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Bulletins
1906 - 07
Series 7
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State Normal School of Colorado

JUNE
1906-1907

STATE NORMAL SCHOOL BULLETIN
SERIES VII. No. 1.

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

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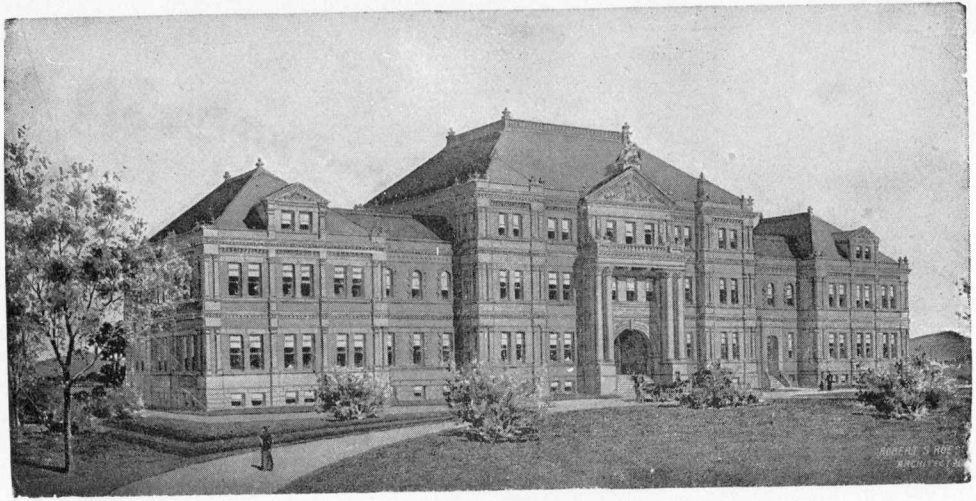
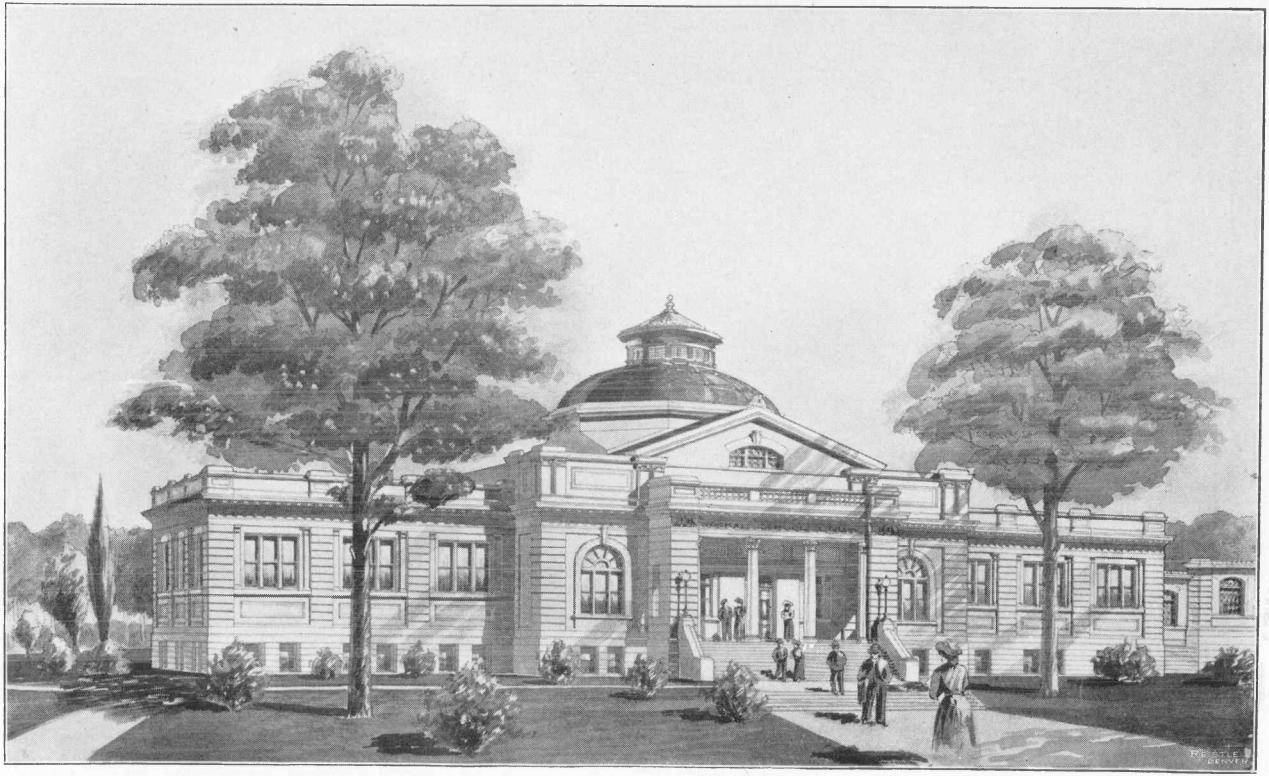


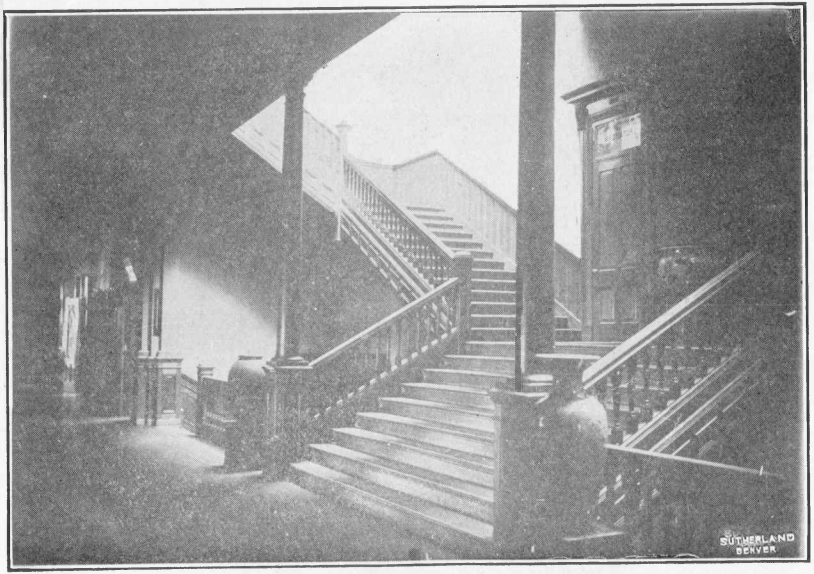
Administration Building.



Library.

President's Residence.

Campus—Main Entrance.



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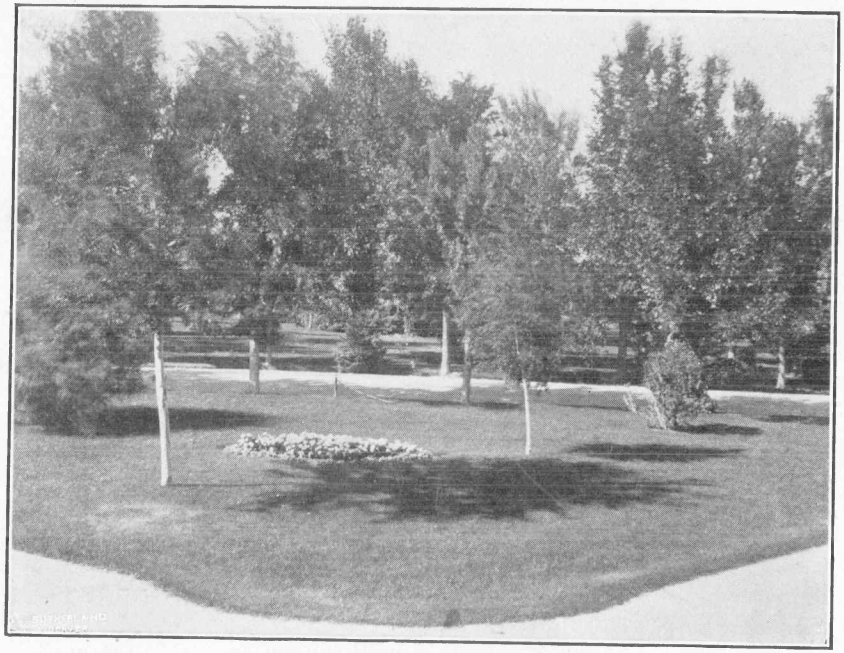

Campus.

SEVENTEENTH

ANNUAL CATALOG*

OF THE

State Normal School

OF COLORADO

Greeley, Colorado

1907-1908

*(In all publications of this institution is employed the spelling recommended by the Simplified Spelling Board.)

PUBLISHT BY
TRUSTEES OF STATE NORMAL SCHOOL

1907

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1908

JANUARY

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ANNOUNCEMENTS.

1907-1908.

FALL TERM.

Opens Tuesday, September 10, 1907.
Closes Monday, December 2, 1907.

WINTER TERM.

Opens Tuesday, December 3, 1907.
Closes Monday, March 2, 1908.

SPRING TERM.

Opens Tuesday, March 10, 1908.
Closes Thursday, June 4, 1908.

SUMMER TERM.

Opens Tuesday, June 16, 1908.
Closes Friday, July 24, 1908.

CHRISTMAS HOLIDAYS.

Christmas Holidays, Friday, December 20, 1907.
Wednesday, January 8, 1908.

COMMENCEMENT WEEK.

Baccalaureate Sermon, Sunday afternoon, May 31, 1908.
Class Day Exercises, Tuesday evening, June 2, 1908.
Alumni Anniversary, Wednesday, June 3, 1908.
Commencement, Thursday, June 4, 1908.
Reception to Graduating Class by President, Thursday evening, June 4, 1908.
Alumni Banquet, December, 1907, Denver, Colo.

BOARD OF TRUSTEES.

HON. L. H. TURNER.....Trinidad
Term expires 1913.

HON. L. W. MARKHAM.....Lamar
Term expires 1913.

HON. RICHARD BROAD, JR.....Golden
Term expires 1909.

HON. C. H. WHEELER.....Greeley
Term expires 1909.

HON. MILTON R. WELCH.....Delta
Term expires 1911.

MRS. THALIA RHOADS.....Denver
Term expires 1911.

MISS KATHERINE L. CRAIG.....Denver
Term expires 1909.

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A. J. PARK.....Secretary
J. M. B. PETRIKIN.....Treasurer

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Finance.

MR. WELCH, MR. WHEELER, MR. BROAD.

Teachers.

MRS. RHOADS, MR. MARKHAM, MR. WELCH, MISS CRAIG.

Library.

MR. MARKHAM, MISS CRAIG, MRS. RHOADS, MR. TURNER.

Kindergarten and Training Departments.

MR. TURNER, MR. MARKHAM, MRS. RHOADS.

Executiv and Building.

MR. WHEELER, MR. BROAD, MR. TURNER, MR. WELCH.

NORMAL SCHOOL FACULTY.

1906-1907-1908.

ZACHARIAH XENOPHON SNYDER, Ph. D., President,
Professor of Education.

JAMES HARVEY HAYS, A. M., Vice-President,
Professor of Latin.

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Professor of English, Literature and History.

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Professor of Biology and Economic Biology.

WILL GRANT CHAMBERS, A. M. and M. S.,
Professor of Psychology and Child-Study.

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Professor of Reading and Interpretation.

RICHARD ERNESTI,
Professor of Drawing and Art.

ELEANOR WILKINSON,
Professor of Domestic Sciences.

SAMUEL MILO HADDEN, Pd. B., A. B.,
Professor of Manual Training.

FRANCIS LORENZO ABBOTT, B. S.,
Professor of Physical Science and Physiography.

ACHSA PARKER, M. A.,
Associate Professor of English, Literature and History.

GEORGE BRUCE HALSTED, A.B., A.M., Ph. D., F.R.A.S.,
Professor of Mathematics.

WILLIAM KENNEDY STIFFEY,
Professor of Vocal Music and History of Music.

DAVID DOUGLAS HUGH, A. M., Superintendent of Training School,
Professor of Pedagogy.

ETHAN ALLEN CROSS, A. B., Ph. M.,
Associate Professor of English, Literature and History.

ABRAM GIDEON, B. L., M. A., Ph. D.,
Professor of Modern Foreign Languages.

GEORGE WASHINGTON BARRETT, M. D., School Physician,
Professor of Physiology, Director of Physical Education.

GURDON RANSON MILLER, Ph. B.,
Professor of History and Sociology.

H. W. HOCHBAUM, B. S. A.,
Associate Professor of Nature Study, School Gardening and Elementary Agriculture.

LEVERETT ALLEN ADAMS, B. A., M. A.,
Associate Professor of Biology, and Curator of the Zoological Museum.

ROYAL WESLEY BULLOCK, Ph. B.,
Training Teacher—Principal High School.

CHARLES WILKIN WADDLE, Ph. D., Assistant Superintendent of Training School,
Training Teacher—Upper Grammar Grades.

ELIZABETH HAYS KENDEL, Pd. M.,
Training Teacher—Lower Grammar Grades.

DORA LADD, Pd. M., A. B.,
Training Teacher—Upper Primary Grades.

BELLA BRUCE SIBLEY, Pd. M.,
Training Teacher—Lower Primary Grades.

ELIZABETH MAUD CANNELL, Director of Kindergarten,
Training Teacher.

MARSHALL PANCOAST, B. L.,
Assistant Principal High School.

JAMES WIDDOWSON, A. B.,
Assistant Critic—Grammar Grades.

ALICE M. KRACKOWIZER, B. S., B. Ed.,
Assistant Critic—Primary Grades.

ALBERT SHERWOOD WILSON, B. A., B. D.,
Librarian, Professor of Bibliography.

GERTRUDE RUPP, Pd. B.,
Assistant Librarian.

VERNON MCKELVEY,
President's Secretary.

Office, Normal Building. Office Hours, 8 to 12 and 1:30 to 5:30.

EXAMINING BOARD.

1907.

Miss Katherine L. Craig,
State Superintendent of Public Instruction.

E. A. Neilson,
County Superintendent, Conejos County.

Z. X. Snyder,
President, State Normal School of Colorado.

FACULTY COMMITTEES.

1907-1908.

Executiv.
Graduation, Classification, Standing, Graduate Work, Electivs, Commencement, Etc.
Professor Hays, Professor Miller, Professor Hugh.

Social Counsel.
Miss Hannum, Miss Parker, Miss Cannell.

Societies.
Professor Miller, Miss Tobey, Miss Parker.

Catalog, Registration, Records and Programs.

PROFESSOR CROSS, PROFESSOR HUGH,
PROFESSOR WADDLE.

Alumni.

PROFESSOR HADDEN, MISS KENDEL, MRS. SIBLEY.

Art.

PROFESSOR ERNESTI, PROFESSOR MILLER.

Reception and Building.

PROFESSOR ABBOTT, MISS HANNUM,
PROFESSOR GIDEON, MISS WILKINSON.

Athletics.

PROFESSOR BARRETT, MISS TOBEY, PROFESSOR HADDEN,
PROFESSOR BULLOCK.

Mentor.

PROFESSOR BEARDSLEY, MISS WILKINSON,
PROFESSOR GIDEON.

Music.

PROFESSOR STIFFEY, MISS KENDEL, PROFESSOR MILLER.

Museum.

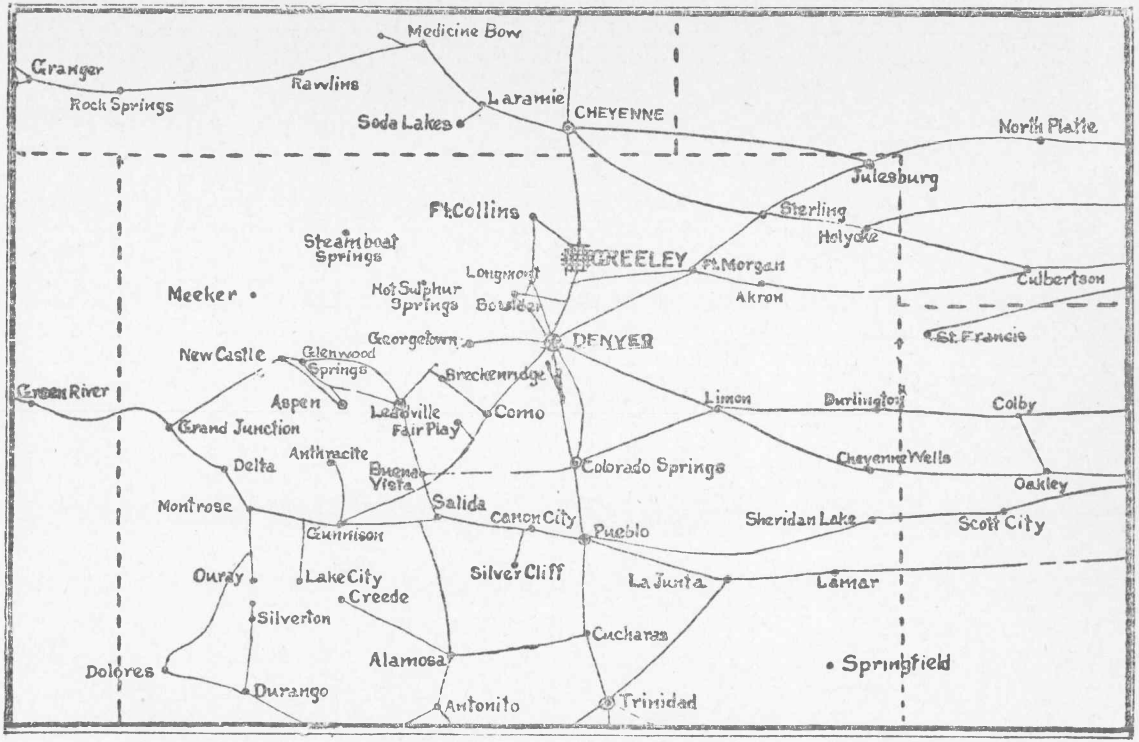
PROFESSOR ADAMS, PROFESSOR BEARDSLEY,
PROFESSOR ABBOTT.

Training School.

PROFESSOR HUGH, PROFESSOR BULLOCK,
PROFESSOR WADDLE, MISS KENDEL, MISS LADD,
MRS. SIBLEY, MISS CANNELL.

Educational Progress.

PROFESSOR CHAMBERS, PROFESSOR MILLER,
PROFESSOR HUGH, PROFESSOR GIDEON, MISS CANNELL,
PROFESSOR HALSTED, PROFESSOR ABBOTT.



GREELEY AND VICINITY

HISTORY OF THE SCHOOL.

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

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

At a meeting of the board of trustees, June 2, 1897, a resolution was past 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 and Colorado & Southern railways, fifty-two miles north of Denver. This city is in the valley of the Cache la Poudre river, 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 thoroly prohibition town. There are about 7,000 inhabitants.

BUILDINGS.

The main building is of red prest brick, trimmed with red sandstone. It is one of the best and most commodious normal school buildings in the United States. It is 240 feet long. This building is situated in the midst of a campus containing forty acres overlooking the city. The building is heated thruout by steam—chiefly by indirect radiation. A thoro system of ventilation is in use, rendering the building healthful and pleasant. It is supplied with water from the city water works.

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

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

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

MAINTENANCE.

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

NORMAL DEPARTMENT

THE FUNCTION OF THE NORMAL SCHOOL.

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

I.—RELATION TO FACULTY.

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

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

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

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

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

e. Professional ethics and spirit bind the faculty into one harmonious whole, without which there is a great lack of efficiency. A due recognition of this professional attitude 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 in a student a lack of natural ability 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 of society are reciprocal. The aim is to individualize and socialize the child.

VI.—RELATION TO THE STATE.

The function of the Normal School in the state is apparent. The state is interested in the education and general intelligence of all its people. To this end it founds schools and maintains a public school system. The Normal School becomes the very heart of this system. It prepares those who go out to have charge of the youth of the commonwealth.

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

NORMAL COURSE OF STUDY.

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

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

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

d. A preparatory course of one year is provided for those who are not high school graduates, but are of sufficient maturity to prepare for a regular course in one year. The course is planned primarily for teachers who have not had high school advantages.

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

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

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

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

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

b. Sixty term hours for the Junior year and sixty-three for the Senior year, in addition to Physical Training work, which is required of all students, constitute a regular year's work in a Normal Course. Ordinarily this consists of four subjects with five recitations per week in each for three terms, with one additional recitation per week in Pedagogy thruout the Senior year.

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

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

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

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

PREPARATORY YEAR.

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

REGULAR NORMAL COURSE.

Junior Year.

	Number of Terms.	Recitations per Week.
Psychology	2	5
Pedagogy	1	5
English	2	5
Reading	1	5
Biology, Physics in the Grades, or Nature Study	1	5*
Music	2	5
Mathematics	1	5
Art	2	5
Sloyd, Domestic Economy or Library Science	1	5
Physical Education	3	2

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

Senior Year.

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

NORMAL COLLEGE COURSE.

First Year.

	Number of Terms.	Recitations per Week.
English	2	5(4)*
†Electivs	10	4
Physical Education	3	2

Second Year.

Psychology	2	5(4)
Pedagogy	1	5(4)
English	2	5(4)
†Electivs	7	4
Physical Education	3	2

*Numbers in parentheses designate Term Hours.

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

Third Year.

	Number of Terms.	Hours per Week.
Education	3	5(4)
Seminar	3	1
Teaching	3	5(4)
†Electivs	6	4

EDUCATION

PROFESSOR ZACHARIAH XENOPHON SNYDER.

COURSES OF STUDY.

1, 2, 3. *Senior.* The following is an outline of the three consecutive courses.

I.—PHILOSOPHY OF EDUCATION.

A.—INTRODUCTION.

a. Meaning of the Philosophy of Pedagogy.

b. The Imprisonment of the Individual: His potential (an involution) matter, life, mind, spirit.

c. His Freedom: Emancipation, evolution, education.

d. The Mass—Its evolution.

B.—INTERNAL ENERGIES.

a. Evolving, or Growing. The vital, the mental, the social, the spiritual principles.

b. Hereditary, or Directiv: 1. Race Experiences; wonder, wander, heroic, romantic, altruistic. 2. National Experiences; national organism, national mind, national spirit. 3. Family Experiences; appearance, organic tendency, temperament, disposition, etc.

c. Volitional: desire, deliberation, choice.

d. Spiritual: deeper nature.

C.—EXTERNAL ENERGIES.

a. Nature: as matter and life.

b. Mind: man, home, church, state, society.

c. Spirit: of nature, of mind, of civilization, of God.

(1). *These build the potential.*

(2). *They occasion its unfolding.*

D.—NATURES.

a. The Physical Life: medium of revelation.

b. The Mental Life: function of the Physical Life.

c. The Social Life: opinion, institutions, civilization.

d. The Spiritual Life: ideals, religion.

E.—LIVING MOMENTUM.

a. Individuality: differentiation, egoism.

b. Personality: transfiguration, humanity.

c. Spirituality: transformation, divinity.

F.—CHARACTER—EXPRESSION.

a. Pedagogical Graces: truth, beauty, good.

b. Christian Graces: faith, hope, love.

c. Motor Elements: nerve, brain, muscle.

II.—SCIENCE OF TEACHING.

Science consists in a systematic order of things and their relations and the laws which regulate them. This is apparent in the sciences 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, and of the laws which regulate them, resulting in his development. Without psychology there can be no science of teaching.

OUTLINE OF WORK.

A.—AGENCIES INVOLVED IN EDUCATION.

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

B.—REQUISITS 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 to civilization.

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

a. *Development of—*

1. Body—health, sanitation.
2. Mind—thinking, feeling, doing.
3. Spirit—reverence, devotion, worship.

b. *Participation—*

1. Actualization—individuality.
2. Transfiguration—personality.
3. Transformation—spirituality.

D.—REQUISITS 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—practise.

c. *Spirit must actualize:*

1. Duty—virtue.
2. Conscience—good.
3. Love—spirituality.

d. *The entire being must motorize:*

1. Individualize.
2. Civilize.
3. Socialize.

E.—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.

d. Adjustment to environment and of environment to self.

III.—ART OF EDUCATION.

A.—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.

B.—GOVERNMENT OF SCHOOL.

a. Harmony:

1. Object—preservation.
2. Aim—disciplin.
3. End—freedom.

C.—INSTRUCTION.

a. Processes:

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

b. Results:

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

IV.—HISTORY OF PEDAGOGY.

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

b. A study of the great educators—theoretical and practical—and their influence on pedagogy and the social problems of their time.

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

d. The practical outcome of a study of the history of pedagogy in relation to teaching and in relation to life. *Three terms.*

PEDAGOGY.

PROFESSOR DAVID DOUGLAS HUGH.

1, 2, 3. *Senior.*

The Senior Seminar.

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

SCIENCE IN GENERAL.

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

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

Science teaching is leading the pupil to be able to interpret his surroundings as a composit 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 disciplin 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 all science work is pursued; and to facilitate study, the school is provided with well equipt laboratories.

LABORATORIES.

Almost the entire third story of the main building is now devoted to the departments of science. The laboratory for *Biology, 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 blackboards, large aquaria and cabinets containing the natural history collections and a department library. Especially worthy of notice are the herbarium cabinet and the fine cases for insects.

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 for the instructor's use, a large demonstration table, with sink and water, drawers and closets. This room and two others used by the instructors in biology and geography are equipt with facilities for solar projection work.

The *chemical laboratory* adjoins the physical laboratory, and is probably as conveniently arranged as that of any similar school in the country. It is furnisht with eight desks, exclusiv 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 thru the ceiling for carrying off foul gases. The desks are of butternut and have renewable oil-cloth tops. The instructor's desk is similarly furnisht, 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.

PSYCHOLOGY AND CHILD STUDY.

PROFESSOR WILL GRANT CHAMBERS.

PSYCHOLOGY.

The work of this department is based on the belief that psychology is of prime importance to the teacher. It is therefore the aim to make the instruction as thoro and as positiv as possible. While all topics of the subject have a cultural value which would justify their place in a course of study, there are certain ones the bearing of which on the profession of teaching is more direct, and these are selected for special emphasis. Slight variations are made from year to year, both in methods of instruction and in subject matter, with a view to finding the material and the method which, in the limited time allotted to the subject, will produce the most genuin and lasting interest and the clearest insight into the more common phenomena of men-

tal life. Whatever the topic or method, the attempt is constantly made to keep the work on a practical basis, and such as can be continued when the student has left school.

No body of psychological knowledge, however carefully acquired, can long be retained or be helpful while retained, unless it has been fitted into the personal living of the student—unless he constantly recognizes it in all his own daily perceiving, remembering, feeling and doing, and in the expression of these activities observable everywhere about him. As far as possible, therefore, principles are arrived at inductively, and reading and lectures are constantly supplemented by experiments and observations both in and out of class. Emphasis is continually placed on the importance of movement as the expression and the necessary completion of mental processes. Each process is studied, not only as it appears in adult life, but also with reference to its growth and its characteristics at each level of mental development as illustrated in child and animal life. The practical origin of all the conscious processes, and the unitary character of mind in all its functionings, are principles upon which all instruction depends.

COURSES OF STUDY.

1. *Junior.*

Physiological and Experimental Psychology.

Thru lectures, readings, discussions and dissections a thoro study is made of the brain and central nervous system, of the sense organs, and of the relation of mind and brain. Physical growth, precocity and dulness, motor ability, and certain phases of the hygiene of instruction

are dwelt upon in this connexion. Sensation, affection, attention, perception and apperception, illusions, and memory are studied in detail with numerous laboratory experiments, personal observations, and exercizes in introspection. Constant use is made of a well stocked library, and themes and note books give evidence of work done by students. *One term.* [Given in Fall Term.]

2. *Junior.*

Descriptiv and Analytical Psychology.

Using Course 1 as a foundation, this course proceeds with a study of the higher types of mental processes, such as emotion, action, thinking, self-consciousness, suggestion and imitation, and related topics. Laboratory methods are still used wherever possible, but more emphasis is placed on introspectiv analysis than in Course 1. The derivation of pedagogical principles from the natural laws of mental activity is a prominent feature of the course, and illustrations are drawn daily from school-room and play-ground. *One term.* [Given in Winter Term.]

3. *Junior.*

Pedagogical Psychology.

This is an attempt to put the main conclusions of psychology into a more usable form for application in the school-room. Starting with Dr. Dewey's conception of education as a "reconstruction of experience," it proceeds to show how all the sound principles of pedagogy are but aids to the mind's natural processes of reconstructing itself. From the viewpoint of functional psychology the Herbartian formal steps are criticized and interpreted, and the

culture epoch theory discust. From a study of the nature and origin of knowledge as revealed in the development of the sciences in primitiv society, the constructiv activities are found to be the true center of correlation for the studies of the curriculum, and the methods of differentiating these studies from the pupil's social-industrial activities are suggested. The school as a social institution naturally comes to be a conspicuous thought of the course, and the best literature along that line is read. The psychology and pedagogy of drawing, writing, reading and other school subjects are considered in their broader aspects. The work is closely correlated thruout with observation of teaching in the training school, and is expected to prepare the students to approach their own practise teaching with some measure of confidence and appreciation of its significance. *One term.* [Given in Spring Term.]

CHILD STUDY.

Aim: The purpose of this study is not to turn out scientific investigators of child life nor, primarily, to add to the literature of the subject, tho the latter is accomplisht to some extent incidentally. The aim of the work in this department may be stated as follows:

a. To make the students familiar with the fundamental principles establisht by the science.

b. To show the application of these principles in practical pedagogy and school hygiene.

c. To establish a habit of careful observation and interpretation of the conduct of children.

d. To arouse that sympathy for child life which is so essential to a real teacher and which can be acquired only thru carefully directed, immediate contact with children.

e. To make plain the legitimate methods of child study, in order that students may be able to determin the value of conclusions met with in their later reading and practise.

f. To conduct one careful inductiv study from beginning to end, under direction, to insure a first hand knowledge of all the foregoing points, to bring out all the difficulties incident to such work, and to give practise in weighing material and deriving generalizations.

Method: Diversity in the sources of material and in the purposes of the different courses makes a diversity in methods of presenting the material necessary. But the one insistent principle which dominates all methods is *informality.* No conventional routine nor rigid formality is allowed to stifle enthusiasm. Whatever the topic or the method, the class meets as a sort of seminar or informal club to talk the matter over in a familiar way. A formal classification of methods used thruout the courses would include: (1) Lectures, (2) Student Reports on Reference Readings, (3) Recitations from Text Books, (4) Personal Observations, Experiments and Examinations, (5) Informal Discussions, Quizzes, etc., and (6) Papers or Theses on Topics Investigated.

COURSES OF STUDY.

1. *Electiv.*

Systematic Child Study.

The course includes:

I. *Introductory lectures* on the history of the child study movement, its relation to the scientific, industrial, and educational development of the last quarter century, its chief promoters, aims, methods, and results. Readings, reports and discussions by students.

II. *The Physical Nature of the Child.* Readings, reports and discussions. (a) Growth, its significance; (b) Physical training, exercize, bodily attributes, etc.; (c) School hygiene.

III. *Interrelation of the Physical and the Mental.* Readings and discussions; (a) Mind and body; (b) Relation of motor power and intelligence; (c) Unidexterity and ambidexterity; (d) Fatigue; (e) Psychology of writing; (f) Psychology of drawing.

IV. *Expansion of the Intellectual Life.* Lectures, readings and discussions.

V. *Expansion of the Moral and Religious Consciousness.*

VI. *Expansion of the Social and Civic Consciousness.*

VII. *Adolescence.* Lectures, readings and reports.

VIII. Concluding lectures on the General Psychology of Child Development.

IX. An Inductiv Study conducted by the class on some important topic. *Two terms.* [Begins in Fall Term.]

2. *Electiv.*

A Practical Course.

This course is primarily for Juniors.

All the pupils of the Training School are examined for defects of eye, ear, nose and throat, motor ability and co-ordination, speech, nerve signs, etc. Tests of memory type are made, and the results related to age, sex, physical condition and school standing, both for individuals and groups. Records are kept and studied by students taking the course. *One term.* [Given in Fall Term.]

3. *Junior.*

Observation and Direction of Play.

Juniors are required to be present on the playground during the play hour of the training school to participate in the children's games, and to direct them when necessary. Careful observations of the children's activities and daily written reports are made, including cases of leadership, imitation, outcasts, bluffers, snobs, bullying, teasing, unusual reactions toward weaklings or cripples, playing with children of different age, etc. At a weekly conference these reports are discussed and causes and significance of reported phenomena brought out. Thru lectures and readings, the meaning of infancy and play is dwelt upon and the relation to education pointed out. This course has proved one of the most interesting and direct approaches to the observation of practise teaching in the training school. *Three terms.*

Note.—This course is continuous thru the year, but different groups of students are making the observation at different times.

BIOLOGICAL SCIENCE.

PROFESSOR ARTHUR EUGENE BEARDSLEY.
ASSOCIATE PROFESSOR H. W. HOCHBAUM.
ASSOCIATE PROFESSOR L. A. ADAMS.

BOTANY.

COURSES OF STUDY.

1.

Elementary Botany—Plant Relations.

A study of the plants in their relations to the environment. Field and laboratory work and recitations. *One term.* [Given in Fall Term.]

2.

Elementary Botany—Plant Structures.

In this course the development of the plant is considered together with its life history. The various structures of plants are studied in relation to their functions, and the modifications of structure correlated with modifications of function and environment. Some of the higher groups of plants are carefully studied as to their characteristics. Some exercise is required in the use of keys in classification, and in determining the names of common plants. *One term.* [Given in Spring Term.]

3, 4, 5. *Electiv.*

Advanced Botany.

A laboratory course in advanced botany is offered, covering a general survey of the plant kingdom, ecology and experimental physiology. *Three terms.*

ZOOLOGY.

1. *Junior.* COURSES OF STUDY.

Morphology.

Study and dissection of typical forms—

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

Study under the microscope of Ameba and Paramœcium, and of sections and tissues of animals of higher groups.

Physiology.

Protoplasm and the cell.
Animals consisting of a single cell.
One-celled plants.
Physiology of the simplest animal—
Manner and means of taking food.
Metabolism—
Secretion.
Digestion.
Assimilation.
Production of energy.
Growth.
Movement.
Irritability.
Reproduction.

Elimination of waste—
Respiration.
Excretion.
Physiology of many-celled animals—
Comparison of the functions of Ameba 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. *One term.* [Given every term.]

Note.—For this course may be substituted Nature Study 1.

2, 3, 4. *Electiv.*
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 are 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 is devoted to field work; this comprises a study of the environment and of the habits and adaptations of the animal studied in relation to the factors of its environment.

Three terms.

Prerequisit: *Zoology, Course 1.*

BIOLOGY.

1. *Electiv.*

Biology for Domestic Economy.

I. Botany.

a. This course 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, are made and bound in folios for the student's future use in teaching.

c. The aim of this course is to train students to observe the plants, trees and flowers about them, to recognize familiar and edible plants wherever they may see them.

II. Zoology.

a. The subject is taken up with reference to Domestic Economy, treating especially of insects injurious to the household, and the crustaceans, birds, fish, wild and domestic animals used for food by man.

III. Bacteriology.

1. Yeast.

a. Preparation and use of the 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 dioxid, alcohol, etc.

e. Functions of yeast in bread making.

2. Molds.

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, of dissemination; changes produced in food by bacteria.

c. Useful bacteria; deleterious effect of some bacteria.

d. Bacteria in Arts.

Two hours per week thruout the year.

NATURE STUDY.

1. *Junior.*

The work in Nature Study follows along two main lines:

A. The Practise of Nature Study.

The time devoted to this part of the work is spent in the actual study of nature. The aim is not only to illustrate by actual practise the pedagogy of the subject, but also in so far as is possible, to increase and develop interest in and sympathy for the nature-environment of the class.

B. The Pedagogy of Nature Study.

Under this head it is designed to acquaint the students with the subject of nature study from the school standpoint. The topics usually treated in the discussion of any school subject; viz., the aim, scope, method, values and results are considered, and govern largely the practise in nature study as outlined above.

In general, the course is designed rather to teach teachers how and why to teach nature study than to increase their knowledge of scientific subjects. A considerable amount of the latter is, however, the incidental result of the work as planned. Plants are the subject matter upon which the course is founded. *One term.* [Given every term.]

Note.—For this course may be substituted Zoology 1.

PHYSICAL SCIENCE.

PROFESSOR FRANCIS LORENZO ABBOTT.

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 labora-

tory once a week, performing experiments for themselves, taking notes, making drawings and explaining what they observe. This is followed by reading from reference books and by discussions. Special attention is given to the application of physical principles in the explanation of common inventions and every-day phenomena. Illustrations of the law of the conservation of energy are everywhere sought for. The school is provided with a well equipt laboratory containing all necessary apparatus; but tho good use is made of this apparatus, the members of the class are taught to improvize, 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.

COURSES OF STUDY.

1. *Preparatory.*

This is practically a course in high school physics. It treats the following subjects: Electricity, light, mechanics, solids and liquids, heat, sound. *One and a half terms.* [Begins in Fall Term.]

Note.—This course extends thruout the year, the class meeting every other day, and alternates with Botany 1.

CHEMISTRY.

All chemistry is taught by laboratory work and recitations. The laboratory is fully equipt, 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. Two laboratory periods are 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 these subjects.

COURSES OF STUDY.

1, 2. *Electiv.*

General Chemistry.

This course assumes that the student has had at least a half year's work in chemistry in some high school. The following is an outline of the work:

a. Review of properties of oxygen, nitrogen, hydrogen and carbon.

b. Study of compounds of the above elements.

c. Relativ importance of these elements and their compounds in the inorganic and organic worlds.

d. Writing of chemical equations and solution of chemical problems.

e. Characteristic acids, bases and salts.

f. Preparation of salts, acids and bases.

g. Study of the properties of typical acids and bases.

h. Study of properties of non-metals, metals and some of their compounds. *Two terms.* [Begins in Fall Term.]

Prerequisit: *One-half year high school chemistry.*

3. *Electiv.*

Quantitativ Analysis.

a. Twenty or more solutions, containing but one salt.

b. Solution containing any or all of the common metals.

c. Alloys.

d. Baking powder, etc.

e. Mineralogy: Blow pipe tests, heating in open and closed tubes, etc., simply to determin name of many of common minerals. *One term.* [Given in Spring Term.]

Prerequisits: *Chemistry 1 and 2.*

4, 5. *Electiv.*

Organic Chemistry.

a. Methane and Ethane.

b. Halogen Derivativs of Methane and Ethane.

c. Oxygen Derivativs of Methane and Ethane. Alcohols—Fermentation—Formic and Acetic Acids, etc.

d. Nitrogen Derivativs of Methane and Ethane or the Cyanids, etc.

e. Hydrocarbons of Methane or Paraffins.

f. Oxygen Derivativs of Paraffin Series, or the Higher Alcohols—Stearic Acid, Soaps, Glycerin, etc.

g. Carbohydrates — Glucose — Sugars — Starch — Gums.

h. Benzene Series of Hydrocarbons and their Derivativs, etc.

Prerequsits: *Chemistry 1, 2, and 3.*

6. *Electiv.*

Physiological Chemistry.

This course aims to give a thoro acquaintance with the principal ingredients of the animal body, and of their relation to food, to tissue, and to waste. The study covers the following topics:

a. Proteids; nativ albumen, derived albumen, globulins, etc.

b. Carbohydrates: starches, dextrin, sugars, glycogen.

c. Fats.

This is followed by a study of various digestiv processes.

a. Saliva and the digestion of starch by ptyalin; amyloplin.

b. Gastric juice and the digestion of proteids by pepsin.

c. Pancreatic juice and the digestion of proteids by trypsin.

d. Analysis and digestion of milk. *One term.* [Given in Winter Term.]

Note.—Required for Domestic Science diploma.

METHODS IN GEOGRAPHY.

PROFESSOR FRANCIS LORENZO ABBOTT.

It is customary to treat geography under separate divisions, such as mathematical, commercial, and physical. The New Geography treats the subject simply as geography. The basis of the new geography is the industries and commerce. If the subject is treated from this standpoint all the reciprocal relations of the different sections of the United States can be shown. By starting with the industries of a country we must necessarily be brought into very close relation with the climatic conditions; and the climate is very largely the result of topography and latitude.

Whether we study the different sections of the United States or the world at large, this method will show the relations and inter-relations of the various countries.

Geography, when properly presented, should show the great cities as they really are, industrial, political, art and educational centers, and great aggregations of people. It should show their relations, and their influence one upon another and upon the surrounding country.

Geography when treated from the above standpoint presents itself as it really is, a complete organic unit. It is thus removed from the list of memory studies and becomes a thought study of true educational and practical value to the child.

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

Daily observations are made of climatic elements, both for immediate results and as a preparation for advanced work. These observations include: Thermometer readings, barometer readings; observations of direction and velocity of wind; of clouds, rain or snow; of sun's noon altitude; of place and time of sun's rising or setting.

The laboratory is supplied with the most faithful representations of nature, such as government maps and charts, photographs and models of actual and typical forms in nature. It also has all customary apparatus, such as terrestrial globes, a celestial globe, a black globe, a tellurian, a solar lantern, wall maps, relief maps, thermometers, barometers, hydrometers, rain gauge, and a number of home-made pieces. Lantern views, photographs and models have become an important feature in our equipment.

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

Cabinet specimens are rapidly accumulating, and include already collections of woods, of agricultural products, and of interesting minerals. Contributions from students and all friends of the school are always welcome.

OUTLINE OF COURSE OF STUDY.

I. Cattle Industry.

1. Grazing of cattle on plains of Rocky Mountains.
2. Shipping of cattle to corn belt.
3. Location of principal cities in corn belt.
4. The packing houses.
5. Distribution of meat and products.
6. Railroad and water routes.
7. Leather industry.
   a. Tanning of hides.
   b. Manufacturing of leather goods.
   c. Their distribution.
8. Climate and topography in connection with the above.

II. Sheep Industry.

1. Grazing of the sheep.
2. Feeding of the sheep.
3. Shearing of the sheep.
4. Shipping of the wool and its manufacturing into cloth.
5. Location of principal towns engaged in manufacturing woolen goods.
6. Power for running this machinery.
   a. Water
   b. Steam.

