubtedly the music. We have no stated times for singing, often, while at work one child may start a song which is caught up by the other children at the table and then those at the next table join in, until all catch the spirit and sing because they cannot help it and work the better for this spontaneous outburst. It was very cloudy during the morning circle and we could not sing good-morning to the sunshine, but while we are having the gift lesson, one child spies a ray of sunshine on the floor and starts our song, which all heartily join.

To take singing out of most children's lives, is like taking sunshine from the day. They love to sing and the more spirit of song we can bring into our work, the better.

One young woman who was teaching geography in the sixth grade, heard the kindergarten children singing the "Miner Song" one morning. Her class was just then studying coal mines, and catching the rhythm and thought of the song, she taught it to those older children, to whom it gave an added interest in the subject. Would it not be advantageous to thus correlate singing, in so far as possible with all subjects throughout the grammar grades, rather than relegate it to the accustomary short music period?

The value of the different phases of instrumental music as factors of kindergarten life, appeals to the thoughtful observer. This school being situated at the edge of town, the kindergarten children are carried to and from by the

coach, and so the majority arrive together. They enter the room, full of the freedom and joyousness of the bright April morning and our musician responds to that feeling by playing delicately, yet with spirit, Mendelssohn's Spring Song; the children seat themselves in the circle and gradually the music changes from this happy out-doors atmosphere to quiet, reverent music, such as Handel's Largo, or Schubert's Rosamonde, which prepares the child for the morning prayer and hymn.

The observer cannot fail to realize what an ally music may be in producing different moods in children, for it is found that they respond readily to various tempos and musical suggestions.

Much might be said in regard to the music for the marches, but suffice it to say, that the standard for that branch of music, as a rule throughout schools is far below other musical standards, hence special emphasis is placed here on the type of marches played. Only music of the highest order is played to our children, for just as the best art and literature are brought before them to establish the right standards, we believe they should have and hear only the best in music. We sometimes say "We have been telling stories and now let us ask the piano to tell us one," and with no further comment, the musician will play a short bit from, perhaps, the duet from Mozart's Don Giovanni, or the Andante from Haydn's Surprise Symphony. The same story must be repeated often to be of any value to the child, but we have frequently heard children humming parts from the piano's story after a few hearings.

No true idea of the kindergarten spirit could be gained from this rather general survey of the work, were there no mention made of our endeavor to bring the children closely in touch with nature.

The absorbing interest which all children have for alive, active creatures, their delight in digging in the earth, their pleasure in watching nature's phenomena and their joy in just being out of doors, is sufficient to justify Nature Study, as the point of departure for the program work. To foster and broaden the children's natural love for nature, then underlies the thought from September until June.

Froebel says, "every contact with nature elevates, strengthens and purifies." We try as far as possible to have the children experience this life at first hand. We wander in small groups all over the campus, and the surrounding fields, finding, hearing and seeing many things. When we wish to visit some particular spot, too far away to walk, again the coach is called into service and carries us forth to see, perhaps, the squirrels down in the park, the sheep on a ranch, the potato cellar or a hay stacker at work.

There are so many interesting animals and industries surrounding these children that we rarely talk of foreign ones, for we believe that such external matter should come later, and in the kindergarten these children should be given an opportunity to talk over and reproduce that of which they already have some apperception.

The children, of course, strengthen their observations by various reproductions. Dramatization is the favorite

one and we are wheat fields, toads, trees, flowers—flowers going to sleep in the fall and awakening in the spring, squirrels, birds and butterflies, according to the dominant interest. By painting, cutting, drawing, modeling and various other mediums, the children give back their impressions.

But all this is mere surface work, unless we can catch some ray of the great thought that nature is simply a revealer of the higher life, and that by an early recognition of an unseen power in the forms of nature, we can help the child to gain some impression of the spirit of God, and so our nature work is not only a preparation for botany and zoology, but is symbolic of much of our ethical teaching.

The positive rather than the negative treatment of children, their gradual appreciation of law through experiencing retributive rather than arbitrary punishment, in fact the nice adjustment between spontaniety and control, as exemplified in true kindergarten practice has deep lessons for all educators.

Froebel says: "Between educator and pupil, between request and obedience, there should invisibly rule a third something to which educator and pupil are equally subject." This is the best, the right, the law which affects each member, old and young, in the kindergarten. The truth of this has been forcibly brought to us this winter in the shape of a cuckoo clock, which was given to the room at the Christmas time by the young women of the kindergarten classes.

When the cuckoo speaks, it speaks to all and all must obey. It is not that I tell you it is time to march, play games or go home, but the clock tells us. It stands for law and order, it is impersonal, steadfast and is fairly alive to the children.

Many are the lessons and much the delight and interest this clock has given us. And when it is quiet and the people stop to listen, the soft cuckoo, cuckoo, cuckoo, may be heard far down the hall and in many rooms. It is a soft but penetrating voice and some say it may be heard way upstairs; may it not be indicative of the permeation of the Kindergarten spirit throughout the school?

CHILDREN'S AIMS.

By Bella B. Sibley.

PARENTS have aims for their children's future. The father wants his son to be a lawyer, and insists that his school life shall be directed towards this end; when the truth is, the boy has in him potentialities, which, if developed, would make him a successful brick mason, with sufficient business ability to conquer the world from a financial standpoint.

The teacher has aims for her pupil. She wants him to do the work of the class and pass with flying colors into the next grade. In order to attain such an end, it is necessary for her to push this aim upon the child, even to the extent of cram and force.

The child has a large fund of knowledge on hand when he enters school, which the teacher should plan to utilize. If he comes from the kindergarten he has studied nature in a very simple but a beautiful way. In the plays and games he has learned some of the great fundamental principles which govern society. Other children have rights which he must recognize if his own are to be acknowledged. If he comes directly from the home, he is not so well developed socially, nor are his senses so well trained; yet we believe in the educational value of the home. In it every

interest springs up easily and spontaneously. It is the most favorable environment for the growth of sympathy. With but few exceptions the family furnishes an atmosphere for the development of the best in the child. He has learned in the home to think and converse in the vernacular. Nature, art and music have had their refining influence upon him. When he comes to school he is familiar with many of the habits of pet animals, the nesting and life of birds, temperature, wind, sunshine and their effect upon plant and animal life. Thus the small circle of the family prepares him for the larger circle of the school, and the school for the greater responsibilities of the citizen.

The primary teacher takes the knowledge which the child has already acquired and uses it as a foundation for his further mental development. This knowledge is related either to nature or man. It is disconnected and fragmentary, and it is the work of the school to connect and expand it. With this in view the teacher takes the child to the great book of nature. "As he learns to read it he becomes acquainted with its Author." Take the child out to nature rather than bring twigs, leaves and flowers into the school room.

Nothing must be undertaken in the work without an aim, which the children can appreciate and adopt. The primary teacher must invent such aims as the children will make their own. When this is done, we believe that it will tend to develop the children in self-reliance to such an extent that they will soon be able to set up aims for themselves. They, however, will begin to do so very gradually

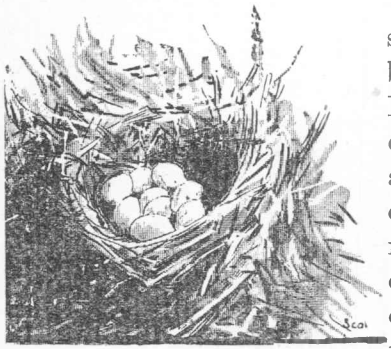
and will require encouragement and suggestions from the teacher. Primary children are not, as a rule, sufficiently well developed to work out many of their own aims; but everything should tend in that direction. Very early in his educational career, the child will, if properly directed, begin to suggest his own aims for at least some of the school work.

The following is an example of an aim given by the teacher which the children can readily adopt: "Now we are going out on the campus to look carefully at the trees. When we come in, we'll play that this part of the room is the campus. We'll draw the walks on the floor with chalk, then we'll all stand up and be trees such as we have seen, and have the Second Grade guess our names. If they guess correctly, they may write them on the board." (The children adopted the above aim. It became their own, and they were very enthusiastic in trying to realize it; consequently, they succeeded.)

During the excursion the teacher talks with the children about the way they think of representing the trees they have chosen; invites them to make suggestions to one another as to improvements. In other words look for means to realize the end. When they come in they arrange themselves according to the aim. As the Second Grade guess their names they write them on the board. The children construct a few short, simple sentences containing some of their tree names. Write on the board. This aim contains work out of doors, gives the child opportunity for express-

ing himself in action, and emphasizes the social development of his nature.

Continue such work in story, song and action, giving the children blackboard imaging of words and sentences in connection with everything, thus laying the foundation for oral expression in reading and written language. Begin with the home and lead the child out in all directions into the great life about him, and connect with life which preceded him in man and nature.



Trees, grass, flowers are studied with the thought of their being homes of birds and insects. Protection from enemies, weather and social life among birds, animals, insects, are pointed out, compared, related. Nature myths and fairy stories which carry the child back into Grecian and Norse life and primitive times are given, thus connecting the past and present.

STUDY OF THE POPLAR TREE—SECOND GRADE.

The children gather autumn leaves, press and work out designs for borders and panels.

One of these borders was placed above the blackboard in the primary room. The design was selected and the leaves were collected and pressed by the children. The leaves were pasted upon a background of dark, rich

brown velvet paper. The blending and shading of the soft colors of the autumn leaves with this background is a study in art, which develops the child's color sense in a very marked degree.

Exercises are given in the quick recognition of trees from the observation of leaves.

As is customary in many of the best schools, we use holidays and special occasions to study the homes of the Pilgrims, and the materials of which they were constructed.

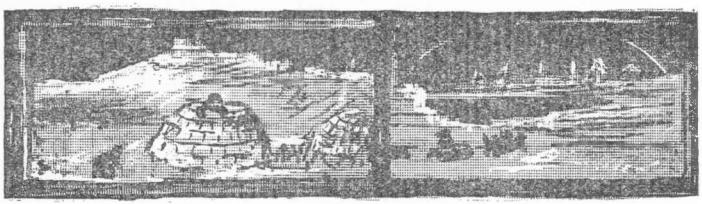
Compare these homes and the first Thanksgiving with the child's home and Thanksgiving as it is to-day. The teacher adapts her own material from the best literature and art

on this subject, emphasizing modes of travel and lack of machinery.

Indian life is taken up, Hiawatha's home, childhood, grandmother, food, clothing are studied. Children can not understand complicated forms of life. They can not construct the Parthenon or the Pyramids of Egypt or even a house such as they live in, but they can construct an Indian wigwam.

In story form the birth and home life of the Christ Child are given.

January is given to the study of the Eskimo, because our climate in this month is as near that of the Far North as it ever will be. The construction of homes, furniture, habits and life of the people, food, clothing, modes of travel, dogs, are taken up; bring in the idea of trade. Ask such questions as: "What have we that would make the Eskimo more happy?" "What has the Eskimo that would keep us warm this weather?"



It is the custom in the primary room to put a frieze around the top of the blackboard, about fourteen inches deep, representing a connected thought that we are studying. As we take up different phases of the work, these friezes are erased, and new ones modeled on the board in

chalk and charcoal. The primary practice teachers do this work. For instance, the January frieze contains a representation of Eskimo life, homes, Aurora Borealis, icebergs, sealing, and dog teams traveling south to a post house, on one side; the other side represents Greeley conditions of life, railroad trains, horse teams traveling to the post house with sugar, better building materials and tools for the Eskimo.