III. Hog Industry.

1. Studied in connection with corn belt.

IV. Wheat Industry.

1. Flour and bread.
2. Kinds of wheat.
3. Study wheat belt.
4. Methods of distribution; railroads, rivers, canals, etc.

V. Cotton Industry.

1. Clothing—cotton cloth.
2. Manufacturing centers of cotton cloth.
3. Growing of cotton.
4. Preparation of cotton for shipment.
5. Transportation of cotton.
   a. Rivers.
   b. Ocean steamers.
   c. Railroads.

VI. Mining Industry.

A. Iron.

1. Uses of.
2. Mining of iron ore.
3. Smelting, etc.—where done.
4. Distribution of manufactured products.

B. Gold, Silver, Lead, etc.
Studied in a similar manner.

C. Coal.

1. Uses of coal.
2. Kinds of coal.
3. Mining of coal.
4. Dangers in mining of coal.
5. Location of coal mines.
6. Relation between coal and iron industries.

VII. Lumber Industry.

1. Use of wood.
2. Kinds of wood.
3. Sawing and transportation of lumber.
4. Lumber regions.
   a. Pacific.
   b. Lake.
   c. Northeast.
   d. Southern.
   e. Mississippi Valley.

VIII. Products of Wood.

1. Paper making.
2. Turpentine, rubber, etc.

IX. Rice Industry.

Follow outline as in wheat.

X. Fruit Industry.

XI. Fish Industry.

XII. Other Industries.

Cement, stone, etc.

MATHEMATICS.

PROFESSOR GEORGE BRUCE HALSTED.

The courses in mathematics have in view giving future teachers such principles for the selection of material, and such mathematical disciplin, and such knowledge of the new methods and procedures, as will make their teaching of arithmetic, algebra and geometry more rational and effectiv. The best methods of study and the new ways of teaching are constantly inculcated.

COURSES OF STUDY.

1, 2, 3. *Preparatory.*

Elementary Algebra.

The usual high school work, including quadratics. Especial emphasis on interpretations of meaning, on the principles of permanence and the fundamental laws of freedom. Effort to develop independent thinking. Mechanical manipulation explained and utilized. *Three terms.*

4, 5. *Preparatory.*

Plane Geometry.

The equivalent of high school work. Especial emphasis on original and inventiv work. The new simplifications utilized. The errors of the books still current taken as dissection material. Text: Halsted's Rational Geometry. *Two terms.* [Begins in Fall Term.]

6. *Preparatory.*

Solid Geometry.

The new method dominated by the two-term prismatoid formula. *One term.* [Given in Spring Term.]

7. *Junior.*

Theory and Methods in Arithmetic.

Special study of the material to be given in the grades, and of the best order and mode of presenting it. Study based on spontaneity of child. Effort to fit the arithmetic to the child instead of the child to the arithmetic. Explication of the practical simplifications which are an outcome of the modern advance. *One term.* [Given every term.]

8, 9. *Electiv.*

Advanced Algebra.

The usual work given in first year of college. Eor method of treatment, compare courses 1, 2. 3. *Two terms.* [Begins in Fall Term.]

10. *Electiv.*

Plane Trigonometry.

The equivalent of a first course in college. Logarithms reviewed. *One term.* [Given in Spring Term.]

11. *Electiv.*

Analytical Geometry.

The Yale course.

Note.—Courses in more advanced mathematics will be given as required. These will be planned especially to meet the needs of students preparing to teach mathematics in high schools.

HISTORY AND SOCIOLOGY.

PROFESSOR GURDON RANSON MILLER.

History is the world stream of human thought and feeling. The subject matter of history is facts in the experiences of individuals and the race.

The student should learn to read causes and effects in human conduct from the records of history; learn to trace the growth of social, political, and industrial ideals, and discern how these have crystalized and embodied in institutions and systems.

American history is selected as best adapted to the teaching of methods in a Normal School. However, the general subject of method is broadly treated, and fully discust, in relation to ancient, medieval and modern European history.

Special attention is given to courses of study in history for all grades of school work.

COURSES OF STUDY.

1. *Senior.*

A Course in American History.

Comprizing a survey of European commercial and political history from 1452 to 1492; a detailed study of American colonization, industrial conditions, and educational and political growth of the colonies; a study of the

American Revolution from the records of the British parliament; a study from original sources of the formation and ratification of the American Constitution; and special individual study of the biographies and political doctrins of American statesmen, tracing the rise of political parties, and the progress of American educational, industrial, and social life.

This course includes methods in history, and outlines of history courses for both elementary and high schools. The seminar method of study is followed the major part of the term, thus offering special opportunity for library research to all students. *One term.* [Given every term.]

1. *Electiv.*

A Course in Sociology.

This course includes a study of the development of human society from the primitiv family to the present highly organized civil community. Special attention is given to the industrial activities of primitiv peoples, and the possible relation of these activities to the present elementary school curriculum.

Fundamentally this course treats of the development of individual character and personality thru contact with human society. The seminar method is used exclusivly, each student pursuing a special, distinct library course. Class-room work includes discussions of students' reports, and lectures by the head of the department. *Three terms, 4 hours per term.*

LATIN.

PROFESSOR JAMES HARVEY HAYS.

The Latin courses are electiv, and, for the most part, are taken by those students who have completed three or four years of Latin in the high school. To such students as have completed high school courses of Latin, an electiv course of two years is offered. This course has been prepared from the viewpoint of the teacher of Latin, and aims to do these things: *a.* To correct careless and faulty pronunciation; *b.* to review in a critical manner the grammar of the language; *c.* to present the best methods of teaching the subject; and *d,* to afford the students an opportunity to extend their acquaintance with authors beyond those found in the high school. The texts usually read are Sallust's Catiline, Horace's Odes, Cicero's *De Senectute* and *Amicitia* and Tacitus's *Germania* and *Agricola.*

The opportunity of teaching Latin classes in the high school of the Training Department is given to competent students. All such teaching is done under the direction, supervision and criticism of this department.

COURSES OF STUDY.

1. *Electiv.*

Studies in the art of teaching Latin; instruction in the art of reading Latin; review of such parts of the grammar as seem necessary. *One term.* [Given in Fall Term.]

2. *Electiv.*

Readings from Horace. *One term.* [Given in Winter Term.]

3. *Electiv.*

Readings from Cicero. *One term.* [Given in Spring Term.]

4, 5, 6. *Electiv.*

Readings from Sallust and Tacitus; teaching Latin in the high school of the Training Department. *Three terms.* [Begins in Fall Term.]

MODERN FOREIGN LANGUAGES.

PROFESSOR ABRAM GIDEON.

GENERAL STATEMENT.*

The work of this department is two-fold in purpose: (a) Cultural, (b) Professional.

(a) In accordance with the first aim the department offers instruction in Modern Foreign Languages as part of a liberal education. The elementary school teacher needs, by way of indirect preparation for his life's work, the stimulus gained from and the broader horizon created thru an acquaintance with some language other than the mother tongue. These courses are open to all students, and due credit is given for work accomplisht.

*For requirements for departmental diploma, see page 106.

(b) The professional courses aim to provide the student with the training necessary for the equipment of a teacher of Modern Foreign Languages. In order to meet the constantly growing demand for teachers who, together with other qualifications, are also competent to give instruction in these branches to pupils of the elementary schools, the State Normal School has incorporated into its program a course of study covering two years, the completion of which entitles the graduate to a special diploma in Modern Languages. The special certificate testifies to the ability of the teacher holding it to give elementary instruction in the language qualified for. These courses are open to all students whose previous training shall have included the preliminary disciplin necessary to furnish a basis for professional studies. In general the preliminary training required to follow the courses may be said to coincide in extent with the four years' high school course in the language selected (consult the recommendations made by the Committee of Twelve of the Modern Language Association); yet this rule will not be mechanically applied to all cases.

Persons desiring to equip themselves as teachers of Modern Foreign Languages in high schools may avail themselves of the opportunities offered by the Normal College course and elect work in this department. While the preliminary requirements serving as a basis are practically identical with those of the special Normal course, one year additional residence work is required for graduation and the subsidiary studies recommended differ somewhat in character from those of the other course.

GERMAN LANGUAGE AND LITERATURE.

A. PRELIMINARY COURSE OF STUDY.

1, 2, 3. *Electiv.*

Elementary German.

Grammar, reading, reproduction, conversation, sight reading.

Text Books: Thomas's German Grammar, Part I; Thomas & Hervey's German Reader and Theme-book; Storm's *Immensee;* Heyse's *L'Arrabbiata;* Gerstäcker's *Germelshausen;* von Hillern's *Höher als die Kirche.* In lieu of the texts mentioned others of the same character may be substituted. *Three terms.*

[This is strictly a beginner's course, presupposing no previous acquaintance with the subject.]

4, 5, 6. *Electiv.*

Intermediate German.

Grammar (especially syntax), reading, reproduction, composition, sight reading.

Text Books: Thomas's German Grammar, Part II; reading matter selected from such works as Riehl's *Der Fluch der Schönheit,* Auerbach's *Brigitta,* Freytag's *Journalisten,* Keller's *Dietegen,* or *Kleider machen Leute,* or *Romeo und Julia auf dem Dorfe,* Meyer's *Gustav Adolf's Page* or *Der Schuss von der Kanzel,* Heine's *Harzreise,* Goethe's *Iphigenia,* Schiller's *Das Lied von der Glocke* and *Wilhelm Tell,* Lessig's *Minna von Barnhelm. Three terms.*

[This course is open to students who have satisfactorily completed the course outlined above or one equivalent. Correct pronunciation, knowledge of the most common grammar facts, appreciation of sentence structure are presupposed and therefore insisted upon as prerequisit.]

7, 8, 9. *Electiv.*

Advanced German.

Grammar review, reading of texts selected from the literature of the past 150 years, reference reading, themes, sight reading. The literature read is chosen mainly from such works as Goethe's *Dichtung und Wahrheit* (in adequate extracts) or *Egmont,* Schiller's *Maria Stuart* or *Wallenstein,* Lessing's *Nathan der Wise,* or *Emilia Galotti,* Scheffel's *Ekkehard,* Freytag's *Soll und Haben* (extracts), Grillparzer's *Der Traum, ein Leben,* Heine's *Ueber Deutschland,* Hebbel's *Maria Magdalene. Three terms.*

[Students in this course, which is conducted mainly in German, are expected to be able to read German with considerable facility. Some of the work is done under the direction of the instructor outside of the class room; some text is read aloud by the instructor in the class room, *e. g.* Ernst's *Flachsmann als Erzieher,* without previous preparation on the part of the student, who is subsequently required to write in German a report upon it.]

[When circumstances permit the Intermediate and Advanced Courses are combined and given as one continuous course of five hours per week throughout the year.]

B. COURSES PRIMARILY PROFESSIONAL.

10. *Electiv.*

General Phonetics.

A study of speech sounds with reference to their physiological origin and mode of production. *Lectures twice a week, Fall Term.*

11, 12. *Electiv.*

Comparativ Phonetics.

Continuation of course 10. The results arrived at thru the preceding investigation are here applied in a comparativ study of English, German and French sounds. Lectures supplemented by practice in reading phonetic texts. *Two terms, two hours per week.* [Begins in Winter Term.]

[While course 10 is introductory and open to all students, courses 11 and 12 presuppose a knowledge of either German or French, and are required of all students who contemplate teaching a modern foreign language.]

13, 14, 15. *Electiv.*

German Philosophers.

Kant, Pestalozzi, Herbart, Natorp. A characteristic work of each of these writers is examined, both for its contribution to education and as literature. Conducted in German. *Three terms, three times a week.* [Offered in alternate years.]

16, 17, 18. *Electiv.*

Selected works of Lessing, Goethe, Schiller and Heine. *Three terms, three times a week.* [Offered in alternate years.]

19, 20. *Electiv.*

German Lyrics and Ballads.

von Klenze's *Deutsche Gedichte* is used as a handbook. Conducted mainly in German. *Two terms, three times a week.* [Offered in alternate years.]

21, 22. *Electiv.*

History of the German Language.

Two terms, twice a week. [Offered in alternate years.]

23, 24, 25. *Electiv.*

Teachers' Seminary.

Discussion of practical problems arising in the Training School. All students who do practise teaching in this department of instruction during the autumn term or who contemplate doing so during any term thruout the year constitute the Seminary. *Three terms, once a week.*

FRENCH.

A. PRELIMINARY COURSE OF STUDY.

1, 2, 3.

Elementary French.

Grammar, reading, reproduction, conversation, sight reading.

Text Books: Fraser & Squair's French Grammar, Part I; reading matter selected from Modern French prose, *e. g.,* some of Daudet's short tales, Halévy's *L' Abbé Constantin* or Meilhac & Halévy's *L' Été de la Saint Martin,* Erckmann-Chatrian's *Le Conscrit de 1813,* or *L'Histoire*

d 'un Paysan, Merimée's *Colomba,* Labiche's *La Grammaire. Three terms.*

4, 5, 6.

Intermediate French.

Grammar (especially syntax), reading, conversation, composition, reference reading, sight reading.

Text Books: Fraser & Squair's French Grammar, Part II; Francois's Advanced French Prose Composition; reading matter chosen from such texts as Daudet's *La Belle-Nivernaise* or *Tartarin de Tarascon,* Dumas's *La Tulipe Noire,* Sand's *La Merè au Diable,* Saint Pierre's *Paul et Virginie,* or others of a similar degree of difficulty. *Three terms.*

[In order to enter this course the student must have satisfactorily completed the elementary course in French. Accurate pronunciation, the leading facts of grammar, and the ability to comprehend with facility ordinary literature and simple conversation are presupposed.]

7, 8, 9.

Advanced French.

Reading, composition, themes, reference reading, sight reading. The literature read in this course is chosen from classical and modern prose and poetry, some of the work being done under the direction of the instructor outside of the class-room. *Three terms, three times a week.*

[When circumstances permit the Intermediate and Advanced Courses are combined and given as one continuous course of five hours per week throughout the year.]

B. COURSES PRIMARILY PROFESSIONAL.

10, 11, 12.

General and Comparativ Phonetics.

See courses 10, 11 and 12, under German Language and Literature.

13, 14, 15.

History of French Literature.

Study of a standard compendium, supplemented by extensiv reading. *Three terms, twice a week.* [Offered in alternate years.]

16, 17.

Modern French Drama.

Three terms, twice a week. [Offered in alternate years.]

ITALIAN.

COURSES OF STUDY.

1, 2, 3.

Elementary Course.

Grammar, reading, conversation, sight reading.

Text Books: Grandgent's Italian Grammar; Bowen's Italian Reader; De Amicis' *Cuore* (selections); Goldoni's *La Locandiera.* *Three terms, three times a week.*

[Open only to students specializing in the department except by special arrangement with the instructor.]

ENGLISH, LITERATURE AND HISTORY

Professor Louise Morris Hannum.
Associate Professor Ethan Allen Cross.
Associate Professor Achsa Parker.

The general aim of the work of this department is four-fold: First, to establish the evolutionary view-point, both for aid in conceiving the greater forms of literary expression in their relation to the development of man and for the understanding of primitiv forms, especially the myth and folk-epic, as the great storehouse for the teacher of children; second, to introduce the student to a few masterpieces in such a way as to lay the foundation for enjoyment of literature as art; third, to develop the power of self-expression side by side with knowledge and interest; fourth, to bring forward and illustrate in the treatment of the pieces read those fundamental principles which should be used by grade teachers in preparing the literary material selected for English work, and in correlating with it oral and written composition. The Junior year is given to a more critical presentation of foundation work in the various disciplins of English: constructiv grammar; oral and written composition, particularly the structure of the expository paragraph and the handling of the narrativ; the life—significance of literature, and the primary principles of its interpretation. In the Senior year the view-points establisht in the Junior year are applied to a larger conception of the history of literature, special attention being

given to the development of expression from communal song to folk epic, with application to the selection and management of material for the grades. The second term comprises a survey of the rise and nature of the great forms, together with more thoro interpretation of the drama and the novel. The Junior electiv course gives a study of English literature from Shakespeare's time to the present in its relation to the history of England during the same time. The Senior electiv courses offer in alternate years a study of Georgian (or Victorian) poetry, and extended practise in selecting and working over material for the grades.

1. *Junior.*

Grammar: function of sentence forms and members, laws of syntax, forms of words; "good use" in oral and written speech.

Composition: theory of the paragraph as an organic unit; elementary laws of the chief types of composition; practise in narrativ and expository paragraph-writing. *One term.* [Given in Fall and Winter Terms.]

2. *Junior.*

Literature: introductory study for conception of the fundamental meaning of literature in its relation to the developing human consciousness. Presentation of the first great form of literature, the natural epic, with study of the Iliad as the greatest example of this form. Brief study of transition from epic to lyric and drama in Greece. Reading of Hamlet as example of the rich content and elaborate form of the developed drama.

Composition: practise in narrativ structure thru selecting a *motif* and synthesizing an appropriate action in such a way as to show clearly the development of the idea; continued paragraph-writing; one long theme. *One term.* [Given in Winter and Spring Terms.]

3. *Senior.*

Pedagogy: a view of the principles of English teaching as concerned with grade work.

Literature: review of the evolutionary conception of literary development, with special emphasis on the pedagogical significance of the myth, saga, ballad, and folk-epic. Review of transition from epic to drama and study of Œdipus Tyrannus and Œdipus Coloneus for dramatic structure and for their indwelling idea as illustrating the growth of the Greek consciousness since its expression in the Iliad.

Composition: practise in presenting in good outline form material of wider range; one theme. *One term.* [Given in Fall and Winter Terms.]

4. *Senior.*

Literature: careful study of one of Shakespeare's great tragedies; study of one novel for theme, structure, treatment, and comparison with the epic and drama; brief treatment either of the lyric or the modern drama.

Composition: application of principles to large wholes; two long themes. *One term.* [Given in Winter and Spring Terms.]

5, 6, 7. *Electiv.*

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

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

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

III. (1) New sources of inspiration in nineteenth century poetry. (2) Careful reading of many individual poems of Burns, Wordsworth, Coleridge, Shelley, Byron, Keats. (3) Study of the characteristic quality, feeling, and attitude toward life and its deeper questions of the Georgian poets, based on the poems read. (4) Suggestions for comparison of the Georgian with the Victorian poets. *Three terms.* [Given in 1906-1907.]

8, 9, 10. *Electiv.*

The aim of this course is to discuss more fully the application of principles of selection to literary material for each of the eight grades; to establish principles of treatment appropriate to various kinds of material and to different ages and degrees of development in grade pupils;

to consider the value and limits of correlation with history, geography and other studies, and of the aid to be derived from drawing, construction work, dramatic presentation, graphic schematizing and other devices; and especially to give thoro practise in preparing material for actual use by adapting, developing, and interpreting it in accordance with the purpose of the teacher. *Three terms.* [Given in 1907-1908.]

11, 12, 13. *Electiv.*

This course extends thru the three terms of the Junior year. Its purpose is to acquaint the student with the History of English Literature thru a comprehensive reading from the works of the best known authors representing the periods and movements in English Literature from Chaucer to Tennyson.

The relation of the literary movements to the life of the people is studied as well as the relation of literature to the other arts prominent in a given period.

READING.

PROFESSOR FRANCES TOBEY.

The courses in Reading are based upon the use made of books in life:

a. Training is grasping factual matter rapidly, accurately, silently and in an orderly manner. (History, science, biography.)

b. Training in finding the ethical and emotional content of a book or story thru the study of characters. This involves complete mastery of the thought and vivid imagining to experience the feeling portrayed. (Fable, myth, epic, drama.)

c. Training in interpretativ power. Responding vocally and physically to such subject-matter as needs expression for its fullest appreciation, gives deeper insight into the text and increases the power of self-expression. (Poetry, drama, orations, story.)

COURSES OF STUDY.

1. *Junior.*

A. A brief application of the scope mentioned above.

B. A Culture Reading Course.

a. The reading of a biography followed by a topical outline of the contents.

b. The reading of a standard novel or drama followed by a written discussion of some phase of the central thot, and the recital of a cutting, setting forth some vital part of the whole.

c. The reading aloud of such verse and poetry as fill out the individual's needs. The finding of each one's favorit poet.

C. A study of the methods of teaching.

a. The finding of criteria for the choice of text books for the grades; the relation of reading to other school work.

b. Intensiv study of text books used in the grades from the standpoint of treatment.

c. The examination of methods used in the mastery of the reading vocabulary.

d. Discussion and observation of the legitimate use of children's love for dramatic performances.

e. Collecting and classifying of data given in pedagogical literature on children's reading.

f. The analysis of vocal expression. The correspondence of thot and feeling to modulation, tone color, phrasing, gesture, and other vocal elements.

g. The teaching of classes by the supervisor, followed by a discussion of the application of principles and theories. *One term.* [Given every term.]

2. *Senior.*

The Senior course is a continuation of the foregoing course, worked out more intensivly. The scope of each division of the work is also enlarged. Vocal defects are analyzed and treated. More subtle interpretations are required. In methods, model lesson plans are examined, and the details of the reading recitation are worked over in class. *One term.* [Given every term.]

MUSIC.

PROFESSOR WILLIAM KENNEDY STIFFEY.

1, 2. *Junior.* COURSES OF STUDY.*

Comprizes one hundred twenty forty-minute recitations in sight singing and theory. The material is written

*For requirements for departmental diploma, see page 106.

by pupils from teacher's dictation, sung and transferred to books. This material constitutes a thoro graded course of studies suitable for any school. *Two terms.* [Given every term.]

3, 4. *Electiv.* Seminar work included.

Persons preparing for special and supervisory work, take the following in addition to the foregoing:

5, 6. *Electiv.*

History of Music.

Daily recitations thruout the year, covering the history of the art from simplest beginnings, noting leaders and works of each period. Characteristic illustrations intersperse this study. *Three terms.*

7, 9. *Electiv.*

Harmony.

Daily recitations in constructiv harmony, designed to develop musical consciousness by realizing all effects indicated by notation. A thoro practical course. *Three terms.*

10, 11, 12. *Electiv.*

Composition and Analysis.

The application of modern counterpoint and harmony to original matter. *Three terms.*

Pottery Made in School.

Pottery Made in School.

ART.

PROFESSOR RICHARD ERNESTI.

This department offers full courses of instruction in public school art, such as is required in most of the graded and high schools of this country, and also has a special art course to qualify graduates to act as supervisors of art education in public and private schools.

COURSES OF STUDY.*

1, 2. *Junior.*

The first year, two terms, will be spent in the study of the underlying principles of art instruction, the study of drawing in pencil, charcoal, pen and ink, and water colors, from the standpoint of public school art, covering the three branches of representation or the pictorial, decoration and design and mechanical drawing. The study of perspectiv, clay modeling, water colors from the still life model and from nature in landscape. *Two terms.* [Begins in Fall and Winter Terms.]

3, 4, 5. *Electiv.*

In the second year, three terms, it is expected that the student will spend the afternoons in academic drawing and painting in the different media, continue work in clay mod-

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*For requirements for departmental diploma, see page 106.

eling and all such work in art as is given in this department, and in design for the Manual Training Department. *Three terms.*

6, 7, 8. *Elective.*
History of Art.
Three terms.

MANUAL TRAINING.

PROFESSOR SAMUEL MILO HADDEN.
MRS. BELLA BRUCE SIBLEY.

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 only incidentally useful in an economic sense.

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

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. The useful in tool work in the elementary school means 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

Manual Training Museum.

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, to secure its highest educativ value, should be correlated with other subjects, as history, nature work, science, etc.

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

COURSES OF STUDY.*

1. *Junior.*

Elementary Course in Woodwork.

This course is designed to give a general knowledge of woods, a fair degree of skill in using wood-working tools, and an acquaintance with the underlying principles of manual training. It also includes mechanical and free-hand drawing in their application to constructiv design and decoration. *One term. Five hours per week.* [Given every term.]

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*For requirements for departmental diploma, see page 106.

2. *Electiv.*

Elementary Wood Carving.

This course, which is conducted by laboratory methods, includes preliminary exercizes in the care and use of tools, and aims to give a general training in the practical application of the fundamental principles of art in drawing, design, clay modeling and historic ornament, as applied to the special work of wood carving. The regular course in art should be taken in connexion with this work. *One term. Eight hours per week.* [Given in Fall Term.]

3. *Electiv.*

Advanced Wood Carving.

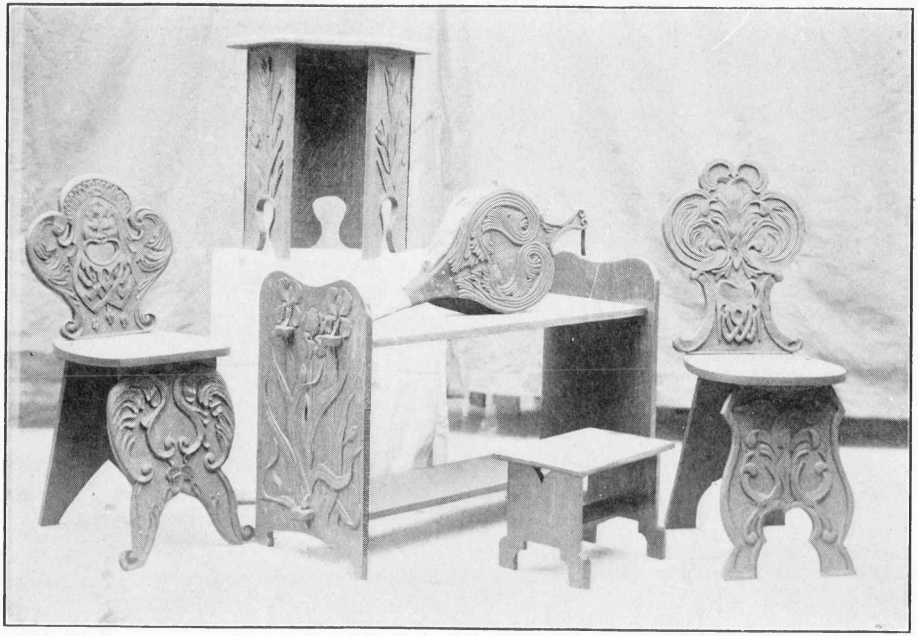
This course is a continuation of the Elementary Course in wood carving and is conducted in the same manner. The work gives a greater opportunity for self-expression in the designing and carving of larger and more complicated objects, and keeps in mind the practical application of the fundamental principles enumerated in the elementary course. *One term. Eight hours per week.* [Given in Winter Term.]

Prerequisit: *Wood Carving 2.*

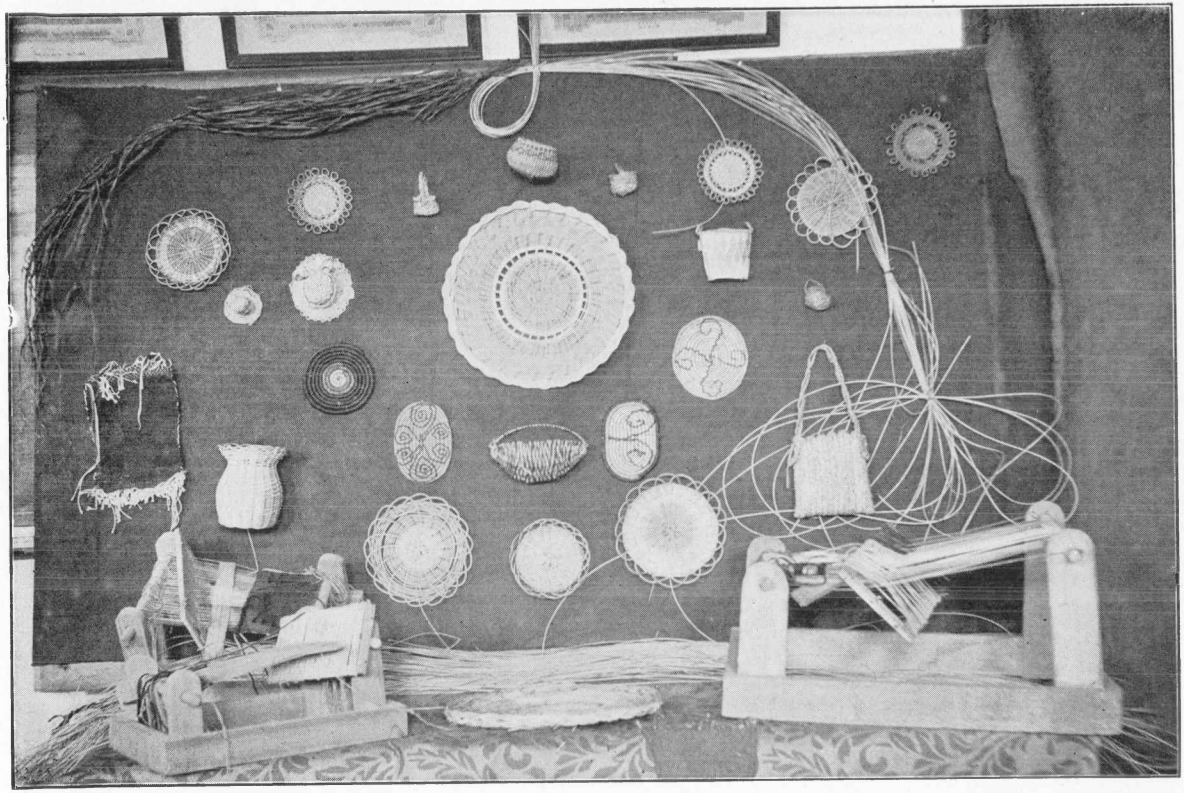
4. *Electiv.*

Constructiv Woodwork.

This course should be taken in connexion with the wood carving courses, as the principles of cabinet and furniture construction receive special attention with a view to applying them in the construction of pieces carved in the carving courses. Special attention is also given to the



Carving—Manual Training.



Basketry.

different methods of staining and finishing of woods. *One term. Eight hours per week.* [Given in Spring Term.]

Prerequisit: *Manual Training 1.*

5. *Electiv.*

A Course in Woodwork Suitable for the Elementary Schools.

This course includes the planning and constructing of a series of objects suitable for the different grades, keeping in mind the following considerations: Correlation, child interest, powers of the individual and the degree of skill required in the different constructiv processes in woodworking. The course also includes methods in teaching, relation of teacher to work, discussion and preparation of materials, care of tools, and working drawings. *One term. Eight hours per week.* [Given in Fall Term.]

Prerequisit: *Manual Training 1.*

6. *Electiv.*

Textils.

The object of this course is to fit students to teach textils in the grades. The course consists of play-house rug-weaving and basketry. The latter subject is studied under the following topics: The place of basketry in the history of art; its relation to pottery, its symbolism, its colors, its materials; braids, raffia embroidery, coil work and rattan models—all leading up to original plans, patterns, forms and combinations, and culminating in the preparation of a course of study for the grades. *One term. Eight hours per week.* [Given in Winter Term.]

7. *Electiv.*

Industrial Development.

This course includes a study of the early industrial processes of primitiv people; the history, evolution and logical development of tools; fundamental and necessary steps involved from the first crude operations to the more complex. The development of the social and artistic impulses of prehistoric people is considered in connexion with the handicrafts having an intimate place in their daily life. The course also includes the history and development of the manual training notion from the economic and pedagogic standpoints, a study of the different European systems and of their influence upon the manual training movement in the United States. The four movements in the United States and their influence upon industrial development in the different schools of the country receives careful study. This course includes the planning of manual training equipment and the development of a course of work for the different elementary grades, based upon the knowledge of the subject obtained in the pursuit of the earlier courses and a practical experience in teaching in the training school. *One term. Four hours per week.* [Given in Spring Term.]

Prerequisits: *Manual Training 1, 4, 5, and practical experience in teaching in the Training Department.*

8. *Electiv.*

Metal Working—Elementary.

This course is a laboratory course, and deals entirely with the simple processes—those suitable for the elementary school. It will include work with Venetian iron and

sheet metal, and aims to create objects of artistic worth. The purpose of this course is to make evident those qualities characteristic of good design, as fine proportion, elegance of form, and correct construction. *One term. Eight hours per week.* [Given in Spring Term.]

DOMESTIC SCIENCE.

PROFESSOR ELEANOR WILKINSON.

COOKING.

COURSES OF STUDY.*

1. *Junior.*
   General principles of cookery.
   Methods of cooking.
   Effect of heat upon food.
   Cooking of simple foods.
   Serving. *One term.* [Given every term.]

2, 3. *Electiv.*
   Study of food principles.
   Simple experiments in foods.
   Food combinations.
   Simple menus.
   Cooking of foods.
   Serving. *Two terms.* [Begins in Winter Term.]

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*For requirements for departmental diploma, see page 106.

4. *Electiv.*

Canning, pickling, preserving, marketing. *One term.* [Given in Fall Term.]

5. *Electiv.*

Fancy cookery.

Chafing dish cookery.

Menus for full course dinners.

Accounts. *One term.* [Given in Winter Term.]

6. *Electiv.*

Invalid cookery.

Study of dietaries. *One term.* [Given in Spring Term.]

SEWING.

COURSES OF STUDY.

1. *Junior.*

Patching, mending and simple repairing; drafting patterns and making simple garments involving all the principles of hand sewing. *One term.* [Given every term.]

2. *Electiv.*

Study of textils—history, growth and manufacture; garment making continued, combining hand and machine sewing. *One term.* [Given in Spring Term.]

3, 4. *Electiv.*

Study of form and color; drawing, cutting, fitting and making of elaborate garments, such as a thin dress, a linen skirt, etc. *Two terms.* [Begins in Winter Term.]

HOUSEHOLD SCIENCE.

1. *Electiv.*

Study of the development of homes from huts, showing how what we now enjoy was developt as an outgrowth from the experience of others, or where we fall back instead of progressing; the history of the development of furniture; the study of beautiful shapes, etc.; a discussion of furnishing and decoration of modern houses, apartments, etc. *One term.* [Given in Winter Term.]

2. *Electiv.*

Emergencies; home nursing.

3. *Electiv.*

Physiology for Domestic Science.

The study of physiology covers:

1. Physiologic ingredients.
2. Nervous system, so far as it is necessary to understand the control of function.
3. Muscular system, sufficient to appreciate the physiology of exercise and the part which muscular tissues play in heart action, gastro-intestinal action, and the like.
4. Circulation.
5. Digestion.
6. Absorption.
7. Respiration.
8. Excretion.
9. Metabolism.
10. Nutrition. *One and a half terms.* [Begins in Fall Term.]

PHYSICAL EDUCATION.

PROFESSOR G. W. BARRETT.

AIMS OF THE DEPARTMENT.

The aims of this department are: to train the student in correct habits of hygienic living; to develop the physical powers and health of the individual; to qualify students to direct and conduct school gymnastics, games and athletics, and to train special teachers of Physical Education.

EQUIPMENT.

The equipment of the department is large and in every way adequate to the carrying out of its work. There is an examining room containing a complete set of anthropometric instruments; there is a large and roomy gymnasium thoroly equipt with apparatus for all kinds of drills and in-door exercize, and there are large and well cared for athletic grounds containing four tennis courts, three out-door basketball courts, a quarter mile running track, which incloses a baseball and a football field, jumping and vaulting pits, and a place for the weights, and a ground for out-door drills.

All students are required to wear at physical training classes the regular gymnasium uniform. The uniform for women consists of a navy blue blouse and divided skirt, and gymnasium shoes. The uniform for men consists of gray flannel trousers, a navy blue quarter-sleeve shirt, and gymnasium shoes. These suits can be secured in Greeley,

made to order, at very reasonable club rates, and for this reason students are advised to wait until they arrive at school to secure gymnasium suits.

MEDICAL AND PHYSICAL EXAMINATIONS.

All students are required to take the medical and physical examination. The examination is made by the director of the department, who is also the school physician. It consists of a thoro medical examination of the heart and lungs, and of the recording of abnormalities, such as round or uneven shoulders, flat chest, weak back, spinal curvature, etc.

After the examination each student is given a handbook of personal hygiene, which contains his prescription of exercise for correction of his physical defects. The handbook also contains valuable health hints on diet, bathing, exercize and general health.

COURSES OF STUDY.*

1, 2, 3. *Junior.*

Required Course for Junior Women.

The work for the Junior girls is primarily recreativ, secondarily correctiv. In the fall and spring much of the work, such as basketball, tennis and athletics, is done out of doors. The gymnasium work consists of marching tactics, dumb-bells, wands, Indian clubs, elementary fencing with single sticks, fancy steps and gymnastic games. Training in foot placing and correct walking is given. *Three terms, two hours per week.*

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*For requirements for departmental diploma, see page 106.

4, 5, 6. *Senior.*

Required Course for Senior Women.

The work for the Senior women is based upon the Swedish system of educational gymnastics for the school room. This work is arranged in five series. Each series representing a year's work in a particular grade in the grammar school. In the winter term class work in French foil fencing, fancy step and gymnastic games is given. In the spring the time is devoted to the study and practise of school yard games, plays and out-door athletics. Marching tactics has a large place, as there is an annual contest in military drill between the Junior and Senior girls. *Three terms, two hours per week.*

7, 8, 9. *Junior.*

Required Course for Junior Men.

More vigorous work is given the Junior men. It consists of dumb-bell drills, apparatus work, instruction in indoor athletics, such as high jumping, pole vaulting, shot-put form, sprinting starts, the hurdle form, and the like. Class work is given in "catch-as-catch-can" wrestling. *Three terms, two hours per week.*

10, 11, 12. *Senior.*

Required Course for Senior Men.

Senior men have the same training in Swedish educational gymnastics as is given the Senior women. In addition they have gymnastic games, in-door athletics and class work in boxing. In the spring all men have systematic training in track and field athletics. *Three terms, two hours per week.*

13. *Electiv.*

Anatomy.

The time spent in anatomy is devoted to the discussion of the more important structures of the body, such as the number and form of the bones of the spine, thorax and extremities; articulations or joints; muscles and their fasciæ; arteries and veins (chief arteries and veins of the trunk and extremities); nervous system; viscera or heart, lungs, alimentary tract, salivary glands, intestines, pancreas, liver, spleen, kidneys and pelvic organs.

Text: Potter's Compend, Gray's Anatomy. *One term.* [Given in Fall Term.]

14. *Electiv.*

Physiology.

The physiology of the muscular system, the heart and circulatory system, the blood; processes of digestion, absorption, metabolism, nutrition and excretion; mechanism of light, vision, sound and hearing; cutaneous and muscular sense; spinal cord and brain. *One term.* [Given in Winter Term.]

15. *Electiv.*

Anthropometry and Applied Anatomy.

In the study of Anthropometry consideration is taken of the history of physical measurements, and of variations in physical characteristics and proportion as affecting the health and vigor of the individual or race. Correct methods of taking measurements, tabulating data, plotting charts and chart making. Prescription and correctiv work is considered in connexion with the study of anthropome-

try. There is ample opportunity to become familiar with the modern methods and instruments in use, and with the different school and college strength tests.

Under the head of Applied Anatomy are considered the applications of general laws of muscular action; man developt by his environment and methods of work; careful consideration of the effect of muscular activity on the various parts of the body; application of the law of levers to problems of development, different tasks to be performed, the different feats to be accomplisht; and a careful consideration of the various forms of gymnasium apparatus and the relativ value of each. *One term.* [Given in Fall Term.]

16. *Electiv.*

First Aid to the Injured and Symptomatology.

First aid is prompt aid in common accidents and emergencies. This course consists of practical talks on what to do first in cases of loss of consciousness due to fainting, asphyxia, coma; how to distinguish the difference and what to do in each case; the difference in sunstroke, apoplexy, epilepsy; how to care for sprains, fractures, dislocations, etc.; how to rescue a drowning person and produce artificial respiration; practise in bandaging various parts of the body for sprains, dislocations, fractures, scalp wounds, etc.; what to do in poison cases, snake bites and burns. Consideration of the causes, symptoms and recognition of the most common diseases. *One term, two hours per week.* [Given in Spring Term.]

17. *Electiv.*

Personal Hygiene and School Hygiene.

Personal hygiene is the science of maintaining health. It embodies the consideration of subjects treating of agents and conditions of life, namely, diet, sleep, exercize, bathing, clothing, air, occupation; the care of the eyes, ears, nose, throat, etc., using as a basis the anatomical structure and physiological functions of the body.

School hygiene deserves the attention of interested parents and well-trained teachers. Practical talks and discussions are devoted to the following topics: School location, drainage and water supply; methods of ventilation and heating; effects of overwork, overheating and overcrowding; light in rooms; school desks and seating; school lunches; treatment of delicate children; medical supervision. *One term, two hours per week.* [Given in Spring Term.]

19. *Electiv.*

Chemistry of Nutrition.

This course consists, in the first half, of a series of lectures on the foods and the chemical changes taking place in the transformation of energy by the body; the manner in which energy is stored up in the body; how the foods are digested; conservation of energy, and allied topics. *One term.* [Given in Winter Term.]

20. *Electiv.*

Organization, Construction and Equipment.

This course consists of the consideration of the pedagogy of physical education, its different interests—educa-

tional; importance of selecting good building sites; laying out of athletic fields, and public play grounds, running tracks, tennis courts, baseball and football fields, etc.; planning and construction of gymnasium, both outdoor and indoor; locks and locker rooms, bath rooms, etc.; selection and arrangement of apparatus. *One term, three hours per week.* [Given in Spring Term.]

18. *Electiv.*

History of Physial Education, and Nomenclature.

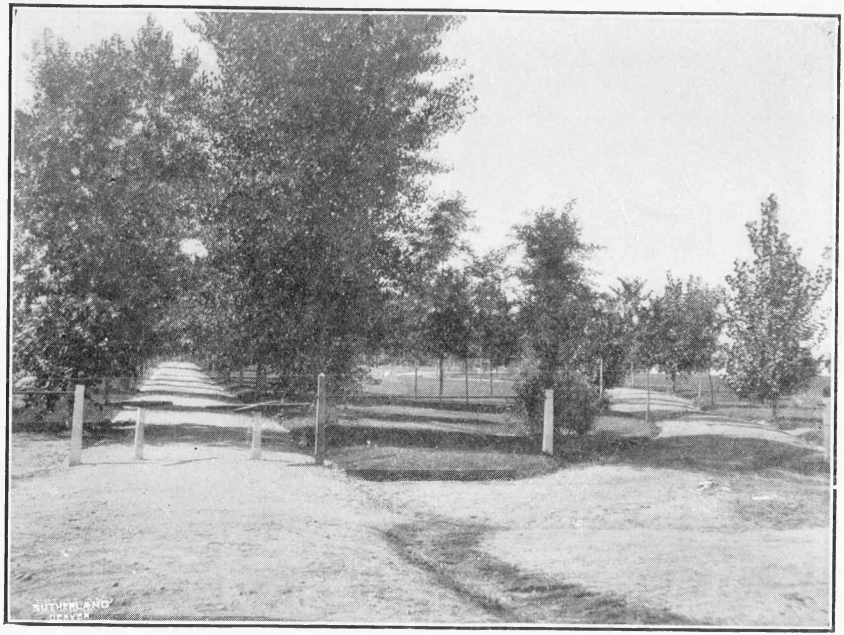
The history of physical training in Greece, Rome, Ancient Germany, the Middle Ages, the Renaissance period, etc., gymnastics in Modern Germany, Sweden, France, England, and America; the military system; Dio Lewis and Winship period; interest in athletic sports and games; medical gymnastics and the physical treatment of disease. Nomenclature in gymnastic terminology, indicating the positions of the body and limbs in the various movements in the different drills and exercizes on the different pieces of apparatus. *One term.* [Given in Spring Term.]

KINDERGARTEN DEPARTMENT.

MISS ELIZABETH MAUD CANNELL, DIRECTOR.

The fundamental principle in kindergarten training is to condition the child for development by rendering it activ thru the play impulse.

In the evolution of public education it is becoming apparent that the kindergarten is to serve as a transition



Campus.

Kindergarten May-Pole.

from the home to the primary school. It serves to initiate the child into the long establisht 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 thruout the state for well-equipt 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 thoro 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 schools of Colorado, ample opportunity is given for practise 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 practising at least one hour a day may overcome this condition. At the close of the Senior year, each student is required to play music suited to the various needs of the kindergarten, as found in such books as Miss Hofer's Volumes of Music for the Child World, rythms and marches by

Anderson and Scammell, and the best kindergarten song books.

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 finisht the Preparatory year of the regular Normal course may elect the two years Kindergarten 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 requisit training in music.

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

COURSES OF STUDY.*

1. *Junior.*

Kindergarten Theory.

Discussion of practical child-training questions, based upon the observation of the children in the kindergarten, supplemented by the student's recollection of his own childish interests and pleasures. The discussions will include such topics as the significance of physical activity, proper means for securing motor co-ordination, the uses and limitation of imitation, the proper training of the senses, etc. From a first hand discussion of such topics,

*For requirements for departmental diploma, see page 106.

the student will pass to the study of Froebel's *Mutter und Kose Lieder,* which embodies his philosophy of child nature. Abstracts will be written on each song.

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

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

Games—"In the Gifts and Occupations the child becomes conscious of his will as a power over matter to convert it to use. In the Games and Plays he becomes conscious of his social self and there dawns the higher ideal of a self that is realized in institutions." The chief value of Froebel's system lies in the Plays and Games rather than in the Gifts and Occupations; therefore especial emphasis is placed on developing the play spirit of the student. Games are played which secure large, broad movements, general motor co-ordination and quick reaction time. The traditional street games of children from the point of departure and competitiv games with the ball are emphasized. *One term.* [Given in Fall Term.]

2. *Junior*

Kindergarten Theory.

Mutter und Kose Lieder continued.

Gift—Theory and practise with the fourth and fifth gifts.

Occupations—Free-hand weaving and folding.

Games—Traditional street games continued. Circle kindergarten games strest, dramatization of natural forces of the industrial world, etc. Finger plays. *One term.* [Given in Winter Term.]

3. *Junior.*

Kindergarten Theory.

Mutter und Kose Lieder continued.

Gift—Theory and practise with the sixth and seventh gifts.

Occupations—Theory and practical work in cutting and in poster work. Cardboard construction.

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

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

Observation—Students observe in the kindergarten according to outlines given them in their work in pedagogy. This is followed by a critical discussion of the work seen. *One term.* [Given in Spring Term.]

4. *Senior.*

Kindergarten Theory.

Froebel's *Mutter und Kose Lieder* continued.

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

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

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

Occupations—Peas and clay modeling. Color and poster work.

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

Games—Same as Junior work.

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

Practical Work in Kindergarten.

Each student has 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. *One term.* [Given in Fall Term.]

5. *Senior.*

Kindergarten Theory.

Mutter und Kose Lieder continued.

Education of Man—Part two in some detail. Topics

from the rest of the book assigned for individual work, relating with modern school methods.

Program—Continued. Discussions of kindergarten organization, mothers' meetings, etc.

Games—Same as Junior work.

Stories—Original stories presented in sketch form for discussion and tested with the children.

Teaching in kindergarten continued. *One term.* [Given in Winter Term.]

6. *Senior.*

Kindergarten Theory.

This now centers itself about the practical work of the kindergarten and the problems it suggests. Program and story work will be continued.

Teaching in kindergarten continued. *One term.* [Given in Spring Term.]

7, 8, 9. *Electiv.*

Realizing that the educational sentiment of to-day asks that all teachers have at least a general understanding of Froebel's philosophy, and also that the best primary positions are open only to those who can make close connexion with public school kindergartens, an electiv course is offered to prepare Normal students to meet these requirements. This is a one-year course giving the same credit as other electiv courses, and is designed especially to meet the need of those preparing for lower grade work. The work is similar to that of the special kindergarten course in the Junior year, but less minute. It aims to give a general survey of kindergarten philosophy as it relates to general

educational theories, with discussions on the resulting reconstruction of school curriculum and methods. The kindergarten hand work is selected and adapted to primary needs. This course in games and rythms corresponds to that of the Junior year. Observation in the kindergarten is required, followed by interpretativ and critical discussion with the supervisor. *Three terms.*

GENERAL KINDERGARTEN OBSERVATION.

It is a necessary part of the pedagogical training that the principles and practise of the kindergarten be understood by all the graduates of the school. Hence in connexion with their pedagogical seminars all the students of the Normal School occasionally observe in the kindergarten room. This is followed by critical discussions of the work seen.

THE TRAINING SCHOOL KINDERGARTEN.

The morning kindergarten gives opportunity of putting into practise the principles and instructions given in the theoretical work. One is useless without the other. The points made under the Training Department are equally applicable in the kindergarten. The real center about which all the kindergarten work revolves is the child's instinctiv 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 is 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 are cared for by the children. When the weather permits the games and work are carried on out of doors.

Since the kindergarten is situated at the edge of town, it is specially conduciv 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 prest, 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 appreciativ 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 the Kindergarten Department for suggestions and plans of work in regard to mother's 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 relativ to child study. All this may be arranged by correspondence.

Besides the correspondence work, the supervisor of the kindergarten would be glad to meet such clubs, at a time to be arranged, and give talks relativ 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.

THE LIBRARY.

ALBERT SHERWOOD WILSON, Librarian.
MISS GERTRUDE RUPP, Assistant Librarian.

For the use of all connected with the school there is an excellent library and reading room, containing about thirty thousand volumes. This is housed in a splendid new library building closely adjoining the main building, and constructed in the most approved form, with all modern conveniences. It is well lighted, ventilated, and heated, and with its spaciousness and artistic features is well suited to provide a comfortable and attractiv environment for

readers. Because in the selection of books there has been careful adaptation to the actual needs of the readers, the library has become an essential feature of the school. The shelves are open to all, and no restrictions are placed upon the use of books, except such as are necessary to give all users of the library an equal opportunity and to provide for a reasonable and proper care of the books.

The library is particularly strong in the reference section. Among the reference books are the following: Encyclopaedias—the new International, the Encyclopædia Britannica, Encyclopædia Americana, Johnson's, People's, Iconographic, Universal, Young People's, American, etc. Dictionaries—the Century, the Encyclopædic, the Standard, the Oxford, Webster's, Worcester's, etc.; dictionaries of particular subjects, as Architecture, Education, Horticulture, Painting, Philosophy, Psychology, Technology, etc.; Lippincott's Gazetteers; Larned's History of Ready Reference; Harper's Cyclopædia of United States History; etc.

The library subscribes regularly for about two hundred and twenty-five of the best magazines and educational journals. It also receives thru the courtesy of the publishers, most of the county papers of the state, and many of the religious papers of the country. As volumes of the leading magazines are completed they are bound and placed on the shelves as reference books, forming a magnificent collection such as is rarely seen in any library. To facilitate the use of periodicals, Poole's and many other good indexes are provided.

Library—Inside.

In the library are to be found many rare and valuable works, such as Audubon's Birds of America, Buffon's Natural History, Nuttall and Michaux's North American Sylva, Linnæus' General System of Nature, and the works of Kirby and Spence, Cuvier, Jardine, Brehm, and others.

In addition to the general library, there is an annex of government publications containing a nearly complete series of congressional documents and departmental publications. Most of these publications are received regularly by the school.

LIBRARY SCIENCE AND HANDICRAFT.

The offering of courses in Libary Science and Library Handicraft is designed, not primarily for those who wish to make librarianship a profession, but for prospectiv teachers who, realizing a strong tendency in educational life to connect more vitally the school-room and the library as co-operativ means of education, wish to equip themselves with the technical information and practical experience necessary for intelligent activity in furthering this most desirable modern movement. With the recent unprecedented increase of public interest in libraries and the corresponding growth in number and size of existing libraries thruout our country, there has been an awakening consciousness of the educational possibilities latent in every library. From an attitude of utter indifference toward libraries the public has past to one of patronizing condescension as toward a public charity, but finally to a full appreciation of them as an essential element of free public

education, worthy to be placed along side of the museum and the school-room, and supportable by general taxation. There is now a general recognition of the need and value of public libraries and supplementing the insufficiency of the school in the adequate preparation of the child for the privileges and duties of life. Only by the continuous exercise of the powers developt in the school can they be conserved and increast. Teachers will constantly find themselves in closest relationship with libraries as allied educativ factors. Also along with the tendency in education away from the mere memorizing of a few text-books teachers are recognizing the need of libraries connected in some way with schools whereby there may be realized the higher ideal of education in which each growing member of society becomes intellectually socialized, i. e., conversant with, and participant of, the higher life of the race as crystalized in the form of books. To this end distinctly school libraries are being establisht, and teachers are frequently called upon to add the duties of librarian to other daily tasks. Therefore it is desirable that each teacher should have some library training in order effectivly to accomplish what may be of great educational value.

1. In response to this need there is offered in the Fall Term a course in Library Science, in which information will be given concerning the formation of libraries, the equipment with necessary furniture, the selection and purchase of books, the mechanical preparation of them previous to placing on shelves, the making of proper accession records, the classification and cataloging of books, and provision of facilities for their use. Theoretical instruction

will be supplemented as far as possible by practical experience in all elements of the work. This will include activity in the reference department, by giving assistance to readers in the discovery of desired material by means of catalogs and indexes, by the use of reference books, and by the keeping of records for the lending and return of books.

As a practical aid in library work, the student is given instruction in Library Handicraft, in order to give a knowledge of the process through which material must go before it is placed in the hands as a book.

General handicraft: Pamphlet boxes, library card trays, note book covers, picture mounting, *passe partout.*

Bookbinding: History of bookbinding, study of different fine bindings, choice of materials, work in collating, sewing, casing, rebinding, making of portfolio, loose leaf cover, magazine cover, and scrap book.

Designing: Lettering, original book covers.

2. For those who for any reason wish to make a more serious study of Library Science and Administration, a special course is offered, such that a high school graduate may complete the work in two years, or a graduate of the Normal School may complete it in one year. When the course of study is satisfactorily completed, the student is granted a special diploma from the Library Department. The requirements for graduation are:

Prerequisits:

Latin: 1 year.

German: 2 years; or German, 1 year and French 1 year.

Normal course:

English: Courses 1, 2, 3, 4, and three electivs.

Psychology: Courses 1, 2.

Reading: Courses 1, 2.

Art: Courses 1, 2.

Physical Education: Courses 1, 2, 3, 4, 5, 6, or 7, 8, 9, 10, 11, 12.

Library Science (including actual practice): Three hours per day for two years, or the equivalent.

The course in Library Science will undertake more thoroughly the work outlined in Course 1, and will include the discussion of problems in library economy and administration. There will be ample opportunity for practical experience, assuring sufficient training to enable the student to assume control of a small library.

DEPARTMENTAL DIPLOMAS.

The following special departments of the Normal School have been establisht: *The Department of Manual Training, The Department of Domestic Science, The Department of Modern Languages, The Department of Music, The Department of Art, The Department of Physical Education, The Kindergarten Department, Library Department.* Each of these special departments has a special course of study so arranged that a high school graduate

may complete the work in two years, or a graduate of the Normal School may complete it in one year. When the course of study of any department is satisfactorily completed, the student is granted a special diploma from that department. These special diplomas are not identical with the regular normal diploma, tho of equal grade with it. The courses follow below:

DEPARTMENT OF MANUAL TRAINING.

REQUIREMENTS FOR GRADUATION.

Manual Training: Courses 1, 2, 3, 4, 5, 6, 7, 8.
English: Courses 1, 2, 3, 4.
Art: Courses 1, 2.
Psychology: Courses 1, 2, 3.
Pedagogy: Course 1.
Education: Courses 1, 2, 3.
Physical Education: Courses 1, 2, 3, 4, 5, 6, or 7, 8, 9, 10, 11, 12.
Teaching: Three terms.

DEPARTMENT OF DOMESTIC SCIENCE.

REQUIREMENTS FOR GRADUATION.

Cooking: Courses 1, 2, 3, 4, 5, 6.
Sewing: Courses 1, 2, 3, 4.
Household Science: Courses 1, 2, 3.
Chemistry: Courses 1, 2, 3, 6.
Biology: Course 1.

English: Courses 1, 2, 3, 4.

Psychology: Courses 1, 2, 3.

Pedagogy: Course 1.

Education: Courses 1, 2, 3.

Physical Education: Courses 1, 2, 3, 4, 5, 6, or 7, 8, 9, 10, 11, 12.

Teaching: Three terms.

THE DEPARTMENT OF MODERN FOREIGN LANGUAGES.

Students not offering the high school courses in German or French for admission will be required to first complete this tintroductory work before entering upon the professional courses. (See 1, 2, 3, 4, 5, 6, 7, 8, 9.)

The following courses in other departments are prescribed for all students:

English: 1, 2, 3, 4.

Psychology: 1, 2, 3.

Pedagogy: 1.

Education: 1, 2, 3.

Physical Education: 1, 2, 3, or 4, 5, 6.

Teaching: Three terms.

For the departmental diploma in German are required: German: 10, 11, 12; 13, 14, 15; or 16, 17, 18; 19, 20; 23, 24, 25;

Recommended: English 8, 9, 10.

For the Normal College Diploma in German are required: German: 10, 11, 12; 13, 14, 15; or 16, 17, 18; 19, 20; 21, 22; 23, 24, 25;

Recommended: French (introductory courses); English 10, 11, 12; Latin (introductory courses).

For the diploma in French are required: French: 10, 11, 12; 13, 14, 15; 16, 17;

Recommended: German (introductory courses); English 8, 9, 10, Latin (introductory courses).

DEPARTMENT OF MUSIC.

REQUIREMENTS FOR GRADUATION.

Music: Courses 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.
English: Courses 1, 2, 3, 4.
Psychology: Courses 1, 2, 3.
Pedagogy: Course 1.
Education: Courses 1, 2, 3.
Teaching: Three terms.

DEPARTMENT OF ART.

REQUIREMENTS FOR GRADUATION.

Art: Courses 1, 2, 3, 4, 5, 6, 7, 8.
Manual Training: Courses 1, 2.
English: Courses 1, 2, 3, 4.
Psychology: Courses 1, 2, 3.
Pedagogy: Course 1.
Education: Courses 1, 2, 3.
Physical Education: Courses 1, 2, 3, 4, 5, 6, or 7, 8, 9, 10, 11, 12.
Teaching: Three terms.

DEPARTMENT OF PHYSICAL EDUCATION.

REQUIREMENTS FOR GRADUATION.

Physical Education: Courses (for women) 1, 2, 3, 4, 5, 6; (for men) 7, 8, 9, 10, 11, 12; (for both) 13, 14, 15, 16, 17, 18, 19.

English: Courses 1, 2, 3, 4.
Psychology: Courses 1, 2, 3.
Biology: Course 1.
Pedagogy: Course 1.
Education: Courses 1, 2, 3.
Teaching: Three terms.

KINDERGARTEN DEPARTMENT.

REQUIREMENTS FOR GRADUATION.

Kindergarten: Courses 1, 2, 3, 4, 5, 6.
English: Courses 1, 2, 3, 4.

Reading: Courses 1, 2.
Art: Courses 1, 2.
Music: Courses 1, 2.
Manual Training: Course 1.
Psychology: Courses 1, 2, 3.
Pedagogy: Course 1.
Education: Courses 1, 2, 3.

Teaching: Three terms in Kindergarten Department and one term in primary grade of Training Department.

LIBRARY DEPARTMENT.

For statement of requirements for graduation see page 106.

FACULTY OF TRAINING DEPARTMENT.

ZACHARIAH XENOPHON SNYDER, Ph. D., President.

EDUCATION.

DAVID DOUGLAS HUGH, A. M., Superintendent of Training Department.

ROYAL WESLEY BULLOCK, Principal of High School.

CHARLES WILKIN WADDLE, Ph. D., Assistant Superintendent of Training Department, Training Teacher —Grammar Grades.

ELIZABETH HAYS KENDEL, Pd. M., Training Teacher—Grammar Grades.

DORA C. LADD, Pd. M., Training Teacher — Primary Grades.

BELLA BRUCE SIBLEY, Pd. M., Training Teacher—Primary Grades.

ALICE M. KRACKOWIZER, B. S., B. Ed.

JAMES WIDDOWSON, A. B.

SUPERVISORS.

JAMES HARVEY HAYS, A. M., Latin and History.

LOUISE MORRIS HANNUM, Ph. D., English and Literature.

ARTHUR EUGENE BEARDSLEY, A. M., Biological Science.

WILL GRANT CHAMBERS, A. M., M. S., Observation.

FRANCES TOBEY, Reading.

Richard Ernesti, Art.
Eleanor Wilkinson, Domestic Science.
Samuel Milo Hadden, Pd. M., Manual Training.
H. W. Hochbaum, Nature Study.
Francis Lorenzo Abbott, A. M., Physical Science.
Abram Gideon, Ph. D., Modern Foreign Languages.
William Kennedy Stiffey, Music.
George Washington Barrett, M. D., Physical Education.
Gurdon Ranson Miller, Ph. B., History.
L. A. Adams, Nature Study and Zoology.

THE TRAINING DEPARTMENT.

IMPORTANCE OF A TRAINING DEPARTMENT.

A training department has long been regarded as an essential part of the equipment of a normal school. The work of this department is the center of interest in all the activities of the larger institution with which it is connected. The problems it presents intensify the interest in every other department, and upon the solution of these problems should be focust the academic and professional training of all members of the school. It is essential, therefore, that every teacher and pupil should be brought into the closest possible relations with the work of this department, and should enter into its activities in a spirit of hearty coöperation.

ORGANIZATION.

The organization of the Training Department of this Normal School is intended to facilitate this coöperation. for the accomplishment of this purpose all grades are represented, from the kindergarten to the high school inclusiv. These grades are directly in charge of training teachers and their assistants. The heads of departments in the Normal School, moreover, assist in the teaching of their own subjects in the Training School. This relation of departmental and training teachers is not intended to destroy the spontaneity of the latter, but to secure for the work of this department both the broader knowledge of the specialist and the practical experience and professional insight of the training teacher. This interaction of different persons concerned with the work tends also to keep alive a healthy interest both in the advancement of knowledge along special lines and in the practical problems of school organization and methods of instruction.

The Normal School student comes into contact with the work of this department both in his Junior and Senior years. In the former he spends two hours a week in the observation of the teaching of the children in the Training School. These observations are conducted in a systematic manner in connexion with the Junior course in psychology and pedagogy. Each observation is in charge of a teacher of the training or of an academic department, and is followed by a discussion of the merits of the lesson. In the Senior year the student teaches a lesson each day under the direction of the same teachers. The subject and the grade

are changed each term. In this way the student acquires during the course of the year considerable experience in the planning and teaching of lessons and in the management of children. By means of personal conferences and teachers' and supervisors' meetings the necessary criticisms are given. Consequently the young teacher is enabled to make more rapid progress in acquiring the art of teaching than when thrown solely upon his own resources in a school of his own.

THE CURRICULUM.

Among the more important problems that demand attention is the organization of the curriculum. The consideration of this subject has become all the more necessary on account of the many new subjects that have been introduced into the schools in recent years. These subjects now make so great a demand upon the time and energy of the child that the educational value of each new claimant to a place in the curriculum must be carefully scrutinized. No new subject should be added unless it satisfies two requirements: first, it must develop and enrich the inner life of the child; and, second, it must help him to become a more useful member of society. In proportion to its value for the realization of these purposes a subject is worthy of consideration.

Tested by these standards most of the newer subjects have fairly well establisht their right to a place in the curriculum, tho their relativ value is yet a matter of doubt. Accordingly, the subjects selected for the curriculum of the Training Department include all those now taught in the

more progressive schools. In addition to the three R's, literature, drawing, picture study, music, history, geography, nature-study, manual training, domestic science and art, and physical training are represented practically in every grade during at least a part of the year. This does not mean that the traditional subjects are eliminated, but they are taught more largely as tools for the mastery of the content subjects. The child has consequently a more natural motiv for studying the formal subjects, and can master them in a shorter time. The elimination of many useless details in such subjects as arithmetic, geography, and history also helps to make room for a larger variety of material.

CORRELATION OF SUBJECTS.

The main solution of the overcrowding of the curriculum, however, must be sought in a closer relation of the subjects taught. This is a problem of primary importance, and is a much larger question than merely the relation of the formal to the content subjects. The different subjects in the curriculum represent different aspects of the environment of the child, and in view of that fact should form an organic unity. They should be to the child simply interrelated parts of his experience. To accomplish this end there is very little differentiation of subjects in the primary grades. In the third and fourth grades the differentiation is more obvious, but the subjects are still taught in close relation to each other. In the study of primitiv, pastoral and agricultural life, for example, literature, art, reading, nature-study, arithmetic,

and industrial work are all very closely related because they all are organic parts of the life the child is living. In the upper grades a greater amount of differentiation occurs, but helpful relations between the subjects are still maintained. During the past year especially, considerable reorganization of the curriculum has taken place with a view to bringing the subjects into more organic relations with each other. While this work is not wholly completed, a marked improvement in this direction has been effected.

METHODS OF INSTRUCTION.

In the work of instruction the self-activity of the child is considered of paramount importance. Hence a great deal of emphasis is placed upon the various modes of expression, as oral and written language, drawing, painting, making, modeling and dramatic representation. Industrial work is given a prominent place in the curriculum. This is intended to enable the pupil to secure a more intelligent understanding of the subjects he is studying by affording him more natural conditions for mental activity. All subjects are approacht, as far as possible, from the functional point of view. Uses and activities are considered before structure. This is true both in subjects that deal with natural phenomena, as nature-study and geography, and in humanistic subjects as literature, grammar, and reading. Thus the aspect of the subject which elicits the strongest interest of the child and calls forth the greatest activity is approacht first.

THE PROGRAM.

The program of studies in the Training Department has of necessity to be governed in part by that of the Normal School. It has been found possible, however, so to adjust the two programs that no serious inconveniences result to either. While in general the forty-five minute periods of the Normal School are observed in the Training Department, in the lower grades two or more lessons are given during this time. In the higher grades one subject as a rule is taken up during this period, but as far as possible ten or fifteen minutes of this time is devoted to a study of the lesson. The length of the lesson can, consequently, be adjusted to the needs of the pupil. The morning hours as a rule are devoted to the more difficult and abstract subjects, while the later hours of the day are occupied chiefly with industrial work, nature-study, drawing and other studies that admit of a greater amount of muscular activity.

THE HIGH SCHOOL.

The High School is an integral part of the Training Department, and, like the Elementary School, offers opportunity for the training of student teachers. It differs very considerably in its organization from schools that are intended primarily to fit young people for college. This is manifest in the more generous provision for electivs, in the dominant character of the courses that are offered, and, to some extent, in the methods of instruction. Less emphasis is placed upon the traditional subjects of the preparatory

school, taught chiefly for their disciplinary value, as the formal study of mathematics and the classics, while more value is attached to subjects that are directly helpful in fitting young people to become intelligent members of society. Accordingly, such subjects as social economics, industrial history, commercial geography, household science and art, applied physics, and various forms of manual training are given much attention. The so-called culture subjects are not neglected. Literature, history, and art occupy a prominent place in the curriculum. While considerable liberty is allowed in the choice of electivs, students are required to choose the larger part of their studies from a few groups of closely related subjects. In this way liberty of choice on the part of the pupil is not incompatible with a systematic organization of the subjects pursued. For examples of such groups of studies see the High School curriculum on pages 157-161.

THE KINDERGARTEN.

The kindergarten, like the High School, is an organic part of the Training Department. It is intended that the transition from the kindergarten to the first grade shall be as easy and natural as that between any other two grades. The work of the kindergarten is open to the observation of students during the Junior year, just the same as that of any other part of the school. Students specializing in the kindergarten teach one term in the primary grades in addition to teaching thruout the year in the kindergarten. In this way a closer relation is establisht between the kindergarten and the primary grades.

LITERATURE AND ENGLISH.

In accordance with the effort which, as explained elsewhere (see introduction to Training School Department), has been made during the past year to bring all subjects into unity thru the relation to the life of the child, the English department has as far as possible subordinated its more subjectiv scheme of development to the conception of educational evironment found practicable in correlating the different subjects of the curriculum. It is intended that a specially close relation shall exist between the material used in History and that used in English.

Among "the different aspects of the environment of the child," it is the ideal and spiritual, not the factual, which are properly presented thru the artistic story. Since, then, only the need for treatment which reaches the imagination and the emotions properly engages the department of literature, the handling of material adapted to the general purposes of the curriculum will be, especially in the lower grades, divided between the History and the English department according to the dominant interests to be served. It will accordingly be understood that whatever subject-matter is taken over by the department of literature will be presented, not in mere chronicle, nor, except for needful transition and interpretation, in exposition, but in appropriate literary form—artistic story, poem, or drama. When, as often happens in the lower grades, pieces are not to be found which present the ideal aspects

of the material to be used in a manner suitable to the child, pupil teachers are encouraged and aided to construct such pieces, arranging, working over, and illuminating the factual matter until the desired impression is attained. This characteristic function of seeking to realize in appropriate forms the feeling elements of experience does not, however, prevent the English department from attempting to develop thru structure, close motivation, and the various aspects of form, those subtler intellectual activities for which the appreciation and study of literature has always afforded the most perfect training.

A constant factor of all English work is composition, chiefly oral in the lower grades, the effort being to develop more individual and constructiv features as pupils gain in the power to embody the more significant features of their own experience. The impulse to draw and to make dramatic representation is encouraged for vivifying and adding variety to self-expression. The aid given by the study of form is afforded by oral development of the paragraph from the third grade, by attention to the function of the steps of the narrativ, and thru constant emphasis on the need for unity and close connexion. In this part of the work, grammar facts and rhetoric facts are interrelated and taught from the standpoint of their use as tools for more adequate expression. While grammar is thus nowhere taught for its own sake, the effort of mastering English syntax as a vehicle of expression is aided, from the fifth grade on, by some systematic instruction in the structure and types of the sentence and in the common form of words as used in the sentence.

FIRST YEAR.

Purpose: To enrich the child's participation in the primary human experiences that center in home by presenting these in simplified form thru the life of nature and thru the instincts and activities of birds and other creatures.

1. *The Outdoor Home:* The conspicuous objects and forces of nature—sun, moon, winds, rain, trees, flowers—presented in a half animistic, half personified aspect.

2. *Bird and Other Animal Homes:* Stories of seeking the home-spot, building, adapting the home to the young, providing food, guarding and teaching the little ones; of bird language, of coöperation between animals and men, of change of home (migration).

SECOND YEAR.

Purpose: To promote natural sympathies by presenting in somewhat idealized form those aspects of primitiv life which best show fundamental and simple human experience.

Primitiv Human Homes: An attempt to find more emotional expression (artistic story, song, dance, perhaps adaptation of primitiv ritual) for the chief phases of primitiv domestic, industrial, and social life.

THIRD YEAR.

Purpose: To present in attractive form the more idylic phases of pastoral and agricultural life; to show the entire course of development of a simple personality unfolding under these primitiv conditions.

1. Pastoral stories from the Bible; tales constructed from legends and incidents of early agricultural life in Colorado.

2. Longfellow's "Hiawatha," adapted as an epic story for children.

FOURTH YEAR.

Purpose: To supplement the presentation of Greek and Northern child life in charge of the History department by giving special impressions of the characteristic feeling of each people for beauty and mystery, and for the life in nature.

1. Greek myths.
2. Norse myths.
3. The *Niebelungen Lied* centered around the personality of Siegfried, and arranged to present a unified story told in epic detail.

FIFTH YEAR.

Purpose: To lead the children to participate in the growth of the ideal of manhood from the "invincible fighter" to the "chivalric statesman," and to see some phases of this ideal working into imperfect expression in history; this purpose carried out by more expository setting and connexion of stories, and by a slight historical background.

1. The Jomsviking.
2. Beowulf.
3. King Arthur and His Round Table.
4. The Crusader.
5. The Puritan Warrior.

SIXTH YEAR.

Purpose: To develop feeling for the deeds and ideals of the heroic individual as a part of the epic life of the whole.

Vivid sketches of the immigration, establishment, rise, and greatest national achievement of three remarkable peoples; development thru these, nation stories of the characteristic qualities and ideals of each people, and the expression of these in the folk-epic of each.

1. The Greeks—Iliad.
2. The Romans—Æneid.
3. The Norman French—Story of Roland.

SEVENTH YEAR.

Purpose: To lead pupils to trace the relation between the traits and development of a particular author (Scott) and the purpose of his books; to add to the interest already gained in the relations between individual and nation a sense of the way in which that relation is vivified by a writer with a strong feeling for the romance of the past; to give training in interpreting the narrativ of stirring action, and in seeing wholeness of meaning in the braided threads of a complex story.

1. *Tales of a Grandfather*—showing the framework of Scott's early acquaintance with the relations between England and Scotland, and of that knowledge of mediæval life in those countries which he had employed so effectivly in his novels.

2. *Ivanhoe*—the setting of the book carrying on the interest in the English nation gained in the last term of the preceding year (see Story of the Norman French, sixth year).

3. *The Talisman* or some poetical work of Scott.

EIGHTH YEAR.

An introduction to American literature: more distinct study of periods of writing as reflecting both the elements of individual experience and the larger phases of the people's change and development. The heroic age of America as compared with that of the people already studied (grade 6). The national period represented by Snow Bound, The House of Seven Gables, and certain stories and lyrics.

READING.

The course in reading aims primarily to supplement the instruction given in the content subjects, such as history, literature, geography and nature-study. It follows, therefore, that reading is taught as a means of obtaining facts not possible to be got at first hand, and of intensifying the experiences narrated in history and literature. While no strict correlation is attempted, as can be seen by a comparison of the courses, yet in the longer literary wholes used in reading other branches of study are used for apperceptiv background. The sustained effort necessary for the mastery of the words is brought about largely by arousing a desire to know the content of a story rather than by depending upon the usual formal, mechanical drill.

Libraries in each room are designed to furnish attractiv books with which to start the reading habit. This extensiv reading also helps to provide the necessary visual training for fixing the symbols. The class recitation is largely given over to realizing the thought and feeling by means of vocal and bodily expression. Festivals, birthday celebrations of poets, artists, and statesmen, and other special programs are also occasions for acquiring freedom of expression. Pupils compose and act simple dramatizations, make speeches, debate, and hold conversations in a natural, easy manner. Performances are used only as a means of intensifying the pupils' experiences, not for the sake of show. Emphasis is placed upon memorizing the literature which is especially used for expression work, and upon dramatization thruout the grades.

Grades 1 and 2.

Purpose: To enable the child to relate his thoughts to written or printed symbols, and to master these symbols by using all his senses, emotions, and dramatic instincts.

Material: Lessons composed by the pupils based upon nature excursions, classic stories told by the teacher, home experiences, construction work, music and pictures; rimes, jingles, and simple poetry; The Thought Reader; The Tree Dwellers; The Cave Men; selected lessons from many other readers.

Grades 3 and 4.

Purpose: To lead the child to pronounce unfamiliar words by the use of diacritical marks and syllabication; to

help him to live thru a narrativ and impersonate the different characters with intelligence; to intensify his experiences and his memory of the symbols by combining making, drawing, modeling and dramatic representation with the oral reading.

Material: Much material should be read, rather than less material studied intensivly; the biographies of artists whose pictures the children know; Hiawatha; the story of David; lessons from Roman history:—Cincinnatus, Regulus, Cornelia; Grecian myths; poetry containing vivid imagery and action; e. g. The Hunting Song by Scott.

Grades 5 and 6.

Purpose: To fix the habit of curiosity to know the pronunciation and meaning of unfamiliar words; to assist pupils to get facts from a book in an organized way; to deal with the true causes of good expression in an effectiv way, including work for earnestness, tone color, emphasis, phrasing, and impersonation.

Material: Supplementary history reading including Pioneer Americans (McMurry), and Four American Pioneers; King Arthur and His Knights (Radford); Beowulf; The King of the Golden River (Ruskin); Dramatic Poems: e. g. The Inchcape Rock; Knight's Chorus (Tennyson); Short Poems From Great Poets.

Grades 7 and 8.

Purpose: To train children to get information from books silently, rapidly, accurately, systematically, and independently; to extend their reading interests to many

good biographies, histories and novels; to make the oral reading of poetry, dramatic narrativ, description and orations a genuin pleasure.

Material: Selections from Ulysses (Lamb), and Ivanhoe; The Nürnberg Stove; Rip Van Winkle; Evangeline; Hervé Riel; The Revenge; Lochinvar; How They Brought the Good News from Ghent to Aix; The Owl Critic; Psychological Development of Expression, Volume I; Lincoln's Gettysburg Speech; The New South; Bannockburn; The Charge of the Light Brigade; Patrick Henry's Speech: The Call to Arms.

MUSIC.

FIRST YEAR.

Songs and exercizes from teacher's pattern. The production of the third and fifth of any key tone and their octaves. Accent and sign for the same. The singing and writing of exercizes from memory. The pointing of phrases on modulator after teacher's pattern. The indication of the same by manual signs. Primary and secondary forms. The beat divided into halves; into quarters. Two-part exercizes from manual signs. Ear exercizes. Exercizes sung to a given syllable. Daily practise with manual signs and modulator. Notation necessary to the foregoing.

SECOND YEAR.

The dominant chord. The singing of every interval possible with the tones of the tonic and dominant chords.

Songs and exercizes sung, written, pointed from modulator, and indicated by manual signs, from memory. Two-part rounds. Exercizes and songs beginning with half-beat tones. The beat-and-a-half tone. Two-part songs. Daily use of ear exercizes, manual signs and modulator. Familiarization of pupils with rythm employing half-beat and quarter-beat tones.

THIRD YEAR.

The sub-dominant chord and all new intervals possible with tones of the same. Melodramatic resolution of tones. Motion of parts. Two-part singing. Simple dissonances. Singing, writing, pointing, and indicating of the half-and-three-quarters beat; the two-quarters-and-a-half beat; the three-quarters and quarter beat; the triplet. Given the key tone, to recognize and write any exercize or song involving the foregoing elements. Ear exercizes daily.

FOURTH YEAR.

Meaning of key and time signs. Ear exercizes daily. Chromatic seconds. The reproduction of easy songs from teachers singing. Three and four-part rounds. Two-part songs. Transition to first remove. Given C, to find any key. The reproduction of the modulator as far as four sharps and four flats. Part pulse dissonances. Daily use of modulator and manual signs.

FIFTH YEAR.

Daily use of ear exercizes, modulator and manual signs. Quarter-beat rest. Syncopations. Chromatic tones

taken by leaps. Sharp four and flat seven as chromatics. Voice leadings indicating transition. Chromatic resolution.

SIXTH YEAR.

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

SEVENTH YEAR.

The writing of the relativ minor to a given major phrase or section, and the singing of the same. Three-part songs and exercizes. The modulator by tone. Knowing the common chords of the major and minor mode, and also the dominant seventh and supertonic seventh of both modes. Daily use of ear exercizes and modulator.

EIGHTH YEAR.

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

Note.—This outline is intended to give the natural order in which the elements of music are acquired and the time necessary to their acquirement by the average pupil under good teaching. It is a guide to the teacher as to the order of presentation, however, rather than as to the time necessary. Technical exercises are to be incidental to singing.

HIGH SCHOOL.

Pupils who have had no previous training 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 are 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 advantages in music as advanced as their preparation may warrant.

ART.

In no department are there such possibilities of correlation with the other studies of the school curriculum as in the department of art. While the general purpose of the work of this department is to refine the taste of the pupil, to intensify his appreciation of the beautiful, and to disciplin his powers of observation, this training is best secured in connexion with the objects the child comes in contact with in his daily life. Hence drawing, modeling, painting and picture study are used to illustrate the subject matter of the other studies, the plants and animals in nature-study, scenes from literature and history, land and water forms in geography, etc. The study of design is closely correlated with industrial work. In these ways not only is the esthetic nature of the child developt, but the study of art has been used to increase his interest in various phases of his environment. The following outline

naturally omits much of this correlated work, as the sequence in this case depends very largely upon the subject-matter of the other studies.

ARRANGEMENT OF TOPICS.

GRADES 1, 2, 3.

Nature Drawing.

Ideas of growth in leaves, flowers, common animals and birds, developt and embodied in typical forms, thru memory drawing.

Color.

Natural order of colors as found in the spectrum, washes of pure color; the three primary colors; picture study.

Pictorial Drawing.

Clear images of common objects, as house, barn, pond, path, etc., developt thru memory drawing; practise to fix ideas of direction and proportion; illustrativ drawing.

Structural Drawing.

Free movement; circles; direction of lines and perpendicular relations; paper folding; practise upon elementary drill forms; memory drawing of geometric figures and application; paper cutting; abstract curves.

Decorativ Drawing.

Arrangement of drawing upon sheet for balanced effect; rythmic arrangement of movable units derived from

animal and plant forms; regular arrangement of units in borders, surfaces, etc.

GRADES 4, 5, 6.

Nature Drawing.

Beauty of line in growing forms; balance of masses; radiation of parts from center of growth; characteristic tree shapes; the growth from seed to seed thru the cycle of the year.

Color.

Color scales of three tones between white and black; color scales of standard colors and intermediate tints and shades; harmonies and contrasts of color.

Pictorial Drawing.

Representation of proportions and of foreshortened surfaces, as seen in leaves, flowers, etc.; study of pictures for illustrations of effects; elements of good pictorial arrangement; principles of foreshortening; memory drawing of foreshortened forms in any position.

Structural Drawing.

Abstract curves; study of pleasing proportions and of adaptation of form to function; designs for objects involving but one view; beauty of curvature; design of simple objects involving one or two views; drawing to scale.

Decorativ Drawing.

Designs with geometric elements, embodying consistent measures; interpretation of leaf and flower forms into ornaments; study of principle of symmetry.

GRADES 7, 8.

Nature Drawing.

Beauty in details of growth; interpretation of natural forms into decorativ forms; interpretation of natural schemes of color into simpler decorativ schemes made up of a limited number of values and hues.

Color.

Study in masses of local and complementary colors in still life work; arrangements of color masses in landscapes.

Pictorial Drawing.

Principles of convergence studied from pictures and objects; memory drawing of type forms in any position; elements of pictorial composition; values; interiors; landscapes; composition in color.

Structural Drawing.

Study of working drawings to learn to read them; study of good examples of applied art; designs for common household utensils, furniture, etc., and for ornamental details; drawing to scale.

Decorativ Drawing.

Designs with abstract spots and with terms derived from plant forms, embodying flow and opposition of line and the other elements of harmony; applications in surface patterns, panels, rosettes, and in ornamental initials, enclosed ornaments, book covers, etc.

HIGH SCHOOL COURSE.

This course embraces all of the higher grade work and the execution of academic drawing, painting and clay modeling, and the study of perspectiv.

HISTORY.

The course in history begins in the first grade and continues thruout the entire elementary school course. During the first four years the supervision of the work is shared by the English department and the history department, thus creating a closer unity and correlation of the work of these departments.

In all primary classes the oral story method is followed exclusivly. In all intermediate classes the oral story method is continued, supplemented by class readings and individual library reading. In upper grades the amount of individual library reading increases, pupils reporting orally to class the results of their work.

The history course is planned to coöperate and correlate with the work of other departments at all possible

points of contact. This outline by reason of its brevity indicates only a few of these possibilities.

Grade 1.

Home life in relation to its environment is the general subject of the year's work. This consists of simple stories of child life at home, and the relation of that life to school and the community. It also includes stories of birds and animals.

Grade 2.

The general topic is primitiv human life,—the hunting and fishing period in the evolution of man. Selections are made from the history of cave dwellers, lake dwellers, and cliff dwellers. The material used is stories of the home life and activities of these peoples, the beginnings of human industries, the development of the use of tools and implements. The children dramatize many of the stories, and learn to make and use simple tools. These stories are made a basis for considerable work in drawing.

Grade 3.

In this grade the transition is made from early primitiv life to the more advanced stages of pastoral and agricultural life. Stories are told of early Aryan shepherd life, Bible pastoral life, and shepherd life in Colorado. These are followed by stories of early Aryan agricultural life, and Colorado farm and ranch life. This year offers opportunity for the study of wool industries, including the use of looms, and primitiv methods of agriculture. Much

of the subject-matter correlates readily with the beginnings of local geography, the study of domestic seeds, plant life, gardening, wild plants and animals.

Grade 4.

The work of this grade centers around the general theme of community life. Stories of Greek, Roman, and Germanic life are used, including in the last the migrations of the Saxons to England and the beginnings of English history. This material affords a basis for much correlated work in art, literature, manual training, and physical training.

Grade 5.