Three charts composed by the children, printed by the teachers and given as reading to supplement Eskimo literature.

As Spring approaches, Greeley agriculture life, the cultivation of the potato, giving the story of its introduction into this country, the manufacture of starch, the sugar beet industry are studied, and excursions to the beet sugar factory are taken. A system of irrigation is worked out on the sand table.

As the weather becomes warmer, a child's home in the hot belt is taken. The climate, plant life, animal life and habits of the people in the Torrid Zone are given in story form.

Children study architecture from pictures and observation of buildings; select ones they like best; draw plans of houses they could construct of straw-board. Each child calculates how much material he will require for his house. This is supplied him. Lines are drawn geometrically straight, and rulers used with some degree of accuracy. The floor and four walls are completed and a sliding partition is inserted, dividing the house into four rooms. A roof is placed over it. At this stage of development it be-

WHAT AGOONACK'S PEOPLE WEAR.

Agoonack is a little Eskimo girl who lives in the far, far north. It is very, very cold where she lives. Do you want to know what kind of clothes she wears?

She looks like a white bear-cub when she is far away. When she comes closer you can see her little brown, plump face, peeping out of her big fur hood.

Agoonack wears a jumper of white bear-skin. She has leggings made of the same kind of skin. She has a little pair of moccasins made of warm sealskin. Her mamma sewed her stockings of birdskin and left the soft down on to keep her warm. Her mittens are made of dogskin.

Agoonack is running to meet her papa and mamma. They are dressed very much alike. They each have two suits of sealskin. The mother's hood is bigger than the father's. It is used to carry Sipsu, Agoonack's brother.

The father hunts the animals. Agoonack scrapes the skin with a queer knife to make it soft and nice. Then her mother cuts out the clothes and sews them with a quill for a needle and reindeer sinews for thread. Next November all will get a new suit and they will celebrate.

Dora Ladd. Second Grade.

comes necessary for the young architect to have a lot upon which to build his house. A part of the primary room floor is marked off by streets, thus representing a city. Blocks and lots are laid out and numbered. The teacher acts as real estate agent, and the children choose a notary public and a recorder. The members of the class divide themselves into groups of twos or threes. These groups go, one at a time, with the real estate agent, select their lots, pay for them with toy money, go to the notary public and have a deed filled out, signed and sealed as follows:

DEED.

This deed, made this 7th day of March, 1902, between Alice M. Allen, of the County of Weld, and State of Colorado, of the first part, and Charles Newton, of the County of Weld and State of Colorado, of the second part.

WITNESSETH, That the said party of the first part, for and in consideration of $1.00, hereby sells and conveys unto the party of the second part the following land in Weld County, Colorado, to-wit: Lot one in block two hundred, in the Town of Greeley, according to the recorded plat thereof.

In witness whereof, the said party of the first part has hereunto set her hand and seal, the day and year first above written. ALICE M. ALLEN. (SEAL)

STATE OF COLORADO, COUNTY OF WELD, SS.

Acknowledged on March 7th, 1902, before me, a Notary Public in and for said County and State.

JOHN JONES,

(SEAL) *Notary Public.*

This done, he goes to the recorder and has his deed recorded, after which he proceeds to erect his house upon his lot on the school room floor.

Thus the children become land owners; and as soon as their houses are built they have them insured. The teacher acts as insurance agent, and a typewritten insurance policy is issued to each owner of an insured house. The premium is paid when the policy is taken out, and an assessment, according to specifications in the policy, is due the first day of each month.

Taxes are due and payable May 1st, of each year.

On a piece of straw-board the size of the kitchen floor each child makes an oilcloth, the pattern for which has been developed as follows: The children observe the oilcloths on kitchens in homes, visit furniture stores, study patterns and colors, select the ones they like best, then draw a pattern of an oilcloth for their kitchens, and color it with wax crayons. The probabilities are that each member of the class will have a different oilcloth. This is what the teacher wishes. It develops the child's individuality.

Rag carpets are woven for the other rooms and a study of fiber plants, silk and wool, is taken up in connection with the weaving. Pasteboard furniture and dolls are made. This work forms a link between the kindergarten play and the study of industries and commerce.

We shall improve upon this next year by having each child make a house of a different size and shape.

The children have studied during the year the life of primitive people, animal life, plant life, and the life of man

in the three zones; compared, contrasted and connected with their own home life and environment. In a simple and interesting way they have studied exchange of produce, commerce and modes of travel. They have compared the Indian snowshoe and the Eskimo dog team with the railroad train and the bicycle; the camel of the desert with the horse. The myth and the fairy story have been copiously introduced all the year, dealing with life in ancient times. Thus a broad foundation has been laid for a further study of history, literature, geography, trade, commerce, travel, manufactures and invention. By means of sand, clay, strawboard and wood the children have been led to imitate the industrial life that comes within their range of experience. Contemporaneous, ancient and primitive life have been connected in this work and found equally simple, furnishing a wealth of material from which to select children's aims.

READING.

Reading, oral and written language are emphasized in the primary grades. The partiality shown these subjects is justified by the fact that language is the instrument that makes possible human social organization. Not only so, but much of the child's mental development depends upon his ability to think in response to the stimuli received from the printed page. Teachers in the upper grades, High Schools, and even in our colleges, admit that it is exceedingly difficult for pupils to master the thoughts that words represent.

On the other hand, it is easy to train pupils to memorize words; but in doing so they are neither taught to read, nor to study. Their minds are concentrated upon the empty sounds, the characters, the form, the ability to pronounce words, which soon becomes habit, so that when hard, continuous study of text is demanded, the pupils have no power of thinking.

Children are taught from the beginning that pronouncing words is not reading. They are encouraged to master the thought and express it. No one method is used exclusively, but many methods are studied by the practice teachers, for the purpose of absorbing the spirit of those who made the methods.

Reading is correlated with everything that is done in the primary grade. For instance, the teacher begins to tell a story. When the most interesting point is reached, a sentence written upon the board gives the climax. The children are anxious to master the thought. The sentence contains something that it is necessary for them to know. The teacher assists them to help one another until they find out what it says. It is thought, not words, that they are eager to get. When they get the thought they spontaneously express it. While getting the thought they incidentally master the words. Or a story is begun as above, but books are given the children, page and number of paragraph are written upon the board, children study the paragraph containing the climax of the story, tell it in their own words, or write it upon the board, to be improved upon by other members of the class. Thus the test of reading is

the ability to study the text and express the thought aroused by it.

The above are two of many little devices that are used as means to the same end.

Toward the latter part of the first year the work in phonics is taken up. Slow pronunciation of words, with which the children are familiar, is given. In this way the child does not come suddenly to a new subject, when he takes up phonics, he simply takes a little step in advance, in a subject with which he is already familiar. He identifies the separate words in the sentence he uses, and in the next place, recognizes the separate sounds in each word. The latter part of the second year new words are pronounced by means of phonics.

LITERATURE.

We consider that the myth and the fairy are the keys which unlock much of the best in art and literature. For instance, the children have been observing trees, flowers and the forces about them. They have been looking at pictures and singing songs. They are given a beautiful myth which enhances their thought, interest and observation. We select from the following:

Indian Myths from Hiawatha.

Nature Myths from the Greek and Norse Mythology.

Fairy Stories and the Odyssey.

MUSIC.

FIRST YEAR—FIRST HALF.

Music.—Songs and exercises from teacher's pattern. Tonic, Dominant and Sub-Dominant chords. To sing and write exercises from memory. Primary and secondary forms.

FIRST YEAR—SECOND HALF.

Music.—The beat divided into halves, into quarters. Ear exercises. Rate songs.

SECOND YEAR—FIRST HALF.

Music.—Review. Two part exercises from manual signs. To sing every interval possible using only one, two, three, five and seven of scale. Exercises sung, written, pointed and indicated by manual signs from memory. Each exercise to be sung to any given syllable. Two part rounds. Ear exercises.

SECOND YEAR—SECOND HALF.

Exercises and songs beginning with half beat tones. The beat-and-a-half tone. The slur. Two-part songs. Ear exercises. Daily use of manual signs and modulator. familiarize pupils with all rhythms employing half-beat tones and quarter-beat tones. Record of voice compass.

SUBJECTS TAUGHT IN FIRST AND SECOND GRADES.

Reading, Writing, Numbers, Literature, Language, Nature Study, Construction Work, Industrial Art, Drawing, Story Illustration, Clay Modeling.

TO WHAT EXTENT CAN CHILDREN FORM THE COURSE OF STUDY?

By Eleanor M. Phillips.

IN the fall of 1901 it was decided to allow the pupils of the Training Department of the Colorado State Normal School more freedom in selection of work and method of accomplishing it than had been practiced formerly.

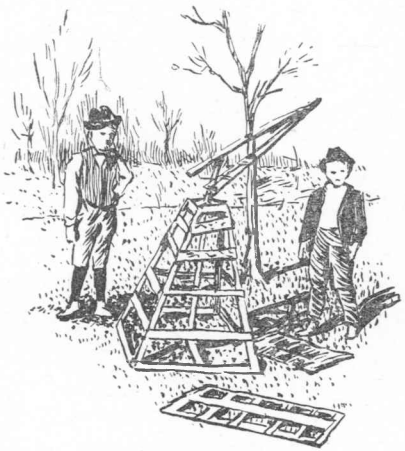
It was suggested that the children in the third and fourth grades (about forty in number, seated in one room) be allowed one or more periods a week during which time they might do what they considered most worth while—the children planning for themselves as well as executing their plans without the teacher's assistance, except where they felt the need of her help.

The matter was presented to the children in this way: If you should have one-half hour each week to do whatever you think most worth while, what are some of the things you would care to do? Many answers were given—most of which showed very little thought, due perhaps partly to the fact that the children had not had sufficient time to think of the matter, and partly to the fact that the idea of planning for themselves in school was such an innovation that they were unable to adjust themselves to it readily. In the

main, the answers were such as the children thought would most please their teacher; accordingly they suggested what they considered the most suitable occupation for school—such as "I should paint." "I should study my reading lesson." A number suggested various subjects for nature study, as this work had been taken up with some enthusiasm. The teacher emphasized the fact that they need not feel that they must do such work as they were accustomed to do; but anything they cared to do that could possibly be done at that time and place. The teacher even ventured so far as to relate some of the experiences of children in another school where a similar plan was tried. This was intended to show the pupils that there were some things thought to be worth while which seemed quite foreign to their ordinary ideas of work in school. Yet the teacher mentioned these with fear and trembling, lest the pupils might copy others' ideas and thus not use their freedom to the extent that was allowed them. However, at the next conference nothing mentioned by the teacher had been adopted by the children, neither had their ideas developed to any marked degree. They still in the main, when asked for their plans, stated that they wished to paint, or draw at the board, or complete some work begun in Sloyd, and a few wished to read and do number work, while many had no plans at all. Some of the boys planned kites and a number of girls brought quilt blocks and pillow covers to make. For some time the teacher allowed the drawing, painting and reading—which were planned for one day only, and then not very clearly—because she realized that

they must have a little time to make the transition from the method of the teacher's planning everything for them to this method of the children's inventing some of their own plans.