The history of the English people is continued in this grade, including the beginnings of American colonial life. The work of the year falls into three main divisions:

1. Stories from early English history.
2. Stories of the Crusades with special reference to England.
3. Stories of Puritan life in England, and the migration of the Puritans to America; life in early Massachusetts colonies; and plantation life in colonial Virginia; Spanish in the Southwest.

Emphasis is placed upon industrial life in the American colonies.

Grade 6.

American history continues thruout this year. This includes:

1. The Dutch and French in America,—Westward movements of the French; Marquette, Joliet, and La Salle. Westward movement of the English,—Boone; Kentucky and the Ohio valley.

2. Stories of the French and Indian wars; Stories of the Revolution.

3. Stories of the great westward migrations, west of the Mississippi river, with special emphasis upon commerce and transportation.

From the beginnings of the colonial period, the correlation of history and geography is constant and close.

Grade 7.

The work of this year consists of a study of European countries, mediæval and modern, with special emphasis on art and travel. The stereopticon is freely used, elementary lectures given, and readings assigned on all special topics. The principal countries studied are the following:

Great Britain,—its great cities, and scenes of historic, commercial, and industrial interest.

Germany,—the principal cities and the river Rhine.

Holland,—the people and their art.

Italy,—Rome, Venice, Florence.

Switzerland,—scenery and industries.

France,—the people, the revolution, art, industries, Paris.

Grade 8.

A review and completion of American history by textbook and library study, with special emphasis upon biography.

GEOGRAPHY.

The general purpose of all the work in geography is to lead the child to observe and interpret geographical phenomena and to know important geographical facts.

Grade 3.

The geography work of the third grade is very simple and hardly to be distinguisht from general nature study. Thru simple, informal studies of the food products of the immediate locality—sugar, flour, beef, mutton—of common building materials, of materials for clothing, etc., an effort is made to give the pupil some idea of the relation of these products to the life of the people of the community, and to interest him in the lives of people of other countries. Simple observations are made of the direction of winds, of time of sunrise and sunset; and many simple facts of this kind are acquired.

Grade 4.

(First half of year.)

In the fourth grade the work of the third grade is continued; and with the aid of relief maps, political maps, pictures, etc., the pupil is given a general acquaintance with the physical and political divisions of North America.

Grade 5.

(First half of year.)

In the fifth grade the pupil studies Europe, Asia, South America, Africa and the Philippine Islands, much

as he studied North America in the fourth grade, but in a somewhat more advanced manner.

The work includes a study of such industrial topics as mining, farming, manufacturing, where each is most carried on, and why, transportation (river systems, lakes, seas, etc., studied in this connexion); of such political topics as centers of population, government, and political divisions (very elementary), and of such physiographical topics as the courses of winds, the planetary belts—trade winds, etc.—the effects of warm and of cold winds.

Students build relief maps of sand and of paper pulp.

GRADE 6.

(First half of year.)

In the sixth grade the study becomes more formal and systematic. The following is an outline of the work:

North and South America—

I. Relief maps made in connexion with study of topics.

II. Industrial topics.

A. Industries of mountain regions.

1. Mining: coal, iron, gold, etc.
2. Lumbering.

B. Industries of plains.

1. Stock raising: cattle and sheep.
2. Agriculture.

C. Industries of prairies.

1. Agriculture: corn, wheat, other grains, stock raising and fattening, and fruits.
2. Mining: coal, iron, copper.
3. Lumbering.

D. Industries of coast plains.

1. Agriculture: cotton, rice, sugar and fruit.
2. Fisheries: cod, salmon, mackerel.

III. Centers of commerce, transportation, manufacturing: Pittsburg and Pueblo, Chicago Omaha, Kansas City, New Orleans, Galveston.

IV. Climate: Causes of seasons, etc.

GRADE 7.

(First half of year.)

Careful study of Europe; general review.

NATURE STUDY.

The *Aim* or *Purpose* of nature study is to broaden and deepen life by putting the individual into touch and sympathy with his environment, or, at least, a part of his environment often neglected. In doing this, latent interests are developt and new ones created, and both are made permanent. Nature study aims to educate according to

Third and Fourth Grade—Nature Study.

correct principles, and it is believed that its influence tends directly and wholly toward developing a rational human being. Because of her great influence upon man and her close relation to God, Nature should be well known to all; and as a foundation for a proper understanding of the problems of all ages, nature-knowledge is of the most vital kind; but it is in the broadening and deepening of every-day life thru interest in and sympathy for Nature that results are most to be hoped for.

The *Method* of studying nature emphasized in the Normal School is that of personal investigation. In no subject should "learning by doing" receive more emphasis. The most skillful teacher is the one who, while securing a proper amount of progress in the attainment of knowledge and interest, gets the most work done by the pupils themselves. The teacher should himself study nature, but *with* the children, nor for them. Most of all, the teacher needs to avoid the habit of getting information, always uncertain, from books and passing it on to the children. The excursion by teacher and pupils, or by individuals, is the most successful device thus far discovered for securing the study of nature by personal investigation.

Hence the preëminent *Source* of nature study must be Nature herself. "Nature studied first hand" is the foundation motto of the whole present movement. The minor, supplementary sources, too often made the main ones, are books, specimens, pictures and persons. These have their value when properly used, but cease to do harm instead of good only when *made supplementary.*

The *Scope* of the present nature study course consists entirely of lessons with animals and lessons with plants. Each kind of plant and animal is studied as an individual, and the child is expected to learn to know it by sight and to become acquainted with those things about it that are most adapted to interest him at his particular stage of development; those that are, in other words, most closely correlated with the child's life.

The lessons with animals are devoted to such animals as are found in the vicinity of the school and town and are thus accessible for first-hand study; and to those others which, while not accessible, are yet of such importance as to deserve study from the supplementary sources. These animal lessons relate to domestic animals, birds, mammals, fishes, insects, and a number of other miscellaneous animals.

The lessons with plants are designed not only to get the child to know plants, but in addition, to acquaint him with methods of rearing them and to encourage him to grow them. To this latter end, an extensiv school garden is maintained, in which all grades, from the kindergarten to the eighth inclusive, grow flowers, vegetables, shrubs, fruits and trees. It is planned to build up an orchard and to plant a large part of the campus with trees grown by the children themselves. Designated spring and fall plants are studied, and special lessons are had upon the plants grown in the school garden, and upon any incidental plants or animals connected with these, such as weeds, insect pests, birds, and so forth.

THE COURSE OF STUDY.

(As followed by each grade.)

I. *Lessons with Animals*—
   1. Domestic animals—as listed.
   2. Birds—as listed.
   3. Mammals—as listed.
   4. Fishes—as listed.
   5. Insects—as listed.
   6. Miscellaneous animals—as listed.
   7. Special work—as outlined and as selected and approved.

II. *Lessons with Plants*—
   1. Spring flowers—as listed.
   2. Fall flowers—as listed.
   3. School garden work.
      (a) Vegetables—as listed. Rear and study.
      (b) Sweet herbs—as listed. Rear and study.
      (c) Flowers—as listed. Rear and study.
      (d) Trees—as listed. Rear and study.
      (e) Fruits—as listed. Rear and study.
      (f) Shrubs—as listed. Rear and study.
   4. Flowerless plants. Study as outlined.
   5. Special work—as outlined and as selected and approved.

III. *Special and Additional Work*—not comprehended above.

The *Results* of the nature study work hoped for, and that it is expected will be realized from the course, are:

(1) a wide *acquaintance* (comparativly) with plants and animals, both wild and domestic; (2) a deep and activ *interest* in "seeing and doing" along the lines touched upon in the course; (3) a large stock of fundamental knowledge necessary to a proper understanding of present day problems; (4) loving and sympathetic contact with nature, resulting in a broader and deeper life.

ARITHMETIC.

The following outline of the arithmetic work is intended to indicate merely the scope of the treatment. In addition to this work, however, many practical applications of number are made in connexion with such subjects as nature-study, geography, manual training, and industrial history. In this way the child meets with natural conditions for the use of number, and learns to appreciate more fully the significance and value of the science. In the primary grades especially the number of facts are taught, for the most part, in connexion with the study of other subjects. In the intermediate grades much more emphasis is placed upon the scientific aspects of the work in order to secure a practical mastery of the fundamental operations of number. In the grammar grades considerable attention is paid to the use of number in connexion with the commercial and industrial activities of the community.

Grades 1 and 2.

(1) The natural number scale.
(2) The primary addition facts.
(3) Subtraction worked by addition.
(4) The primary multiplication facts.
(5) The corresponding division facts.
(6) Relations of foot, yard, inch; pint, quart, gallon; cent, nickel, dime, dollar; used primarily in illustrations.
(7) Length. (8) Area. (9) Volume.

Grade 3.

(1) Mastery of operations with integers. New facts especially.
(2) Decimals.
(3) Meaning and use of fractions, their addition, subtraction, and simpler cases of multiplication and division.
(4) Relations between fractions.
(5) Denominate number facts. (Used primarily in illustrations.)
(6) Length. (7) Area. (8) Volume.

Grade 4.

(1) Facility in operations with integers.
(2) Facile use of decimals.
(3) General meaning of fractions, and general use.
(4) General method of addition and subtraction of fractions,—work confined, however, to fractions in common use.

(5) Simpler cases of multiplication and division of fractions.
(6) Denominate numbers in common use. (Used primarily in illustrations.)
(7) Simpler multiplication and division by numbers of two places.
(8) Length.
(9) Area.
(10) Volume.

GRADE 5.

(1) Multiplication and division by numbers of three places.
(2) General methods of multiplication and division of decimals.
(3) Length.
(4) Area.
(5) Volume.

GRADE 6.

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

GRADE 7.

(1) Constructural and inventional geometry.
(2) Areas of parallelograms, triangles, trapezoids, etc., and circles.
(3) Volumes of prisms, pyramids, right circular cones and cylinders, spheres, etc.
(4) The Prismatoid.

GRADE 8.

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

MANUAL TRAINING.

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.

FIRST GRADE.

The work done in the first grade is entirely suggested by the subjects developt in the regular lesson along the lines of nature study, home, literature, industries, etc.

Below are a few of the notions that have been workt 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 connexion with the study of 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 connexion with the study of fruits. Sewing: the gathering of seeds to fill a cushion for the doll house. Basketry: the making of baskets of raffia, during the study of fiber, home work or Indian basketry.

SECOND GRADE.

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 house of any other material suggested by the children. The house may be built in connexion 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 pasteboard

house in connexion 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. 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. Bed room: bed and chairs of raffia, dresser of pasteboard, bowl and pitcher of clay. Parlor: chairs of various kinds, stand made of pasteboard, carpet of silkalin strips woven on loom, curtains of thin paper or cloth, people of pasteboard, dresses of cloth or tissue paper, hats of raffia.

After the house is put up, a fence should be made of bent iron or wire.

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 are 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, raffia, 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 connexion with the study of textils, looms of different kinds are described, and, if possible, the children are shown a loom in operation. After a general notion of a loom, its use, etc., the entire class make simple looms upon which they weave simple patterns. In the development of basketry, the different materials are explained of which baskets are made, their uses, etc. Afterwards a few simple baskets, or mats, of raffia, hemp, or any other suitable material are made.

FOURTH GRADE.

Simple working drawings of objects to be made. A series of objects is made 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 pen rack, stamp box woven of raffia, mat of raffia for ink bottle, letter box of wood to hold mail. Many other useful series are suggested during the year's work. During holiday seasons, presents of different materials may be made.

FIFTH GRADE.

A working drawing, showing the different steps in the construction of the object to be made, is markt 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.

Sixth Grade Manual Training Work.

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.

SIXTH GRADE.

With gain in mechanical skill comes more care in working out the details of plans to be followed. Encouragement is given to make apparatus useful in games, as boats, sleds and kites. During the study of the industries, water wheels, undershot and overshot, may be made. Other suggestiv models are camp stool, doll bed, bread boards, etc.

SEVENTH GRADE.

Working drawings, together with a development of design, with practise in the decoration of objects completed, including marketry, simple wood carving and bent iron work.

EIGHTH GRADE.

More advanced work along the same lines as those followed in the seventh grade, with more stress placed on the decoration and finishing, as stains, polishes, etc.

HIGH SCHOOL.

The work in the High School is entirely individual, each pupil being expected to work out his own design, preparatory to the constructiv work. The course in general consists of constructiv work, picture frames, chairs, taborets, stools, bookcases, tables, etc. Decorativ practise in designing, uses of ornament with a view of suiting the

decorating to the object to be decorated. Wood carving, marketry, staining and finishing are studied.

SEWING AND COOKING.

Grade 5.

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

Grade 6.

I. Review of former stitches.
Overhanding.
Bands.
Gathering.
Felled seam.
French seam.
Placket.
Aprons.
II. Elementary cooking.

Grade 7.

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

GRADE 8.

Cooking.

HIGH SCHOOL.

I. Suit of underwear, shirtwaist suit, study of material.
II. Cooking.

PHYSICAL EDUCATION.

HYGIENE.—GYMNASTICS.

The purpose of these courses is to secure health, improved bodily development, recreation, promotion of growth and functions, disciplin and attention. The means employed to these ends are play, games and sports, drill, gymnastics. The basis of efficiency in developing the physical condition is a proper understanding of the individual health. This understanding is accomplisht by the careful physical examination given at the beginning of each year. This investigation of the conditions of health, growth, and general and special development is carried on by a specialist, and forms a valuable aid in the direction of the child's instruction. All the influences that bear upon the preservation of the best physical conditions for the child are scrutinized and regulated as far as possible.

GRADES 1 AND 2.

Aim. Development of coördination, muscular and rythm senses. Emphasis of recreativ element. Development of spontaneous activity and attention.

Means. Use of imitativ games, exercize songs and stories, minute plays. Exercize of large fundamental muscle groups; running, skipping, simple marching, easy fancy steps, bean bag and ball tossing; imitation and musical accompaniment derive uniformity and later disciplin.

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

Grades 3 and 4.

Aim. Training and disciplin and attention and development of muscular coördination and control.

Means. Simple educational and Swedish gymnastics, by command; simple fancy steps; elementary marching tactics; and story gymnastics, which are given thru the medium of play. These natural movements of childhood give opportunity for muscular coördination, so highly desirable in all physical exercizes for children. Special attention is given to carriage and posture thru correctiv exercizes.

Grades 5 and 6.

Aim. Emphasis of development of disciplin. Relaxation from class work. Correction of posture and carriage. Improvement of general appearance of class.

Means. Swedish free exercizes. Fancy steps and marching. Military drill, with organization of company. Setting up exercize. Manual of arms with wands. Competitiv games. Field day sports.

At this period increased growth requires a large amount of carefully adjusted exercize. The respiratory and heart power should receive attention and be developt. The teacher must instruct, by precept, example and correction.

Grades 7 and 8.

Aim. In these grades individual conditions of growth and development receive especial attention. The teacher directs exercize to assist the formation of correct habits of posture and carriage, and to correct defectiv habits. Disciplin and orderly habit is still a direct aim.

Means. Free exercize, fancy steps, figure marching, dumb bell exercizes, Indian club drill, games and sports for the girls.

The boys will have military drill, with the organization of a regular company with officers, military "setting up" exercize, wooden dumb bell drill. In more advanced class work, there is required exercize on fixt apparatus in gymnasium, field and track sports outdoors, school fencing. The hygienic value of the relaxation of gymnasium games and exercize is fully utilized.

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

HIGH SCHOOL DEPARTMENT

HIGH SCHOOL DEPARTMENT.

ROYAL WESLEY BULLOCK, PRINCIPAL.

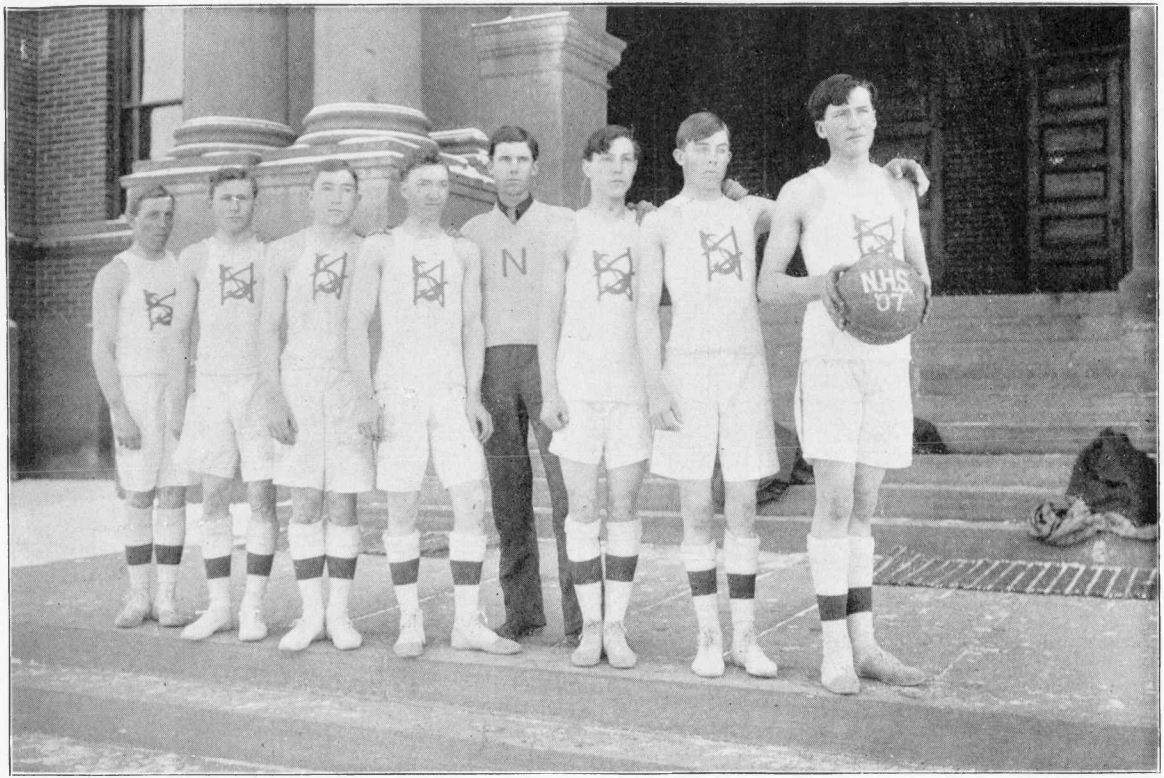
The High School Department of the Normal School offers an excellent opportunity for high school training free of tuition to those who have completed the eighth grade of a common school or its equivalent.

Students who hold an eighth grade county diploma are admitted without examination. All students entering the high school for the first time should bring some record of their previous work to facilitate their assignment to proper classes.

GENERAL NOTES.

The school year is divided into three terms of three months each. Tuition is free. Text books are furnisht by the school. A library fee of $2.50 per term is charged for the use of all books and library material. A deposit of $2.00 is required when the student enters, which is returned, less the value of any books lost or damaged, when the student leaves the school or at the end of the year. All high school students pay $1.00 per term athletic fee. All students who take sloyd, cooking, or sewing, pay $1.00 per term for material used.

High school students have full use of the laboratories, studies, library, gymnasium, and all equipment of the



Normal High School Basketball Team, 1906-7.

school on the same conditions as the normal students. A complete job printing plant has recently been added to the manual training equipment for the exclusiv use of high school students, giving opportunity for a limited number of students to learn the theory and practice of composition and printing.

The plan of government in the High School is designed to be such as will most fully develop the student's self control and make him socially a good citizen. Disciplin is maintained with the aim of securing equal rights for all and the greatest individual freedom consistent with the welfare of all. All students meet for morning exercizes at ten o'clock, and all report at their respectiv classes at the appointed hours. Vacant periods and study hours, may, with certain limitations, be spent at the discretion and judgment of the student. All students living in homes other than their own are under the general control of the school at all times. This supervision is designed to assure proper decorum at all times and in all places.

The Shakespearean Literary Society is organized, officered and controlled by the students. It meets weekly at 2:45 Friday afternoons.

There is a vigorous athletic association in the high school organized and maintained by the students.

The enrolment of the high school for the year 1906-1907 is 201.

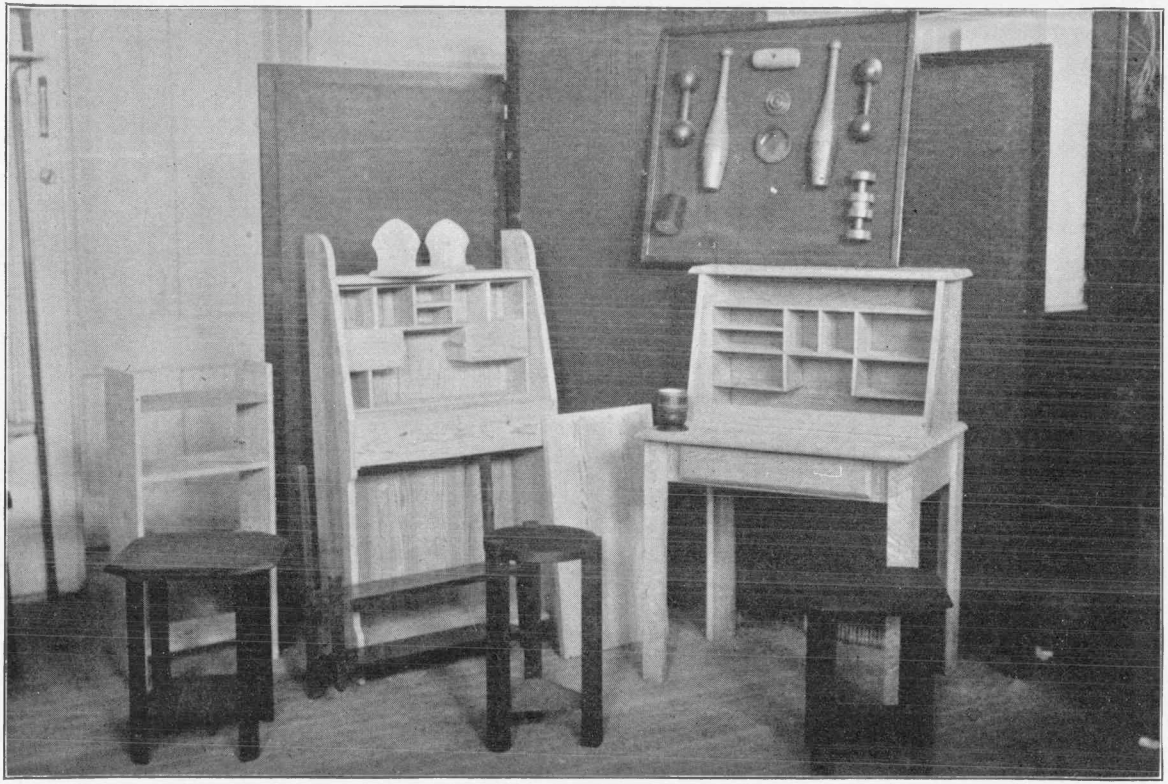
COURSE OF STUDY.

36 weeks in one year's work.
22 recitations per week required.
792 recitations in one year's work.
12 recitations count one credit.
66 credits in one year's work.
198 credits required for graduation.
"R" indicates required subjects, all others are electiv.

In order to take full work, the student must take all the required work of each year and enough electiv to make at least 22 recitations per week.

NINTH GRADE.

FALL TERM.	WINTER TERM.	SPRING TERM.
English .....5 R	Reading ....5 R	English .....5 R
Algebra .....5 R	Algebra .....5 R	Algebra .....5 R
Ancient History 5	Ancient History 4	Medieval History
Latin 5	Latin 5	Latin 5
German 5	German 5	German 5
Zoology 4	Zoology 4	Zoology 4
Mechanical Drawing 4	Pictorial Drawing 4	Designing 4
Music 4	Music 4	Music 4
Elementary Joinery 4	Elementary Joinery.....4	Advanced Joinery 4
Physical Training .....4 R	Physical Training .....1 R	Physical Training .....1 R



High School—Manual Training.

TENTH GRADE.

FALL TERM.	WINTER TERM.	SPRING TERM.
Reading ....5 R	English .....5 R	English ....5 R
Algebra 5	Algebra 5	Arithmetic 5
Civics 5	Civics 5	Civics 5
English History 4	English History 4	Modern History 4
Bird Study.....4	Taxidermy 4	Bird Ecology...4
Botany 4	Physiology 4	Botany 4
History of Commerce 4	Geography of Commerce ...4	Physical Geography 4
Latin 5	Latin 5	Latin 5
German 5	German 5	German 5
Sewing 4	Sewing 4	Textils and household art.
Wood Turning..4	Advanced Joinery	Advanced Joinery
Music 4	Music 4	Music 4
Pictorial Drawing 4	Mechanical Drawing 4	Decorative Design 4

NOTE.—Figures indicate number of recitations per week.

ELEVENTH GRADE.

FALL TERM.	WINTER TERM.	SPRING TERM.
English .....5 R	English .....5 R	Reading 5
Industrial History .....5 R	Industrial History .....5 R	Economics 5
Geometry 4	Geometry 4	Geometry 4
Latin 5	Latin 5	Latin 5
German 5	German 5	German 5
Cooking 4	Cooking and Dietetics.....4	Food composition and food values 4

FALL TERM.	WINTER TERM.	SPRING TERM.
Physics 4	Physics 4	Physics 4
Agriculture 4	Agriculture 4	Agriculture 4
Wood carving...4	Inlaying 4	Parketry 4
Printing 4	Printing 4	Printing 4
Music 4	Music 4	Music 4
Pictorial Drawing 4	Mechanical Drawing 4	Decorative Designing 4
Library Handicraft 4	Library Handicraft 4	Library Science 4
Physical Training .....1 R	Physical Training .....1 R	Physical Training .....1 R

TWELFTH GRADE.

FALL TERM.	WINTER TERM.	SPRING TERM.
English .....5 R	English .....5 R	Reading 5
Political Economy 5	Political Economy 5	Political Economy 5
History Modern Europe 5	History Modern Europe 5	History Modern Europe 5
Chemistry 5	Chemistry 5	Chemistry 5
Latin 5	Latin 5	Latin 5
German 5	German 5	German 5
Trigonometry ..5	Trigonometry ..5	Trigonometry ..5
Bacteriology ...4	Bacteriology ...4	Bacteriology ...4
Music 4	Music 4	Music 4
Art 4	Art 4	Art 4
Manual Training 4	Manual Training 4	Manual Training 4
Physical Training .....1 R	Physical Training.....1 R	Physical Training .....1 R

The regular course of the high school is three years in length, and students who finish this course satisfactorily receive the diploma of the school. A fourth year of work is offered in the twelfth grade for those students who wish to prepare for college or who, for any reason, wish to extend their course. For this year's work is given a special certificate showing the fulfillment of college requirements.

The arrangement of the program is such as to facilitate and to encourage the grouping of related subjects by the students when choosing their electivs. In this way a student may pursue some special line of work thruout his course, while taking the required work and some promiscuous electivs. Some of the suggested groups are as follows:

AGRICULTURAL GROUP.	MANUAL TRAINING GROUP.	INDUSTRIAL GROUP.
Zoology 3	Mechanical Drawing 1	History of Commerce 1
Botany 2	Pictorial Drawing 1	Geography of Commerce ...2
Biology 1	Designing 1	Physical Geography 1
Agriculture 2	Elementary Joinery 1	Business Arithmetic 1
Soil Bacteriology 1	Advanced Joinery 2	Industrial History 2
Chemistry 3	Wood Turning..1	Economics 1
	Wood Carving..1	
	Inlaying 1	
	Iron Work.....1	
	Printing 3	

DOMESTIC SCIENCE GROUP.

Mechanical Drawing	1	Designing	1
Pictorial Drawing	1	Sewing	2
		Household Art..	1
		Cooking	3
Chemistry	3		
Physiology	1		
Bacteriology ...	1		

NOTE.—Figures indicate number of terms the subject is given each year.

Similarly groups can be formed in History, Mathematics, Language, Physical Science, and the like, by consultation with the principal of the High School and the superintendent of the training school.

Students who finish satisfactorily the three years' course in the High School enter the Junior year of the State Normal School.

Normal High School Cooking Class.

MISCELLANEOUS

ADMISSION.

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

The resolution regulates the admission.

1. All who enter must give evidence of good moral character.

2. High school graduates, or those having at least an equivalent education, may enter the Junior class without examination.

3. Persons who hold a teacher's certificate will be admitted to the Preparatory class without examination. All, also, who have an equivalent education will be admitted.

4. Graduates of other normal schools of high standing will be admitted to the Senior year.

5. College graduates will be admitted to the Senior year.

GOVERNMENT.

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

Disciplin consists in transforming objectiv authority into subjectiv 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 motivs and obedient servants to the laws of man and God. This conception of government put into execution is the only one capable of develop-

ing high character. The school aims to develop this power of self-control, and to cultivate such sentiment as will render disciplin unnecessary. Activity is the principle of development. Self-government makes the student strong and fits him for life, while coercion, or government from without, renders him unfit for self-regulation. By thus bringing the student's regulativ powers into use—*i. e.,* by his self-acting—there is produced an abiding tendency to self government. 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.

DISCIPLIN—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 developt. 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.

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 thoroly prepared and worthy of all for which their diplomas stand. It is the policy of the school, by making all graduates "worthy of their hire," to protect those who employ them; for in so doing we protect no less 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.

The school gives special diplomas in certain lines of work, which entitle holders to teach in the schools of the state. See page 106.

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.

MUSEUM OF FINE ARTS AND ARTS-CRAFTS.

The Art Museum is one of the features of the equipment of the institution. It contains excellent copies of ancient, medieval and modern art. In sculpture there are life size pieces of Niobe and Child, the Annunciation of the Virgin, the Wrestlers, Spinario, Venus de Milo, The Boy and Swan, David, *Nike,* or Victory, Joan d' Arc, Beatrice, Paul Revere, Plato, Froebel, Armor of Achilles, Beethoven, Judgment, Trojan Shields, Miltonic Shield, Water Nymphs, Declaration of Independence, Treaty of Peace, Frieze of the Parthenon, Singing Boys, Apollo Belvedere, Diana of the Stag, Pestalozzi, Hiawatha, Chief Ouray, Olympian Hermes, Demosthenes, Greek Slave, Flight of Night, Lincoln, Washington, Shakespeare, Two Doves, etc.

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

In pottery there is a good collection. It is possible

Pottery—Museum.

that there is no normal school in the country that has as good a ceramic collection. The specimens are used in the arts-craft work, to inspire and instruct, to the end of creating a feeling for the beautiful and useful. The ceramics of a number of countries are already represented in the museum. Among them are a number of American potteries; a very good Japanese collection; China; Mexico; Italy; Hungary; Holland; France; Ireland; many potteries of England; Sweden; Belgium; Norway; Russia; etc. There is also a very fair collection of Cliff Dweller and Indian Pottery.

NATURAL HISTORY MUSEUM.

A museum is indispensable to an educational institution. It is a center of information and inspiration. If properly classified, it brings nature into a small compass and enables the pupil to see the orderly whole. In this age of science, teachers of public schools must have a working knowledge of the subjects of elementary science, and also know how to present them as nature study that they may be able to lead children to have a feeling for nature, to love nature and to know it. The school has a good, working museum. The specimens are not in a separate room under lock and key, but the cases are in the laboratories, halls and rooms where they are to be used. The museum contains the birds of Colorado, the birds' eggs of Colorado and surrounding states, many nests and eggs mounted as they are in nature, many insects of this and other states and countries, numerous specimens prepared in liquids,

the best collection of Colorado fishes in the state, nearly all the mammals of the state, about 6,000 plants, numerous fossils, an excellent collection of microscopic specimens, charts, maps, living specimens, and a fair collection of minerals. There are about 25,000 individual specimens in the museum.

The museum is the outgrowth of the field work done in the school by teachers and pupils. In science and nature study great stress is laid on coming in contact with the objects of nature in their natural habitat. It is the field work that makes the museum so vital in our work. In all the grades of the training school the museum has its influence. Specimens suitable to the grade are in every room.

If there are persons who have specimens and do not have places to keep them, the school will 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 of specimens 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.

CHRISTIAN ASSOCIATION.

Realizing the necessity for religious and social culture in the school, and believing much good comes of Christian

association, a large number of interested students have organized themselves into the Young Women's Christian Association. Meetings are held at various times, and persons who have given considerable thought to the life and aspirations of young people are invited to address the meetings. Much good is also done by this association in the way of creating closer social relations among the students.

The officers of the Young Woman's Christian Association at present are:

President.....Dorothea Wortmann
Vice-President.....Clarice Philips
Secretary.....Jeanette Libby
Treasurer.....Edith Forbush

LITERARY SOCIETIES.

CLIONIAN, PHILOMATHIAN.

There are in the school two literary societies, organized and managed by the students. Membership is optional. The societies are for the cultivation of such powers and graces as are usually cultivated in such organizations, and their programs are made up of music, declamation, oratory, dramatic reading and interpretation, parliamentary practice, etc. Each society meets twice in each school month.

The present organization of the societies is as follows:

CLIONIAN.

President ..... Edith Brake
Vice-President ..... Emma Gill
Secretary ..... Mary Spence
Treasurer ..... Frank Latson
Sergeant-at-Arms ..... A. G. Draper

PHILOMATHIAN.

President ..... Druzella Mackey
Vice-President ..... Mary Towne
Secretary ..... Nettie Anderson
Treasurer ..... Edna Berkey
Sergeant-at-Arms ..... Chrissie Robertson

ALUMNI ASSOCIATION.

The Alumni Association is the strong organization for influence connected with the school. There are now 1,167 members. This means as many centers of influence for better educational work and for their *Alma Mater,* "Old Normal."

PUBLICATIONS.

1. The State Normal School publishes the annual catalog. Sixteen of these catalogs have appeared.

2. During the year bulletins are issued from departments setting forth the work done in special lines, etc. These bulletins are sent out over the state to educational people, giving the point of view of the treatment of subjects in the Normal. They have a good effect on the educational interests of the state.

3. The Crucible is a monthly magazine conducted by the student body. It gives the treatment of subjects in the Normal as they have affected the student, and also gives school and alumni news.

4. The Young Men's Christian Association gets out an annual directory setting forth its work in the institution.

SESSIONS OF SCHOOL.

In the Normal Department there are no regular daily sessions which all students are required to attend. The library is open every morning at 7:30, and regular recitations begin at 8:20. Students are required to be present only at their recitation and laboratory periods; the rest of the time they are free to employ as they find most to their advantage. Regular recitations are over for the day at 3:30, and the library closes at 5:00 in winter and at 5:30 in autumn, spring and summer.

In the Training Department there are two daily sessions, the morning session opening at 9:00 and closing at 12:00, the afternoon session opening at 1:15 and closing at 3:15.

EXPENSES.

Tuition is free to citizens of this state.

The use of all text books (our plan of work requires a great many), library books, 30,000 in all; the use of 250 magazines; all materials, such as iron, wood, rattan, raffia, etc., for the Manual Training department; all foods and materials for the domestic science department; all chemicals in the laboratories; all equipment in the music de-

partment; and the use of the museum in the art department are furnished by the school to the students for the following fees:

NORMAL DEPARTMENT.

All Normal students pay the following fees each term:

Book fee	$4
Industrial fee	1
Laboratory fee	1
Museum fee	1
Music fee	1
Art fee	1
Athletic fee	1
Total	$10

All Normal students not citizens of Colorado pay $10 per term in addition to the fees enumerated above. To be a citizen of Colorado means to be in the state long enough to qualify as a legal voter.

TRAINING SCHOOL DEPARTMENT.

Each student in the High School department pays the following fees each term:

Book fee	$3
Museum and laboratory fee	1
Industrial fee	1
Music fee	1
Art fee	1
Athletic fee	1
Total	$8

Each pupil in the grammar department pays the following fees each term:

Book fee $2
Industrial fee 1

Total.....$3

Each pupil in the primary department pays the following fees each term:

Book fee $1

Each pupil in the kindergarten department pays the following fee:

Fee for each term.....$1

BOARD AND ROOM.

Board and room costs from $3.25 to $3.75 per week, where two students occupy one room. There are a number of chances for students to do work in families whereby they may be able to earn their room and board or part of the same.

CAPS AND GOWNS.

All members of the Senior class provide themselves with college gowns and caps. Gowns may be purchast 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.

SUGGESTIONS TO PROSPECTIV STUDENTS.

1. Any one who contemplates attending a teachers' 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. Any one who proposes attending our school should write as soon as he has made up his mind, letting us know how he wishes to board, and whether he wishes us to make arrangements for him, and letting us know on what train he will arrive.

For further information, address the Secretary or President.

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.

STUDENTS' RELIEF FUND.

The object of this fund is to afford pecuniary assistance to meritorious students who have exceptional need of such help. It not infrequently happens that a promising student who has entered upon his work with the expectation of carrying it thru until graduation, meets with an unexpected loss, thru sickness or other causes, which compels him either to leave the school or to continue the work under conditions that are not conduciv to the best results. To meet the need of these students, a fund has been estab-

lisht, called the Students' Relief Fund, from which money is loaned to such students until they are in a position to repay it.

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

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

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

GIFTS TO NORMAL SCHOOL.

The school has received some generous gifts from various sources.

I. Money and Land—

1. The Colorado Mortgage & Investment Company $15,000
2. John T. Cranford, 32 acres of land valued now at $2,000 per acre..... 64,000
3. Citizens of Greeley, 8 acres..... 16,000

II. Gifts by Classes—

1891—Life size bust of Plato.
1893—Life size bust of Pestalozzi.
1894—Large picture.
1895—Life size bust of Shakespeare.
1896—Picture—The Acropolis.
1897—Frieze of Parthenon, three sections, plaster.
1898—Mahogany cabinet and life size bust of Indian.
1899—Pictures—the Sistine Madonna, the Last Supper, and the Immaculate Conception.
1900—Flemish oak desk.
1901—Pictures—the Dance of the Muses, Aurora, Hoffman's Christ.
1902—Ninth Avenue Entrance—stone—large.
1903—Bust of Beatrice—marble—life size on marble pedestal.
1904—Picture—Spanish Peaks—Adams.
1905—Flying Mercury—Bronze, 5 ft. 10 in.

1906—Arts-Craft Clock with chimes, 7 ft. 6 in. high.

1907—Stained Glass Window for Library.

III. Other Gifts—

1. Two fine pieces of pottery from Teco Company, Chicago.
2. Three plates from Robinson & Co., England.
3. Six pieces of porcelain from Haviland, France.
4. A collection of tiles from Pittsburg, Pa.
5. Piece of delft ware, Holland.
6. Several pieces of Beleek, Ireland.
7. Vase, Hermann Kahler, Holland.
8. Several ceramic medallions, Italy.
9. Vase, Owens, Zanesville, by W. C. Wilson, Greeley.
10. Six pieces of pottery, by Weller, Zanesville.
11. Fifteen books for library, F. A. Meredith, Fort Lupton.
12. The Infusoria, by Mr. Plumb, Greeley.
13. Twenty Cliff Dweller skulls, by Prof. Hewett.
14. A porcupine.
15. Bust of Sir Walter Scott, by H. W. West.
15. An American eagle, mounted, by Mr. Thayer, Greeley.
16. Two mounted blue herons, by Mr. Freeman, Greeley.
17. Mastodon tooth.
18. A number of books for library.
19. A collection of eggs, by Tyndall Snyder.

20. A collection of birds, Colorado and Pennsylvania.
21. A collection of minerals and fossils from Pennsylvania.
22. A lifting machine, Dr. Marsh, Greeley.
23. A pelican, Mr. Martin, La Salle.
24. Pair of tongs, old timers, Mrs. Cheeseman, Greeley.
25. A New England ferrule, Mrs. Thayer, Greeley.
26. Shrubs and trees, by different classes and by citizens of Greeley.
27. Collection of plants, by Prof. F. H. Byington.
28. An oil portrait of Judge J. M. Wallace, first President of Board Trustees, Prof. Ernesti.
29. A large Indian olla, Prof. Ernesti.
30. Collection of rocks, Smithsonian Institution.
31. Collection of animals, Smithsonian Institution.

IV. Gifts by Training School—

1. Dance of the Muses, High School.
2. Picture.
3. A mission clock, by Eighth Grade.
4. Flying Mercury, plaster, Eighth Grade.
5. Picture—Holland scene, Eighth Grade.
6. Three Madonnas, Eighth Grade.
7. Portrait of Tennyson, Eighth Grade.
8. Bust of Lincoln, Eighth Grade.
9. Bust of Washington, Eighth Grade.
10. Pictures—Three others, Eighth Grade.
11. Picture by Senior Class of High School, 1906.

V. On Deposit—

1. A collection of birds' eggs of Iowa, Mr. Crone.
2. A collection of minerals, polisht, Mr. Lyons.

CATALOG OF STUDENTS

CATALOG OF STUDENTS.

SENIORS—208.

Ahrens, Hazel V.....Denver, Colo.
Albert, Ruby.....Berthoud, Colo.
Allen, Grace E.....Denver, Colo.
Anderson, Eloise.....Denver, Colo.
Anderson, Nettie.....Colorado Springs, Colo.
Anderson, Mary.....Toledo, Ohio.
Arbuthnot, Melissa.....Boulder, Colo.
Armstrong, Mabel.....Denver, Colo.
Augur, Charlotte C.....Denver, Colo.
Bailey, Lena D.....Greeley, Colo.
Baird, Olive A.....La Salle, Colo.
Barr, F. E.....Oberlin, Kansas.
Baker, Grace E.....Carbondale, Colo.
Baroch, Eulalie.....Denver, Colo.
Barry, Lois M.....Evans, Colo.
Berkey, Edna.....Canon City, Colo.
Berkey, Pearl.....Canon City, Colo.
Besser, Grace B.....Denver, Colo.
Billington, Maud B.....Prinsville, Ohio
Blaesi, Mary C.....Denver, Colo.
Blake, Helen.....Denver, Colo.
Blandin, Ethel I.....Eaton, Colo.
Boyd, Helen.....Cripple Creek, Colo.
Boyd, Sela M.....Greeley, Colo.
Brennan, Lulu .....Cripple Creek, Colo.
Brown, Benjamin F.....Ault, Colo.
Brown, Dessie.....Fruita, Colo.
Brush, Ada.....Greeley, Colo.
Budge, Jessie.....Greeley, Colo.
Buxton, Delores V.....Silver Plume, Colo.
Byron, Helen F.....Aspen, Colo.

Caldwell, Bunnye.....Denver, Colo.
Callison, Cyrus O.....Cheyenne Wells, Colo.
Cameron, J. Truby.....Greeley, Colo.
Carlson, Margaret H.....Denver, Colo.
Carpenter, Anna.....Greeley, Colo.
Casey, Ethel S.....Denver, Colo.
Cartwright, Edna.....La Junta, Colo.
Chase, Lucile B.....Denver, Colo.
Chamberlain, Pansy E.....Montrose, Colo.
Christopher, Bertha.....Ault, Colo.
Combs, Ethel L.....Denver, Colo.
Cooke, Gertrude .....Denver, Colo.
Cooke, Gertrude .....Denver, Colo.
Cooke, Lenore G.....Denver, Colo.
Conner, Grace R. .....Greeley, Colo.
Connely, Mary H.....Denver, Colo.
Cooper, Isa D. .....Windsor, Colo.
Cox, Lizzie H.....Wray, Colo.
Cox, Helen L. .....Denver, Colo.
Craig, Carrie M.....Durango, Colo.
Cronin, Josephine.....Leadville, Colo.
Cunningham, Rola.....Wray, Colo.
Daven, Hazel L.....Greeley, Colo.
Davis, Juanita I.....Denver, Colo.
Dawson, Olive I.....Julesburg, Colo.
Dean, Iva.....La Salle, Colo.
Donnelly, Celeste.....Holyoke, Colo.
Doull, Rose M.....Denver, Colo.
Dowling, Katharyn.....Greeley, Colo.
Drach, Mary M. .....Glenwood Springs, Colo.
Draper, Bert G.....Hudson, Colo.
Dudley, Flora.....Colorado Springs, Colo.
Duenweg, Rosa A.....Platteville, Colo.
Edwards, Ethel.....Victor, Colo.
Estes, Dosia A.....Gunnison, Colo.
Evans, Charlotte.....Smith Center, Kan.
Flach, Marie I.....Denver, Colo.
Flint, Ruth L.....Greeley, Colo.

Folts, Vera.....Denver, Colo.
Forsyth, Orrin M.....Greeeley, Colo.
Foster, Gertrude M.....Pueblo, Colo.
Frederick, Marie A.....Denver, Colo.
Gehman, Wanda L.....Golden, Colo.
Gill, Emma.....Denver, Colo.
Gilpatrick, Gail L.....Eaton, Colo.
Gladney, Annie M.....Rocky Ford, Colo.
Godley, Sophia L.....Edgewater, Colo.
Goodrich, Annie H.....Denver, Colo.
Goodwin, Edna F.....Crawford, Colo.
Gorman, Edith.....Denver, Colo.
Gross, Etta.....Greeley, Colo.
Guise, Mabel L.....Gold Hill, Colo.
Hamilton, Mabelle .....Cedar Rapids, Neb.
Harrington, E. Mary.....Cheyenne, Wyo.
Hedstrom, Horace H.....Shoemaker, N. Mex.
Heltman, Mamie.....Sterling, Colo.
Herrington, Edith P.....La Salle, Colo.
Hildebrand, Miriam E.....Denver, Colo.
Hines, Viola.....Denver, Colo.
Irons, Blanche .....Greeley, Colo.
Imrie, Harracena.....Denver, Colo.
Jeffery, Esther M.....Denver, Colo.
Jennerick, Burdella.....Brighton, Colo.
Johnson, Anna .....Denver, Colo.
Jones, Ida B.....Sidney, Colo.
Jones, Wilhelmina.....Littleton, Colo.
Johnson, Georgia A.....Denver, Colo.
Joyce, Gertrude.....Cripple Creek, Colo.
Kammerer, Mary D. .....Deuel, Colo.
Kendall, Mary E.....Silver Plume, Colo.
King, Reta L.....Sterling, Colo.
Kirkpatrick, Sadie .....Albion, Neb.
Koster, Bettie E.....Rico, Colo.
Kouba, Marie A.....Boulder, Colo.
Kouba, Emma T.....Boulder, Colo.
Lafferty, Edith.....Denver, Colo.

Latson, Frank E.....Rocky Ford, Colo.
Landrum, Mabel R.....Sterling, Colo.
Laughlin, Grace E.....La Salle, Colo.
Laughlin, Ethel M.....La Salle, Colo.
Laughrey, Leona.....Greeley, Colo.
Lauterman, Mary P.....Colorado Springs, Colo.
Layden, Susie A.....Georgetown, Colo.
Lewis, Donna M.....Greeley, Colo.
Lillard, Bella.....Canon City, Colo.
Lillard, Daisy G.....Denver, Colo.
Linn, Leta R.....Denver, Colo.
Linville, Eva B.....Greeley, Colo.
Love, S. Helen .....Ft. Collins, Colo.
Mackey, Druzilla.....Pueblo, Colo.
Mahoney, Rebecca.....Pueblo, Colo.
Markwardt, Alma.....Lansing, Ia.
McAfee, Fannie G.....Las Animas, Colo.
McCarn, Rocena.....Denver, Colo.
McFarland, Rachel B.....Greeley, Colo.
McGowan, Cynthia M.....Canon City, Colo.
McGrath, Katherine .....Moweaqua, Ills.
McMillan, Ella.....Greeley, Colo.
Meddings, Ada M.....Pueblo, Colo.
Meeker, Anicartha.....Denver, Colo.
Meredith, Nora.....Boulder, Colo.
Milligan, Mabel.....Crested Butte, Colo.
Mills, Carrie T.....Greeley, Colo.
Mills, Ruth E.....Greeley, Colo.
Moore, Edith M.....Fruita, Colo.
Moore, Grace G. .....Greeley, Colo.
Morgan, Grace M.....Denver, Colo.
Morrison, Marguerite E.....Evans, Colo.
Mosher, Edna T.....Gypson, Colo.
Mottaz, Margaret S. (Mrs.).....Windsor, Colo.
Muller, Maude L.....Denver, Colo.
Muncaster, Edith.....Victor, Colo.
Mundy, Florence.....Silver Plume, Colo.
Nettleton, Augusta E.....Eaton, Colo.

Nusbaum, Jess.....Greeley, Colo.
Newton, Lillian.....Greeley, Colo.
Norgaard, Marie R.....Gypson, Colo.
Offdenkamp, Ruth.....Pueblo, Colo.
Oklun, Mattie .....Georgetown, Colo.
Olney, Nellie.....Denver, Colo.
Pearcy, Lillie.....Eads, Colo.
Peterson, A. Mary.....Brush, Colo.
Peterson, Mary V.....Ft. Collins, Colo.
Philip, J. Lonie.....Ft. Lupton, Colo.
Poirson, Eugenie.....Silver Plume, Colo.
Pressler, Anna W.....Golden, Colo.
Pridmore, Eula.....Monte Vista, Colo.
Proctor, Irene E.....Denver, Colo.
Purdee, Myrtle.....La Junta, Colo.
Redic, Ray.....Butler, Pa.
Redic, Mary E.....Telluride, Colo.
Rice, Lucile.....Greeley, Colo.
Robertson, Chrissie G.....Del Norte, Colo.
Robinson, Arminia.....Evans, Colo.
Roddy, Gary.....Greeley, Colo.
Routon, V. E. .....Rocky Ford, Colo.
Ross, Edwin A.....Greeley, Colo.
Salmon, Edith L.....Denver, Colo.
Sawin, Katherine.....Manitou, Colo.
Schattinger, Mary L. .....Denver, Colo.
Schillig, Clara.....Greeley, Colo.
Schroeder, Helen M.....Greeley, Colo.
Scott, Leta M.....Windsor, Colo.
Shaw, Helen D.....Pueblo, Colo.
Shellabarger, Mary .....Moffat, Colo.
Smith, L. A. (Mrs.) .....Rocky Ford, Colo.
Spence, Mary R.....Chromo, Colo.
Springsteen, Frank .....Denver, Colo.
Stampfel, Alvene.....Rico, Colo.
Stannard, Emily M.....Golden, Colo.
Stannard, Laura V.....Golden, Colo.
Stauffer, Beulah G.....Denver, Colo.

Sullivan, Mary E.....Denver, Colo.
Tabor, Elizabeth.....Chicago, Ills.
Thompson, Ira.....Trenton, Mo.
Tierney, Bertha.....Basalt, Colo.
Todd, Adella N. (Mrs.).....Greeley, Colo.
Towne, Mary E.....Rocky Ford, Colo.
Troutman, May.....Ft. Collins, Colo.
Troutman, Leah.....Ft. Collins, Colo.
Troutman, Leah.....Ft. Collins, Colo.
Tully, Mary S.....Glenwood Springs, Colo.
Turner, Elva M. (Mrs.).....Colorado Springs, Colo.
Twombly, Margaret.....Lupton, Colo.
Uzzell, Mary M.....Denver, Colo.
VanWinkle, Grace I.....Cope, Colo.
Veach, Pearl V.....Champion, Neb.
Wagner, Hazel J.....Ft. Morgan, Colo.
Wallace, Mary H.....Windsor, Colo.
Webster, Mary R.....Canon City, Colo.
Weyand, Mamie.....Cripple Creek, Colo.
Wilkinson, Mabel.....Greeley, Colo.
Wilson, Nora.....Colorado Springs, Colo.
Wolf, Clara (Mrs.).....Denver, Colo.
Woodford, Cora M.....Canon City, Colo.
Wright, Nellie G.....Telluride, Colo.
Wylie, Eva.....Greeley, Colo.

JUNIORS—212.

Alexander, Elsie.....Saguache, Colo.
Alan, Edwina.....Denver, Colo.
Allison, Dessa.....Palisade, Colo.
Allsworth, Brainard.....La Junta, Colo.
Archibald, Allie.....Greeley, Colo.
Babcock, Florence A.....Denver, Colo.
Bacharach, Bernice.....Colorado Springs, Colo.
Bailey, Esther.....Loveland, Colo.
Baird, Myrtle.....Greeley, Colo.
Baker, Georgia I.....Greeley, Colo.
Banta, Elizabeth.....Greeley, Colo.

Bardwell, Bernice.....Greeley, Colo.
Barmettler, Alice.....Georgetown, Colo.
Barry, Susie.....Evans, Colo.
Beatty, Mary.....La Junta, Colo.
Beck, Catharine.....Denver, Colo.
Bell, Juanita.....Denver, Colo.
Benning, Mabel.....Pueblo, Colo.
Blair, Myrtle.....Pueblo, Colo.
Bliss, Bessie E.....Greeley, Colo.
Bliss, Carl .....Greeley, Colo.
Brainard, Fay.....Greeley, Colo.
Brainard, Ona.....Greeley, Colo.
Brake, Edith.....Denver, Colo.
Broome, Lenore.....Pueblo, Colo.
Brown, Mona.....Canon City, Colo.
Bruce, Isabel.....Telluride, Colo.
Bruns, Cora.....Saguache, Colo.
Burkitt, Susie V.....Fruita, Colo.
Byron, Blanche.....Montrose, Colo.
Cain, Nell J.....Lamar, Colo.
Callaway, June.....Montrose, Colo.
Crater, Ethel.....Paonia, Colo.
Caven, Lois.....Denver, Colo.
Chapin, Jennie B.....Milwaukee, Wis.
Chatin, Janet.....Walsenburg, Colo.
Chester, Alice M.....Mack, Colo.
Churchill, Isabel L.....Greeley, Colo.
Clark, Nellie N.....Pueblo, Colo.
Cleverly, Susan C.....Denver, Colo.
Coughlin, Irene.....Silver Plume, Colo.
Cramer, Mary.....Telluride, Colo.
Crawford, Ada.....Greeley, Colo.
Crawford, Georgie.....Greeley, Colo.
Curtis, Ernest.....Greeley, Colo.
Dale, Ethel.....Golden, Colo.
Daven, Luella.....Greeley, Colo.
Dawson, Myrtle.....Julesburg, Colo.
Deane, Flora.....Denver, Colo.

Delling, Olive.....Greeley, Colo.
Desjardins, May.....Denver, Colo.
Deitrich, Carrie.....Monte Vista, Colo.
Deitsch, Katharyn .....Bartley, Neb.
Desmond, Leona.....Greeley, Colo.
Dixon, Barbara.....Colorado Springs, Colo.
Doke, Nellie.....Greeley, Colo.
Doull, Frances.....Greeley, Colo.
Duenweg, Anna.....Platteville, Colo.
Earle, Eva Maude.....Delta, Colo.
Eggleston, Martha.....Cotopaxi, Colo.
Emery, Emily A.....Sugar Loaf, Colo.
Faris, Mabel.....Sulphur Springs, Colo.
Fiertag, Caroline.....Ft. Lupton, Colo.
Fillebrown, Gladys F. (Mrs.).....Boston, Mass.
Floyd, Brenda.....Victor, Colo.
Forbush, Edith L.....Pueblo, Colo.
Force, Harriett.....Denver, Colo.
Force, Jessie .....Denver, Colo.
Franck, Mary .....Canon City, Colo.
Gaines, Joysa.....Pueblo, Colo.
Gammon, Hallie.....Loveland, Colo.
Garfield, Bernice.....Akron, Colo.
Gjellum, Bertha.....Fowler, Colo.
Goldsworthy, Anita.....Golden, Colo.
Goldsworthy, Monica.....Golden, Colo.
Gruber, Edna.....Las Animas, Colo.
Hall, Ruby .....Stratton, Neb.
Hamilton, Louisa E.....Greeley, Colo.
Hammond, Edna.....Dolores, Colo.
Hampton, Evelyn.....Goldfield, Colo.
Haney, Mabel.....Denver, Colo.
Hard, Nellie.....Longmont, Colo.
Harbottle, Annie M.....Greeley, Colo.
Harris, Irmagard.....Denver, Colo.
Hartman, Bessie A.....Colorado Springs, Colo.
Hawkins, Lydia.....Trinidad, Colo.
Heathcock, Lela M.....Linden, Colo.

Henderson, Rhoda.....Longmont, Colo.
Holly, Frances.....La Junta, Colo.
Holliday, Margaret.....Laramie, Wyo.
Howard, Elizabeth (Mrs.).....Davenport, Ia.
Hoy, E. Lillian.....Greeley, Colo.
Hoyt, Laura.....Greeley, Colo.
Hullender, Ruth.....Breckenridge, Colo.
Hurley, Will.....Greeley, Colo.
Isham, Ethel H.....Colorado Springs, Colo.
Johnson, Mildred .....Greeley, Colo.
Johnston, Harry.....Evans, Colo.
Kane, Mary A.....Trinidad, Colo.
Keefe, Mary.....Denver, Colo.
Keliher, Linnie.....Greeley, Colo.
Kingsbury, Hazel.....Telluride, Colo.
Kingwill, Bernice.....Denver, Colo.
Kislingbury, Anna.....Durango, Colo.
Kleeman, Amelia .....Hough, Neb.
Knapp, Hortense.....Denver, Colo.
Kyle, Homer.....Evans, Colo.
Lane, Florence M.....Rocky Ford, Colo.
Lapham, Etta.....Grand Junction, Colo.
Latson, Irma.....Rocky Ford, Colo.
Lawler, Cecelia.....Aspen, Colo.
Lee, Emma.....Lander, Wyo.
Lee, Eva G.....Evanston, Ills.
Lemmon, Alfaretta.....Denver, Colo.
Levell, Dolina.....Victor, Colo.
Libby, Jennette.....Denver, Colo.
Lilly, Paris I.....Pueblo, Colo.
Linn, Vera M.....Denver, Colo.
Little, Zelma.....Beulah, Colo.
Mager, Brunhilde.....Denver, Colo.
Mager, Clara.....Denver, Colo.
Mallaby, Julia.....Pueblo, Colo.
Mallonee, Iva.....Denver, Colo.
Mapes, Bessie.....Greeley, Colo.
Marron, Florence.....Denver, Colo.

McCahan, Maude.....Pueblo, Colo.
McDaniel, Grace.....Pueblo, Colo.
McDaniel, Mabel.....Pueblo, Colo.
McDonald, Grace.....Victor, Colo.
McGowan, Florence .....Ft. Collins, Colo.
McKelvie, William .....Hygiene, Colo.
Miller, Frances .....Denver, Colo.
Miner, Elizabeth .....Crested Butte, Colo.
Moore, Atta .....Hillsboro, Colo.
Moore, Catherine .....Grand Junction, Colo.
Moore, Josie .....Ouray, Colo.
Murray, May R. .....Las Animas, Colo.
Murray, Julia.....Denver, Colo.
Myers, Sadie M. .....Del Norte, Colo.
Nagel, Blanche .....Boulder, Colo.
Noll, Florence.....Denver, Colo.
Nordstrom, Sylvia .....Greeley, Colo.
O'Boyle, Alice .....Denver, Colo.
O'Connell, Mamie .....Anaconda, Colo.
Olson, Leah .....Ault, Colo.
Olson, Mayda (Mrs.) .....Ault, Colo.
Overbay, May .....Delta, Colo.
Padgett, Mabel.....Greeley, Colo.
Parker, Susie M.....Denver, Colo.
Parrett, Florence .....Denver, Colo.
Patterson, May.....Greeley, Colo.
Peterson, Josie .....Greeley, Colo.
Philips, Clarice .....Denver, Colo.
Phillips, Helen .....Greeley, Colo.
Preston, Iva .....Crested Butte, Colo.
Purdy, Edna J.....Pueblo, Colo.
Quinby, Ellen .....Uva, Wyo.
Rafield, Ethel .....Colorado Springs, Colo.
Ramsdell, Fred .....Greeley, Colo.
Redden, Julia.....Gunnison, Colo.
Roberts, Ethel .....Brush, Colo.
Roberts, Guy .....Edgewater, Colo.
Robison, Merna .....Denver, Colo.

Rockefeller, Edna M. ..... Crested Butte, Colo.
Rose, Julia ..... Mansfield, Pa.
Ross, Edwin A. ..... Detroit, Mich.
Sackett, Anna ..... Telluride, Colo.
Sampson, Nellie E. ..... Cheyenne, Wyo.
Schafer, Marguerite ..... Doe Run, Mo.
Schattinger, Clara ..... Denver, Colo.
Seabury, Ethel E. ..... Cheyenne, Wyo.
Sheffel, Mildred ..... Denver, Colo.
Smith, Eula ..... Greeley, Colo.
Smith, Helen ..... Denver, Colo.
Soister, Hazel ..... Pueblo, Colo.
Sopp, Helen ..... Greeley, Colo.
Soyer, Elsie ..... Denver, Colo.
Sperry, Bessie ..... Colorado Springs, Colo.
Standley, Marian L. ..... Cripple Creek, Colo.
Statler, Margaret ..... Greeley, Colo.
Stull, Anne ..... Juanita, Neb.
Stryker, Mary ..... Boulder, Colo.
Sutton, Ferry E ..... Bijou Basin, Colo.
Taylor, Lola ..... Mancos, Colo.
Taylor, Margaret ..... Golden, Colo.
Thompson, Leotta ..... Las Animas, Colo.
Thompson, Florence ..... Greeley, Colo.
Thompson, Nellie ..... Greeley, Colo.
Tupper, Ada ..... Denver, Colo.
Turner, Spencer ..... Greeley, Colo.
Twist, Jane ..... Greeley, Colo.
Twomey, Iona ..... Julesburg, Colo.
VanDyne, Marion ..... Greeley, Colo.
Wade, Bonnie ..... Pueblo, Colo.
Waite, Nellie L. ..... Greeley, Colo.
Wasley, Mabel ..... Greeley, Colo.
Watson, Eva ..... Lake City, Colo.
Weber, Lina ..... Sugar City, Colo.
Weckel, Lillian ..... Fruita, Colo.
Wedow, Elizabeth ..... Denver, Colo.
Wenger, Mattie ..... Telluride, Colo.

West, Mae ..... Denver, Colo.
Wieland, Pearl ..... La Junta, Colo.
Wilson, Mabel ..... Greeley, Colo.
Wilson, Grace ..... Greeley, Colo.
Willson, Myrtle ..... Greeley, Colo.
Wills, Edna ..... Denver, Colo.
Wimmer, Albert B. ..... Creston, Ia.
Wimmer, Edith ..... Loveland, Colo.
Woodward, Ethel ..... Cripple Creek, Colo.
Wooster, Ruth ..... Emporia, Kan.
Wortmann, Dorothea ..... Denver, Colo.

SPECIALS—3.

Allen, Lillian M. ..... Greeley, Colo.
Hiatt, Paris ..... Greeley, Colo.
Jastrowitz, Alex ..... Greeley, Colo.

SUMMER TERM—206.

Alan, Edwina ..... Greeley, Colo.
Arbuthnot, Melissa ..... Boulder, Colo.
Augur, Charlotte C. ..... Denver, Colo.
Bailey, A. B. ..... Sanford, Colo.
Bailey, Latilla W. ..... Holyoke, Colo.
Bailey, W. L. ..... Holyoke, Colo.
Baltosser, H. M. ..... Fruita, Colo.
Bassler, Marv B. ..... Ironton, Colo.
Barr, F. E. ..... Oberlin, Kan.
Baum, Gladys ..... Osceola, Neb.
Beal, Mary I. ..... Fruita, Colo.
Beck, Catherine ..... Denver, Colo.
Bergstrand, Nellie ..... Denver, Colo.
Biggerstaff, Willett ..... Trinidad, Colo.
Blaine, W. G ..... De Beque, Colo.
Bledsoe, Laura (Mrs.) ..... Denver, Colo.
Blucher, Mary J. ..... Denver, Colo.
Blystone, Dora ..... Sterling, Colo.
Blystone, Olive ..... Sterling, Colo.
Bonifield, May L. ..... Shame, Colo.

Boyd, Helen ..... Cripple Creek, Colo.
Boyd, J. Belle ..... Edgewater, Colo.
Boyer, Ella ..... Georgetown, Colo.
Brennan, Lulu ..... Cripple Creek, Colo.
Brooks, Ella ..... Windsor, Colo.
Brown, Edith L. ..... Denver, Colo.
Bunning, Elsie ..... Bengelman, Neb.
Burdette, Lizzie ..... Cumberland, Ia.
Butler, Bernice ..... St. Joseph, Mo.
Callison, C. O. ..... Greeley, Colo.
Carpenter, Anna C. ..... Greeley, Colo.
Carroll, E. K. (Mrs.) ..... Colorado Springs, Colo.
Clark, Pearl ..... Trinidad, Colo.
Collom, Leila ..... Denver, Colo.
Comstock, Yoland B. ..... La Junta, Colo.
Connely, Mary H. ..... Denver, Colo.
Conkright, Josie ..... Morganville, Kan.
Cooke, Gertrude ..... Denver, Colo.
Cowles, Olive J. ..... Pueblo, Colo.
Cumley, Ruby ..... Wray, Colo.
Cunningham, Rola ..... Wray, Colo.
Curtis, Earl S. ..... Greeley, Colo.
Delle, Arda M. ..... Canon City, Colo.
Diehl, Gertrude ..... Georgetown, Colo.
Doherty, Anita ..... Denver, Colo.
Donnelly, Celeste ..... Holyoke, Colo.
Doull, Rose ..... Denver, Colo.
Draper, Alberta G. ..... Greeley, Colo.
Duenweg, Rose ..... Platteville, Colo.
Earle, Eva ..... Delta, Colo.
Edgar, Ellis M. ..... Greeley, Colo.
Evans, Charlotte ..... Smith Center, Kan.
Ferris, Hortense ..... Pueblo, Colo.
Fickes, Birdie ..... Sterling, Colo.
Fickes, Myrtle ..... Sterling, Colo.
Finley, Ethel ..... Windsor, Colo.
Finney, Ethel ..... Alexandria, Egypt.
Gehman, Wanda ..... Golden, Colo.

Gerrish, Jessie ..... Holyoke, Colo.
Gildersleve, Helen ..... Aguilar, Colo.
Glotfelty, Gertrude ..... Colorado Springs, Colo.
Graham, Gertrude ..... Ft. Collins, Colo.
Grimes, Ida V. ..... Leadville, Colo.
Hammond, Mary E. ..... Woodson, Kan.
Hamilton, Isabelle ..... Holyoke, Colo.
Hartley, Theresa ..... Trinidad, Colo.
Harrington, E. Mary ..... Cheyenne, Wyo.
Haug, Anna ..... Lyon, Colo.
Haven, Bella ..... Granada, Colo.
Hecker, Mary ..... Monte Vista, Colo.
Hedgpeth, Lena ..... Greeley, Colo.
Heighton, Harry ..... Greeley, Colo.
Hemberger, Elizabeth ..... Golden, Colo.
Hershey, Janet ..... Denver, Colo.
High, Ada ..... Fruita, Colo.
Higinbotham, Ethel ..... Aspen, Colo.
Higgason, Helen ..... Ault, Colo.
Hildebrand, Etta K. ..... Cedar Falls, Ia.
Homberger, E. H. ..... Julesburg, Colo.
Hon, Clyde ..... Denver, Colo.
Hornberger, Etta ..... Pueblo, Colo.
Huiatt, Beatrice ..... Trinidad, Colo.
Humphreys, C. E. ..... Dennison, Ia.
Jackson, Pearle ..... Colorado Springs, Colo.
Jennerick, Burdella ..... Brighton, Colo.
Johnson, Alice ..... Denver, Colo.
Johnson, Anna ..... Greeley, Colo.
Johnson, Anna G. ..... Greeley, Colo.
Johnson, Alex E. ..... El Moro, Colo.
Johnson, Ida ..... Georgetown, Colo.
Johnson, Maggie M. ..... Sterling, Colo.
Johnson, Mary E. ..... Sterling, Colo.
Johnson, Minnie ..... Greeley, Colo.
Jones, Ida B. ..... Sidney, Neb.
Jones, Wilhelmina ..... Littleton, Colo.
Kelly, Lota ..... Denver, Colo.

Kendel, A. I. ..... Greeley, Colo.
Kendel, Mary ..... Greeley, Colo.
Kerr, Katherine ..... Pierce, Neb.
King, Reta ..... Sterling, Colo.
Kleeman, Amelia ..... Hough, Neb.
Knight, Marian ..... Telluride, Colo.
Kring, Alida ..... Grand Island, Neb.
Lee, Eva G. ..... Evanston, Ill.
Lillard, Bella ..... Denver, Colo.
Lillard, Daisy ..... Denver, Colo.
Linn, Leta ..... Denver, Colo.
Lory, Clara ..... Windsor, Colo.
Lucas, Cora ..... Greeley, Colo.
Lydick, Nora ..... Basalt, Colo.
Mackay, Charlotte ..... Trinidad, Colo.
MacIntyre, Avice ..... Caddoa, Colo.
Martensen, L. H. ..... Sanford, Colo.
McCarthy, Mary ..... Pueblo, Colo.
McKinlay, Marie ..... Laramie, Wyo.
McLaughlin, G. P. ..... Eagle, Colo.
McMillan, Ivan ..... La Salle, Colo.
Mead, Lexie ..... Greeley, Colo.
Meehan, Maude ..... Aspen, Colo.
Meigs, Isabelle ..... Pueblo, Colo.
Mellor, Ethel ..... Aspen, Colo.
Mellor, Florence ..... Aspen, Colo.
Miles, Alice ..... Center, Colo.
Miller, Katharine A. ..... Central City, Colo.
Miller, Maud ..... Wray, Colo.
Mitchell, M. J. Y. (Mrs.) ..... Idaho Springs, Colo.
Moore, Gussie E. ..... Del Norte, Colo.
Moore, Gertrude E. ..... De Beque, Colo.
Moore, Pearl ..... Ft. Collins, Colo.
Morrison, Kellaphene ..... Howard, Colo.
Morrison, Maude ..... Buena Vista, Colo.
Morris, Nellie ..... Williamsburg, Colo.
Nash, Katharine F. ..... Georgetown, Colo.
Nelson, Miranda ..... Denver, Colo.

Norgaard, Marie ..... Gypson, Colo.
Norris, Luella ..... Kersey, Colo.
Nusbaum, Jess ..... Greeley, Colo.
O'Dea, Mary ..... Leadville, Colo.
Oklun, Mattie ..... Georgetown, Colo.
Pickering, Clara ..... Fruita, Colo.
Powers, Myrtle ..... Windsor, Colo.
Pursell, Vera D. ..... Greeley, Colo.
Reinhart, Lottie ..... Highand, Ills.
Reed, Gertrude ..... Greeley, Colo.
Richardson, Etta E. ..... Greeley, Colo.
Rice, Helen ..... Greeley, Colo.
Rice, Lucile ..... Greeley, Colo.
Rider, Ida M. ..... Colorado Springs, Colo.
Robinson, Henrietta ..... Pueblo, Colo.
Robinson, Roberta ..... Pueblo, Colo.
Roddy, Gary ..... Greeley, Colo.
Rosedahl, Charlotte ..... Denver, Colo.
Rosedahl, Victoria ..... Denver, Colo.
Rudd, Lucile ..... Fairplay, Colo.
Salmon, Edith ..... Denver, Colo.
Sanburg, Ellen ..... Boulder, Colo.
Schillig, Clara ..... Greeley, Colo.
Selles, Bettie ..... Salida, Colo.
Seydel, Alta ..... Pueblo, Colo.
Schroeder, Helen ..... Greeley, Colo.
Shacklett, Stella ..... Pueblo, Colo.
Sheely, Nellie I. ..... Montrose, Colo.
Shumate, Agnes ..... Rocky Ford, Colo.
Shumate, Mary D. ..... Rocky Ford, Colo.
Smith, Mary ..... Atwood, Colo.
Smith, Nettie ..... Atwood, Colo.
Snyder, E. Tyndall ..... Greeley, Colo.
Stannard, Laura ..... Golden, Colo.
Stapp, Melvina ..... Colchester, Ills.
Stevens, L. B. ..... Leadville, Colo.
Stevens, L. B. (Mrs.) ..... Leadville, Colo.
Stephens, Mabel ..... Denver, Colo.

Steele, Mabel ..... Joley, Ia.
Stiles, Elizabeth ..... Georgetown, Colo.
Strecker, Ethel ..... Florence, Colo.
Sumnicht, Mollie ..... Carbondale, Colo.
Taylor, Adella ..... Lake City, Ia.
Taylor, Margaret ..... Craig, Colo.
Thomas, Helen ..... Greeley, Colo.
Thompson, A. N. ..... Colorado Springs, Colo.
Thompson, A. N. (Mrs.) ..... Colorado Springs, Colo.
Thompson, Ira A. ..... Trenton, Mo.
Thobory, Mabel ..... Eagle, Colo.
VanBuren, G. Arthur ..... Rariton, Ills.
VanDorpin, Anna ..... Denver, Colo.
VanWinkle, Grace ..... Cope, Colo.
Veach, Pearle ..... Champion, Neb.
Walsh, Delia ..... Cripple Creek, Colo.
Weaver, Mary ..... Pueblo, Colo.
Weed, Minnie ..... Canon City, Colo.
Westborg, Emma ..... Ft. Collins, Colo.
Webster, Mary ..... Canon City, Colo.
Whiton, Emma ..... Pueblo, Colo.
White, Grace ..... Greeley, Colo.
White, Ida M. ..... St. Joseph, Mo.
Wheeler, Ina B. ..... Aspen, Colo.
Wilder, George ..... Ft. Collins, Colo.
Wilson, Ida ..... Lamar, Colo.
Wilkinson, Mabel ..... Greeley, Colo.
Wolf, Mabel ..... Greeley, Colo.
Woodbury, May ..... Greeley, Colo.
Woodruff, Burnice L. ..... Knoxville, Ia.
Woodward, Ethel ..... Cripple Creek, Colo.
Wylie, Eva ..... Greeley, Colo.
Yarbury, Minnie ..... Pueblo, Colo.

HIGH SCHOOL DEPARTMENT.

ELEVENTH GRADE—62.

Baird, Alice
Beardsley, Edith
Bons, Mamie
Camp, Myrtle
Chestnut, Maud
Craig, Maud
Crawford, Charles
Dannels, Clara
Dean, Rose
Delling, Evelyn
Devinny, Marie
Dick, Jeanne
Durning, Bertha
Eggleston, Martha
Erskine, Cora
Fedde, Agnes
Finch, Lester
Gammon, Minnie
Garrigues, Grace
Hall, Frank
Hall, Beula
Hall, Rena
Hall, Carl
Hammond, Maud
Hammond, Edna
Hibner, Dee
Holliday, Margaret
Hoy, Lillian
Jillson, Hazel
Johnson, John
Jones, Lynn
Kelley, Lillian
Kindred, Avis
Kyle, Clover
Kyle, Henry
Lamma, Clara
Lamoy, Madaline
Lockhart, James
Long, Margaret
Lucas, Cora
Mackey, Gertrude
Mead, Wilhemina
Morris, Clara
McAfee, Mona
McCamm, Maude
McCreery, Mildred
Patterson, Alice
Pearson, Hazel
Piedalue, Laura
Putney, Maud
Quinlan, Agnes
Reid, Janet
Richardson, Clyde
Reilly, Katie
Roberts, Mabel
Roland, Garnet
Royer, Russell
Tracy, Lillian
VanGorder, Elizabeth
Wright, Lora
Young, George
Yerion, Cena

TENTH GRADE—58.

Alexander, Edith
Bedford, Merton
Bernethy, Ruth
Blumer, Henrietta
Bowerman, Ina
Brady, Teresa
Bradfield, Louis
Calvin, Nona
Carpenter, James
Cary, Leta
Chestnut, Asa
Clock, Louva
Cook, Mary
Cooper, Agnes
Douhan, Julia
Elmer, Marjorie
Faris, Robert
Fester, Mabel
Gates, Allie
Gardner, Ralph

Goodwin, Lizzie
Gore, Stella
Graham, Katherine
Grant, Allister
Hatch, Frank
Hill, Georgie
Hosack, Walter
Houghton, Vera
Hunter, Calla
Jackson, James
Jackson, Alma
Leeper, Effie
Miller, Alta
McClintock, Alice
McClenahan, Stella
McCullom, Merriam
Nusbaum, Elsie
Paine, Velma
Patterson, Marjorie
Pence, Pansy
Peterson, Jennie
Real, Mary
Reeves, Frank
Rygren, Emma
Sanburn, Lillian
Schroeder, Alma
Seabory, Ethel
Sherman, Jessie
Straight, Alan
Talbot, Nellie
Ward, Katie
Ward, Maud
Werkheiser, Ola
Whitescarver, Merle
Wilmarth, Maud
Wilson, Ella
Work, Marion
Zilar, Bessie

NINTH GRADE—81.

Bender, Sulvia
Beardsley, Inez
Bergman, Emma
Blair, Anna
Blair, Bessie
Blair, Bertha
Blaisdell, Oscar
Bradley, Rosa
Brainard, Rose
Brockway, Ada
Camp, Bessie
Carpenter, Edith
Carrithers, Glessner
Christman, Mary
Comer, Myra
Crook, Earl
Ericson, Arthur
Fay, Charles
Finch, Clarence
Finch, Callie
Freeman, Harman
Gardner, Howard
Gordon, Chauncey
Hammond, Louise
Hart, Alex
Heighton, Charles
Hopkins, Mildred
Horton, Charles
Hudson, Mary
Huffsmith, Gertrude
Johnson, Mabel
Kelley, Letah
Kennedy, Lyrra
Laughtry, Bernice
Lawson, Bessie
Lee, Arthur
Ling, Bessie
Lockhart, Mae
Mackey, Joseph
Miller, Lois
Mitchele, Charles
Moore, Elizabeth
Morris, Ruth
Motheral, Clara
Mott, Irene
Mundy, James
McClellan, Elma
McCoy, Adelaide
McCollom, Agnes
McKinney, Iva
Nordstrom, Sylvia
Park, Olive

Piedalue, Regina
Real, John
Real, Elizabeth
Rogers, Francis
Sayers, Denson
Schafferhoff, Anna
Schulze, Laura
Scott, Herbert
Shambo, Mabel
Shearer, Harlan
Smith, Helen
Smith, John
Sprangers, Marie
Steck, Susie
Swanson, Lois
Sweet, Gladys
Tepley, Anna
Thompson, William
Thompson, Laura
Turner, Elmer
Vail, Efton
Varvel, Emmett
Warner, Carl
Watson, Marie
Webber, Mary
Wilson, Pearl
Wilmarth, Alta
Williams, Flossie

GRAMMAR DEPARTMENT.

EIGHTH GRADE—30.

Adams, Roy
Baab, Bertha
Bly, Hazel
Calvin, Claude
Calvin, Everett
Carter, Ralph
Campbell, Della
Carlson, Gust
Davidson, Chief
Durning, Charlie
Farr, Gladys
Harbottle, Adaline
Hopkins, Helen
Hunter, Hugh
Hunter, Eugene
Kellogg, Bert
Malm, Carl
Newland, Rollie
Ovesen, Theodore
Phelps, Mattie
Rehn, Katherine
Roseman, Fletcher
Sample, Lela
Schulze, Bertha
Sputh, John
Swanson, Harry
Waite, Earl
Wolfe, Walter
Wyatt, Hilda
Wyatt, Mabel

SEVENTH GRADE—25.

Anderson, Fritz
Brainard, Grace
Billings, Gordon
Blair, Harold
Benton, Mabel
Carlson, Henry
Davidson, Lulu
Durning, Jamie
Ennis Arthur
Evans, Willie
Gore, Floy
Harsh, Leo
Lawson, Mary
Lofgren, Adolph
Michaels, Charlie
Mundy, Emery
Newton, Charlie
Pattee, Isabelle
Ringle, Helen
Standley, Hilda
Stewart, Hazel
Swanson, May
Tell, Sylvia
VanGorder, Perry
Waite, Rosie

SIXTH GRADE—28.

Adams, George
Adams, Ruth
Anderson, Ellen
Calvin, Florence
Camp, Greeley
Carlson, Albin
Dawson, Kenneth
Dean, Florence
Dedrick, Helene
Edwards, Lizzie
Elliott, John
Elmer, Catherine
Fairchild, Lola
Gross, Eda
Johnson, Shirley
Kidder, Jay
Kindred, Harold
Kindred, Roy
Lodwick, Paul
Lofgren, Hattie
McClelland, Ralph
Miller, May
Swart, Katherine
Sweet, Marian
Tell, Lorette
Vandermey, Willie
VanSickle, Hazel
Watson, Carl

FIFTH GRADE—22.

Anderson, Albert
Anderson, Lucien
Benton, Elbert
Billings, Ada
Calvin, Clyde
Courtney, Rose
Dawson, Wayne
Farr, Ruth
Galland, Mamie
Gill, Richard
Gore, Flo
Gormley, Harry
Houghton, Genette
Lodwick, Byron
McCarthy, Jerry
Miller, Jaunetta
Motheral, Roy
Mundy, Edwin
Rydin, Carl
Smith, Una
Stephens, Edith
Walker, Madge

PRIMARY DEPARTMENT.

FOURTH GRADE—37.

Adams, Donald
Adams, Mary
Anderson, Annie
Anderson, Carl
Bly, Lucius
Brainard, Omer
Calvin, Bert
Calvin, Maggie
Coleman, Leila
Coleman, Maxine
Davidson, Mabel
Erdbrugger, Elsie
Ericson, Clara
Ericson, Ruth
Foley, Ruth
Foulke, Lola
Gehrig, Hilda
Hays, Harold
Houghten, Roy
Johnson, Walter
Kimbley, Ona
Kimbley, Orville
McCarthy, Mary
Nealand, Mary
Newton, Frankie
Ovesen, Esther

Prunty, Iona
Reeves, Virgil
Ringle, Margaret
Shattuck, Mary
Stoneking, Fay
Tegtmann, Edward
Tegtmann, Ernest
Valley, Mary
Waite, Clarence
Wilmarth, Ronald
Winegar, Fred

THIRD GRADE—15.

Anderson, George
Anderson, Lily
Bilsborough, Walter
Calvin, Elizabeth
Calvin, Van
Carlson, Annie
Courtney, Ocie
Crawford, Kenneth
Dedrick, Walter
Lofgren, Mabel
Lowe, Florence
Oberg, Hasel
Prunty, Leuty
Sweet, Mildred
Talbert, John

SECOND GRADE—18.

Anderson, Blanche
Beisham, Mary
Blair, Mildred
Carlson, Tillie
Ennis, Hazel
Foley, Irene
Gehrig, Ada
Hays, Robert
Hughes, Clara
Kindred, Dorothy
Kirkham, Meldon
McClelland, Alvin
Michael, Hannah
Stoneking, May
Tegtman, Frank
Valley, Foncey
Vanderman, Marie
Walker, Charles

FIRST GRADE—23.

Adams, Elizabeth
Adams, William Charles
Anderson, Henry
Anderson, Carl
DeSellum, Wesley
Foley, Raymond
Foulk, Richard V.
Gale, Jessie
Gehrig, Raymond
Hughes, Bennet
Hall, Edgar
Houghton, Albert
Kelvin, Lenna
Murray, Evelyn
Prunty, Lloyd
Shattuck, Flora
Smiser, Sherron
Sears, Evelyn
Talbor, Flossie
Tegtman, Charles
Wilmarth, Carl
Winegar, Mabel
Wilson, Louis

KINDERGARTEN—32.

Beardsley, Alma
Blair, Florence
Bly, Helen
Broman, Paul
Bullock, Phillip
Butcher, William
Cannon, Mott
Carrel, Lee
Clark, Lawrence
Croll, Brinker
Ernesti, Virginius
Hays, Helen
Hays, James
Hibbard, Gail
Houghton, Dorothy
Kirkham, Roscoe
Marshall, Rhona
McCarthy, Bessie
McPherson, Charles
McPherson, Dorothy
Mooreland, Dorothy
Onstine, Eunice
Patterson, Donald
Phelps, Louis
Ringle, Arthur
Seaman, Ruth
Sears, Marguerite
Stevens, Horace
Smyzer, Marvin
Schade, Gilbert
Walker, Mildred
Willson, Ivy

SUMMARY OF ATTENDANCE.

NORMAL DEPARTMENT.

SENIORS.

Females	197	
Males	11	
		208

JUNIORS.

Females	202	
Males	10	
		212

SPECIALS.

Females	1	
Males	2	
		3

SUMMER TERM.