Within a few days a Fourth Grade boy brought a drawing of a hay-stacker, explained it to the teacher, telling how large he wished the hay-stacker, and just how it was to be used. He had the promise of another Fourth Grade boy to assist him in the work. The boy with the plan went to



the Sloyd room where the teacher gave him a large sheet of paper upon which to make a working drawing. This consumed the period and the boy waited anxiously for another hour for this work. They completed this hay-stacker in about six weeks, having one period a week in

which to work except the last two weeks when the time was extended to two half hour periods a week.

The time was increased, indeed for all the pupils, at their own request because of their growing interest.

An elaborate plan of a modern cottage was soon brought in by a Fourth Grade boy who was the son of a carpenter, and who had a very clear conception of the steps necessary for the erection of a house, from the original plan to the painting of the house. He seemed to have very little idea that this cottage would be built; but was confident that he was capable of building it if he had the material. When asked where he would place it he pointed out several good locations on the campus. The teacher suggested that he reduce and simplify the plan, and make an estimate of the cost of building the house. This he did, consulting the lumber company, and deciding that for $23 he could build a nice little cottage with two small rooms. He also said that with the assistance of four or five boys whom he selected to help him he could have the work completed by Thanksgiving. This boy had so much confidence in his own ability and was so enthusiastic over his plan that he had no difficulty in securing plenty of assistant carpenters. There was talk of trying to raise the money among the pupils; but that seemed hopeless. Finally the boys were told that the school would appropriate $8.00 for the Third and Fourth Grades to use as they thought best. Now if this house committee could reduce the size and expense of the house so that it could be built for $8.00, and all interested in the investment of this money should agree to

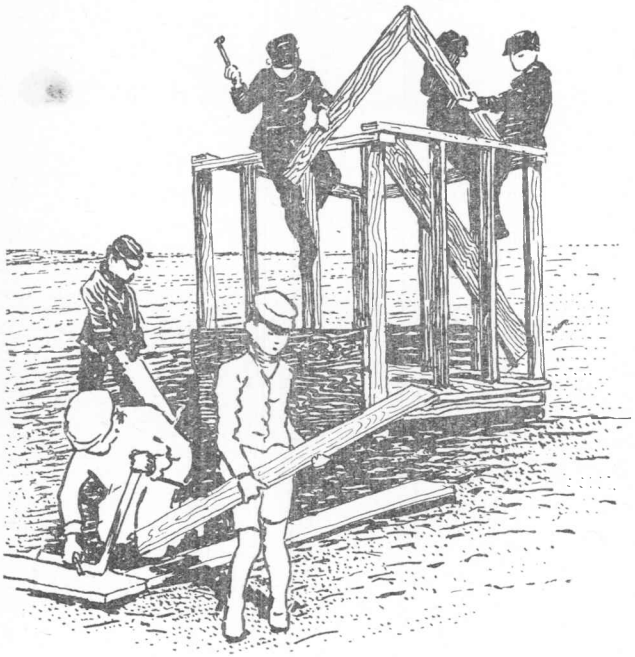
its being used for this purpose, they might be able to carry out their plans.

By this time, which was six weeks after the first plan had been presented, many other members of the school had caught the inspiration and had planned (a very natural thing to do) furniture, such as tables, book-cases, chairs and bedding, towels, couch pillows, etc., for the new house.

Notwithstanding their interest, the appropriation of $8.00 to this scheme was a very crucial point which led to a great deal of discussion on the part of the pupils. The matter was placed before the school in this way: The school is willing to give this year about $8.00 to this room to use in whatever you think is the best possible way. You will need to think the matter over carefully and be ready to give your decisions in a few days. At the appointed time for the next discussion some children advised buying a case for their room in which to keep relics brought by them for study and ornament. Pictures for the room were strongly urged by others. Many other things were mentioned; but the large majority favored investing the money in the house, which would prove to be of service as "a recitation room" and "a place in which to keep many articles made in school." The enthusiastic majority—including all directly interested in building and furnishing the house—convinced the minority of its value, and when the votes were cast it was seen that the pupils were unanimously in favor of spending the money for the house.

The boys ordered the lumber; but when actual work was to begin a seeming hindrance arose. Some of the boys

were unaccustomed to handling carpenters' tools, and the supervisor of the Sloyd department could not allow them to take valuable tools out to the field. The boys suggested bringing tools from home; but on presenting the matter to



a young man in the senior class who understood manual work, he kindly offered to be present as often as possible. This allowed them the use of the Sloyd tools. In one of their reports of the progress of the work they said of this young man, "Mr. S. never helps us, he just makes us

think." They explained that he would ask them as the work advanced which of several ways would be the best to pursue.

The building progressed rapidly for a time, but was not complete, as the boys had expected, at Thanksgiving—only the frame was up. There were many causes for the delay, such as illness of the leading carpenter and absence of Mr. S. At Christmas time, also, the house was incomplete; but the enthusiasm was still intense.

While this house was progressing, other groups were planning and executing work. A sewing group was formed. This committee was very enthusiastic. The children contributed material for various articles and when it was impossible for them to bring what they needed from home they assessed themselves a few pennies and purchased material.

When some money had been brought one of the group suggested that they must select a member to take care of it. So they elected a treasurer. Some one proposd that another member keep account of all that was done, and a secretary was appointed. A president was also elected.

The idea of estimating the time that would be required to accomplish a certain piece of work was not introduced at first although this seems to be such an important element in all working plans.

One of the seniors, Miss F., who taught these pupils at another hour in the day, became interested in this work and offered to assist. She made no effort to direct the children; but let them know that if she could be of service at

any time they might call upon her. In one of their reports they stated that they fringed a towel; but did not know how to keep it from raveling, so Miss F. showed them the kind of stitch to use for this purpose.

Frequently plans were changed as the work developed. Two girls were making a comforter of blue cheese-cloth tied with white knots. When it was almost completed they decided it would be prettier with a ruffle around the edge. They took four cents from the treasury and bought material for a ruffle.

There was little tendency to be fickle on the part of most of the children. Drifting aimlessly from one plan or idea to another, or from one group to another, was rare, yet the children's plans were constantly changing as their ideas developed.

The furniture group was rather a changeable one. It consisted of smaller divisions—a chair committee, a bookcase committee, a table committee, etc. The chair group at one time, included nine children, each of whom was to make a part of a chair. One boy was selected by the group to make the working drawing. Another was appointed to superintend the work. This task he found to be difficult. When the parts were finished some of the members had to drop out for a time while a smaller number—two boys—put the chair together. This plan did not prove to be satisfactory as the legs of the chair, for instance, were not sufficiently uniform. The leader had not been able to see that all followed the plan. The number was too great for

him to supervise. It was decided that for so large a number to work on one chair was not advisable.

The original idea seemed to be to have a set of chairs all alike, and one or two rockers. The first chair was criticised because its back was too vertical. Although it was a strong little chair that "would hold the weight of the teacher" as the children proudly declared, yet it was not very artistic. To enlarge their ideas of beauty in furniture, the teacher brought pictures of various chairs and encouraged the pupils to do the same, but without requiring them to accept these suggestions, or even encouraging them to do so.

This group was not as well organized as the sewing group. Children were accepted or rejected more readily without seeming annoyance to those concerned. This may have been due to the fact that making chairs was rather a newer occupation than was sewing to the sewing group, and experience was necessary in order to show the children what was a good plan to pursue.

Not only was the artistic side a perplexity, but other obstacles presented themselves. After planning the chairs it was found that the Sloyd department could not furnish material for the furniture and the pupils must secure this in some other way. A boy from another group, whose sympathies were aroused, brought a nice half-inch board. Several children brought good pieces of boxes that worked up well into furniture. Sand paper and nails were also furnished by the children.

The house was building; the furnishings were on the way; and now the need of dishes suggested itself to a thoughtful boy. The children hooted at the idea, thinking for the moment that it was impossible, but when he explained that he had in mind clay dishes, many who had joined no group were anxious to help him undertake the work. The pupils in these grades are usually very fond of modeling in clay. Many of the group, however, were found to work aimlessly, soon to tire of the occupation, and finally to drop out without action being taken by the other members.

A secretary was appointed to keep a careful record of all articles made. She was selected because of her excellent penmanship. Her reports were placed in a little book made by the children for this purpose. A president was appointed to manage things, such as passing the clay, and the papers to protect the desk, seeing that everything was properly collected and the good pieces of work preserved. Some trouble arose as the president seemed inclined to exercise too much authority in regard to what pieces were suitable to be preserved. About this time one of the girls withdrew from the sewing group, thinking that she was not appreciated there. This group was sorry to lose her; but could not induce her to remain. She at once was invited to become president of the clay group.

Other minor groups were formed, and several individuals worked alone. One boy made knives and forks and spoons. He invited no one to assist him and no one requested to be allowed to join him.

A brother and sister made a foot-stool—not from an original design, but from a model in the Sloyd room. One boy made some pretty designs in wood carving and wood burning.

At different times when a subject presented by a teacher in some regular work was thought by the pupils to need their attention they asked permission of their committee to waive the work they had planned and attend to this. The following is an incident of this kind: The teacher of Fourth Grade literature had told the story of Damon and Pythias, and the children were trying to act it out in class. There arose much discussion in regard to the proper expressions to use when presenting the story in the new form of a drama. The teacher suggested that a committee from the class be appointed to write the drama. If their arrangement were accepted by all, the play would be given accordingly. Several girls were selected for this work. When the next period for the work planned by the children came, which was the same afternoon, the girls requested that they be allowed to leave their groups and do the work assigned by the teacher. When they were in a small room by themselves for the purpose of writing the drama, they agreed to play it as well as write it, and invite the other members of the Fourth Grade and some of their teachers to witness it. As this was Friday, and they had decided to give the play on Monday, they must get their invitations out at once. When the teacher entered the room all were rushed with work—some writing invitations, others programs, and a few the drama. Groups had been formed within the

group—division of labor was felt to be the most effective plan. One girl stated that Bessie was managing the work,

and Bessie explained that after all were started she wasn't needed as manager so she was helping to write invitations.

This committee requested the use of the room for practice after school that evening. The parts were learned, and very simple costumes were planned, each girl telling what she could bring or make. Only a few things were to be made; a crown for the king was one of these.

On the following Monday the play was given at the regular hour for the literature lesson. The audience was requested to offer criticisms. These were kindly accepted, and the cast decided to improve upon the play and present it before the whole school at general exercises if the permission of the president could be obtained.

One of the criticisms made was that when the wife of Pythias received the note containing the king's decree that her husband must be executed, she fainted; but the audience had no way of knowing the cause of her faint. The next time it was played she read the note aloud before fainting.

While this was not strictly work which the children had originated, the plan of giving the play before an audience was entirely their own.

The pupils at various times during the day wished to tell what work they had done or planned. The teacher suggested that the time for other regular work should not be taken for this; but if they wished occasionally to devote the period set apart for work planned by themselves to reports, each committee that had something worth giving might report before the whole school.