Females	187		
Males	19		
		206	
Total			629

TRAINING SCHOOL.

High School Department:		
Eleventh Grade	62	
Tenth Grade	58	
Ninth Grade	81	
		201

Grammar Department:		
Eighth Grade	30	
Seventh Grade	25	
Sixth Grade	28	
Fifth Grade	22	
		105
Primary Department:		
Fourth Grade	37	
Third Grade	15	
Second Grade	18	
First Grade	23	
		93
Kindergarten Department		32
Total Registration		1060
Counted twice		35
Total		1025

ALUMNI

OFFICERS.

L. H. Harrison.....President
Mary Uzzell.....Vice-President
Mary Blaesi.....Secretary
Vernon McKelvey.....Treasurer
Axel E. Johnson, Trinidad.....Alumni Editor

DIRECTORY.

REGULAR GRADUATE COURSE.

Bentson, Hilma.....Holyoke, Colo.
Braucht, Frank.....Ann Arbor, Mich.
Browne, Merge J. (Mrs.).....Milledgeville, Ga.
Collins, C. Bruce.....Buena Vista, Colo.
Fenneman, Sarah Glisson (Mrs.).....Madison, Wis.
Garrigues, Helen (Mrs. McGrew).....Sulphur Springs, Colo.
Graham, Anna.....Greeley, Colo.
Heath, Herbert.....Silverton, Colo.
Hewett, E. L.....Washington, D. C.
Jackson, O. E.....Holyoke, Colo.
Keightley, Anna K.....Pueblo, Colo.
Kendel, Elizabeth.....Greeley, Colo.
Ladd, Dora C.....Greeley, Colo.
Meddins, W. C. P.....Pueblo, Colo.
Miles, Cornelia (Mrs.).....Denver, Colo.
Mooney, William B.....Spearfish, S. Dak.
Phillips, Eleanor (Mrs. Phelps).....Enid, Okla.
Reid, Lois E. (Mrs. Barry).....Greeley, Colo.
Reedy, Mary B.....Beatrice, Neb.
Robb, Mary.....Greeley, Colo.
Sibley, Blanche.....Greeley, Colo.
Sutherland, Mary L.....Phoenix, Ariz.
Terry, Earl K.....Idaho Springs, Colo.
Ward, John J.....Castle Rock, Colo.

ART.

Worley, Victor E.....Buena Vista, Colo.
Woodbury, May L.....Fort Morgan, Colo.

MUSIC.

English, Myrtle .....Fort Morgan, Colo.
Kendel, Mary .....Leadville, Colo.
Taylor, Mary D.....Goldfield, Colo.

LIBRARY.

Wilson, Elma A.....Greeley, Colo.

CLASS OF 1891.

Berryman, Eliza E. (Mrs. Howard).....La Jolla, Calif.
Bliss, Clara S. (Mrs. Ward).....Greeley, Colo.
*Bybee, W. F.....Colorado Springs, Colo.
Evans, Bessie B. (Mrs. Edgerton).....Montrose, Colo.
Fashbaugh, Carrie E.....Greeley, Colo.
Hardcastle, Amy B. (Mrs. Davidson).....Fort Collins, Colo.
John, Grant B.....Denver, Colo.
Lincoln, Generva .....Utah
*Montgomery, Jessie .....
McNair, Agnes .....Eaton, Colo.
Spencer, Frank C.....Monte Vista, Colo.
Whiteman, John R.....Greeley, Colo.

CLASS OF 1892.

Van Craig, Edna E. (Mrs.).....Greeley, Colo.
Dresser, Helen C. (Mrs. Dressor).....Whittier, Calif.
Jones, Edith Helen.....Denver, Colo.
Jones, Winifred .....Denver, Colo.
Lynch, Andrew R.....Morenci, Ariz.
McFie, Mabel (Mrs. Miller).....Albuquerque, N. M.
McFie, Vina (Mrs. LeRoy).....Evans, Colo.
Meek, Idela .....Colorado Springs, Colo.
Miller, J. A.....Albuquerque, N. M.
Moore, Mamie F.....Denver, Colo.

*Deceased.

Mumper, Anna T. (Mrs. Wallace) ..... Fort Collins, Colo.
McClelland, Robert A. ..... Ruby Hill, Nev.
Putnam, Kate (Mrs. Elms) ..... South Denver, Colo.
Robinson, Fannie F. ..... Denver, Colo.
*Smith, Mary L. (Mrs. Batterson) ..... Erie, Colo.
Wilson, Elma A. ..... Greeley, Colo.

CLASS OF 1893.

Bybee, Carrie S. ..... Colorado Springs, Colo.
Dace, Mary (Mrs. Farnsworth) ..... Fort Morgan, Colo.
Dunn, Rosalie M. ..... St. Louis, Mo.
Heath, Herbert G. ..... Silverton, Colo.
Hewett, Edgar L. ..... Washington, D. C.
*Hewett, Cora W. (Mrs.) ..... Washington, D. C.
Houston, George M. ..... Greeley, Colo.
Jacobs, Mary Fay (Mrs. Lunt) ..... Windsor, Colo.
*Johnson, Hattie L. (Mrs. Wallace) ..... Denver, Colo.
Knight, Lizzie M. ..... Sapperton, B. C.
MacNitt, E. Alice (Mrs. Montgomery) ..... Longmont, Colo.
McLain, Minnie E. ..... Fort Collins, Colo.
Marsh, Mary B. (Mrs. Smith) ..... Gunnison, Colo.
Nixon, Alice M. (Mrs. Jacobs) ..... Greeley, Colo.
Pearce, Stella ..... Seattle, Wash.
Priest, Lee (Mrs. Shepherd) ..... Cripple Creek, Colo.
Seed, Stella H. (Mrs. Freeman) ..... South Pasadena, Calif.
Stockton, J. Leroy ..... New York City
Struble, Lizzie (Mrs. Cole) ..... Denver, Colo.
Thomas, Cora M. ..... Greeley, Colo.
Varney, Julia A. ..... Idaho Springs, Colo.
Walter, Clara B. ..... Riverside, Calif.
Wheeler, B. B. ..... Muskogee, I. T.

CLASS OF 1894.

Bond, Dell ..... Dennison, Ia.
Burnett, Ruth ..... Mendota, Ill.
Catherwood, Grace A. (Mrs. Billig) ..... Boulder, Colo.

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*Deceased.

Clark, Charles E.....Greeley, Colo.
*Coffey, Gillian .....Denver, Colo.
Cordes, Carrie (Mrs. Loftiss).....Akron, Colo.
Creager, Katie (Mrs. Bullock).....Greeley, Colo.
Day, Nellie (Mrs. Tolman).....Cripple Creek, Colo.
Delbridge, Eloise (Mrs. Petrikin).....Denver, Colo.
Durkee, Alice (Mrs. Rockafellow).....Canon City, Colo.
*Freeman, Maude (Mrs. Felton).....San Francisco, Calif.
Gardiner, Julia .....Denver, Colo.
Gass, Maud .....Denver, Colo.
Lewis, Lottie (Mrs. Davis).....Central City, Colo.
Lynch, John .....Pueblo, Colo.
Melvin, Pearl (Mrs. Ruthledge).....Belleville, Tex.
*McGee, May (Mrs. Winzer).....Cripple Creek, Colo.
Merrill, Louisa A.....Denver, Colo.
Messenger, Edna (Mrs. West).....Boulder, Colo.
Nauman, Minnie (Mrs. Lauritsen).....Cambridge, Neb.
Peters, Anna .....Trinidad, Colo.
Rank, Margaret (Mrs. Morrow).....Denver, Colo.
Robinson, Anna .....Denver, Colo.
Severance, Dora (Mrs. Tinsman).....Windsor, Colo.
*Shumway, William .....San Antonio, Tex.
Trehearne, Beatrice .....Denver, Colo.
Turner, Flora B.....Hartland, Vt.
Welch, Irene (Mrs. Grisson).....Hoquiam, Wash.
Williams, Nellie .....Cherry, Colo.
Woods, James .....Grand Junction, Colo.
Work, Anna (Mrs. Shawkey).....Charleston, W. Va.
Work, Ella (Mrs. Bailor).....Golden, Colo.
Wright, Lulu (Mrs. Heileman).....Pueblo, Colo.
Wright, Nana .....Greeley, Colo.
Yard, Jessie (Mrs. Crawford).....Colton, Calif.

CLASS OF 1895.

Allen, Mame C.....Long Beach, Calif.
Brown, Rebecca .....San Francisco, Calif.

*Deceased.

Canning, Annetta ..... Aspen, Colo.
Coleman, Mary B..... Seattle, Wash.
Clark, Ruth M. (Mrs. Russell)..... Denver, Colo.
Dobbins, Nettie M..... West Point, Miss.
Downey, Abner ..... San Francisco, Calif.
Felton, Mark A..... San Francisco, Calif.
*Freeman, Maude (Mrs. Felton)..... Greeley, Colo.
Gale, Grace M. (Mrs. Clark)..... Los Angeles, Calif.
Goddard, Susan ..... Denver, Colo.
*Hadley, Laurie ..... Eagle, Colo.
Hubbard, Nettie L. (Mrs. Lynch)..... Pueblo, Colo.
Huecker, Lydia E. (Mrs. Dr. Rover)..... Denver, Colo.
King, L. C. (Mrs.)..... Axiel, Colo.
*Lines, Celia ..... Platteville, Colo.
McClave, Blanche M..... Eaton, Colo.
McCoy, Maude M. (Mrs. Frazier)..... Ordway, Colo.
*Marsh, C. T..... Platteville, Colo.
Miller, Edwin ..... Fort Collins, Colo.
Molnar, Louis ..... Washington, D. C.
Newman, Emma ..... Denver, Colo.
Peck, Vera ..... Denver, Colo.
Phillips, Stella (Mrs. North)..... Goldfield, Colo.
Price, J. M..... Loveland, Colo.
Stanton, Kate M. (Mrs. Wallace)..... Boulder, Colo.
Snyder, E. R..... San Jose, Calif.
Stratton, Ella E..... Cripple Creek, Colo.
Sydner, Cecil E..... Las Animas, Colo.
Uhri, Sophia ..... Canon City, Colo.
Woodruff, Myrna ..... Colorado Springs, Colo.
Wyman, Ree (Mrs. Moyer)..... Denver, Colo.

CLASS OF 1896.

Agnew, Minerva (Mrs. Brotherton)..... Silverton, Colo.
Ault, C. B..... Goldfield, Colo.
Bell, J. R..... Denver, Colo.
Berger, Florence (Mrs. Miller)..... Greeley, Colo.

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*Deceased.

Bliss, Lillian M.....Denver, Colo.
Boyd, Sela M.....Greeley, Colo.
Briggs, Jennie M. (Mrs. Mayo).....Rocky Ford, Colo.
Cameron, William F.....Ashland, Ore.
Cameron, Agnes (Mrs. Palmer).....Canon City, Colo.
Collom, Mattie (Mrs. Singleton).....Golden, Colo.
Dittey, Mollie .....Lynchburg, Ohio
Donahue, J. Leo.....Denver, Colo.
Graham, Kate (Mrs. Nierns).....Montrose, Colo.
Hamilton, Ida M. (Mrs.).....Colorado Springs, Colo.
Hanks, Alberta (Mrs. Stevens).....Leadville, Colo.
Hollingshead, C. A.....Denver, Colo.
Howard, Florence .....Denver, Colo.
Howard, Wellington .....Deuel, Colo.
James, Annie (Mrs. Preston).....Denver, Colo
Jamison, Grace (Mrs. Rowe).....Denver, Colo.
Kendel, Elizabeth .....Greeley, Colo.
Mathews, Minnie V. (Mrs. Dole).....Victor, Colo.
Newman, Winnifred (Mrs. Scoville).....Platteville, Colo.
Norton, Nell (Mrs. Lawyer).....Victor, Colo.
Paul, Isabel (Mrs. Clayton).....Greeley, Colo.
Patton, Mabel .....Pueblo, Colo.
Pollock, Emma .....Denver, Colo.
Probst, Emma .....Denver, Colo.
Shull, Grace (Mrs. Eichmann).....Berthoud, Colo.
Smith, Luna .....Greeley, Colo.
Stevenson, Audrey .....Colorado Springs, Colo.

CLASS OF 1897.

Adams, Helen .....New York City
Benson, Franc V. (Mrs. Lanham).....Loveland, Colo.
Brownlee, Sylvia .....Rocky Ford, Colo.
Buffington, Lulu (Mrs. Hogan).....Breckenridge, Colo.
Burns, T. E.....Windsor, Colo.
Dowell, H. L.....Greeley, Colo.
Ellis, Carrie E.....Greeley, Colo.

Guynn, H. G. ..... Smithton, Pa.
Hadden, S. M. ..... Greeley, Colo.
Hamilton, Jessie M. ..... Denver, Colo.
Hammond, Eva V. (Mrs. Blood) ..... Denver, Colo.
Hersey, Rose (Mrs. New) ..... Denver, Colo.
Hinkley, Anna C. (Mrs. Mathis) ..... Denver, Colo.
Hoch, Lillian E. ..... Montclaire, Colo.
Holaday, Minnie (Mrs. Rathmell) ..... Ouray, Colo.
Holliday, Maud (Mrs. Bell) ..... Denver, Colo.
Ingersol, May ..... Lewiston, Idaho
Jones, B. Ida (Mrs. Stockton) ..... Victor, Colo.
Kendel, Juanita ..... Greeley, Colo.
King, Alpha E. ..... Rocky Ford, Colo.
Knapp, Edith A. ..... Lamar, Colo.
Lockett, Margarette (Mrs. Patterson) ..... Waverly, Tenn.
*McDonald, R. A. ..... El Paso, Tex.
McKinley, Hattie (Mrs. Shaffer) ..... Idaho Springs, Colo.
McLeod, Carrie ..... Canon City, Colo.
Newall, Agnes (Mrs. Coston) ..... Fort Morgan, Colo.
Putnam, Jennie (Mrs. Lyford) ..... Greeley, Colo.
Rudolph, Victoria (Mrs. Eldred) ..... Canon City, Colo.
Sanborn, Mabel (Mrs. Marsh) ..... Greeley, Colo.
Slatore, Nelson (Mrs. Thompson) ..... Colorado Springs, Colo.
Smith, Cora E. (Mrs McDonald) ..... El Paso, Tex.
Steans, Henry G. ..... Buena Vista, Colo.
Stevenson, Eleanor (Mrs. Kittle) ..... Greeley, Colo.
Stockton, Guy C. ..... Victor, Colo.
Thompson, Andrew W. ..... Colorado Springs, Colo.
Walker, F. A. ..... New Castle, Colo.
Wheeler, Gertrude E. (Mrs. Bell) ..... Bakersfield, Calif.
White, Esther F. (Mrs.) ..... Canon City, Colo.
Wilkinson, Bessie M. ..... Pueblo, Colo.
Wilson, Edith ..... Redlands, Calif.
Witter, Stella (Mrs. Kerlee) ..... Greeley, Colo.
Work, C. M. ..... Fort Morgan, Colo.
Wright, Olive (Mrs. Egbers) ..... Canon City, Colo.
Young, Kate (Mrs.) ..... Mankato, Minn.

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*Deceased.

CLASS OF 1898.

Amsden, Elmer E.....Durango, Colo.
Ashley, Helen M. (Mrs. Hawkins).....Hope, Idaho
Bartels, Bina .....Pueblo, Colo.
Bryant, Fannie .....Denver, Colo.
Burgess, Edith (Mrs. Stockton).....New York City
Butler, May (Mrs. Wiles).....Trinidad, Colo.
Butscher, Louis C.....Denver, Colo.
Carlson, George A.....Fort Collins, Colo.
Clark, Fred W.....Trinidad, Colo.
Coover, Carrie E. (Mrs.).....San Francisco, Calif.
Coover, J. E.....Sonora, Calif.
Cronkhite, Theodore (Mrs. Hubbell).....Fort Lupton, Colo.
Delbridge, Wychie (Mrs. Desch).....Grand Junction, Colo.
Dolan, Alice .....Leadville, Colo.
Downey, Elijah H.....Greeley, Colo.
Farmer, Grace (Mrs. Sweetser).....Lihue, Kanai, Hawaiian Islands
*Fennell, Anna .....Greeley, Colo.
Fowler, O. S.....University Park, Colo.
Harrison, Virginia (Mrs. White).....Montrose, Colo.
Hawes, Mary M. (Mrs. Amesse).....Brooklyn, N. Y.
Hetrick, Grace C. (Mrs. McNabb).....Denver, Colo.
Hodge, Louise W. (Mrs. Pitcarthly).....Pueblo, Colo.
Hogarty, Michaella (Mrs. Carpenter).....Greeley, Colo.
Howard, Ethel (Mrs. Dowell).....Greeley, Colo.
Howard, Sadie (Mrs. Johnson).....El Moro, Colo.
Howett, Edwin L.....Ault, Colo.
Johnson, Minnie (Mrs. Nelson).....Leadville, Colo.
Kridler, Grace (Mrs. Haff).....Cripple Creek, Colo.
Llewellyn, Sarah (Mrs. Snyder).....San Jose, Calif.
Lory, Charles A.....Fort Collins, Colo.
McCracken, Mary (Mrs. Steans).....Buena Vista, Colo.
McKeehan, Cora .....Denver, Colo.
Montag, Ida C.....Como, Colo.
Moorehouse, Geneva .....Denver, Colo.
Nash, Margaret.....Cripple Creek, Colo.

*Deceased.

*O'Brien, Emma L.....Fort Collins, Colo.
Putman, Nellie (Mrs. Moseley).....Fort Morgan, Colo.
Reeder, John M.....Santa Ana, Calif.
Richards, Carrie L (Mrs. Lory).....Ft. Collins, Colo.
Riddell, Fannie .....Denver, Colo.
Ross, Hettie M. (Dr.).....North Denver, Colo.
Scanlon, Mary .....New Britain, Conn.
Sibley, Bella B. (Mrs.).....Greeley, Colo.
Smith, Helen Fay (Mrs. Zarbell).....Anniston, Alb.
*Stebbins, Helen H. (Mrs. McLeod).....Leadville, Colo.
Stevenson, Mildred.....Colorado Springs, Colo.
Tate, Ethel H. (Mrs. Daniels).....Greeley, Colo.
Taylor, Nellie A. (Mrs. Akin).....Fort Collins, Colo.
Thomas, Helen .....Albany, N. Y.
Thomas, Kathryn (Mrs. Russell).....Denver, Colo.
Van Horn, George.....Loveland, Colo.
Waite, Vesta M. (Mrs. Daeschner).....Del Norte, Colo.
Watson, Ola .....Littleton, Colo.
White, Walter (Dr.).....Greeley, Colo.
Wilkins, Emma T.....Fort Collins, Colo.
Williams, Mary E. (Mrs. Wilson).....Greeley, Colo.
Wintz, Claudia .....Denver, Colo.
Zimmerman, George .....Emmit, Idaho

CLASS OF 1899.

Amick, M. Ethel.....Canon City, Colo.
Anderson, Emma L. (Mrs. Lyon).....Greeley, Colo.
Anderson, Myra M.....Colorado Springs, Colo.
Bartels, Harriet B. (Mrs. Robinson).....Leadville, Colo.
Bashor, Sarah E.....Longmont, Colo.
Braucht, Frank E.....Ann Arbor, Mich.
Burnett, Fannie .....Gunnison, Colo.
Camp, Archibald L.....Salida, Colo.
Campbell, Florence E.....Granite, Colo.
Clonch, Minnie B. (Mrs. Decker).....Crested Butte, Colo.
Curran, Katie .....Florence, Colo.

*Deceased.

Dare, Adela F. (Mrs.) ..... Telluride, Colo.
*DeWeese, Luella (Mrs.) ..... Pueblo, Colo.
Dill, Victoria M. ..... Racine, Wis.
Dingman, Jennie K. ..... Pueblo, Colo.
Fleming, Guy B. ..... Dowagiac, Mich.
Graham, Mary M. (Mrs. Badger) ..... Greeley, Colo.
Gregg, Florence E. ..... Pueblo, Colo.
Gregg, Maud C. ..... Pueblo, Colo.
Hammersley, Mabel (Mrs. Moore) ..... Bisbee, Ariz.
Harrison, Lucian H. ..... Greeley, Colo.
Heath, Edith V. ..... Loveland, Colo.
Hersey, Nellie R. (Mrs. Luper) ..... Greeley, Colo.
*Huffman, E. ..... Evans, Colo.
Kellogg, Gertrude F. ..... Grand Junction, Colo.
Kendall, Zella A. (Mrs. Lewis) ..... La Junta, Colo.
Kendel, Arthur I. ..... Alamosa, Colo.
Kimball, Effie M. (Mrs. Wier) ..... Des Moines, Ia.
Law, Daisy N. ..... Greeley, Colo.
Law, Nona J. (Mrs. Harris) ..... New Windsor, Colo.
Long, Olive ..... Lafayette, Colo.
Lundy, Granville E. ..... Evans, Colo.
McCord, Emma D. (Mrs. Weaver) ..... Colorado Springs, Colo.
McIntosh, Edith L. ..... Ouray, Colo.
McLellon, E. Irene (Mrs. Bledsoe) ..... Bisbee, Ariz.
McLeod, Mary C. ..... Loveland, Colo.
Manifold, W. H. ..... Lincoln, Neb.
Miller, Mary F. (Mrs.) ..... Denver, Colo.
Morehouse, Florence A. (Mrs. Berry) ..... Lamar, Colo.
Newby, Florence (Mrs. Hays) ..... Agency, Mo.
Noel, Maude (Mrs. McMillen) ..... La Selle, Colo.
Patterson, Daisy P. (Mrs. Paul) ..... Pittsburg, Pa.
Poirson, Henriette (Mrs. Dillie) ..... Greeley, Colo.
Pollock, Rose M. (Mrs. Jeter) ..... Colorado Springs, Colo.
Potts, J. George ..... Denver, Colo.
Powell, Frances L. ..... Colorado City, Colo.
Powell, M. Evelyn (Mrs. Avery) ..... Chicago, Ill.

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*Deceased.

Powelson, Pearl E. (Mrs. Clark).....Grand Junction, Colo.
Price, Virginia E.....Fairfield, Ia.
Rankin, Pearl B.....Greeley, Colo.
Roberts, Stella E. (Mrs. Naylor).....Canon City, Colo.
Robinson, Angelina B. (Mrs. Johnson).....Red Cliff, Colo.
*Robinson, Nellie.....Colorado Springs, Colo.
Rochat, Emma Cecile (Mrs. Weaver).....Greeley, Colo.
Ross, Maude E. (Mrs. Casner).....Olathe, Colo.
St. Cyr, Helen E. (Mrs. McMechen).....Salida, Colo.
Scheffler, Bertha S.....Denver, Colo.
Seaton, Janet .....Georgetown, Colo.
Small, Lavina A.....Denver, Colo.
Smith, Amy A. (Mrs. Moynahan).....Breckenridge, Colo.
Sparlin, Nellie .....Denver, Colo.
Strayer, Grace A.....Denver, Colo.
Strickler, C. S.....Wray, Nebr.
Swan, Rosa E.....Denver, Colo.
Tharp, B. Ellen.....Eaton, Colo.
Weiland, Adelbert A.....Boulder, Colo.
West, Edna W.....Greeley, Colo.
Wilkinson, Marguerite.....Cripple Creek, Colo.
Williams, Lizzie F. (Mrs. McDonough).....Los Pinos, Colo.
Wise, Effie M. (Mrs. Cattell).....Boulder, Colo,

CLASS OF 1900.

Albee, Emma .....Berthoud, Colo.
Ashback, Margaret (Mrs.).....Durango, Colo.
Bliss, Nellie M.....Greeley, Colo.
Bresse, Minnie .....Matoon, Ill.
*Brown, L. E.....Boulder, Colo.
Calder, Henrietta.....Canon City, Colo.
Churchill, Isabella (Mrs.).....Greeley, Colo.
Clonch, May (Mrs. McDonald).....Crested Butte, Colo.
Collins, C. Bruce.....Buena Vista, Colo.
Cooper, Theda A. (Mrs. Benshadler).....Crested Butte, Colo.
Cooperrider, A. O.....Boulder, Colo.

*Deceased.

Cornell, Hattie (Mrs. Goodfellow) ..... Edgewater, Colo.
Danielson, Cora ..... Los Angeles, Calif.
DeVine, Elsie (Mrs.) ..... Greeley, Colo.
Doyle, Mabel ..... Salida, Colo.
Evans, Emma (Mrs. Hahn) ..... Severance, Colo.
Ellis, Adda ..... Loveland, Colo.
Ellis Esther ..... La Salle, Colo.
Fagan, Jennie ..... Leadville, Colo.
Fowler, Ruby ..... Boulder, Colo.
Frink, Marguerite R. ..... Fort Collins, Colo.
Gibson, Mildred ..... Greeley, Colo.
Goodale, Nellie ..... Lamar, Colo.
Grout, Lizzie M. ..... Pueblo, Colo.
Hughes, Adella ..... Trinidad, Colo.
Hughes, Ida ..... Denver, Colo.
Imboden, J. W. ..... Evans, Colo.
Jamison, Rea ..... Pueblo, Colo.
Jones, Jennie ..... Denver, Colo.
Kendel, Alice (Mrs. Johnson) ..... Leadville, Colo.
Kenwell, Joseph C. ..... Edgewater, Colo.
Kersey, Margaret (Mrs. Cahill) ..... Greeley, Colo.
Ketner, Sarah ..... Denver, Colo.
Latson, Elmer ..... Manilla, P. I.
Lewis, W. A. ..... La Junta, Colo.
Lowe, Elizabeth F. ..... Denver, Colo.
Lowther, Laura (Mrs. Laws) ..... Canon City, Colo.
Markuson, Martha ..... Denver, Colo.
Mayne, Fannie ..... Greeley, Colo.
McKelvey, Eva ..... New Windsor, Colo.
McNee, Elizabeth ..... Kersey, Colo.
Melville, Bessie L. (Mrs. Hawthorn) ..... Las Animas, Colo.
Mulnix, Sadie S. ..... Pueblo, Colo.
Neel, Ora ..... Eaton, Colo.
Nutting, Drusilla ..... Canon City, Colo.
O'Boyle, Lila ..... Grand Junction, Colo.
O'Connell, Mamie ..... Cheyenne, Wyo.
Olson, Mamie ..... Georgetown, Colo.
Orr, Irma (Mrs. Edwards) ..... Central City, Colo.

Poland, Belle ..... Pueblo, Colo.
*Probst, Rose ..... Denver, Colo.
Resor, Virginia ..... Pueblo, Colo.
Riek, Meta (Mrs. Irving) ..... Fay, Nev.
*Robbins, W. F. ..... Highland Lake, Colo.
Romans, Ab. H. ..... Loveland, Colo.
Sarell, Jessie (Mrs. Rudd) ..... Golden, Colo.
Schmidt, Kari (Mrs. Williams) ..... Central City, Colo.
Searles, Nina (Mrs. Kendel) ..... Eaton, Colo.
Seybold, Bertha (Mrs. Fisher) ..... Durango, Colo.
Stockdale, Martha ..... Colorado Springs, Colo.
Smith, Frances ..... Cripple Creek, Colo.
Smith, Olive ..... Erie, Colo.
Taylor, Hazel ..... Durango, Colo.
Veniere, Cecilia ..... Denver, Colo.
Warning, G. A. ..... Grand Junction, Colo.
Waters, Eva ..... Brush, Colo.
Williams, S. D. ..... Rico, Colo.
Williamson, Lucy (Mrs. Griffee) ..... Emporia, Kan.
Wilson, Marie (Mrs. Benham) ..... Mt. Vernon, Ia.
Wood, Carolyn (Mrs. Greenacre) ..... Fort Collins, Colo.

CLASS OF 1901.

Adams, Mary ..... Denver, Colo.
Allnutt, Frederic ..... Greeley, Colo.
Andrews, Adell ..... Denver, Colo.
Bailey, Louise ..... Bisbee, Ariz.
Barnard, Margaret ..... Pueblo, Colo.
Bent, Clinton ..... Castle Rock, Colo.
Beswick, Dolphin ..... Colorado Springs, Colo.
Breuer, Emma (Mrs. Brownell) ..... Coal Creek, Colo.
Broquet, Prudence (Mrs. Bailey) ..... Manhattan, Kan.
Carter, Carrie (Mrs. Martin) ..... Bareda, Neb.
Carter, Lina ..... Denver, Colo.

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*Deceased.

*Craven, May (Mrs. Clemens) ..... Leadville, Colo.
Crone, John V. ..... Greeley, Colo.
Day, Reba ..... Greeley, Colo.
Delbridge, Lucy ..... Greeley, Colo.
Demsey, Nettie ..... Pueblo, Colo.
Dugan, Julia (Mrs. Beach) ..... La Plata, Colo.
Edwards, Mabel ..... Carbondale, Penn.
Filkins, Grace ..... Greeley, Colo.
Gibbs, Elizabeth ..... Monte Vista, Colo.
Graham, Melcena (Mrs. Howard) ..... Duel, Colo.
Hall, Agnes ..... Leadville, Colo.
Hamm, Elsie (Mrs. Humphreys) ..... Longmont, Colo.
Harrington, Ada ..... Colorado Springs, Colo.
Henderson, Alice (Mrs. Bryant) ..... Cripple Creek, Colo.
Holland, Nena (Mrs. Gedge) ..... Greeley, Colo.
House, Louise (Mrs. Downey) ..... Greeley, Colo.
Jones, Katie ..... Denver, Colo.
Kesler, Joseph ..... Boulder, Colo.
Keyes, Victor ..... Denver, Colo.
Kittle, Helen (Mrs. Starr) ..... Greeley, Colo.
Knowlton, Charles ..... Ureka, Utah
Lowe, Anna ..... Denver, Colo.
Lundy, Katie ..... Fort Morgan, Colo.
McCarthy, Mary ..... Pueblo, Colo.
McCloskey, Viola (Mrs. Waddle) ..... Greeley, Colo.
McCoy, Anna ..... Denver, Colo.
McMullin, Edith (Mrs. Collins) ..... Buena Vista, Colo.
McKelvey, Katharyn ..... Windsor, Colo.
McPherson, Mattie ..... Boulder, Colo.
McPherson, William ..... Greeley, Colo.
Merchant, Maud (Mrs. Harvey) ..... Leadville, Colo.
Morris, Florence ..... Cripple Creek, Colo.
Needham, Charles ..... Boulder, Colo.
Norine, Mayme ..... Chicago, Ill.
Norton, Nona (Mrs. Broadbent) ..... Ordway, Colo.
O'Brien, Rhoda ..... Lyons, Colo.

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*Deceased.

O'Connor, Charles ..... Boulder, Colo.
Onstine, Eulalia ..... Cripple Creek, Colo.
O'Keefe, Agnes ..... Denver, Colo.
Parrett, Kate ..... Alcott, Colo.
Peterson, Hanna ..... Empire, Colo.
Remington, Mayme (Mrs. O'Maila) ..... Fairplay, Colo.
Robinson, Abbie ..... Basalt, Colo.
Robertson, Jean ..... Chicago, Ill.
Schutz, Tyro ..... Crested Butte, Colo.
Scott, Lucy ..... Eaton, Colo.
Scheffler, Josephine ..... Denver, Colo.
Sellers, Gilbert ..... Galesburg, Ill.
Snyder, Laura (Mrs. Hadden) ..... Greeley, Colo.
Tefft, Ruth (Mrs. Parr) ..... Pagosa Springs, Colo.
Veverka, Madaline ..... Sterling, Colo.
Watson, Alice ..... Denver, Colo.
Welch, Hattie ..... Boulder, Colo.
Welch, Harry ..... Boulder, Colo.
Weller, Mary ..... Colorado Springs, Colo.
Webster, Ella ..... Los Angeles, Calif.
Wolfenden, Anna (Mrs. Allnutt) ..... Greeley, Colo.
Wood, Florence (Mrs. Leavitt) ..... Los Angeles, Calif.

CLASS OF 1902.

Allen, Alice (Mrs. Kennedy) ..... Windsor, Colo.
Anthony, Anna ..... Denver, Colo.
Bailey, W. L ..... Lake City, Colo.
Bowen, Claudia (Mrs. Romans) ..... Loveland, Colo.
Bowman, Julia B. (Mrs. Deitch) ..... Goldfield, Colo.
Boylan, Daisey D ..... Hubbard, Iowa
Bracewell, Cora ..... Salida, Colo.
Carter, Ethel I ..... Denver, Colo.
Cheeley, Ella (Mrs. Frink) ..... Larkspur, Colo.
Coil, Lina D ..... Boulder, Colo.
Crone, John V. (Normal College) ..... Greeley, Colo.
Day, Fannie L ..... Masters, Colo.
Enoch, Mary Priscilla ..... Grand Junction, Colo.
Farlow, Floe ..... Valley City, N. Dak.

Floyd A. J. (Normal College) ..... Trinidad, Colo.
Follett, Celinda G. ..... Elkton, Colo.
Fugate, Inda (Mrs. Bowman) ..... Guffey, Colo.
Fugate, Laura E. (Mrs. Bent) ..... Castle Rock, Colo.
Gale, Edith V. ..... Greeley, Colo.
Garcia, James ..... Boulder, Colo.
Geffs, Bessie (Mrs. Carlson) ..... Eaton, Colo.
Gibbons, Marcella ..... Las Animas, Colo.
Green, Hilda ..... Ludlow, Colo.
Grove, Rhena M. ..... Phoenix, Ariz.
Harbottle, John ..... La Salle, Colo.
Henderson, Alice (Mrs. Bryant) ..... Cripple Creek, Colo.
Hiatt, J. Frances (Mrs. Reid) ..... Apex, Colo.
*Hotchkiss, Esther ..... Hotchkiss, Colo.
Jessup, Leona (Mrs. Kesler) ..... Boulder, Colo.
Keightley, Anna K. ..... New York City
Kelsey, Sofia (Mrs. Decker) ..... Denver, Colo.
Kennedy, Ethel (Mrs. Rugh) ..... Greeley, Colo.
Keplinger, Peter ..... Amethyst, Colo.
Knowlton, Richard G. ..... Colorado Springs, Colo.
Ladd, Dora ..... Greeley, Colo.
Leonard, Sadie K. ..... Denver, Colo.
Lewis, Charlotte ..... Pueblo, Colo.
Llewellyn, Mary J. (Mrs. Alder) ..... Rockvale, Colo.
Lovering, Esther A. ..... Buena Vista, Colo.
Marshall, Estella D. (Mrs. Darrah) ..... Denver, Colo.
Martin, Teena (Mrs. Willson) ..... Denver, Colo.
McNee, Jessie ..... Blairsburg, Iowa
Mitchell, Bessie ..... Cripple Creek, Colo.
Mooney, William B. ..... Spearfish, S. Dak.
Mosher, Abbie ..... Denver, Colo.
Moss, Eva May ..... Colorado Springs, Colo.
Mundee, Helen A. ..... Silverton, Colo.
Packer, W. R. ..... Colorado Springs, Colo.
Pechin, Zadia ..... Eaton, Colo.
Pendell, Dorcas M. ..... Saginaw, Mich.

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*Deceased.

Porter, Della E. (Mrs. Roberts) ..... Rocky Ford, Colo.
Powers, Myrtle A ..... Windsor, Colo.
Proctor, Ula ..... Canon City, Colo.
Rankin, Bessie (Mrs. Adams) ..... Palmer, Neb.
Reid, Lois E. (Mrs. Barry) ..... Greeley, Colo.
Reynolds, Alma S ..... Denver, Colo.
Rhys, Mary G ..... Denver, Colo.
Richardson, E. Florence ..... Tonopah, Nev.
Robinette, Sara J ..... Denver, Colo.
Scriven, Dee M ..... Spearfish, S. Dak.
Sellers, Will ..... Denver, Colo.
Smith, Adda Wilson (Mrs.) ..... Bellinghan, Wash.
Smith, Frank B ..... Boulder, Colo.
Thompson, Blanche ..... Colorado Springs, Colo.
*Thompson, Jettie (Mrs. McElfresh) ..... Starkville, Colo.
Thompson, Nellie ..... Colorado Springs, Colo.
Tilyou, Mabel L. (Mrs. Mackey) ..... La Salle, Colo.
Washburn, Lizzie (Mrs. Coffman) ..... Greeley, Colo.
*Welch, Fred ..... Greeley, Colo.
West, Olive ..... Telluride, Colo.
Wiedmann, D. E ..... Central City, Colo.
Willcox, Margaret (Mrs. Baltosser) ..... Fruita, Colo.
Willie, Anna (Mrs. Malonnee) ..... Denver, Colo.
Wood, Florence (Mrs. Leavitt) ..... Los Angeles, Calif.

CLASS OF 1903.

Allyn, Emily (Mrs. Porter) ..... Windsor, Colo.
Asmus, Karina ..... Cripple Creek, Colo.
Atherly, Varina ..... Fort Collins, Colo.
Ayers, Lucy E ..... Denver, Colo.
Bandy, Pearl ..... White Water, Colo.
Balch, Edith J ..... Manzanola, Colo.
Bay, Minnie (Mrs Ward) ..... Orchard Lake, Mich.
Beardsley, Earl ..... Greeley, Colo.
Bodle, Veda ..... Denver, Colo.
Carnine, Stella M. (Mrs. Biddle) ..... Salida, Colo.

*Deceased.

Churchill, Flossie E. ..... Pueblo, Colo.
Clement, H. Harman ..... Georgetown, Colo.
Clement, Aurora W. (Mrs.) ..... Georgetown, Colo.
Clonch, Nell P. ..... Windsor, Colo.
Cooley, Ruth ..... Trinidad, Colo.
Day, Etta M. ..... La Salle, Colo.
Eaton, Fern B. ..... Grand Junction, Colo.
Fagan, Katie D. ..... Leadville, Colo.
Faus, Ada ..... Monte Vista, Colo.
Farnworth, Mary (Mrs. Hilsalock) ..... Angus, Neb.
Fisher, Edna V. ..... New York City
Gordon, Carrie (Mrs. Scott) ..... Denver, Colo.
Gruber, Mayme F. (Mrs. Barcley) ..... Leadville, Colo.
Hayward, Lois ..... Boulder, Colo.
Henebry, Agatha C. (Mrs. Catlett) ..... Victor, Colo.
Herrick, Olive M. (Mrs. Wilson) ..... Loveland, Colo.
Howard, Mildred ..... Fort Collins, Colo.
Hogarty, Viola Collins (Mrs.) ..... Pueblo, Colo.
Hughell, Samuel L. ..... Denver, Colo.
Hunter, Maud E. ..... Rinn, Colo.
Ingram, Grace (Mrs. Cushman) ..... Eaton, Colo.
Inman, Minnie J. ..... Fort Morgan, Colo.
Jones, Allie ..... Rock Springs, Wyo.
Keeler, Bessie ..... Kersey, Colo.
Kemp, Josephine (Mrs. McGuire) ..... Beckwith, Calif.
Kendel, Mary ..... Leadville, Colo.
Kleinsorge, Louise J. ..... Riverside, Calif.
Lauenstein, Minnie V. ..... Durango, Colo.
Martin, Beatrice E. ..... Denver, Colo.
McCoy, Minnie E. (Mrs. Bradfield) ..... Greeley, Colo.
McCracken, Katherine ..... Leadville, Colo.
McCullough, Edith E. ..... Grover, Colo.
McIntyre, Jennie ..... Lamar, Colo.
McNeal, Chandos L. (Mrs. Funk) ..... Central City, Colo.
Mergelman, Lulu ..... Iola, Colo.
Middleswarth, Harriet E. ..... Denver, Colo.
Mitchell, Miriam V. ..... Denver, Colo.
Mundie, Isabelle F. (Mrs. Mabee) ..... Central City, Colo.
Nevitt, Eva E. (Mrs. Wood) ..... Del Norte, Colo.

Neuman, Ella ..... Victor, Colo.
Newcomb, Anna H..... Saguache, Colo.
Phillips, Jessie ..... Montrose, Colo.
Poirson, Louise..... Fort Collins, Colo.
Reynolds, Gerda ..... Eaton, Colo.
Robinson, Goldie W..... Leadville, Colo.
Ross, M. Esther..... Greeley, Colo.
Scherrer, Josephine L..... Denver, Colo.
Schweitzer, Katherine ..... Florence, Colo.
Scofield, Beulah F..... Delta, Colo.
Singleton, Helen A. (Mrs.) ..... Florence, Colo.
Slavin, Helen A..... Leadville, Colo.
Sleeper, Sarah E..... Johnstown, Colo.
Stealy, Elza R..... Iowa City, Iowa
Stokes, Katherine E..... Leadville, Colo.
Stone, Alice I..... Colorado Springs, Colo.
Taylor, Hope C..... Grand Junction, Colo.
Tilyou, Blanche ..... Longmont, Colo.
Tucker, Hazel ..... Central City, Colo.
Van Cleave, Ada M..... Wilsonville, Neb.
Wakeman, Alleah ..... Denver, Colo.
Watson, Edna (Mrs. Knowlton) ..... Colorado Springs, Colo.
Welch, Jeanne..... Fort Collins, Colo.
White, Mabel ..... Denver, Colo.
Whitham, Bronte ..... Redstone, Colo.
Whitham, Xavia ..... Redstone, Colo.
Wilson, Isabelle D..... Eaton, Colo.
Worth, Katie (Mrs. McClain) ..... Fruita, Colo.
Worrell, Blanche ..... Leadville, Colo.
Wood, Texie M. (Mrs. Armatage) ..... Eaton, Colo.
Young, Charles ..... Panora, Iowa
Youngclaus, Emma ..... Del Norte, Colo.
Youngclaus, Katherine ..... Brighton, Colo.

CLASS OF 1904.

Graduate Course.

Clement, Aurora W. (Mrs.) ..... Georgetown, Colo.
Clement, H. Harman..... Georgetown, Colo.

Crone, John V.....Greeley, Colo.
Kleinsorge, Eliza .....Des Moines, Iowa
Mitchell, Miriam V.....Denver, Colo.
Sibley, Bella B. (Mrs.).....Greeley, Colo.
Wilson, Elma A. (Library).....Greeley, Colo.

REGULAR COURSE.

Alexander, Grace L.....Greeley, Colo,
Alps, George W.....La Salle, Colo.
Blunt, Carrie E.....Longmont, Colo.
Buckley, Emma F.....Greeley, Colo.
Burbank, Myrtle E.....Longmont, Colo.
Bushyager, Genetta .....Denver, Colo.
*Campbell, Jennie M.....Loveland, Colo.
Candor, Ethel .....Ordway, Colo.
Carrel, Mabel .....Pueblo, Colo.
Cartwright, Mabel .....Ordway, Colo.
Cassidy, Eva (Mrs. Hamilton).....Des Moines, Iowa
Cleave, Clara J.....Leadville, Colo.
Coleman, Cora.....Grand Junction, Colo.
Cook, Florence .....La Junta, Colo.
Cope, Minnie M.....Salida, Colo.
Crawford, Sadie R.....Daffodil, Colo.
Curtis, Grace E.....Longmont, Colo.
Doane, Maude S.....Fairfax, S. D.
Dale, Dora (Mrs. Steck).....Greeley, Colo.
Dayton, Georgian I.....Pueblo, Colo.
Dillman, Caroline (Mrs. Kehm).....Leavenworth, Kan.
Dolan, Margaret J.....Leadville, Colo.
Douglas, Edith S.....Longmont, Colo.
Doull, Elizabeth G.....Loveland, Colo.
Dullman, Ethel P.....Spearfish, S. D.
Evans, Katharyne M.....Denver, Colo.
Elliott, Elizabeth .....Brighton, Colo.
Elliott, Caroline (Mrs. Canady).....Brighton, Colo.
Frink, Ruby .....Erie, Colo.

*Deceased.

Garrigues, Helen (Mrs. McGrew) ..... Sulphur Springs, Colo.
Hughes, Emma E. ..... Eaton, Colo.
Ingersoll, Nettie R. ..... Santa Barbara, Calif.
Johnson, Axel E. ..... Trinidad Colo.
Jones, Bessie E. ..... Telluride, Colo.
Jones, Katherine ..... Chicago, Ill.
Kauffman, Harriett ..... Alamosa, Colo.
Kelley, Edith (Mrs. McDougall) ..... Eaton, Colo.
Kelsey, Wheeler ..... Fort Lupton, Colo.
Kendel, Mary ..... Leadville, Colo.
Kerr, Berdie ..... Pagosa Junction, Colo.
Lakin, Irene R. ..... Victor, Colo.
Lewis, Ella M. ..... Loveland, Colo.
Lincoln, Clara S. ..... Eaton, Colo.
Little, Isabel M. ..... Denver, Colo.
MacArthur, Jessie J. ..... Fort Collins, Colo.
McDonald, Mollie A. ..... Malta, Colo.
McKeon, Madge L. ..... Cripple Creek, Colo.
McMurphey, Jessie ..... Ponca City, Okla.
Meddins, Winifred C. P. ..... Pueblo, Colo.
Menke, Alice ..... Denver, Colo.
Merrill, Ada M. (Mrs. Hedges) ..... Portland, Ore.
Miller, Mary G. ..... Denver, Colo.
Morey, Jessie ..... Independence, Colo.
Nelson, Josephine (Mrs. Myers) ..... Greeley, Colo.
Nelson, Lena M. ..... Canon City, Colo.
Oldham, Ethel J. ..... Fowler, Colo.
Osborne, Mary C. ..... Monte Vista, Colo.
Pendery, Alice E. ..... Julesburg, Colo.
Patterson, Elizabeth V. ..... Greeley, Colo.
Perry, Geraldine M. ..... Littleton, Colo.
Porter, Frances ..... Greeley, Colo.
Ramsey, L. Fern ..... Denver, Colo.
Reid, Pearl ..... Colorado Springs, Colo.
Russell, Mabel N. (Mrs. Cozad) ..... Denver, Colo.
Said, Nettie A. ..... Los Angeles, Calif.
Sanborn, Roma (Mrs. Kendel) ..... Alamosa, Colo.
Savage, Ella G. ..... Salida, Colo.

Scott, Bertha L.....Windsor, Colo.
Scott, Ethel .....Hotchkiss, Colo.
Singer, Harriet H. (Mrs. Howlett).....Fort Collins, Colo.
Smith, Lavinia.....Colorado Springs, Colo.
Snyder, E. Tyndall.....Boulder, Colo.
Stevens, Laura C.....Loveland, Colo.
Sutherland, Mary L.....Phoenix, Ariz.
Thedinga, Mary E.....Colorado Springs, Colo.
Thomas, Lillie .....Denver, Colo.
Turner, Mattie .....Lamar, Colo.
Wetzel, George L.....Willow Creek, Mo.
Woodbury, May L.....Sterling, Colo.
Worley, James .....Waverly, Colo.
Worley, Victor E.....Buena Vista, Colo.

CLASS OF 1905.

Graduate Course.

Collins, C. Bruce.....Buena Vista, Colo.
Garrigues, Helen (Mrs. McGrew).....Sulphur Springs, Colo.
Meddins, W. C. P.....Pueblo, Colo.
Sutherland, Mary L.....Phoenix, Ariz.

Regular Course.

Adams, Roxana M.....Loveland, Colo.
Alexander, Raymond P.....Mancos, Colo.
Ball, Maud .....Greeley, Colo.
Beckford, Edith R.....Denver, Colo.
Bentson, Hilma C.....Holyoke, Colo.
Blaine, William D.....Pueblo, Colo.
Browne, Merge J. (Mrs.).....Milledgeville, Ga.
Broman, Cora.....Las Animas, Colo.
Brown, Araba D.....Sterling, Colo.
Buchanan, Lucile B.....Barnum, Colo.
Carson, Madge .....Denver, Colo.
Carson, Jessie .....Leadville, Colo.
Chase, Bertha M.....Edgewater, Colo.
Churchill, Harry V.....Antonito, Colo.
Crawford, Mabel L.....Leadville, Colo.

Cope, Myrtle ..... Delta, Colo.
Correll, Gertrude E..... Cripple Creek, Colo.
Craine, Carrie E..... Denver, Colo.
Cummings, Josephine ..... Greeley, Colo.
Cuney, Nannie I..... Laird, Colo.
DeSellem, Belle (Mrs) ..... Greeley, Colo.
Eadie, Isabel P..... Mancos, Colo.
Eldredge, Eva ..... Pueblo, Colo.
Ellis, Ralph W..... La Salle, Colo.
English, Myrtle ..... Fort Morgan, Colo.
Evans, Clara (Mrs. Brunelle) ..... Belleview, Colo.
Fergus, Mabel C..... Denver, Colo.
Ferguson, Mabel C..... Denver, Colo.
Forsyth, Clara ..... Alamosa, Colo.
Graham, Anna D..... Eaton, Colo.
Graham, Veda S..... Denver, Colo.
Godley, Sophie ..... Denver, Colo.
Goldacker, Mary V. (Mrs. Rathbun) ..... Clifton, Ariz.
Heighton, Harry W..... Greeley, Colo.
Holland, M. Pearl..... Loveland, Colo.
Hooper, Dorothy..... Sugar City, Colo.
Hughes, Mildred B..... Fowler, Colo.
Hummer, Ruthella ..... Cripple Creek, Colo.
Hunter, Leona D..... Greeley, Colo.
Hutchinson, Jessie A..... Denver, Colo.
Hunting, Addie L..... Arapahoe, Colo.
Kerr, Harriette ..... Mancos, Colo.
Kibby, Laura M..... Loveland, Colo.
Kuhnley, Mabel L..... Delta, Colo.
Kulp, Freeda (Mrs. Naylor) ..... Denver, Colo.
LaMar, Leona ..... North Platte, Neb.
Lewis, Mabel A..... Las Animas, Colo.
Lucas, M. Adella..... Rockvale, Colo.
Magner, Bessie M..... Pueblo, Colo.
Mahoney, Elizabeth ..... Pueblo, Colo.
Maine, Lottie ..... Walden, Colo.
Martin, Maude E..... Cripple Creek, Colo.
McBreen, Barbara ..... Denver, Colo.

McDermet, Ella ..... Gibbs, Mo.
McFarland, Rachel B..... Greeley, Colo.
McKelvey, Nina..... La Salle, Colo.
McDonald, Anna ..... Leadville, Colo.
McKune, D. Hazel..... Del Norte, Colo.
McLravy, M. Pearl..... Aspen, Colo.
Meddins, Beatrice ..... Denver, Colo.
Morand, Earle G..... Trinidad, Colo.
Nash, Kathryn A..... Windsor, Colo.
Nash, Katharine F..... Crested Butte, Colo.
Pasley, Edith L. (Mrs. Heightoon)..... Greeley, Colo.
Porter, F. Gertrude..... Fruita, Colo.
Reid, Pearl..... Colorado Springs, Colo.
Riggs, Caroline..... Fort Morgan, Colo.
Robb, Pearl (Mrs. Austin)..... Greeley, Colo.
Rupp, Gertrude ..... Greeley, Colo.
Scott, Madeleine ..... Akron, Colo
Sexson, John A..... Mancos, Colo.
Sibley, Banche T..... Rocky Ford, Colo.
Smith, Alma ..... Longmont, Colo.
Smith, T. Carrie..... Coal Creek, Colo.
Sparling, Emma ..... Denver, Colo.
Terry, Earl K..... Idaho Springs, Colo.
Thomas, Myra ..... Greeley, Colo.
Twomey, H. Jennie..... Julesburg, Colo.
Wilson, Mary ..... Denver, Colo.
Zorn, Frederica E..... Fruita, Colo.

KINDERGARTEN AND PRIMARY COURSE.

Brush, Ruth G..... Loveland, Colo.
Ford, Rae R..... Lamar, Colo.
Fulweider, Eva ..... Denver, Colo.
Grimoldby, Winifred A..... Chicago, Ill.
Hanel, Bertha ..... Trenton, Neb.
Jenkins, Marie ..... Denver, Colo.
Jones, Eleanor M..... Denver, Colo.
Kniest, Eleanor E..... Colorado Springs, Colo.
Mosier, Leila ..... Las Animas, Colo.

Newsome, Ethel ..... Colorado Springs, Colo.
Pate, Pearl A. ..... Denver, Colo.
Reed, Adaline W. ..... Denver, Colo.
Robb, Mary ..... Greeley, Colo.
Robinson, Frances I. ..... La Junta, Colo.
Shumate, Letha ..... Rocky Ford, Colo.
Taylor, Mary D. ..... Goldfield, Colo.
Veazey, Oma ..... Leadville, Colo.

ART COURSE.

Boyd, Helen ..... Reno, Nev.
Sheeley, Nellie I. ..... Montrose, Colo.
Reid, Pearl ..... Colorado Springs, Colo.
Welty, J. Florence (Mrs. Merrell) ..... Eaton, Colo.

MANUAL TRAINING COURSE.

Hunting, Addie L. (Mrs. Sweeney) ..... Los Angeles, Calif.
Lewis, Mabel A. ..... Colorado Springs, Colo.
Mahoney, Elizabeth M. ..... Pueblo, Colo.
Maine, Lottie ..... Walden, Colo.
Nash, Kathryn A. ..... Windsor, Colo.
Nash, Katharine F. ..... Crested Butte, Colo.
Riggs, Caroline ..... Fort Morgan, Colo.
Smith, T. Carrie ..... Coal Creek, Colo.
Terry, Earl K. ..... Idaho Springs, Colo.
Work, Josephine ..... Fort Morgan, Colo.

DOMESTIC SCIENCE COURSE.

Brush, Mary ..... Farmington, Mass.
Reedy, Mary B. ..... Beatrice, Neb.
Work, Josephine ..... Fort Morgan, Colo.

LIBRARY COURSE.

Rupp, Gertrude ..... Greeley, Colo.

CLASS OF 1906.

GRADUATE STUDENTS.

REGULAR COURSE.

Bentson, Hilma ..... Holyoke, Colo.
Braucht, Frank ..... Ann Arbor, Mich.

Browne, Merge J. (Mrs.) ..... Milledgeville, Ga.
Graham, Anna ..... Eaton, Colo.
Reedy, Mary B. ..... Beatrice, Neb.
Robb, Mary ..... Greeley, Colo.
Sibley, Blanche ..... Rocky Ford, Colo.
Terry, Earl K. ..... Idaho Springs, Colo.

ART COURSE.

Worley, Victor E. ..... Buena Vista, Colo.
Woodbury, May ..... Sterling, Colo.

MUSIC COURSE.

English, Myrtle ..... Greeley, Colo.
Taylor, Mary D. ..... Greeley, Colo.

REGULAR COURSE.

Allison, Grace Elizabeth ..... Denver, Colo.
Alps, Rosaline (Mrs. Carlson) ..... Fort Collins, Colo.
Anderson, Grace Mabel ..... Sheridan, Wyo.
Appleby, Carrie Louise ..... Monte Vista, Colo.
Aulsebrook, Martha ..... Portland, Colo.
Bassler, Mary Barber ..... Mancos, Colo.
Bailey, Mary E. (Mrs.) ..... Denver, Colo.
Baird, Lavinia ..... Breckenridge, Colo.
Beach, Rae L. ..... Longmont, Colo.
Beardsley, Eugene Darwin ..... Greeley, Colo.
Biegler, H. K. (Mrs.) ..... Clarinda, Iowa
Bowen, Martha C. ..... Golden, Colo.
Boyer, Ella F. ..... Ordway, Colo.
Bracewell, Laverna Goodwin (Mrs.) ..... Greeley, Colo.
Brown, Edith Lucile ..... Pueblo, Colo.
Bucks, Ada ..... Denver, Colo.
Bunning, Elsie ..... Greeley, Colo.
Burns, Margaret M. ..... Leaville, Colo.
Butcher, Arthur J. ..... La Jara, Colo.
Butterfield, Mary Ethel ..... Monte Vista, Colo.
Chivington, Cordelia (Mrs.) ..... Rock Springs, Wyo.
Christopherson, Genevieve Catherine ..... Denver, Colo.
Coles, Joseph D. ..... South Pasadena, Calif.

Conkright, Josephine ..... Greeley, Colo.
Daniels, Laura Amelia ..... Saguache, Colo.
Dale, Ruth Arvilla (Mrs. Ellis) ..... La Salle, Colo.
Day, Grace T. ..... Gypsum, Colo.
Deane, Edna ..... La Salle, Colo.
Dillman, Josephine ..... Wheatland, Wyo.
Doherty, Marguerite Anita ..... Eaton, Colo.
Doke, Carrie A. ..... Hardin, Colo.
Donahue, Marie V. ..... Cripple Creek, Colo.
Donovan, Margaret ..... Lafayette, Colo.
Dyekman, Ruby ..... Frances, Colo.
Dyer, Edna Lorena ..... Crested Butte, Colo.
Edminister, Ethel A. (Mrs. Bliss) ..... Greeley, Colo.
Ellis, E. Edith ..... Johnstown, Colo.
Filger, Irma C. ..... Leadville, Colo.
Finch, Myrtle M. ..... Denver, Colo.
Finney, Emma A. ..... Greeley, Colo.
Fitzpatrick, Mary ..... Jefferson, Colo.
Foote, Amy Rachel ..... Elbert, Colo.
Frank, D. Alice ..... Pueblo, Colo.
Gehrung, Emma Gertrude ..... La Junta, Colo.
Glaze, Anna Wolfe ..... Henderson, Colo.
Hall, Elizabeth Perry ..... Cripple Creek, Colo.
Hall, Ivan Clifford ..... Colorado Springs, Colo.
Hall, Mabel Gladys ..... Ault, Colo.
Hansen, Laura Z. M. ..... Denver, Colo.
Hansen, Zelma Elizabeth ..... Denver, Colo.
Harkey, Tula Lake ..... Birmingham, Ala.
Heiskell, Bettie G. ..... Fort Morgan, Colo.
Hiatt, Grace (Mrs. Webb) ..... Apex, Colo.
Hoffmann, Ethel Angenette ..... Plattville, Colo.
Holmes, Luella ..... Canon City, Colo.
Howard, Maud ..... Greeley, Colo.
Hoy, Minnie M. ..... Cripple Creek, Colo.
Jamieson, Estella L. ..... Lamar, Neb.
Johnson, Alice ..... Denver, Colo.
Johnson, Earl Lynd ..... Plattville, Colo.
Kendel, J. C. ..... Greeley, Colo.

Lewis, Alta Coral.....Antonito, Colo.
Light, Edith Mary.....Aspen, Colo.
Mallery, Mary Margaret.....Boulder, Colo.
Marshall, Myrtle E.....Swink, Colo.
Marteeny, Maude Estelle.....Aspen, Colo.
McCormick, Cora Frances .....Denver, Colo.
McCutcheon, Mary Bruen.....Mineral Wells, Tex.
McFeeley, Mary Valeria.....Lamar, Colo.
McKinlay, Marie .....Castle Rock, Colo.
Midgett, Alma Mayme .....La Salle, Colo.
Miller, Laura Louise .....Denver, Colo.
Montague, Ruth E.....Denver, Colo.
Morrison, Kellaphene (Mrs.).....Gypsum, Colo.
Murray, Grace .....Fort Collins, Colo.
Nash, Ella May .....Crested Butte, Colo.
Nelson, Louise .....Ault, Colo.
Norris, Luella .....Kersey, Colo.
Partner, Nettie Orvilla.....Rocky Ford, Colo.
Pasley, Elizabeth Mabel (Mrs. Hampton).....Central City, Colo.
Paxton, Lucinda Ann.....Lamar, Colo.
Peck, Ethel Gertrude .....Pueblo, Colo.
Picket, Lulu May.....Westlake, Colo.
Pittman, Alice .....Wheatland, Wyo.
Porges, Nettie.....Cripple Creek, Colo.
Powell, Olive Elizabeth.....Rockvale, Colo.
Preston, Charles W.....Walden, Colo.
Proffitt, Edward F.....Julesburg, Colo.
Provis, Dora Mary .....Mancos, Colo.
Radford, Minnie Etheline.....Grover, Colo.
Randall, Maud Agnew (Mrs.).....Greeley, Colo.
Rendahl, Martin O.....Longmont, Colo.
Robey, Claude .....Kremmling, Colo.
Robinson, Blanch .....Spokane, Wash.
Sanford, Edith D. (Mrs. Thompson).....Greeley, Colo.
Sanford, Margaret O.....Crested Butte, Colo.
Saunders, Edith .....Pueblo, Colo.
Sayer, Emma .....Las Animas, Colo.
Sayer, Myrtle P.....Coal Creek, Colo.

Schafranka, Ella ..... Animas City, Colo.
Scheid, Ethel M. ..... Delta, Colo.
Schumate, Agnes J. ..... Las Animas, Colo.
Shumate, Mary D. ..... Rocky Ford, Colo.
Sibley, Winifred M. ..... Denver, Colo.
Sites, Florence Ethel ..... Las Animas, Colo.
Smith, Anna P. ..... Greeley, Colo.
Smith, Carolin Estella ..... Kingmon, Ariz.
Snook, Harry ..... Ault, Colo.
Stewart, Charles Edmond ..... Fort Morgan, Colo.
Van Buren, Guy Arthur ..... Fort Collins, Colo.
Walsh, Ella P. ..... Cripple Creek, Colo.
Watson, Margaret Reynolds ..... Las Animas, Colo.
Weeber, Callie ..... Pueblo, Colo.
Webber, Jennie E. ..... Monte Vista, Colo.
Wolfe, Clara L. (Mrs. Holland) ..... Greeley, Colo.
Woods, Hulda Marie ..... Denver, Colo.
Work, Anna Dayton ..... Colorado Springs, Colo.
Yardley, Alice Elizabeth ..... Greeley, Colo.

KINDERGARTEN AND PRIMARY COURSE.

Anderson, Pearle C. ..... Fort Collins, Colo.
Auld, Mae ..... Antonito, Colo.
Bailey, Bessie May ..... Denver, Colo.
Burgess, Grace Elizabeth ..... Cripple Creek, Colo.
Galer, Anna Grozzelle ..... Denver, Colo.
Glaze, Carrie Ellen ..... Denver, Colo.
Hawley, Nelle ..... Trinidad, Colo.
Scott, Nancy May ..... Ogden, Utah
Sherry, Lulu ..... Alamosa, Colo.
Waxham, Faith Caroline ..... Denver, Colo.
Webb, Margaret Elizabeth ..... Denver, Colo.
Wells, Leila M. ..... Pueblo, Colo.

ART COURSE.

Abbott, Vivian ..... Greeley, Colo.
Bassler, Mary Barber ..... Mancos, Colo.
Beal, Elizabeth ..... Longmont, Colo.
Hafling, Reuben G. ..... Las Animas, Colo.

Henry, Luella V.....Boulder, Colo.
Mead, Lexie .....Greeley, Colo.
Waggoner, Reba (Mrs. Haruff).....Pueblo, Colo.

MANUAL TRAINING COURSE.

Cheese, Cora .....Plattville, Colo.
Christopherson, Genevieve Catherine.....Denver, Colo.
Collom, Leila M.....Denver, Colo.
Curtis, Earl S.....La Junta, Colo.
Hafling, Reuben G.....Las Animas, Colo.
Johnson, Alice .....Buena Vista, Colo.
Saunders, Edith .....Pueblo, Colo.

DOMESTIC SCIENCE COURSE.

Cooper, Majorie Carolyn.....Manzanola, Colo.
Gardner, Marian A.....Denver, Colo.
Uzzell, Margaret James.....Pueblo, Colo.

MUSIC COURSE.

Kendel, J. C.....Greeley, Colo.
Mead, Lexie .....Greeley, Colo.

LIBRARY COURSE.

Yardley, Alice Elizabeth.....Greeley, Colo.
Ingram, Lillian Grace (Mrs. Cushman).....Eaton, Colo.

CLASS OF 1907.

GRADUATE COURSE.

Bailey, W. L.....Lake City, Colo.
Gibbons, Marcella .....Las Animas, Colo.
Hewett, Edgar L.....Washington, D. C.
Johnson, Axel E.....El Moro, Colo.
Lewis, Donna M.....Greeley, Colo.
Stockton, Guy C.....Victor, Colo.

REGULAR COURSE.

Ahrens, Hazel V.....Denver, Colo.
Anderson, Eloise .....Denver, Colo.
Anderson, Nettie .....Colorado Springs, Colo.
Anderson, Mary Elizabeth.....Toledo, Ohio

Arbuthnot, Melissa ..... Boulder, Colo.
Bailey, D. Lena ..... Greeley, Colo.
Bailey, Latilla (Mrs.) ..... Lake City, Colo.
Baird, Olive A. ..... La Salle, Colo.
Baker, Grace E. ..... Carbondale, Colo.
Baroch, Eulalia ..... Denver, Colo.
Barry, Lois M. ..... Evans, Colo.
Berkey, Edna ..... Canon City, Colo.
Berkey, Pearl ..... Canon City, Colo.
Blaesi, Mary C. ..... Denver, Colo.
Blake, Helen ..... Denver, Colo.
Boyd, Helen ..... Reno, Nev.
Brennan, Lulu May ..... Cripple Creek, Colo.
Brown, Benjamin F. ..... Ault, Colo.
Brown, Dessie M. ..... Greeley, Colo.
Budge, Jessie ..... Greeley, Colo.
Byron, Helen Fern ..... Aspen, Colo.
Caldwell, Irene M. ..... Denver, Colo.
Callison, Cyrus O. ..... Cheyenne Wells, Colo.
Carlson, Margaret H. ..... Denver, Colo.
Carroll, E. K. (Mrs.) ..... Colorado Springs, Colo.
Carpenter, Anna ..... Atlantic City, Wyo.
Casey, Ethel S. ..... Denver, Colo.
Cartwright, Edna ..... La Junta, Colo.
Chase, Lucile B. ..... Denver, Colo.
Christopher, Bertha ..... Ault, Colo.
Combs, Ethel L. ..... Denver, Colo.
Cook, Gertrude ..... Denver, Colo.
Conner, R. Grace ..... Greeley, Colo.
Connelly, Mary H. ..... Denver, Colo.
Cooper, Isaphine D. ..... Windsor, Colo.
Cox, Lizzie R. ..... Wray, Colo.
Cronin, Josephine ..... Leadville, Colo.
Daven, Hazel L. ..... Greeley, Colo.
Davis, Juanita I. ..... Denver, Colo.
Donnelly, M. Celeste ..... Holyoke, Colo.
Doull, Rose M. ..... Denver, Colo.
Drach, Mary M. ..... Glenwood Springs, Colo.

Draper, Albert G.....Hudson, Colo.
Dudley, Fora .....Colorado Springs, Colo.
Duenweg, Rosa A.....Platteville, Colo.
Edwards, Ethel .....Victor, Colo.
Estes, Dosia A.....Gunnison, Colo.
Evans, Charlotte .....Smith Center, Kan.
Flach, Marie I.....Denver, Colo.
Flint, Ruth L.....Greeley, Colo.
Forsyth, Orrin M.....Greeley, Colo.
Foster, Gertrude M.....Pueblo, Colo.
Frederick, Marie A.....Denver, Colo.
Gehman, Wanda L.....Golden, Colo.
Gill, Emma .....Denver, Colo.
Gilpatrick, Gail L.....Eaton, Colo.
Goodwin, Edna F.....Crawford, Colo.
Gross, Etta .....Greeley, Colo.
Guise, Mabel L.....Gold Hill, Colo.
Hamilton, Mabelle .....Cedar Rapids, Neb.
Harrington, E. Mary .....Cheyenne, Wyo.
Hecker, Mary M.....Monte Vista, Colo.
Hedstrom, Horace H.....Shoemaker, N. M.
Herrington, Edith P.....La Salle, Colo.
Hines, Viola .....Denver, Colo.
Irons, Blanche .....Greeley, Colo.
Imrie, Harracena .....Denver, Colo.
Jeffery, Esther M.....Denver, Colo.
Jennerick, Burdella A.....Brighton, Colo.
Jones, Ida B.....Sidney, Colo.
Jones, Wilhelmina .....Littleton, Colo.
Johnson, Anna .....Edgewater, Colo.
Johnson, Georgia W.....Denver, Colo.
Johnson, Ida .....Georgetown, Colo.
Joyce, Gertrude .....Cripple Creek, Colo.
Kammerer, Mary D.....Deuel, Colo.
Kendall, Mary E.....Silver Plume, Colo.
King, Reta .....Sterling, Colo.
Kirkpatrick, Sadie .....Albion, Neb.
Koster, Elizabeth E.....Rico, Colo.

Kouba, Emma T.....Boulder, Colo.
Latson, Frank E.....Rocky Ford, Colo.
Laughlin, Grace E.....La Salle, Colo.
Laughrey, Leona.....Greeley, Colo.
Layden, Susie A.....Georgetown, Colo.
Lillard, Zanelda Belle .....Canon City, Colo.
Lillard, Daisy G.....Denver, Colo.
Linville, Eva Boyle.....Greeley, Colo.
Love, S. Helen.....Fort Collins, Colo.
Mackey, Druzilla R.....Pueblo, Colo.
Mahoney, Rebecca .....Pueblo, Colo.
Markwardt, Alma L.....Lansing, Iowa
McAfee, Fannie G.....Las Animas, Colo.
McCarn, Rocena .....Denver, Colo.
Meddings, Ada M.....Greeley, Colo.
Meeker, Anicartha M.....Denver, Colo.
Meredith, Nora .....Boulder, Colo.
Milligan, Mabel .....Crested Butte, Colo.
*Mills, Carrie T.....Marshalltown, Iowa
Moore, Edith M.....Fruita, Colo.
Morgan, Grace M.....Denver, Colo.
Mosher, Edna T.....Gypson, Colo.
Muller, Maude L.....Denver, Colo.
Mundy, Florence .....Silver Plume, Colo.
Muncaster, Edith A.....Victor, Colo.
Nettleton, E. Augusta .....Eaton, Colo.
Newton, Lillian B.....Greeley, Colo.
Norgaard, R. Marie.....Gypsum, Colo.
Offdenkamp, A. Ruth.....Pueblo, Colo.
Oklun, Mattie .....Georgetown, Colo.
Olney, Nellie .....Denver, Colo.
Petersen, A. Maria.....Brush, Colo.
Peterson, Mary V.....Fort Collins, Colo.
Philip, J. Lonie.....Fort Lupton, Colo.
Poirson, Eugenie .....Silver Plume, Colo.
Pressler, Anna W.....Golden, Colo.

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*Deceased.

Pearcey, Lillie .....Eads, Colo.
Redic, Mary E.....Telluride, Colo.
Robertson, Chrissie G.....Del Norte, Colo.
Robinson, Armina E.....Greeley, Colo.
Roddy, Gary .....Greeley, Colo.
Rowton, V. E.....Rocky Ford, Colo.
Schattinger, Mary L.....Denver, Colo.
Scott, Leta M.....Windsor, Colo.
Shaw, Helen D.....Pueblo, Colo.
Smith, Leta A. (Mrs.) .....Rocky Ford, Colo.
Spence, Mary R.....Chromo, Colo.
Stampfel, Alvene L..... Rico, Colo.
Stannard, Emily M.....Golden, Colo.
Stannard, Laura V.....Golden, Colo.
Stauffer, Beulah G.....Denver, Colo.
Stiles, Elizabeth .....Georgetown, Colo.
Sullivan, Mary E.....Denver, Colo.
Tierney, Mary Bertha.....Basalt, Colo.
Towne, Mary E.....Rocky Ford, Colo.
Troutman, May .....Fort Collins, Colo.
Troutman, Leah .....Fort Collins, Colo.
Tully, Mary Shields.....Glenwood Springs, Colo.
Turner, Elva M. (Mrs.) .....Colorado Springs, Colo.
Uzzell, Mary M.....Denver, Colo.
VanWinkle, Grace I.....Copel, Colo.
Wallace, Mary H.....Windsor, Colo.
Wilkinson, Mabel .....Greeley, Colo.
Wilson, Nora .....Colorado Springs, Colo.
Wolf, Clara (Mrs.) .....Denver, Colo.
Woodward, Ethel .....Cripple Creek, Colo.
Woodford, Cora M.....Canon City, Colo.
Wylie, Eva .....Greeley, Colo.
White, Grace .....Boulder, Colo.

ART COURSE.

Blaine, William D.....Pueblo, Colo.
Blandin, Ethel I.....Eaton, Colo.
Brush, Ada .....Greeley, Colo.

Chamberlain, Pansy E.....Montrose, Colo.
Craig, Carrie M.....Durango, Colo.
Dowling, Katharyn H.....Greeley, Colo.
Johnson, Alice .....Denver, Colo.
Jones, Ida B.....Sidney, Colo.
Landrum, Mabel R.....Sterling, Colo.
Philip, J. Lonie .....Fort Lupton, Colo.
Proctor, Irene E.....Denver, Colo.
Rice, Lucile .....Denver, Colo.
Twombly, Margaret .....Fort Lupton, Colo.
Webster, Mary R.....Canon City, Colo.

DOMESTIC SCIENCE COURSE.

Laughlin, Ethel M.....La Salle, Colo.

KINDERGARTEN AND PRIMARY COURSE.

Allen, Grace E.....Denver, Colo.
Armstrong, Mabel .....Denver, Colo.
Augur, Charlotte C.....Denver, Colo.
Besser, Grace B.....Denver, Colo.
Cunningham, Carrie C.....Wray, Colo.
Cox, Helen L.....Denver, Colo.
Dawson, Olive I.....Julesburg, Colo.
Dean, Iva .....La Salle, Colo.
Godley, Sophia L.....Edgewater, Colo.
Gorman, Edith .....Denver, Colo.
Hildebrand, Miriam E.....Denver, Colo.
Lafferty, Edith .....Denver, Colo.
McGowan, Cynthia M.....Canon City, Colo.
Mills, Ruth E.....Marshalltown, Iowa
Sawin, Katherine .....Manitou, Colo.
Schillig, Clara .....Greeley, Colo.
Tabor, Elizabeth .....Chicago, Ill.
Weyand, Mamie .....Cripple Creek, Colo.
Wright, Nell Grant .....Telluride, Colo.

LIBRARY COURSE.

Albert, Ruby .....Berthoud, Colo.
Boyd, Sela M.....Greeley, Colo.

MANUAL TRAINING COURSE.

Billington, Maud B. ..... Painesville, Ohio
Brown, Edith Lucile ..... Pueblo, Colo.
Doull, Rose M. ..... Denver, Colo.
Morrison, Marguerite E. ..... Evans, Colo.
Nusbaum, Jess ..... Greeley, Colo.
Pridmore, Eula ..... Monte Vista, Colo.
Purdee, Myrtle ..... La Junta, Colo.
Roddy, Gary ..... Greeley, Colo.
Rowton, V. E. ..... Rocky Ford, Colo.
Ross, Edwin A. ..... Greeley, Colo.
Salmon, Edith L. ..... Denver, Colo.
Schroeder, Helen W. ..... Greeley, Colo.
Springsteen, Francis ..... Denver, Colo.

MUSIC COURSE.

Beardsley, Eugene ..... Greeley, Colo.
Sibley, Winifred ..... Denver, Colo.

SUMMARY.

Class of 1891	12
Class of 1892	16
Class of 1893	23
Class of 1894	35
Class of 1895	32
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Class of 1901	69
Class of 1902	74
Class of 1903	82
Class of 1904	87
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CONTENTS.

ILLUSTRATIONS.

THE W. F. ROBINSON PTG. CO., DENVER

HIGH SCHOOL

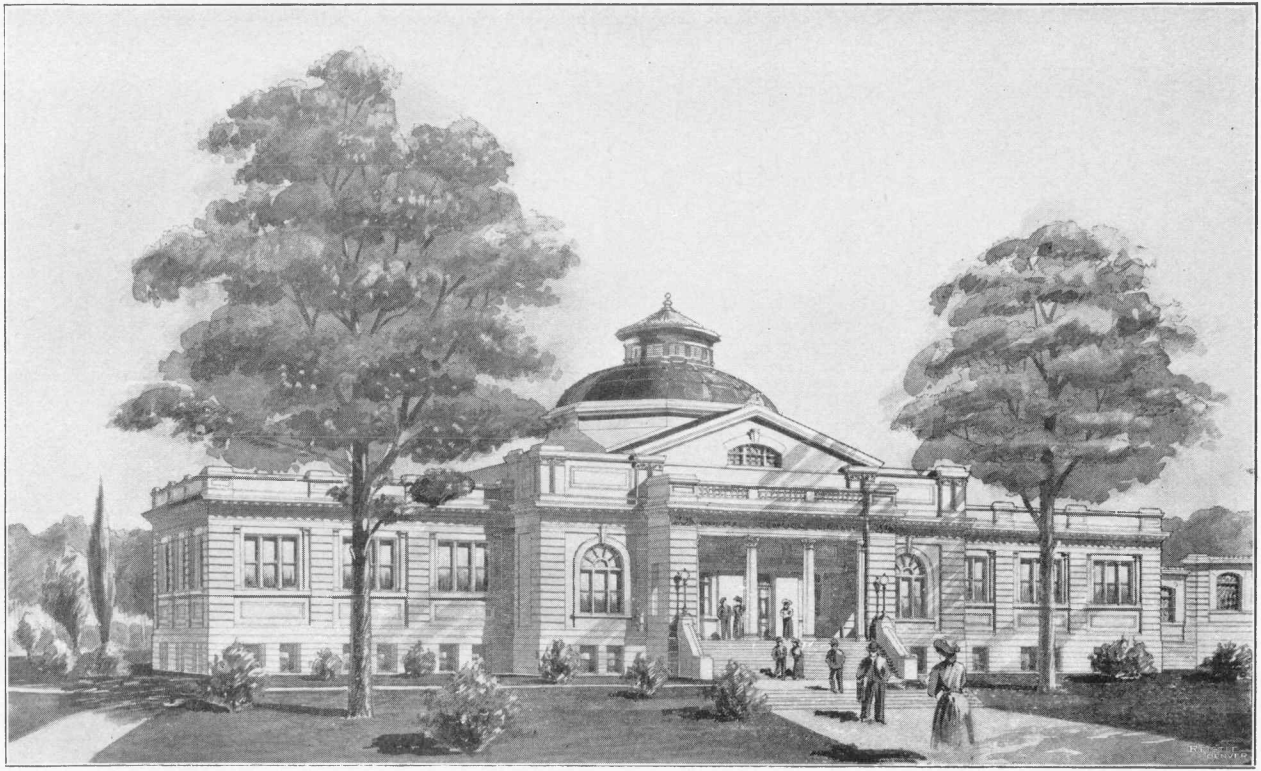
OF

The Training Department

OF

Colorado State Normal School

JUNE, 1907



Library.

HIGH SCHOOL

OF

The Training Department

OF

Colorado State Normal School

JUNE, 1907.

1907

JANUARY

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APRIL

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1908

JANUARY

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FEBRUARY

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MARCH

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APRIL

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DECEMBER

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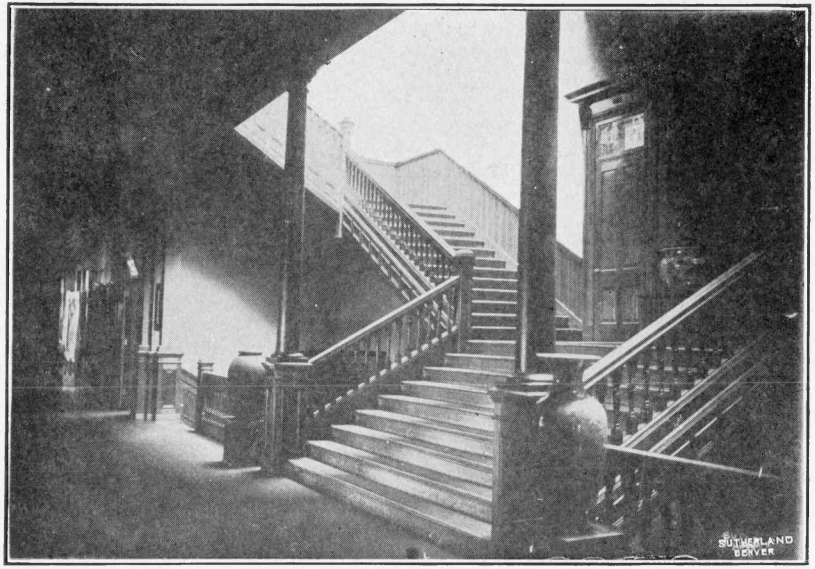
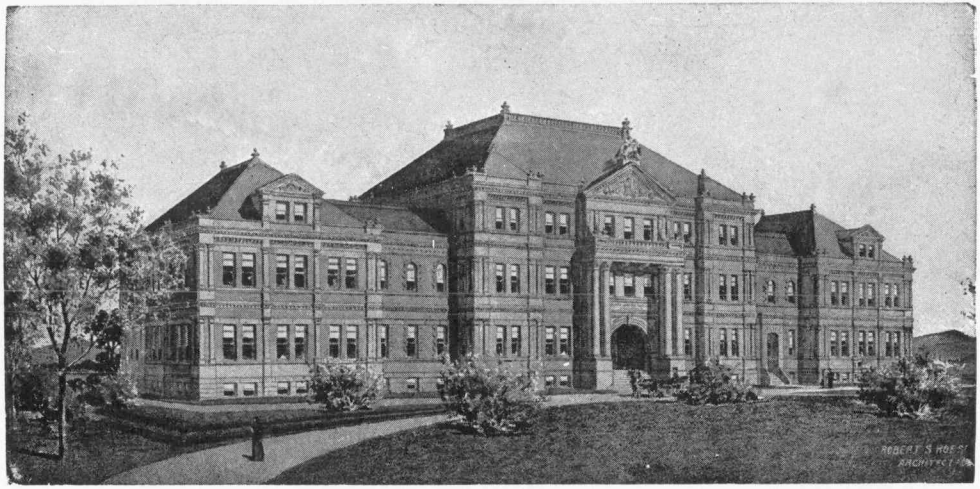


Stairway.



Administration Building.

ANNOUNCEMENTS.

FALL TERM.

Opens Tuesday, September 10, 1907.
Closes Monday, December 2, 1907.

WINTER TERM.

Opens Tuesday, December 3, 1907.
Closes Monday, March 2, 1908.

SPRING TERM.

Opens Tuesday, March 10, 1908.
Closes Friday, May 29, 1908.

Christmas Holidays from Friday, December 20, 1907, to Tuesday, January 7, 1908.
Class Day, May 28, 1908.
Graduation Exercises, May 29, 1907.

FACULTY.

ZACHARIAH XENOPHON SNYDER, Ph. D.,
President Normal School.

DAVID DOUGLAS HUGH, A. M.,
Superintendent Training School.

ROYAL WESLEY BULLOCK, Ph. B.,
Principal High School.
History and Economics.

MARSHALL PANCOAST, B. L.,
Assistant Principal High School.
Reading and Literary Work.

ACHSA PARKER, M. A., Preceptress,
English and Literature.

ETHAN ALLEN CROSS, A. B., Ph. M.,
English and Literature.

JAMES HARVEY HAYS, A. M.,
Professor of Latin.

ARTHUR EUGENE BEARDSLEY, M. S.,
Professor of Biology.

FRANCES TOBEY, B. S.,
Professor of Reading and Interpretation.

RICHARD ERNESTI,
Professor of Drawing and Art.

ELEANOR WILKINSON,
Professor of Domestic Economy.

SAMUEL MILO HADDEN, Pd. B., A. B.,
Professor of Manual Training.

FRANCIS LORENZO ABBOTT, B. S.,
Professor of Physical Science.

GEORGE BRUCE HALSTED, B. A., M. A., Ph. D., F.R.A.S.,
Professor of Mathematics.

WILLIAM KENNEDY STIFFEY,
Professor of Vocal Music.

ABRAM GIDEON, B. L., B. H., M. A., Ph. D.,
Professor of Modern Foreign Languages.

G. W. BARRETT, M. D.,
School Physician, Director of Physical Education.

L. A. ADAMS, A. B., M. A.,
Associate Professor of Biology.

GURDON RANSOM MILLER, Ph. B.,
Professor of History and Sociology.

H. W. HOCHBAUM, B. S. A.,
Professor of Nature Study and Out Door Art.

ALBERT S. WILSON, B. A., B. D.,
Librarian.

GERTRUDE RUPP, Pd. B.,
Assistant Librarian.