The first report was so lengthy that the allotted thirty-five minutes were not sufficient, and the pupils agreed to continue on the following day. This report was extremely interesting. The teacher asked the pupils what committee they would like to hear from first. Some one suggested the sewing group. Their report was well planned, and that entirely without the teacher's help. The president took charge, calling on the members of the committee to place all articles made and being made on a table in front of the room. Then the secretary was asked to read the daily minutes which showed the official workings of the committee, where articles were obtained, how money was raised and expended. The president then called on the different members to show and explain their work, which each did, answering any questions asked by the school concerning the original plans or the method of work. This report was so interesting that it proved to be a great stimulus to some of the weaker and not so well organized groups. While there was so great a variety of work exhibited yet the report showed a unity of purpose and a helpful spirit.

Up to this point the work has been considered from the detailed and concrete side. It may be profitable to note some generalizations drawn by the teacher.

There are frequent opportunities for the pupils to teach one another in this work. The very effort of the child to show his fellow worker how to improve reacts upon himself. He becomes a more severe critic of his own work.

But perhaps a more important feature in this method is the confidence the children gain in themselves, and their

increased ability to set forth clearly their ideas and plans. Early in the work, criticism by the teacher was likely to result fatally, as the children weakly yielded to her suggestions, giving up their own plans and accepting her ideas without any reason whatever except that she was the teacher.

Later there was seen to be marked development in the entire room. The child who had gained confidence in himself gave his reason for the faith that was in him and often convinced the teacher. There were two very extreme cases where pupils who had been diffident were transformed into boys with strong opinions and clear reasons for these opinions. These two boys were both on the house committee and felt the weight of the responsibility.

The helpfulness of the children to each other has been mentioned. Closely related to this is the assistance the pupils gained at home. This was not the kind of help that parents give when they compel their children to learn a lesson; but help which was warmly soliticed by the children. Lengthy papers and difficult drawings have been worked out at home with the happy prospect of carrying out these plans at school. The parents contributed not only with their ideas, but assisted in material ways. It seems to be an efficacious means of leading the pupils voluntarily to take their school work into their homes.

The element of drudgery is made easy by the anticipation of the materialization of their own plans. For years we have quoted among pedagogical principles: "All know-

ledge to be most effective must be accompanied by a glow of interest." It is a principle which all teachers labor earnestly to observe, often even introducing artificial means for its accomplishment. In the work above described the principle is forgotten in the glow of real enthusiasm—natural interest—unsolicited by the teacher.

The Third and Fourth Grades were not separated in this work. The result was that nearly every group included pupils of both grades. This condition tended to break up the rigidity of grades and to create a more congenial spirit among the pupils. The teachers of various subjects felt that the effect of the group work was to decrease the pressure of discipline and to develop a more kindly spirit toward teachers as well as pupils.

Considerable difference was observed in the ability of the Third and Fourth Grade pupils to plan for a series of steps in any work. The Third Grade were not capable of looking as far ahead nor of holding their attention upon one thing so long as the Fourth Grade. Far more ideas were advanced by the Fourth Grade pupils, and the organization of the groups including a majority of Fourth Grade children, was more complete and effective. However, the test was hardly fair, as there were twenty-six Fourth Grade and only fourteen Third Grade pupils in the room.

The pupils' method of disciplining themselves was worth noting. It arose from real needs, the children observing that they could not carry out their plans where there was disorder in the group. Early in the work when

a group could not have the teacher's assistance some member of the class would volunteer to "keep the group quiet" or some one would say, "Let Mary be the teacher and keep us quiet." But when they learned that the teacher was unwilling to appoint a deputy for her place they devised plans of self-government. True self-discipline is not the meaningless drudgery of "keeping things quiet" because the teacher wishes it or because "it is nice to have it so." Self-government arises from the felt need of the children to make conditions such as will be most conducive to the best possible work. Sometimes the officials of the group attempted to assume too much authority and were remonstrated with by the members. Sometimes a child became disorderly and refused to do his work so that the group were compelled to withdraw from him. Several times the entire group became noisy and disturbed others in the room. In such cases the teacher appealed to the president or other official, and if he were not able to bring about order the entire group was considered a hindrance to the room and was asked by the teacher to join those who had no plans and who were doing work arranged by the teacher.

The work planned by the pupils has a wonderfully stimulating effect upon the teacher as well as the pupil. It offers one of the best opportunities for her to know her pupils—their various tastes, their strength and weakness.

The teacher found it impossible to be of service to the various committees if she attempted to examine the plans during the hour at which they worked. When she pre-

sented this difficulty to the school they saw the necessity of giving her their plans on the preceding day in order that she might have one evening in which to examine them. From this time a few seats in the room were reserved for those who wished to write plans. While many did this at home there were usually a few writing plans at school each day.

HOUSE APPROACHING COMPLETION.

At first there was a tendency to be hasty and careless about the writing. The teacher declined spending her time on carelessly written papers, and the pupils found it important to exercise care in all writing, spelling and drawing if plans were to receive attention. As the work progressed many of the pupils took almost as much pride in the accuracy and neat appearance of the plans as in the completed work. A good, well-written plan had its effect in convincing the teacher of the value of the proposed work.

Measuring and figuring were often necessary, but only a small per cent of the number work usually given in these grades ever arose in the children's plans.

The question has been asked by some who have seen the work, "How much of the school time could profitably be spent in work planned by the children?" Perhaps only observation as the work develops could enable one to answer this question. In these grades the time given to this work, up to the present (Christmas), has been from one to three hours a week, with an average of about two hours each week.

This is a very small per cent of the school time. The brief course of study below shows something of the scope of the regular work outlined for the children.

LITERATURE.

Robinson Crusoe.
Hiawatha.

Stories from Hawthorne's Wonder Book and Tanglewood Tales.
Norse Myths.
Nibelung Tales.

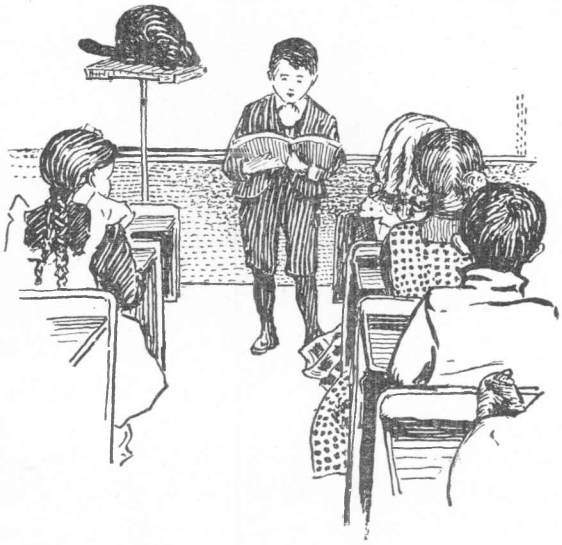
Appropriate stories are given for Thanksgiving, Christmas and the birthdays of Washington and Lincoln.

The developing method is used in presenting the literature. The pupils, with the teacher's help, then make an outline consisting of a series of interesting points, arranged according to the degree of interest. Later the pupils write these stories in their own words, having this outline to guide them in the arrangement of the story. The pupils are encouraged to make their original writing the final one, if they are capable of doing so. Their aim in writing is to preserve a collection of these stories, which they bind in permanent form.

As the teacher observes the work of the pupils and discovers their needs in writing, spelling and language, she sets apart a portion of the time for special work along these lines.

READING.

To reading is given more time than to any other one subject, as this is the avenue through which much of the child's knowledge is to be obtained. Emphasis is laid upon gaining the thought by silent reading, as well as by oral expression.



The following are some of the books used:

Baldwin's Third Year.
Cyr's Third Reader.
Fairy Tales and Fables by Thompson.
Robinson Crusoe for Boys and Girls, by Lida B. McMurry and Mary Husted. This is read after it has been used as Literature.
Baldwin's Fourth Year.
Hans Andersen's Stories.
Fifty Famous Stories Retold by Baldwin.
Baldwin's Old Greek Stories—used as literature earlier in the year.

Legends of Norseland, by Mara L. Pratt—used as literature in the winter and read in the spring.

Children are encouraged to bring stories from home which they have prepared to read to the class.

Each pupil is allowed to take one book from the library each week to read at his home.

NATURE STUDY.

Nature study work is divided between the general observation of outdoor life and the detailed study of objects brought to class. Frequent excursions are made for the purpose of studying flowers, plants, trees and birds in their habitat. Children should have a speaking acquaintance with many more plants and animals than can possibly be studied in a detailed way. In the fall the migration of birds, the preparation of all nature for winter is observed. Leaves, seeds, cocoons, etc., are gathered. In the spring a garden is planted on the campus and its growth watched. During these two seasons the children do much of their work out of doors.

In the winter season snow crystals, salt crystals and rocks are studied. The life histories of some animals are taken up, e. g., the study of the beaver. As the subject is developed, the pupils work out in the sand table the beaver's home, showing the trees in various stages of preparation for building a dam, and the house of the beaver. Small clay beavers are modeled from a mounted specimen and placed in these homes.

Aside from the sand table work and moulding, free hand cutting and drawing are done in this connection.

A book is written containing a series of chapters on the subjects studied. Later this book is used as reading material.

Physical experiments in magnetism, electricity, heat and light are made. These are carefully written up and illustrated with drawings, then bound in permanent form with other written work by the children.

GEOGRAPHY.

LOCAL FEATURES.

Study of soils, sand, irrigation, drainage, hills and valleys. Maps of school room, school grounds, and of Greeley. Clay modeling and sand table work in this connection.

LOCAL INDUSTRIES.

Visit to: a building in process of erection, the beet sugar factory, a blacksmith shop, etc. ("Tarr and McMurry" is used as reference book for the teacher).

NUMBER WORK.

While much of the number work arises from other subjects taught, we plan to cover the following work: Sense training, sight, touch, hearing. Objects are used as the basis of all work. Ratios of time, value, distance.

OBJECTIVE WORK IN NUMBER.

Rapid drills in addition, subtraction, multiplication and division. Application of these in the form of concrete

problems correlated with other subjects. Long and square measure. Areas of rectangular fields, of square and rectangular gardens (correlated with garden work).

MUSIC.

(Outlined by Music Director.)

The sub-dominant chord and all new intervals possible with tones of the same. Melodic resolutions of tones. Motion of parts. Two part singing. Simple dissonances. Sing, write, point and indicate songs and exercises from memory. The half and two-quarter beat; the two-quarters and 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.

Meaning of key and time signs. Chromatic seconds. To reproduce easy songs from teacher's singing. Three and four part rounds. 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.

DRAWING.

(Outlined by the Drawing Teacher.)

Nature Study.—In fall and springtime, study of leaves, sprays and plants, birds, insects, animals and posed figure in winter term.

Landscape.—Simple elements of natural scenery; natural phenomena.

Object.—Common flat objects, natural and artificial; study grouping.

Color.—The six standard colors and six intermediate hues. Study of tints and shades. Color analysis.

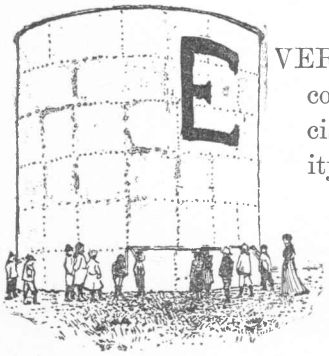
Elementary Design.—Balance and proportion of dark and light. Principle of subordination and repetition. Study of rhythm and terms.

Correlation.—Illustration of other branches, as Reading, Literature and Nature Study. Illustration of anniversaries and holidays.

Picture Study.—Study of good pictures or reproductions for the purpose of cultivating taste, ideal conceptions and developing in them an appreciation of correct ideals of graphic expression.

FIFTH AND SIXTH GRADE WORK.

By Elizabeth H. Kendal.



EVERY teacher wishes to develop self-control, self-reliance, energy and decision of action and to foster originality in her pupils. To do this she uses every indication which shows the trend of interest and purpose in a recitation to gain a closer, a more intimate knowledge of the child and to guide her in directing the work to their best development.

Beside the periods we devote to work in which the child takes the initiative and the teacher simply helps in the work offered by the pupils as they desire her assistance or accept her suggestions, we have done some work in the various branches studied in Fifth and Sixth Grades, based upon propositions from the pupils of which a few examples may not be uninteresting.

A class in the Fifth Grade, who were studying perimeters and areas, proposed that they should find the area of the stand-pipe, which is a part of the city water supply system. While considering the advisability of this plan,

the objection was raised that it would be impossible to find the altitude; but one pupil recalled the fact that the tank was marked off in sections, that were not very high, and suggested that one might be measured and the altitude computed. So armed with a hundred-foot tape line, a yard stick, and note books, they went next day, accompanied by their teacher, to the stand-pipe a quarter of a mile distant where the measurements were taken. When the calculations had been made, the question as to the number of cubic feet and the number of gallons it would contain, arose. This led in the following lessons to the study of the volume of cylinders, for which they found the relation of the diameter to the circumference necessary. This was given them by their teacher after they had by measurements found various results: as $3^1/_8$, $3^1/_5$, etc. The interest taken in these subsequent lessons, fully compensated for trouble taken and was suggestive to us, at least.

One of the most interesting recitations which we have had in history this year was a council to which the Fifth Grade invited us. In their study of the explorations of Father Marquette and Joliet, they had followed their wanderings down the Mississippi to the mouth of the Arkansas, which was the farthest point reached by the expedition, and finding that a council was held there between the white men and the Indians to consider the best course of procedure, the children decided to reproduce the scene as nearly as possible. They sought with equal zeal to find what they deemed suitable costumes and arguments to sup-

port their positions. The Indians urged the white men to stay with them to pray and preach or trade as they felt the leaders could be most easily influenced, and reported monsters in the river and hostile natives in the region to the south. Some of the white men urged that they con-

tinue their journey to the mouth of the river, others that they return to Fort Frontenac and report progress to the governor before it was too late. This argument finally decided the matter, and after being given guides by these friendly Indians, they departed on their homeward way.

Inspired by a desire to represent their parts well the children questioned their teachers and read all available material in order to get light upon the characters they were to represent and showed considerable ingenuity and ideas of appropriateness in the working out of their parts.

The children proposed when we began the study of the Plymouth Colony that they should build a house as similar as possible to those of the Pilgrims. Though it seemed a large undertaking for them, the teacher thought that it could be accomplished, if it were planned carefully. So planning together, they decided to build a log house, 5x8x5½, which was to have a chimney and fireplace. After planning the details of the work, the class was divided into committees, to measure, saw, and chisel the logs and to

clear the ground for the house. As they had no stone nor brick, with which to build the chimney, they decided to

make the brick themselves. This gave employment to those who could not work on the logs. They also appointed two secretaries to keep records of the plans made and of the work accomplished each day.

The work was begun with enthusiasm and in fact did not lack in interest to the majority of the children until we stopped working. But either because of injudicious planning or because the work was really too difficult for them, it dragged from week to week until it became too cold for work and, though the children said that the Pilgrims did not stop for a snow storm, we though it best to abandon the work at least until spring.

As the history work did not stop at the same time, it will of course be finished, not as a part of the history work, but as a manual training exercise.

Although it was something of a disappointment and as it stands thus unfinished is a monument to our imperfect judgment and planning, we derived many benefits from the work. The interest in all subjects pertaining to the life of the colony was stimulated to a great degree and they read all they could find upon the topics considered during the sessions of the class in the school room, for example such topics as: How they lighted their houses. How they told time, etc. In connection with this work, they made sun-dials, candles, and candlesticks, wrote paragraphs and told incidents in the lives of settlers, showing their character, laws, customs, relation to the Indians, etc.

The difficulties that they met with in their work made them appreciate more fully the privations and hardships of the faithful band at Plymouth and impressed indelibly upon their minds the image of the little log house and what it typified.

This plan having been partially unsuccessful, a plan was proposed which the children adopted with pleasure and which, after having been in operation for six weeks, promises to be the most successful of any work we have done this year. The class has been divided into five groups, each group chooses a colony the history of which it is to study and present to the others. After careful preparation the group reports to the entire class the facts which it thinks important or interesting and is criticised freely by the others, often having to look up points more fully and report again. Each child in the class keeps a note-book in which he records the principal events in the report given during the preceding lesson. The group then takes the material that it has gathered and, cutting out all detailed and unimportant points, prepares a history of the colony.

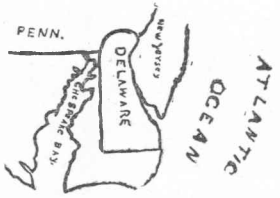
If this chart is approved by the entire class and the teacher, it is printed and is kept as permanent record of the work accomplished. (See chart, page 89.)

The work differs from the other examples given in having originated in the mind of a teacher but in having the details worked out almost entirely by the pupils. The pupils are supplied with books, Fiske, Montgomery, Pratt's American History Stories, Dutton's Colonies, etc., from

which they gather material as they desire, although they are grateful for suggestions or questions that aid them, for example: Superintendent Miller of Denver, while visiting during one of their study-recitations, gave them work for an entire period by asking why Delaware was curved on the northern boundary.

The interest in the work is quite remarkable; the reports, usually well prepared; the criticisms, sensible, kindly, and helpful; but the secret of its success lies in my judgment in the deeply-rooted love of humanity to realize its desires in action, for it is in the magic printing of the chart that the attraction, which calls forth their best efforts, resides.

THE DELAWARE COLONY.



Delaware was settled by the Swedes in the year 1638.

The company that was sent over from Sweden were plain, strong, and industrious people. The Swedes hadn't had possession of the land ten years when the Dutch of New York came in and took it from the Swedes and sent all of them back to Sweden who would not obey their laws. Then the English took it from the Dutch in 1665.

The English owned Virginia Massachusetts and Pennsylvania and they wanted New Jersey and Delaware so that if any of the countries across the ocean should want to fight with them that they would have a better chance to fight as they did not want their country divided.

William Penn thought he would like to have the land so he bought it from the Duke of York, it was considered a part of Pennsylvania so he called it the Territory.

There were farms that extended into Pennsylvania which belonged to Delaware. When

During the winter term we have been making a series of simple experiments in physics. Now, one of the great faults in past teaching and especially in science, has been that it was the teacher who asked nearly all the questions and though the child might follow her guidance with intelligent interest, he did not feel encouraged and inspired to make personal investigations in the realm of nature. For this reason, the teacher in charge of this class has taken advantage of many of the questions asked in class by referring them in experimental form to nature. Many of these experiments may seem trivial from a mature point of view, but, because they encourage the children to try things for themselves and to have faith in their ability to do something of themselves that is worth while and also because it may be of importance in the development of the child, though of small account to us, we consider these little efforts of the greatest importance.

A few such problems that arose are:

Would not either end of this magnet attract either end of another magnet?

Will a magnet gather iron filings from out of a pan of water?

If the magnetism passes through things it will not attract, will it not attract a brass cup if the cup is filled with iron filings?

If we were to mix the iron filings with sand, would the magnet pick them up?

How large is the magnetic field of this magnet?

Does a glass have to be a round tube to be electrified?

When the pith ball is repelled by the comb after it has been attracted, does the electricity in the pith ball attract the brass rod?

One thing that the comb will not attract is glass. (Proved incorrect.)

From these glimpses of the work done in the Fifth and Sixth Grades, an idea may be gained of the spirit of the work done, though it is too fragmentary and disconnected to give anything beyond that.

A very brief and rough outline of work covered in these grades is appended.

HISTORY.

In history the lives of discoverers and explorers, as DeSoto, LaSalle, Drake, Hudson, Fremont, etc.; the Colonies, King Phillip's war, French and Indian war, events leading to the Revolutionary war.

SCIENCE.

Fall flowers and plant life. Animals of locality, *e. g.*, coyote, gopher, and related species, especial study of canines, felines, and rodents; climatic conditions; weather chart; forms of water; forms of matter; simple experiments in light, magnetism, electricity, liquid and air pressure; recognition of common kinds of rocks found on excursions; birds that spend the winter in Greeley, birds re-

turning in the spring; spring flowers and germination of seeds.

GEOGRAPHY.

The world as a whole; forms of land and water; types and comparison of examples—river basin and work of erosion from study of an arroyo nearby, comparing it with the Mississippi, the Nile, etc.; trade relations and industries, dependence upon climate and topography, *e. g.*, cattle industry, life of ranchman and cowboy, round-up, shipment, trade centers, packing-houses, products, exports, and countries to which they are sent; influence of the barrier of the Rocky mountains upon this industry, geography of North America, and dependencies of the United States. Tarr and McMurry, Redway and Hinman, and Frye are used as text-books. Excursions and imaginary journeys are taken.

ARITHMETIC.

We finish the Elementary and begin the Advanced book of Speer's Arithmetic. In Sixth grade we cover the subject of fractions including work on accounts and bills.

LITERATURE.

When necessary, owing to lack of previous training, we give Greek and Norse myths and hero stories, also stories of famous men and women of all nations. After having such a foundation, we take up stories from Norse his-

tory. The Vikings; the coming of the Angles and Saxons; an adaptation of Beowulf; the beginnings of nations, life and movements of masses instead of individuals, as illustrated in the Aryans, Greeks, Romans, Teutons; the King Arthur legends. Flight of the Tartar Tribe—adapted—etc.

CORRELATED WORK.

Language work, spelling and writing do not have special periods set aside for their study, but are correlated with the other work and make a part of every subject.

Reading is correlated wherever possible with other subjects, especially science and literature. In the reading classes equal attention is given to expression and sight reading.

On the expression side of our work, though we have special lessons where the attention is given to the principles of drawing, use of water colors, etc., pencil, chalk, charcoal, clay, and wax are used for illustrative and constructive work in all the branches. For example in reading, geography, literature and history, we illustrate word pictures given by the pupils, teacher, or text.

In science we draw or model animals studied; design borders for weather charts and make drawings of apparatus used in experiments, we design badges and banners for field day exercises of physical culture class.

MANUAL TRAINING.

Sloyd and sewing are given in these grades, the children choosing the articles to be made.

In Sloyd the boys have made sleds, pin-trays, doll-beds, or cradles for little sisters' dolls, a little cabinet, a book-case, a water-wheel, bows and arrows, checker-boards (inlaid wood), picture frames decorated with carving or by pyrography, etc.

In sewing the girls have made needle-cases, handkerchiefs, party-bags, doll clothes and, in the Sixth Grade, skirts for themselves.

MUSIC.

Two short music lessons are given each day, in which many melodious exercises, rounds, and songs are given from best composers, with constant effort to train musical taste and appreciation. The technical work is given when it is necessary for the interpretation of an exercise or song which they are to give, and only as it is a natural outgrowth of the desire to understand a selection and the application is direct. Some of the points brought out by these means are:

Quarter-beat rests, syncopations, chromatic tones by leaps, sections, sharp 4 and flat 7 as chromatics, ear exercises and modulator daily, voice leadings, indicating transition, chromatic resolutions, reproduction of modulator from memory, the minor mode, elements of melody, phrases, sections, periods, melodic cadence, analytical reci-

tations with especial regard to constants. Reproduction of the extended modulator. Major, minor, and diminished chords.

Beautiful and simple songs from the best composers are sung for the children by the teacher or by invited artists at intervals as an inspiration and ideal.

SUBJECTS TAUGHT IN THE FIFTH AND SIXTH GRADES.

Reading, Writing, Arithmetic, Spelling, Grammar, Composition, Language, Literature, History, Geography, Sloyd, Sewing, Cooking, Music, Drawing, Modeling, Industrial and Constructive Work, Nature Study.

WORK IN HISTORY—EIGHTH GRADE.

By Eliza George Kleinsorge.

THE study of the administrations is difficult for beginners in history, when the presidents, following in rapid succession, are made the basis of mental procedure. The sojourn of our executive in the national seat of honor is so short and, except in a few cases, his influence is so limited that he does not become a fitting ideal around which to group ideas for the pupils who at this age are forming their own ideals of life. At this period it seems best to teach our national history with the prevailing social development and political ideas as the basis of procedure, emphasizing our great men in any line of work and bringing them as ideals before the students. With this in mind the following plan was tried with an Eighth Grade class:

It was thought best, in so far as possible, to have the pupils really experience the history studied; not to take time to dramatize each part, not to work it out on the laboratory plan as though they were post-graduates in Berlin; and, not that they were to be grown up men and women making of themselves a backward moving panorama over the historical world, but that they were to be schoolboys and schoolgirls living and thinking during the time that

this particular bit of history was being made, and, in their own way, live and make that bit of history.

The preparation for this was a saturation of ideas concerning the social conditions of this time. The class was divided into three divisons—the Southern, the Middle, and the New England people. In every way possible, the class was flooded with facts; every thing to be found concerning the manufactures, commerce, products, costumes, customs, home and public life, education and religion, was made a part of their lives. Their recitations were conversations among themselves, each group trying to give the others a perfect idea of the social conditions of their section of the country. A Southerner told how he spent his Christmas, a Pennsylvanian grew eloquent upon the subject of an exciting trip from Philadelphia to New York, accomplished in two short days by the flying stage, the New Englander tamed their hilarity with a long talk on his previous day's experience, it being the holy Sabbath.

The administrations were begun by forming the three departments of government:

One member of the class was elected President Washington and was "so nominated in the social bond" both in and out of school. He appointed a cabinet to assist him in his arduous duties.

A supreme judge and four associate judges were appointed.

The whole school was formed into a house of representatives and a senate. The school-room was divided in

two by a home-made curtain so that each house had a place of meeting. The pupils now assumed the age, name and responsibilities of the member of congress whom they represented.

Washington committed and delivered to congress the noted speech made famous by the real George a century ago. The questions of the day came up before congress in the form of bills and were warmly discussed by the members. The young senator stood firmly for the rights of the South, while the representative from Massachusetts used all his Yankee wit to insure proper legislation for New England. The first questions were suggested by the teachers, but very soon the pupils began to see the necessity of, and to bring up questions of their own, often things that the teachers had not thought of at all; for instance, in Washington's administration, they asked one day what was the condition of the navy and began to take measures to strengthen the same. The bills at first were prepared out of school hours by a committee appointed by each house; the teachers had to meet with them for long sitting to show them how to frame their bills, what the questions meant, what arguments to use, etc. After they were able to stand alone, each member of the class framed a bill and the whole class voted upon the best one which would be presented before congress the next day. Now, any committee appointed can frame a very acceptable bill; the pupils strive to be put upon such committees; new pupils are turned over to them for instruction in this branch of legislation. The congress soon found that there was a great deal of

writing to be done in copying all those bills, so they shrewdly elected a boy, who is doing printing in another phase of school work, state printer. He prints the bills on the school press and each member of congress has a copy before him at the time of discussion. These bills are kept and bound in a book, in chronological order. The printer has a decided advantage in being a member of congress and often amends a bill by striking out useless words because it is much easier to print. The following is a facsimile of a bill:

MATTIE MILLER. REPRESENTATIVE from N. C.

H. B. NO. 6.

A BILL FOR

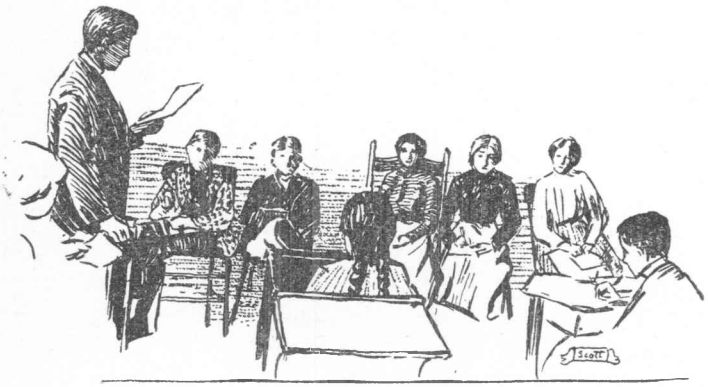
An act to provide for the admission of Maine as a free state and Missouri as a slaves state with the provision that slavery be prohibited west of the Mississippi and north of the parallel 30°and 30'

A secretary is appointed who keeps a record of all the doings of the class. Each pupil also keeps a record, of his own accord, of what he considers important. Many of these books are surprisingly fine, almost little histories in themselves.

When the Alien and Sedition laws came up, the Southerners concluded that they were not "fair," as they expressed it, and they began looking up the constitution to verify their views, finally concluding that it was a question for the supreme court to settle and a test case was brought up before that dignified body. This was the first

time that the judicial part of our government became a vital part of their history.

By the time the Dred Scott question came up, they were quite well acquainted with legal proceedings. The following is a copy of one of the lawyer's briefs read before the court in that noted case:



Honorable Judges of the Supreme Court—In this case, the real question is whether this nation can be half slave holders and half anti-slave holders. A well-known saying of the Bible is, "A home divided against itself can not stand." The story of the case is a well-known one to you; the owner of this slave took him to a free State, then to a territory where slavery was prohibited—it is claimed that this man is free under the law.

According to the constitution, this man can not be a citizen of any State since he has under the constitution

merely an existence as a thing, an importation and no legal claim to the term citizen.

An accepted definition for citizen is a person, native or naturalized—a free man as distinguished from a slave. This man claims to be a citizen and to be entitled to the law; according to our definition he is not a citizen, according to the constitution he is a thing, not a person, so taking these two facts together, we may see that he is not entitled to the law.

The owner of Dred Scott was unquestionably his possessor until this action was brought.

My opponent said that the constitution is not made for the Territories, but for the States. Amendment 5 says that no person shall be deprived of his property without due process of law. Dred Scott was Emmerson's property. Congress has tried to deprive men of their property through the Missouri compromise.

When the constitution was made, it was made for all the United States, not only for the thirteen original States, but for all the States and Territories.

Now, let us take an example, say a man owns a horse, he goes to a State where it is forbidden to have such a kind of horse, he has no intention of becoming a citizen of that State, therefore since the law declares that no citizen of this State shall hold such a horse, he can not be held liable for owning such a horse, as he is not a citizen.

The same thing applies in this case.

Therefore, Honorable Judges of the Supreme Court, said Scott is not free, but still is in the possession of Mr.

Emmerson, who did not declare, nor did he have any intention of becoming a citizen of Illinois or Wisconsin.

ISABEL CHURCHILL.

While working on an appropriation for the Erie canal, one day, a Senator asked how much money was in the treasury; the Secretary of Treasury was called in to give a general report of the financial condition. The first speaker on the subject of the appropriation declared that it would be a sin and shame to spend $15,000,000 of government money on a scheme that would benefit New York State alone. The next speaker dwelt loud and long on the benefit to the whole country to be derived from this one water-way. He said that Western New York, Northern Ohio and "The Garden of Canada" were the food-producing regions, and by furnishing this cheap means of transportation to the coast, the price of breadstuffs would be lowered for all, particularly for the South, which was the chief buyer; also that the canal would open up new markets in the West for the products of all other States. A pupil stepped to the board, drew a map of the region and made a speech suggesting that the grain of this region be shipped via Great Lakes, St. Lawrence, Lake Champlain, Hudson to New York, and that goods could be shipped into this same region via Mississippi and Ohio Rivers. The next speaker was scathing in his remarks, asking how the boats could go over the Niagara Falls and how reach the Hudson from Lake Champlain; he closed by assuring the Senate that the opponent was not well informed, for only

last week the House had defeated a bill to clear the Ohio River of stumps and stones, making it navigable for a part of the year.

Either House can run itself in the absence of a teacher. One case of disorder has occurred at such a time —a pupil who wanted to talk too much without recognition from the chair. From the other side of the curtain I heard, "If the Senator from Maine continues to disturb the House, will the Sergeant please conduct him to the hall," and the wagging tongue was silenced.

A boy was arguing a point after school with his chum and was getting the worst of the argument; he gained the upperhand by saying, "Now, Washington, you can't argue that policy any longer, you died last week; we sent resolutions to your wife."

A pupil who visited another school brought back this report: "I don't see how they understand their history at all, they study a book just as it comes, whether it is the way the history happened or not."

This is the method, somewhat briefly stated with a few examples from the children's experience, which gives a glimpse of the life they are living.

RESULTS.

The interest is intense and constant. The pupils are not only interested in the history of the past, but also in the present history that comes within the boundary of their experience; when the President's message came out this winter it was eagerly seized upon, was read quite intelli-

gently, and compared with Washington's, noting the changed conditions and also that some of the problems of that time are still of importance. Roosevelt's ideas broadened their local view of things and now all the actions of Congress pertaining to irrigation, sugar tax, etc., are looked after and reported to the class with greatest care.

As soon as the bill for the appropriation for their Erie canal came up, the whole class took a sudden interest in the Panama question, and nothing on that subject escapes them.

The students seem to comprehend fully what they are doing, they refuse to take any action until they know the why and the wherefore. Last week a phase of banking law came up that they could not grasp, so they adjourned Congress and spent a recitation on the subject; they reviewed banking from Hamilton's first idea of it down to the date which they were studying, and worked away, seeking information from all possible sources until they felt that they could again proceed intelligently to make laws concerning banks.

By this method the individual is strongly developed in self-reliance and independence. The pupil, in taking the role of Senator, forgets himself, becomes thoroughly imbued with the idea he is presenting, loses all self-consciousness and can think and talk on his feet; timid pupils who could not make a complete sentence can talk entertainingly for five or ten minutes at a time.

The ability of each pupil is utilized—one becomes an authority on tariff, another on finance, etc., and each feels his worth when he has contributed his mite to the good of all.

They are seeing history in its unity and full vitality; they see that events do not happen by chance, neither is the President a cause of events to any great degree; they see that Presidents come and Presidents go, but principles go on forever. They realize that the times of peace are the vital epochs of history, and that wars are only hindering or retarding instances in the great onward movement.

They have not studied the constitution in class at all, yet they know it in a very vital way; they are constantly searching through it for a clause to support some point taken in the proceedings, and they fight like supreme judges for its proper interpretation.

The social relations which this method develops are fine. Each must learn to respect the opinion of others, must have tolerance and charity. When a boy becomes thoroughly imbued with the idea that there should be a tax on tobacco, it is often quite a shock to him to see his chum, who happens to be a Southerner through that administration, protest against this view; this brings him face to face with the fact that he is only one of a community, that he is only a part of a whole. Taught by this method, he could not graduate, having the idea that he knew it all and feeling a profound pity for those who had preceded him and intolerance for the classes that are to follow.

The imagination of childhood is still used in playing the role of politics and the vivid picture thus made is indelibly stamped upon the memory. All through the work strong glimmers of the reasoning ability manifest themselves. The creative is also there in embryo. Their character sketch of Lincoln is just as real to them, just as wonderful and enjoyable as is Miss Tarbell's creation of Lincoln. Of course it is created in their own image, an Eighth Grade image, but it is there, strong, real and vivid.

The plan is not ideal, is not the long sought royal road to history study, but it is a step in that direction for the student teachers. For the pupils, it is very practical, teaching them how to meet and overcome the problems of every day life.

SCIENCE.

The Seventh Grade devoted the early part of the fall to the study of the butterfly, the cocoon, the chrysalis, etc., making frequent excursions to the alfalfa fields for the butterflies, to the cabbage patch for the caterpillars, and to the trees and weeds for cocoons. In the Sloyd room, the boys made the little board cases for drying the butterflies which are to be mounted in glass for our school museum. Their study of butterflies and moths was much broadened by the kindness of one of the ladies of Greeley, who gave the students the benefit and inspiration of her large collection gathered from all over the world.

Their search among the trees of the campus for cocoons aroused an interest in the trees themselves. Draw-

ings were made of the trees in their fall and winter dress; the leaves and bark were studied. They made long trips to trees in the vicinity and one sturdy cotton wood along an irrigating ditch was sacrificed for a cross section. Of the varieties of trees on our campus the pupils know almost all.

When the days became too cold for out-door work, the teachers constructed a windlass and began experiments in the first principles of physics. The students suggested many improvements for assisting, or making easier the pulling of each other by means of the windlass and rope; one said, "Make the handle longer and it will go better." Another, "Make the axle smaller and I can pull more boys." "If we had a handle on each end of the axle, one up and one down, we could pull twice as many boys." These suppositions were all proven by changing the windlass as directed. They soon suggested that the lever and pulleys were also used to assist in the moving of loads. All their suppositions were proven, by their own experiments, to be either true or false. While they were studying four movable pulleys, I asked the class one day which they would use—a windlass or pulleys—to move 800 pounds up a cliff 100 feet high, with 100 pounds force. They were divided in opinion. Our lazy boy said that he would use pulleys and would fasten 100 pounds on the end of the rope to make it pull up the remainder of the load. This was not fully accepted by the class when the time for closing came. In the next recitation, one of the boys was ready to down the easy-going lad by proving that he would have to drop

his weighted rope 400 feet in order to pull the load up 100 feet.

The arithmetic lessons were correlated with the work, teaching proportion at this time. All sorts of examples were used, based on such principles as—

Weight is to power as power-arm is to radius of axle.

Force is to load as distance traversed by load is to distance traversed by power.

INDUSTRIAL WORK.

In industrial work, perhaps a list of some of the articles of the year's work would give an idea of what we are trying to do with our hands and brains working together.

In the Sloyd work, the Eighth Grade are making a plain, solid mahogany table in the William Morris style, but designed by themselves. The Seventh Grade boys have designed and are making a Dutch piano stool of mahogany.

Both pieces will have covers, designed and woven by the girls of the room. They will also weave a rug of rag carpet for the floor beneath. On the table will stand several pieces of pottery molded, decorated, glazed and fired by the students. Also a book-rack, paper knives and a wooden tray carved by the boys.

In the Eighth Grade reading class they have been studying "The Nuerenburg Stove." This they are now dramatizing. The boys who are in the printing group will print the book for the class. Another boy will make the wood cuts for it. In the drawing lesson the whole class are

making designs for the cover of the book which will be bound and completed by them.

SUBJECTS TAUGHT IN THE SEVENTH AND EIGHTH GRADES.

Reading, Writing, Arithmetic, Grammar, Spelling, Language, Literature, History, Geography, German, Sloyd, Sewing, Cooking, Printing, Weaving, Pottery, Moulding and other industrial and constructive work, Music, Drawing, Modeling, Nature Study.

HIGH SCHOOL.

*By Royal W. Bullock.

FUNCTION OF THE HIGH SCHOOL.

THE High School has a function above and beyond that of fitting for college or higher institutions of learning. Its greater function is to vitalize, realize, and utilize the knowledge acquired in earlier years and to convert it more fully into power. The High School is now "the people's university." It must prepare for life rather than for college, and preparation for life implies, not only knowledge the implement of power, but *skill* in applying knowledge to the accomplishment of worthy ends.

AIM OF THE HIGH SCHOOL.

It is the aim of the High School to afford a training that shall be at once practical, disciplinary and cultural. It is believed that these three aims are not antagonistic, but that any subject can and should be so taught that practical knowledge will be gained, the mental processes be quickened and strengthened, and a culture result that comes from deeper and wider interests and from "such an ac-

*The articles on English, Mathematics, Reading, Physical Culture, Music and Drawing were written by the special Supervisors.

quaintance with life as is needed for social efficiency or morality."

TEACHERS.

The teaching of the High School is divided between the Normal School Faculty and the Seniors in training. At present twenty-one Seniors and eight Faculty members are teaching High School classes. This arrangement permits the Seniors to profit both by observation and experience.

In addition to the supervision of the Superintendent of the Training School and the Principal of the High School, the Senior is given the direct assistance of the head of the department in which he works.

The weekly meeting of High School teachers and supervisors is another source of inspiration and help. Such topics as "The Psychology of Adolescence," "Student Ideals," "The Social Life," "The Didactics," of special subjects, etc., form the basis of discussion. Recently a series of conferences on "The Teaching of Latin," "The Teaching of Biology," and ten or twelve other subjects, has resulted in great good.

EQUIPMENT.

High School students have full use of the various laboratories of the Normal School, and of the studios and library, on the same conditions as the Normal students. They are given special instruction in the use of the library

and are enabled to use its fifteen thousand volumes intelligently and effectively.

GENERAL NOTES.

The Shakespearean 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 school is a member of the "Weld County High School League," and meets the other schools of the County once a year for athletic and literary contests.

From time to time the students are addressed by Superintendents and Principals of other schools and by members of the Normal School Faculty, on subjects of educational and ethical importance.

Tuition is free. A library fee of $2.00 per semester is charged for the use of books.

ENGLISH.

The teaching of English in three-fold in its purpose: it endeavors, first, to cultivate correct speech; secondly, it aims to develop the power of expression; and thirdly, it strives to bring to the pupil's knowledge, and thereby to his appreciation, the best literary products. To achieve

these three purposes is the measure of the work we set for ourselves in our High School Department.

Grammar is presented both formally and practically: practically, in that care is given to the language employed by pupils in the class room and in written work; formally, in the study of a text-book because they are now beginning to ask the *why* of constructions. The endeavor is constantly made to secure criticism of incorrect speech from the young people themselves; in this manner the better trained half of the class help the less fortunate, and the indifferent student is spurred by the exact. Attention is focussed upon correct grammatical usage in all composition.

Composition is given prominence because it is the means of expression. Since geniuses rarely obtrude themselves among us we do not attempt to make literary writers; on the other hand, we are content if we can bring the youth to say clearly and forcibly what is in his mind. Daily conversation, which is simply oral composition, is the means of securing to any individual so large a means of pleasure and profit that the pupil should be taught to grasp its opportunities; the orderly and forceful arrangement of his ideas in writing is so frequent a demand upon every intelligent citizen that the pupil should be helped to meet this obligation. To these ends the arrangement of matter in recitation is cultivated, and a weekly paragraph upon some subject of interest is required. This demand for the paragraph, at the beginning of the second semester of the third

year is increased to two each week. The aim of the composition of the first two years is to secure clear and correct expression; the large matters of literary form are developed during the third year.

While grammar and composition afford the technical training of English study, its stimulating and broadening phase is the thoughtful reading of worthy books. *The Iliad, Ivanhoe, Macbeth, Julius Caesar, The Merchant of Venice*—each has its peculiar function in enlarging the youth's view, in widening his experience, and in deepening his interest in men. We endeavor not only to interest and stimulate, but also to form a deep love for great literature so that for all his future the student will have within him this perennial source of joy and growth. It is this pregnant third of English instruction that furnishes the teacher's touchstone, demanding, as it does, all the fineness, insight, and depth of which her nature is capable.

Grammar, Composition, Literature—all these subjects with their varied exactions and opportunities, are comprised within that simple-sounding, lightly spoken term, "High School English."

READING.

Good oral reading necessitates a comprehension of the thought of an author, and the ability to express that thought effectively by means of the vocal organs.

Every definite thought relation has a definite vocal form for its expression, *e. g.,* phrasing is the voice form

that shows the relation of the modifiers to the principal clause. As the study of literature is a study of the construction of thought forms and an analysis of thought content, the vocal interpretation of a piece of literature by a pupil, measures his appreciation of the thought and enables the teacher to discover, and correct his misinterpretation. Moreover the *spirit* of literature is revealed by the voice in a more subtle and powerful manner than by any other mode of expression.

A reading class should do three things for its individual member: First, arouse the intellect to image clearly; second, stimulate the emotions to *feel* the significance of the selection; and third, exercise the will by furnishing an occasion for moving or convincing others. Besides this regular reading class work, our High School affords individual training on chosen selections for Literary Society or special occasions, and careful attention is given to interpretation of the Drama. The response of body and voice to these more intense states, secures naturalness, and freedom of expression.

PHYSICAL CULTURE.

The work done in Physical Culture is both formative and reformative. It aims to attain and maintain for individual students, strong, healthful bodies, well under control of the mind.

Pupils are given individual attention and special exercises to overcome their particular physical defects. Nar-

row chests and round shoulders are the most common difficulties. Strong breathing exercises, with practice for strengthening the muscles of the thorax, train the body to erectness and increase the lung capacity. Other exercises affect the bearing and carriage, enabling the different parts of the body to act in harmony. Still other groups of exercises aim at development of bodily expression.

Besides this formal class work, interest in all out-of-door sports is encouraged, and habits of recreation are formed, for we believe these habits once formed will continue through life affording pleasure and profit.

A girl's Field Day is held in May, at which, after long practice, the girls contest in such games as basket ball, tennis, hoop rolling, tether tennis, archery, quoits, races, etc.

MODERN LANGUAGE.

The conversational method is used to introduce the student to the modern languages, not for the sake of the conversation itself, but because this seems the quickest, easiest, and most interesting way for him to master the vocabulary and the Grammar of the language. Intelligent and fluent reading of the language is the real aim of the work. As soon as possible, the student is allowed to read the literary masterpieces of the language, and to study them as such. Oral and written composition is constantly used in the earlier stages of the study, but in an informal manner. Frequent comparison with the Grammar and

Literature of his own language broadens his knowledge of both languages.

LATIN.

It is believed that even "First Year Latin," properly taught, has a distinct and immediate value in its effect upon the pupil's English, besides the more distant value of preparing him to read Latin. Every new word is a study in etymology; every construction, a study in English Grammar; and every translation, an exercise in English Composition. In his later reading of Classic Literature the student is expected, not only to perform the mental gymnastics necessary to secure a translation of the text; but to become familiar with the life, the thought, and the feeling of the people who produced this Literature. He seeks the culture value of the subject, in the broadest sense of the term.

SCIENCE.

A brief sketch of the work being done in the Ninth Grade Biology class this year will illustrate the general method followed in Science work.

At the beginning of the year, the class after free discussion, decided upon the following as their general aim for the year: "To become more familiar with the animal life in and around Greeley." Their three main sources of information in the order of their value, they concluded, must be: Observation of animals themselves either wild or

in captivity; conversation with observers, including of course, their teacher; and the reading of books.

They next decided that they could accomplish more by dividing up the work in some way and finally formed themselves into four groups or committees, one for the study of insects, one for birds, one for water animals, and one for land animals. Each student joined the committee that seemed to offer the best opportunity for interesting and profitable work for him. Each committee then elected a chairman and arranged for sub-committees or individuals to observe, study, and report on, some particular animal.

As arranged by the students after some discussion and several trials, the further course of procedure is now as follows: The individual student contrives his own means for studying his animal, verifies his observations by consulting the best authorities at his command, and prepares a written report which is handed to the teacher several days before it is to be presented to the class. The teacher edits the report and advises with the student as to the best way of presenting it to the class. When the student reports to the class he is, for the time being, the teacher in full charge and is responsible not only for teaching his subject, but for attending to it that the other students know and understand what he has given. To this end he illustrates his "talk" by numerous drawings, mounted specimens, skeletons, charts, outlines, and sometimes live animals. He then hears the questions of the class, answering them as far as possible and noting those he can not answer, for further study. Lastly he questions them to determine

whether or not they are clear on the principal points of the subject. This constitutes the "recitation" of a student and he usually recites for a period of from fifteen to forty minutes.

Among the animals already studied by actual observation and reported on in this way, are, the pocket gopher, jack rabbit, cotton tail, prairie dog, muskrat, salamander, etc., and several birds, as the horned lark, black bird, etc. Many other animals reported on had been observed previously by many members of the class, although studied at the time from museum specimens. Among these are the coyote, eagle, snowy owl, and others.

Permanent wall charts for various purposes are made by the class from time to time, using rubber type on heavy Manilla paper. Another feature of the work is the "observation book" in which any student may at any time record his observations of animal life, signing and dating it properly so that he may be called upon by others to explain and amplify his written statement. This also serves to date events, as the appearance of certain birds, their time of nesting, etc.

The general results of the class work thus far have been more than satisfactory, and it seems that aside from the scientific knowledge and habit of observation which the student would naturally secure from this subject, he gains by this method a valuable training in setting his own tasks, devising his own means, collecting his own resources, and accomplishing the aim he himself has set up.

The study of Botany and Physiography is pursued on the same general plan. A close study of local phenomena furnishes data from which the student may reason in the solution of problems relating to distant localities. Frequent excursions form the basis of many subsequent recitations.

The students in Physics apply their knowledge to the needs of the school by adjusting electric bells, arranging

telephone and light wires, managing the stereopticon, etc. They endeavor to keep up to date by reading the current scientific magazines. A complete wireless telegraphy outfit is managed by the students with satisfactory results for short distances.

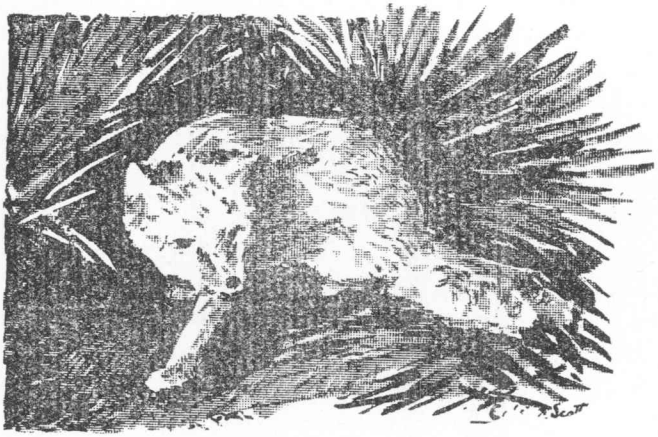
MANUAL TRAINING.

In the Manual Training department the High School does not aim to do the work of a Trade School, but as the name indicates, to train the hand to obey the mind readily and effectively, and furthermore to train the mind to conceive clearly, plan purposefully, and execute by persistent application. To this end the student is encouraged to prepare original designs of articles suited to his own needs, and is held responsible for the feasibility of the design and the genuine merit of the completed work. It thus happens that most of the work done by the students is upon articles which they desire for their own immediate use. Among the pieces thus made are bookcases, bookshelves, collar boxes, tool boxes, chairs, ornamental tables, checkerboards, crokinole boards, photograph frames, and numerous articles of bent iron work. Inlaying, veneering, and pyrography are freely used in decorating the wood work. The making of apparatus for experiments, mountings for maps and charts, frames and cases for specimens, bulletin boards, etc., correlates the work of this department with the other work of the school.

In the Domestic Economy Department the same breadth of purpose obtains. In their athletic work the girls wear gymnasium suits made by the sewing class, and invited guests frequently enjoy a course dinner planned, bought, prepared, and served by one of the cooking classes.

TAXIDERMY.

Taxidermy is a subject deserving more general recognition than it now receives in High Schools. The work is an interesting form of manual training, developing deftness, skill, and dexterity in the highest degree; an adjunct of science, demanding accurate knowledge of animal forms and habits; and a branch of art, comparable to painting or sculpture.



The novice has a vague impression that a fox skin sewed up and poured full of sawdust, will take on the form and semblance of the original wearer of the skin. This is far from true as the early attempts of many students will prove. To properly remove a skin, make a frame of suitable shape and size, form a body upon this frame, round

out the skin to natural proportions, select and fix suitable eyes, and give to the finished specimen a lifelike poise and pose, requires the deftness of a skilled workman, the knowledge of a naturalist, and the constructive imagination of an artist.

Abundant practical use is found for the finished product, by supplying cabinets or decorating the home with Nature's beautiful forms. The present High School class has added materially to our museum, shipped specimens to the Chicago schools in exchange for articles from their locality, and is now preparing an exhibit of work for the St. Louis Fair.

MATHEMATICS.

The High School work in Mathematics consists of the usual elementary work in Algebra and Geometry. The predominant aim in both subjects is to lead the pupil to observe, think, judge and act, rapidly and accurately. The pupil is encouraged and urged to take the initiative in his work and to discover original proofs for truths he knows, and, if possible, to discover new truths. To this end the work is presented to the pupil in such a manner that it is rational, sensible, and real to him. All mere memorizing and repeating of phrases, meaningless to the pupil, is avoided. A strong effort is made to cultivate, along with accuracy of logic, a clear, concise, and forcible means of expression, and a careful and accurate use of terms, thus

closely correlating the work in Mathematics with the work in English.

HISTORY.

"In society as it exists today, the dominant note running through all of our struggles and problems, is economic."

The study of man in society is deservedly receiving more and more attention. The High School course in History should not only be a means of culture but should fit the student to reason from cause to effect and enable him to master present day sociological problems, whether studied formally in school or encountered practically in the business of life.

To accomplish this aim, the student in the Ninth Grade follows the evolution of the race and the development of civilization as a whole, by a liberal course in General History.

In the Tenth Grade, English History is studied with special reference to the growth of institutions, its relation to American History, and as a type of National development.

The Eleventh Grade work is an intensive study of American institutional growth and a review of Civics.

In all this history work the student is expected not only to learn the facts of History but to be able to organize and interpret those facts, in the light of knowledge acquired. The method in detail, is largely that of Mace and of Hinsdale. The lessons are assigned by topics, which are

worked out in the library, and the stereopticon is used freely in illustrating the subject.

MUSIC.

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, rythm, 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 students, offering advantage in Music as advanced as their preparation may warrant.

DRAWING IN HIGH SCHOOL.

It is not the aim to make artists in this work, but to develop artistic feeling and encourage original thought. Art knowledge is of value to the individual and the country at large. To the individual it means culture and to the nation it saves impoverishment.

The drawing in High School consists of the study of design, color, composition and perspective. The study of plant growth and adaptation to design is studied in Fall and Spring terms. Charcoal studies from still life in light and shade and consideration of arrangement of drawing

upon the paper. Balance and Rhythm are studied, using abstract spots as elements of design. A study is made of historic examples, color values and color harmonies, cast drawing from head, and sketching from life; pen and ink drawing from still life groups, and original designing for wrought iron, furniture, and textiles.

COURSE OF STUDY.

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.
6. 132 points required to graduate.
7. Figures below in parenthesis 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	(4)	R.
General History	(4)	E.
Algebra	(4)	R.
Botany	(4)	E.
Reading and Physical Culture	(2)	R.

Latin	(4)	E. one.
German	(4)	
French	(4)	
Spanish	(4)	
Sloyd	(4)	E. one.
Cooking	(4)	
Sewing	(4)	
Art	(4)	
Library Work (limited to four students)	(4)	
Taxidermy	(4)	
Vocal Music	(4)	

TENTH GRADE.

Literature and English	(3)	R.
English History	(4)	E.
Algebra and Geometry	(4)	R.
Zoology—Physiology	(4)	E.
Reading and Physical Culture	(2)	R.
Latin	(4)	E. one.
German	(4)	
French	(4)	
Spanish	(4)	
Sloyd	(4)	E. one.
Cooking	(4)	
Sewing	(4)	
Art	(4)	
Library Work (limited to four students)	(4)	
Taxidermy	(4)	
Vocal Music	(4)	

ELEVENTH GRADE.

Literature and English	(3)	R.
American History and Government	(4)	R.

Solid Geometry	(4)	E.
Physics	(5)	E.
Reading and Physical Culture	(2)	R.
Chemistry	(4)	E.
Physiography	(4)	E.
Latin	(4)	E. one.
German	(4)	
French	(4)	
Spanish	(4)	
Sloyd	(4)	E. one.
Cooking	(4)	
Sewing	(4)	
Art	(4)	
Library Work (limited to four students)	(4)	
Taxidermy	(4)	
Vocal Music	(4)	

OFFERED WORK.

Besides the broad group of elective studies open to the student, he may in the last two years, instead of an elective, substitute "offered work." This means that any student having the originality, ambition, and ability to do so, may plan a year or half year's work in any line of research, investigation, or occupation; and if a committee of the High School Faculty are convinced of the feasibility and value of the plan as set forth by the student in a written syllabus or outline, he is allowed to pursue that work and is given credit for what is accomplished.

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