COLORADO STATE NORMAL HIGH SCHOOL.

Historical.

In the year 1900 a few pupils in the Training School were given ninth grade work. The next year ninth and tenth grade classes were conducted, still in connection with the upper grammar grades. In 1902 the High School was fully organized with a complete course of study, and with a principal in charge, thus making it a distinct department, while still an integral part of the Normal School system. In 1904, upon completion of the west wing of the main building, the High School was assigned to its present beautiful assembly room and the surrounding recitation rooms.

Ideals and Purposes.

The time has come when the American high school must be in fact, as it is in theory, a public school, closely continuous with the grammar grade school, and offering opportunities to all the youth of the land. The high school must be more than a college preparatory school, more than an elementary trade school, more than a school for any single class of people. It must lead naturally and easily either to the college, to the trade and technical school, to the professions, or to the immediate business of life without further school training.

To prepare students for so wide and varied a range of possibilities the high school must put the individual in pos-

session of at least three factors of success, viz., (1) Large knowledge of facts; (2) Good intellectual habits; (3) High civic ideals.

Knowledge of facts is still, as always, an essential, but it is not now, as formerly, the sole end and aim of school activity. Information may be considered the grist of the intellectual mill; it is dead material, but it is golden grain, capable of being elaborated and assimilated into rich red blood. One business of the school, then, is to see that the student is constantly acquiring truth and steadily building it into his own life and experience. Not by reading alone, but, as well, by observation, by experiment, by experience, and by contact with other minds, should the student come into his just intellectual inheritance, the wisdom of the past and the present.

Intellectual habits are formed from characteristic modes of thought, and these, in turn, become ability along the line of the acquired mental habit. The school concerns itself, consequently, with the establishment of correct habits of thought. Each study affords opportunities which must not be overlooked for the development of judgment, caution, reflection, investigation, perseverance, and similar qualities of mind which collectivly constitute good common sense. These habits, crystalized into character, remain with the individual thru life tho the subject matter of the studies may be forgotten.

Civic ideals are the outgrowth of social experience under circumstances favorable to reflection and consideration for others. Modern society is complex and highly organized. To live happily in this great social body the

student must early learn to adapt himself readily to the varied and ever-changing demands of the social circle in which he moves. Experience in class organizations, in literary societies, in athletic teams, and in the numerous groups organized in the school for different purposes soon teaches effectivly the lessons of consideration for others, unselfishness, gentleness, courtesy, and all those social virtues and graces which constitute refinement and good breeding. At the same time such experience brings out the strong qualities of leadership and administrativ ability in those who are to become moving forces in adult society. To be a good citizen one must not only be good, but be good for something. Civic usefulness is the result of habits of co-operation with others for a common purpose.

Discipline.

That discipline is best which soonest enables a youth to direct his own activities to useful ends while, at the same time, co-operating with others for the common good. The truest freedom is the result of the greatest self restraint. In the Normal High School only such restrictions are enforced as will safeguard the individual and protect the rights of the student body. Coercion is resorted to in no case, the student always being allowed to deliberate upon an issue and choose for himself a course of conduct. If that conduct is wholly inconsistent with the ideals and purposes of the school, the student is advised to withdraw.

Students living in other than their own homes are under the general supervision of the school at all times, and are expected to preserve a proper decorum at all times, in the town as well as in the school.

Each student has a regular program of recitations to attend. His study hours and vacant periods are, with slight restrictions, at his own disposal.

Equipment.

High School students have the use of all the regular Normal School equipment. This includes the library of 30,000 volumes; the laboratories for chemistry, physics, biology, sloyd, domestic economy, etc.; the very extensiv museums of natural history, botany, biology, mineralogy, anthropology, modern industries, etc.; the gymnasium and athletic equipment; the art and ceramic studios and exhibits; the stereopticon and slides; and, in short, all the educational apparatus of a well equipt state institution. This makes the Normal High School probably the best equipt secondary school in the state.

Fees and Expenses.

Tuition is free. Text books are furnisht by the school. All students pay $3.00 per term book fee, $1.00 per term athletic fee, and $1.00 per term museum and laboratory fee, $1.00 per term industrial fee, $1.00 per term music fee and $1.00 per term art fee. A deposit of $2.00 is required from each student when he registers, which is returned, less the value of any books lost or damaged, when the student leaves school or at the end of the year.

Room and board costs from $3.25 to $3.75 per week, where two room together. There are many opportunities for young men and women to earn their board and room or either separately by working out of school hours. A great many students take their entire high school course in this way.

HISTORY AND CIVICS.

PROFESSOR GURDON RANSOM MILLER.

History is considered one of the fundamental subjects of the curriculum because it offers opportunity for unifying the student's fund of knowledge, and gives a basis for the establishment of new lines of study. History is the meeting ground of all branches of knowledge and can therefore be made a common viewpoint from which to discuss the relationship of all branches of study. This study, particularly, liberalizes the student's thought and puts him into the world stream of human life. By a constant use of the library the student is brought to know books also, knowing some books thoroly and many books familiarly.

In the first year of the course is given two terms of ancient history and one term of medieval; in the second year English history two terms and modern European history one term; and in the third year social institutions and civics, and industrial history and economics.

The ancient history comprizes a study of the Hebrew, Egyptian, Babylonian, Persian, Greek, and Roman civilizations to the year 476 A. D. It deals with the progress of industries, art, and government, and teaches by comparison what contributions these nations have made to our modern life. The course in medieval history covers the evolution of European nations from the fall of Rome to the Renaissance and Reformation, and the beginning of modern European civilization. The course in English history deals with the development of social, industrial, and civic insti-

tutions in England, and with the relation of the growth of England to the development of America. The modern European history treats of the development and organization of European governments and gives a general view of world history during the nineteenth century.

The course in industrial history and economics gives a general survey of the evolution of differentiated industries, then follows with an intensiv study of typical special industries, as agriculture, fishing, mining, manufacturing, trading, transportation, etc., and of mechanical inventions, such as the telegraph, telephone and printing machines, in their effect upon social and industrial life. The course considers that application of human effort and ingenuity to the natural resources of our country which has resulted in our phenomenal material prosperity, and a corresponding increase in comfort, ease, and convenience. It deals with those social problems growing out of modern industrial conditions, with labor organizations, child labor, co-operation, socialism, government or municipal ownership, and with all the most prominent efforts for the solution of social problems.

The constant effort in this course is to arouse in the pupil a keen and abiding interest in all the life activities about him, and to train him to understand and interpret these activities through his knowledge of the laws and forces that have in the past produced the conditions which he now experiences. Society in the process of making is the point of departure and the final goal in all the special investigations of this course.

CIVICS.

The course in Civics is a study of the theory and practics of citizenship. Such a study may begin where the old course in Civil Government used to end, with a study of the theory of government drawn from a reading of the constitution alone, but it must include the practical working out of civic problems down to the smallest local civic unit.

As the course is actually given in this school the work begins with organized observation of the work of the city council and committees, of the municipal courts and officers of the same, of school districts and their control, and of the county government in all departments, legislativ, executiv and judicial. Excursions are taken to the county offices and to the sessions of court by the class in a body, and individual students consult all local office holders for information relativ to the position. The work of the juvenile court is considered in some detail, and the method of enforcing all local ordinances is observed.

In the study of state government special attention is given to the work of the legislativ body. The course of various bills of special interest is traced through committees, and all the forces that affect the final fate of a bill are estimated. All recent and pending legislation is critically examined. The work of important state boards is examined in a local and practical way.

The work on national government, besides the usual reading of the constitution, includes an exhaustiv study of

the administrativ departments, particularly the Postoffice Department, Department of the Interior, Department of Commerce and Labor, and Department of Agriculture. The publications of the various bureaus are read and the most recent activities of the bureaus are discust. Thruout the course every effort is made to understand the practical working of all governmental forces as they touch the actual life and interests of citizens.

MATHEMATICS.

PROFESSOR GEORGE BRUCE HALSTED.

It must be a gratification to all educated people that mathematics, the oldest and greatest of the classics, despite its generous gifts of time to the newer studies, has bloomed in practical effectivness as never before.

The whole world is becoming mathematical. Sylvester, the greatest mathematician any living person has ever seen, used to say that in his youth the person who had been thru calculus was looked upon as another Dante back from the tour of the Inferno. To-day the Germans, the leaders in matters pedagogic, are claiming that all school boys should be given the great fundamental ideas of the differential and integral calculus, and especially the function concept. Analytical geometry has already become such common property that the daily papers use and presume it, and advertisers, those keen self-seekers, rely upon it.

With less than the customary expenditure of time, our

high school makes accessible to every one algebra, that giant pincers of modern practise, and geometry, that key to the dominance of the Teuton-Saxon races. After these broadening world tools are in hand, renewed opportunity is given to work over arithmetic with deepening grasp and scope. The principle of permanence, disentangling and unifying all of these sciences, becomes a handle by which to carry them thru life as a part of one's necessary, modern equipment.

Thru all the work in mathematics mere memorizing of phrases, meaningless to the pupil, is avoided. Every 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.

LATIN.

PROFESSOR JAMES HARVEY HAYS.

Latin as taught in the High School is taught for its own sake, for the benefit of a better knowledge of English, a richer insight into words of our own language, a closer touch with a civilization which has wrought itself so effectivly into our own, and a culture born of a close acquaintance with the best thoughts and greatest activities of a people who were at one period masters of the civilized world.

Particular care is given to pronunciation, sentence structure, order of words and phrases in the sentence, as well as the meaning of each case and mood as met in the

text which the pupil is reading. Nor is any feature of history or arkeology that is calculated to illuminate Roman life neglected.

The class room method has always in view the accomplishment of the greatest results with as little waste as possible. The texts read, after preparation in an introductory book, are the Gallic Wars, selections from Eutropius, Nepos and others, Orations of Cicero and the Æneid of Vergil.

ENGLISH.

PROFESSOR ETHAN ALLEN CROSS.

The study of English is an art study, and in the Normal High School close attention is given to the content and technique of the principal literary art forms: the essay, the short story, the novel, narrativ poetry, lyric poetry, and the drama. The aim of this work is to give the student an intelligent appreciation of literature which will cause him to love good books and to continue to read them after school days are over. Few people have an opportunity often to see a great painting or to hear a great piece of music interpreted by a master, but everyone has access to the best of literary art. It follows that all should have as thoro training in the appreciation and interpretation of literature as is possible. Care is taken that the study of literary forms shall not be carried so far as to deaden the interest of the student in good books.

Systematic work in composition is given in connec-

tion with the study of classics thruout the three years of the high school course. The aim of this work is to help the students to proficiency in writing and speaking simple, direct, effectiv prose. To this end careful instruction and much practise are given in correct grammatical construction, spelling, punctuation, phrasing and paragraphing.

There is a close correlation of the work in Reading and English. The first makes use of standard pieces of literature, placing the emphasis upon expression; the second uses similar works, looking more for appreciation thru a knowledge of structure and the details of the author's art, but the teacher of English does not forget that the pupil has no better way of showing understanding and appreciation than thru intelligent, effectiv, oral interpretation.

The ninth grade reads Shakespeare's Julius Cæsar; Homer's Odyssey; Scott's Lady of the Lake; selections from Irving's Sketch Book; and selections from the best American poets and prose writers. In addition to these works a number of books are read outside of class and reports made upon them.

In the tenth grade Coleridge's Ancient Mariner; Arnold's Shrab and Rustum; Tennyson's Enoch Arden; Addison's Sir Roger de Coverley Papers, with Macaulay's Essay on Addison as collateral reading; and Shakespeare's Merchant of Venice are the material for class study. The outside reading is continued in this grade. A drill in the common difficulties of grammar is given in the spring term.

The class work for the eleventh grade consists of a

careful reading and study of Shakespeare's Macbeth; Burke's Speech on Conciliation; Tennyson's Idyls of the King; Carlyle's Essay on Burns, with selections from Burns' poems; and Milton's Minor Poems, with Macaulay's Essay on Milton as collateral reading. It is expected that the students in this grade will read two or more of the standard English novels and one or two novels by recent writers and report upon this reading in a short review of each book read. Two or three weeks are given to a very brief outline study of the periods and movements in English literary history.

READING AND ORATORY.

PROFESSOR FRANCES TOBEY.

Expression is necessary to evolution. A power is developt in the ratio in which it is used. A rounded development of the individual is attained only by calling forth his powers in co-ordinated activity. This law is ample justification for the emphasis placed upon the work of the department of Reading and Oratory.

The old-time elocution sought to fix forms of expression upon the growing soul, thus limiting its growth and narrowing its individuality. The new school of expression recognizes that it is never educational to dictate form to spirit; that the spirit, if quickened and directed, will command its own forms, more beautiful, because truer, than any which artist or teacher might impose upon it.

The department aims, then, to attain a co-ordinate

activity of all the powers of the pupil: instant realizing power, which involves keen intellectual activity and imaginativ grasp; ready emotional response, which inevitably follows realizing power; force of character, manifest in habitual self-control and in definitness and strength of purpose; and physical freedom and power, manifest in good presence and bodily and vocal responsivness.

No other course of training in the curriculum aims so directly at the co-ordinated development of the entire being, physical, mental, moral, and spiritual, as the persistent and systematic endeavor to lead out into adequate expression all the growing powers of the young mind. The pupil must learn to think quickly, on his feet, before audiences. His imagination must play activly about the thoughts and pictures which he would make vivid to an audience. His emotional nature must be stirred before he can move his hearers. Earnest purpose must possess him if he would carry conviction thru his discourse.

Since oratory is a social power, concerned with directing the thinking, feeling and willing of an audience, most of the training of the department consists of class work. A spirit of class unity is encouraged; the pupil is alternately the teacher and the interested, sympathetic listener. In his growing desire and persistent endeavor to influence minds thru his thought or the thoughts of great authors, he soon forgets any ideal he may have held of performing prettily, to be approved by the listeners. Thus the limitations of self-consciousness and of petty ideals gradually disappear, and spontaniety and purpose begin to mark his expression. This end attained, no limit can be set to his

growth, except the limit of his earnestness and of his capacity for work.

This ideal of service thru revelation is held before the students in all classes, in every department. The student is led to appreciate that the only excuse he may have for coming before a class for oral recitation, is to reveal truth to the class. Thus the daily class work of the pupil is conduciv to freedom and purpose.

The pupil becomes practised in the vocal interpretation of a varied range of literature. As a means of quickening his perception of literary values, such training has been found inestimable. In recognition of this fact, a close correlation is sought between the department of Reading and the English department. It is a question whether the fullest appreciation of the beauties of the greatest literature is gained until one can reveal them thru a luminous oral reading. Much literature makes an appeal thru the ear, and will not yield all its beauty to a silent reading of the printed page.

But, altho the cultural value of systematic training in vocal expression is the primary reason for the maintenance of the department, there is a secondary end of no small significance. The practical importance of the speech arts is recognized to-day in the schools and in the pursuits of life. A young woman of free, poised, expansive presence, who can illuminate great literature thru an intelligent, sympathetic vocal interpretation, is prepared to give much pleasure in whatever sphere she may enter. A young man who can marshal his thoughts and express them with adequate clarity and force, possesses an equipment

for which he will have need in any career which he may choose. Young people who have been put in possession of their developt faculties, and who have had the social instinct awakened and quickened within them, are in a position to serve largely and vitally.

The Shakespearean Literary Society, of which every student is a member, presents weekly programs of varied nature, affording thereby ample opportunity for individual effort. While the organization is maintained and controlled by the students, the exercises presented are under the direction of instructors, and constructiv criticism follows every program. The exercises of the society are usually an outgrowth of the daily class work of the school. Thus the advantages of the old-fashioned lyceum, with its drill in public address and its parliamentary practise, with its appeal to the social instinct and its scope for the exercise of executiv ability, are supplemented by systematic training and judicious direction. The students enjoy much freedom in planning and carrying out the work of the society, while their plans and work are unified by definite ideals of culture.

Annual oratorical and recitation contests between the classes offer a stimulus to effectiv work. A dramatic contest is contemplated as an added annual exercise. The Senior Class play, presented during commencement week, affords close familiarity with a literary and dramatic product of merit, and careful drill in dramatic response. The class of 1907 will present "Twelfth Night." The plays of 1904, 1905 and 1906 were respectivly: "The Rivals," "As You Like It," and "A Winter's Tale."

GEOGRAPHY.

PROFESSOR FRANCIS ABBOTT.

It is customary to treat Geography under separate divisions, such as mathematical, commercial, and physical. The New Method treats the subject simply as Geography, and does not differentiate it into such divisions. The basis of the new geography is the Industries and Commerce.

If the subject is treated from this standpoint, all the reciprocal relations of the different sections of the United States can be shown.

By starting with the industries of a country, we must necessarily be brought into very close relations with the climatic conditions; and the climate is very largely the result of latitude topography.

Whether we study the different sections of the United States or the world at large, this method will show the relations and interrelations of the various countries.

Geography, when properly presented, should show us the great cities as they really are, industrial, political, art and educational centers, and great aggregations of people. It should show their relations and their influence upon one another, and upon the country at large.

Geography when treated from this standpoint presents itself as it really is, a complete organic unit. It is thus removed from the list of memory studies and becomes a thought study of true educational and practical value to the child.

OUTLINE OF THE COURSE IN GEOGRAPHY.

I. Cattle and Sheep Industry.
   (a) Study the climate and topography of the Rocky Mountains.
   (b) Location of the principal packing centers.
   (c) Study of the corn belt.
   (d) Location of principal railroads and waterways.
   (e) Leather industry.
      1. Tanning of hides.
      2. Manufacture of leather goods.

II. Agriculture.

III. Mining, etc.

Topics II and III are treated in a manner similar to the treatment of I.

PHYSICS.

Three terms are devoted to the study of physics. The work is taken up from the practical side, using actual machinery to illustrate the principles of physics. We endeavor to make the study of practical value in the everyday life of the pupil.

CHEMISTRY.

The course in chemistry runs thru the entire year, special attention being given to those facts which are significant in practical affairs, such as cookery, medicine and the arts.

ZOOLOGY AND BOTANY.

PROFESSOR ARTHUR EUGENE BEARDSLEY.

In the Zoology course animals are studied with respect to their structure, habits, life history and geographical distribution; their relation to their environment, to man, and to other members of the animal and plant worlds, and to inorganic nature; and their classification as indicated by the relationships existing among them.

The work of the course consists in laboratory and field studies and class recitations; complete reports of the studies upon chosen animals are required from time to time. In this work particular attention is given to the fauna of Colorado, with the purpose of familiarizing the pupil with the animals of his own state.

BOTANY.

The course in botany extends thru two terms, the first of which is given in the fall, the other in the spring term. In the fall term the plants are studied with reference more especially to their relations to the environment, such as the relation to light, nutrition, reproduction, the relation of flowers and insects, the struggle for existence, protection, plant societies and Botanical Geography.

In the spring term more emphasis is placed upon the study of the plant as an individual and upon its structural relationships. The common plants of the vicinity are studied in the classroom and in the field, leading to a determination of the name, habits, relationships and mode of life of each.

BIRD STUDY.

PROFESSOR L. A. ADAMS.

This course is planned to meet the needs of the High School pupil and will necessarily be of a popular nature. A study of birds is always interesting and one's life is greatly enriched if he is able to know and appreciate the little feathered friends of the wood and field. We greet the robin with joy in the spring and feel that we are meeting an old friend. The object of this course will be to make friends of a larger number of our common birds.

The first half term will be spent in becoming familiar with the different groups of birds, with special attention to their habits and ecology. References will be given to popular articles in some of the magazines, such as Outing, Country Life in America, Bird Lore, etc. In the second half of the term, the time will be spent in the laboratory, where the birds will be studied and drawn, and the relation of the external anatomy to the ecology will be worked out. Some outdoor work will be undertaken when the opportunity offers.

AGRICULTURE.

PROFESSOR H. W. HOCHBAUM.

In adding the study of agriculture to the High School curriculum the idea was not that of simply adding a subject rising in popularity, in this day of the "simple life," and the "new agriculture," nor was it intended that we should in any way compete with the agricultural colleges of the country. Their equipment is larger and better than an institution such as the State Normal School could hope to have. Moreover, the ideals and purposes of the two classes of institutions are widely different.

The introduction of agriculture as a school study in the high and grade schools, at least those of argicultural regions, is but an expression of the need felt for a more sympathetic relation between the school life of the child and his daily life. That may be said to be the kernel of

modern education; i. e., to have a living sympathy between the everyday life of the pupil and his school life. As a result of the need felt for this relation we have successfully introduced such subjects as domestic science, nature-study, manual training and other things which teach of the good and common things of the child's environment and daily occupation.

The introduction of the study of agriculture in the high school curriculum needs scarcely to be defended, when we think how important a role the agricultural industries of this state and country play. In spite of the great increase within the last few years in manufactures, agriculture still leads by a large margin in the value of exports. The present agricultural population of Colorado, a state in the richest agricultural country of the world, is large. Yet ten years from now that population will be increased fifty times. The economic status of the state will soon depend upon its agricultural efficiency. That efficiency must be increased and the youth of the land, the farmers of the future, must be educated in better agricultural methods, and to see in agriculture, the oldest and best of man's industries, something besides a mere livelihood.

The course in agriculture runs thru the year. The student should elect it preferably in his last year of school, after having studied some of the natural sciences, as botany or chemistry, in the earlier years of the high school course. An elementary knowledge of chemistry and botany are very helpful, for agriculture has to do with the way in which the plant or animal lives.

There are two immediate purposes of agricultural

operations: to raise plants, and to raise animals. Plants are raised either for their own value or for their use in feeding man and animals. In studying agriculture, then, it is well to begin with the plant, proceed to the animal, and then consider questions of practice and management that grow out of these subjects.

The study of the plant may be provided for under two general heads: (1) the plant itself; (2) the environment that influences the plant.

The subject of environment is studied under the following heads:

(*A*) Light and air. Influence of seasons, temperature, light, etc.
(*B*) Air. Function above ground and in the soil.
(*C*) Soil. Functions. Origin. Kinds. Composition. Texture.
(*D*) Moisture. Purpose. Importance. Quantity. How modified.
(*E*) Applied plant food. Fertilizers. Leading plant foods; how supplied.
(*F*) Repressiv agencies. Insects, fungi. Toxic agencies and untoward conditions.

The plant is studied in relation to—

(*A*) Composition.
(*B*) Structure.
(*C*) Physiology.
(*D*) Heredity.
(*E*) Classification.

In the class work actual study is made of the leading crops of the community. Methods of growing the crop are discust, as well as methods of preparing the land; fertilizing; harvesting; marketing; value and profit.

The four main crops of the region—wheat, potatoes, sugar beets and alfalfa—will be thus studied in detail. Crops which might be added with advantage to the list of agricultural products raised in the region will also be studied.

ANIMALS AND ANIMAL HUSBANDRY.

(*A*) Classification of domestic animals.
- (*a*) Cattle, sheep, swine, horses, fowls, bees, etc.
- (*b*) Origin and history. Purposes and uses. Breeds and varieties.

(*B*) Nutrition of domestic animals.

(*C*) Foods.
- (*a*) Pasturage and bulky foods, forage and fodders, green and dried fodders, concentrated foods.
- (*b*) Grains and seeds, etc.

(*D*) Rations.

Food requirements of different animals for different purposes.

(*E*) Animal products.
- (*a*) Meat. Eggs. Milk. Wool, etc.
- (*b*) Beef fattening; wool growing; dairy industry, making cheese and butter; poultry raising, for eggs; for meat production.

FARM MANAGEMENT.

(*A*) Farm schemes.
- (*a*) Kinds of farming.
- (*b*) Rotations.
- (*c*) The farmstead. Laying out of the farm with reference to arrangement of buildings, fields, water supply.

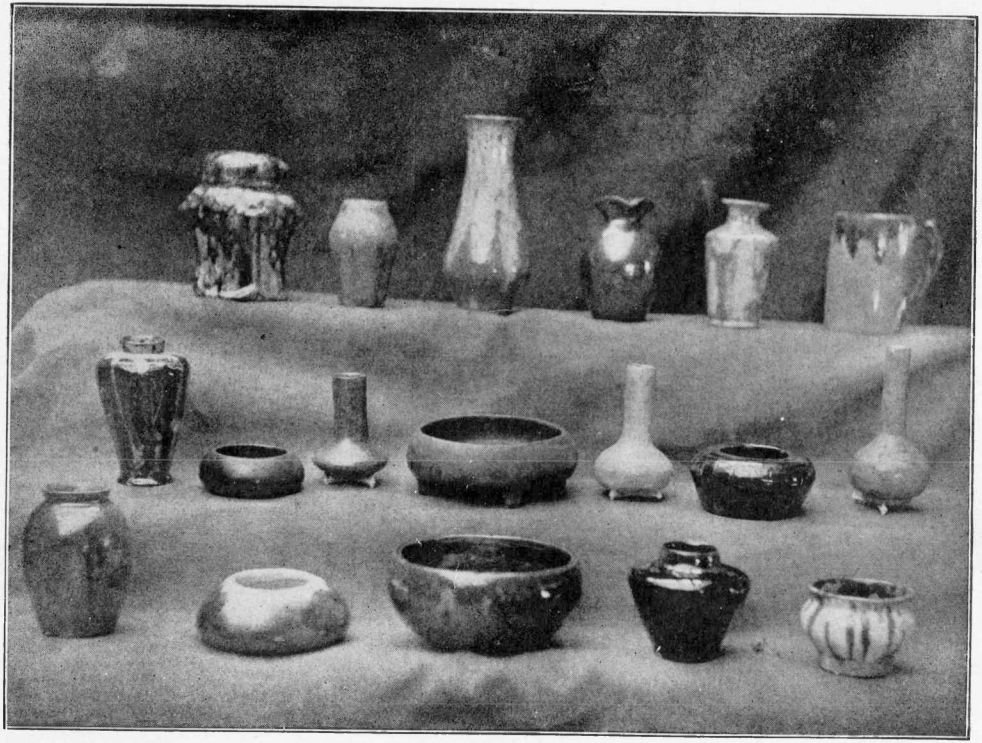
(*B*) Farm practise.
- (*a*) Tillage—purpose and methods.
- (*b*) Irrigation—purpose and methods.
- (*c*) Drainage—purpose and methods.

In the study of farm crops and animals, excursions will be made from time to time to study the crops of the region and the various animal industries, represented near by. The agricultural museum, with its large collection of farm and garden seeds will afford valuable laboratory practise in getting acquainted with the various kinds of seeds, as well as study in the value of seed selection. This museum will also have exhibits of the smaller agricultural implements, modern and primitiv.

MUSIC.

PROFESSOR WILLIAM KENNEDY STIFFEY.

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 points: Key relationship, tone quality, rhythm, simple forms, pronun-



Pottery.

Pottery.

ciation, 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.

ART.

PROFESSOR RICHARD ERNESTI.

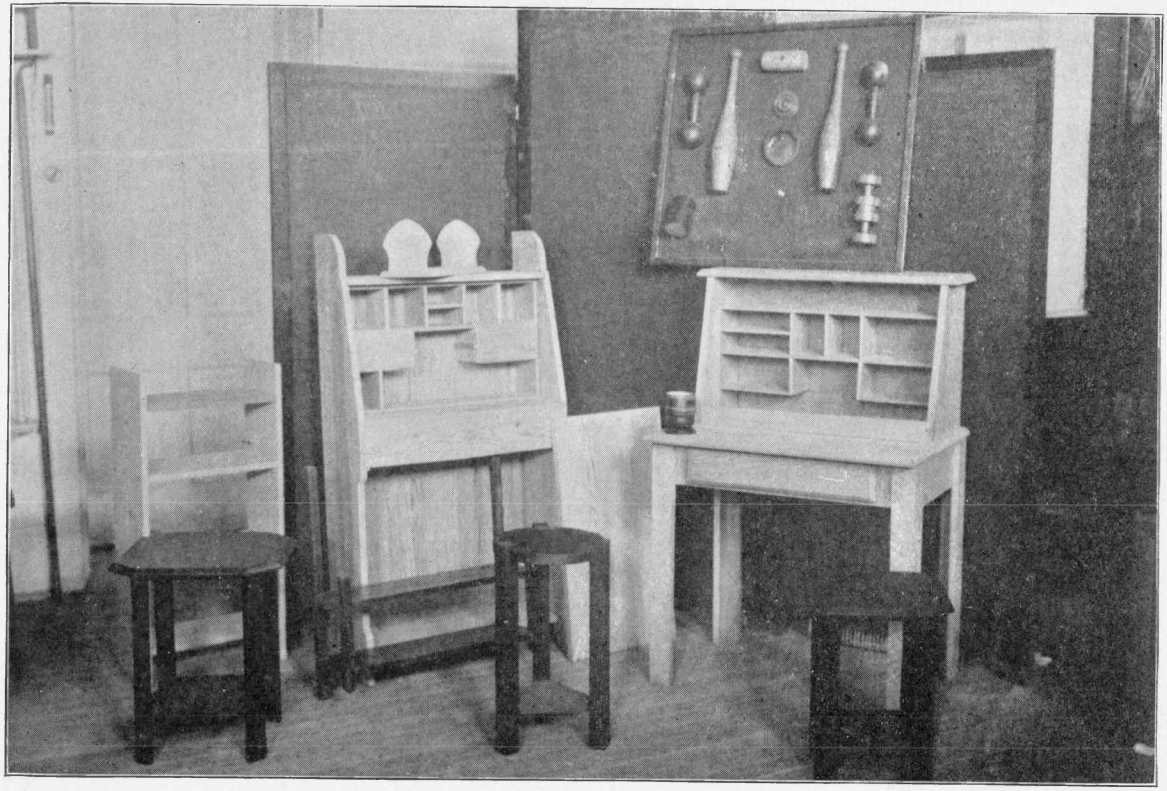
The work of the department embraces three branches of art, all of which make for a larger and better life, and also afford a preparation for college or for technical and engineering courses. These are mechanical drawing, pictorial drawing and designing.

The aims of the three lines of work are definite and the purpose is a serious one. Students need drawing as they need writing. Drawing should be studied as a *mode of thought*. It develops the power to see straight and to do straight, which is the basis of all industrial skill. Industrial skill, which will largely dominate the future of America, must be acquired by youth in the public schools.

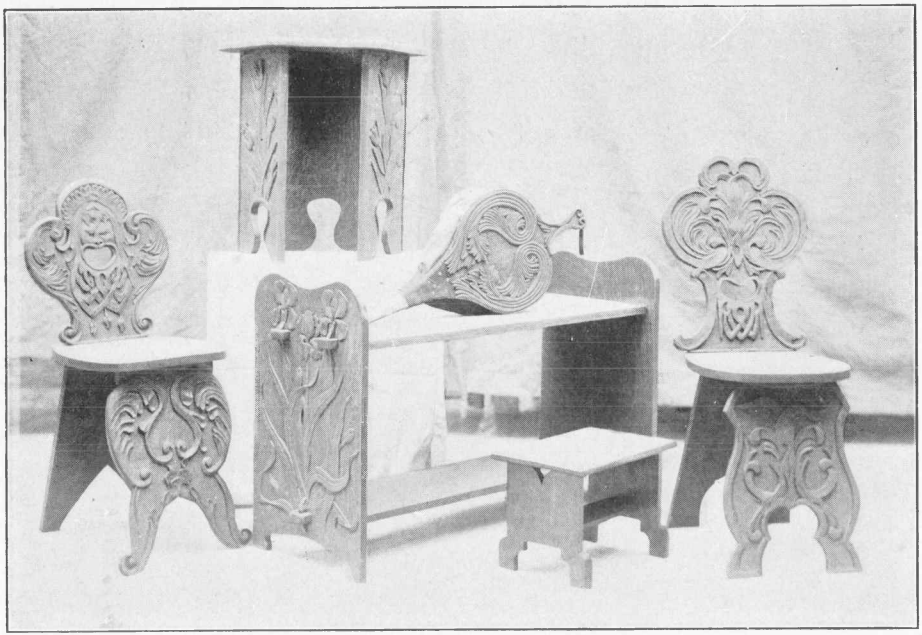
A knowledge of the fundamental principles of the science of representation, skill of hand, culture which comes with an habitual right attitude toward works of art, familiarity with the best products of art, and a knowledge of the principles of design, are among the aims in the different lines of art work.

In the mechanical course all the individual problems scattered thru the work of the lower grades are gathered and placed in a proper relation to each other in a scientific study of structural drawing, with its subheadings of geometry, projection and developments. Practical problems arising in the chemical and physical laboratories, in the manual training department, in the home, in short, in the daily life of the pupil, will be met and solved intelligently. A beginners' course in architecture is embraced in this division of the work, which gives the home the prominence which it deserves. The pleasure of planning and constructing a home belongs to every one. Floor plans are made, all principles of utility, hygiene, and esthetics are considered; elevations to these plans follow, and schemes of interior structure, design and color are prepared. The home being the foundation of the nation, the value of this lesson for life's sake becomes at once apparent, aside from the fact that these studies add to the privileges of entry into the best technical schools and universities of the land. Instruction is also given in the principles of structural design, in the modes of beauty, and in the history of the great craftsmen.

In the free hand course is given a scientific study of pictorial drawing with its subheadings of perspectiv, color, light and shade, together with a solution of those practical problems of representation arising in the school or in the home. Instruction is given in the principles of composition, in beauty, and in the history of the great artists. Examples of the best in art are studied, and collections are made of photographs of merit, especially those which are



Normal High School Manual Training Work.



Manual Training—Carving.

typical of seasonal beauty or show commonplace objects glorified by conditions of weather or of setting.

The course in decorativ design deals with practical problems from the department of domestic science, from the school paper and other school work, and from the home and daily life. Instruction is given in modes of beauty, in the historic styles of ornament, and in the history of the great designers. Examples of the best results of decoration should be studied in the art museum and from reproductions and prints. In this connection the school art museum is as important in its way as is a library in the study of literature.

MANUAL TRAINING.

PROFESSOR SAMUEL MILO HADDEN.

Doing with the hands has always been an important aid in the development of civilization. Doing with a purpose has as its result all new discoveries and inventions. The great gulf between the savage and the civilized man was spanned by the fundamental hand-working tools.

Carlyle gives a graphic and poetic picture of the influence of tools on civilization when he says: "Man is a tool-using animal. He can use tools, can devise tools; with these the granite mountains melt into light dust before him; he kneads iron as if it were soft paste; seas are his smooth highways, wind and fire his unerring steeds. Nowhere do you find him without tools; without tools he is nothing, with tools he is all."

With this knowledge alone of the tremendous influence of tools upon the destiny of the human race every child should have tool practice incorporated into his work in the schools.

Joinery—Elementary Course.

This course is designed for individuals who have had no previous training in the use of hand wood working tools.

The course aims to give an acquaintance with the underlying principles of construction and a fair degree of skill in the use of tools, including in general about what is enumerated below:

Talks on saws: use, kinds, setting, filing.

Talks on planes: use, abuse, sharpening, etc.

Talks on the various other fundamental tools: squares, gauges, chisels, screwdrivers, braces, bits, etc.

Talks on the construction of various joints.

Application of the above knowledge to the end that simple, artistic, well balanced, useful pieces may be constructed, the product of a thinking, knowing, doing individual.

Wood Carving—Elementary Course.

This course is conducted by the laboratory method and includes preliminary exercises in the care and use of tools. It is aimed to give a general training in the practical application of the fundamental principles of art in drawing, design, clay modeling and historic ornament, as applied to the special work of wood carving. Courses in art should be taken either before or in connection with this work.

Cabinet Making.

Talks on woods, grain, quarter sawing, seasoning and drying.

The use of clamps, handscrews, wedges, presses and vises.

Talks on glue, glued joints, doweled joints, tongued and groved joints, etc.

The fundamental principles of cabinet and furniture construction will receive special attention with a view to applying them in the construction of substantial and artistic pieces of work.

Mechanical and free hand drawing in their application to constructiv design will be included in this course.

Wood Turning—Elementary Course.

The following subjects will be discust: power, hangers, shafting, speed, belting, counter shaft;

The lathe, primitiv and modern, care of lathe, oiling, cleaning, speed for various purposes;

Turning tools, chisels, gauges, skews, grinding and whetting;

Turning between centers of cylindrical forms, V grooves, concave and convex curves, and their application in various artistic and useful forms;

Chuck turning, face plate turning, surfaces, beads and hollows, wood chucks, etc., and their application in rings, pulleys, etc.

Printing Course.

The work will be so arranged that every student taking the work will have an opportunity to become ac-

quainted with all the different necessary steps which enter into the production of a printed page.

In general the work will cover the following fundamental processes:

Composition and distribution, dealing with materials, tools and appliances.

Paragraph structure, spacing, capitalization and indentation.

Making up into pages, locking into forms.

Reading and correcting proof.

Press work, tools and appliances.

Management of inks.

Cleaning of type.

DOMESTIC SCIENCE.

PROFESSOR ELEANOR WILKINSON.

The work in cooking and sewing in the high school should be closely related to whatever of science, art or practical work the pupils have had. The kitchen laboratory, which is only another kind of chemical laboratory, should be a place where an interest is awakened in the application of the laws learned in the chemical and physical laboratories. That this work may be effectiv there must be correlation between this subject and a connected and systematic course in general science. When thus taught in its proper relation to these other branches, cooking stimulates investigation, develops powers of accurate observation and leads to the application of knowledge of natural sciences to practical use in the preparation of foods.

Normal High School Cooking Class.

That cooking and sewing are of practical value is no argument against their being made a part of the school curriculum, but that they should be taught as an end in themselves rather than a means is a mistake. The aim is "not to teach how to make a living, but how to live." These subjects when rightly understood afford ample opportunity for thought as well as manual demonstration, and are, therefore, educational.

The high school course in cookery includes a study of the nature constituents, and relative values of foods, the objects of cooking and the effect of the various cooking processes on the different food principles.

The following foods are studied as to their source, preparation for the market, chemical composition, physical structure, digestibility, absorption, nutritive value, economy, etc.

Vegetable Foods—pulses, roots, tubers, green vegetables and fruits; sugars, wheat flour, breads.

Leavening agents, such as baking powders, eggs, yeasts. Various fermentation processes.

Animal Foods—milk, cheese, eggs, meats. Studies in dietaries, preparation of simple menus, table setting and serving. Class room work is illustrated by work in the kitchen.

The work in sewing includes both hand and machine work, cutting and fitting, and the making of such garments as are of greatest interest to girls of high school age. The study of textils and harmony of color combinations are also taken at this time.

PHYSICAL TRAINING.

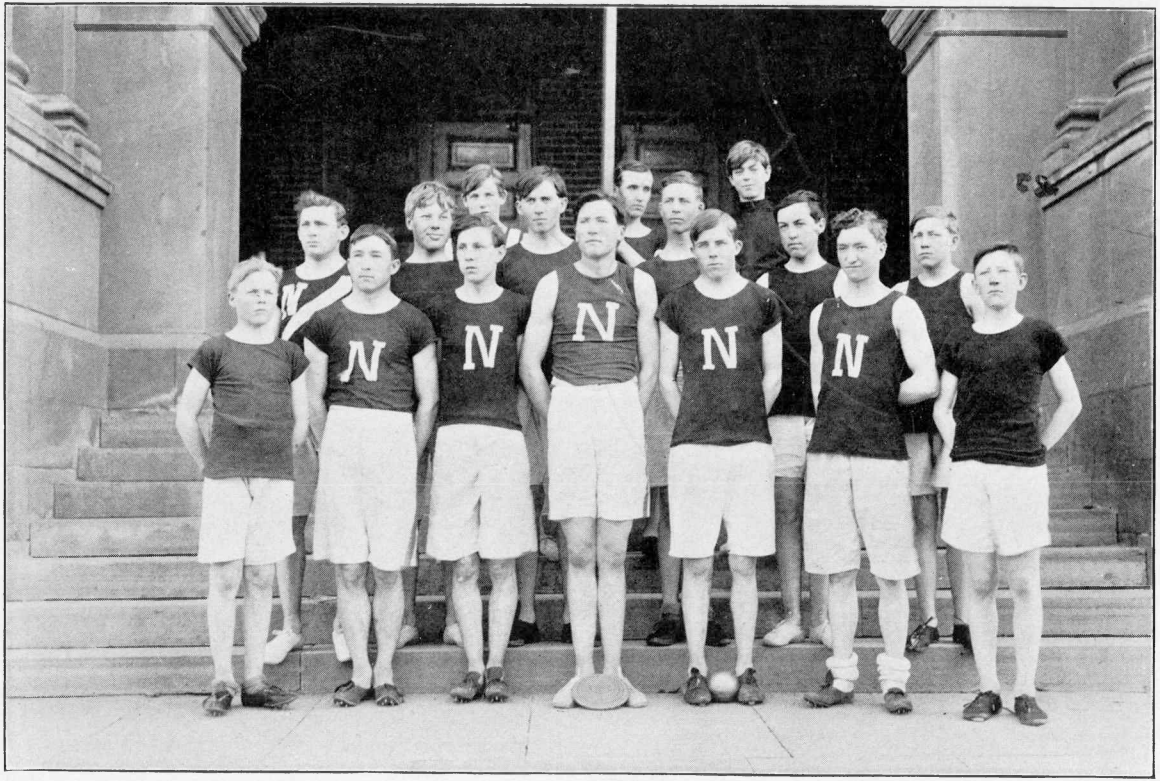
PROFESSOR G. W. BARRETT.

The object of this department is to provide the means for the development of health and strength, and training in bodily vigor at the most opportune time—the high school age. To this end training in all forms of gymnastics, games and athletics is given and encouraged.

EQUIPMENT.

The equipment of the department is large and in every way adequate to the carrying out of its work. There is an examining room containing a complete set of anthropometric instruments; there is a large and roomy gymnasium thoroly equipt with apparatus for all kinds of drills and in-door exercize, and there are large and well cared for athletic grounds containing four tennis courts, three out-door basketball courts, a quarter mile running track, which incloses a baseball and a football field, jumping and vaulting pits, and a place for the weights, and a ground for out-door drills.

All students are required to wear at physical training classes the regular gymnasium uniform. The uniform for women consists of a navy blue blouse and divided skirt, and gymnasium shoes. The uniform for men consists of white knee trousers, a navy blue quarter-sleeve shirt, and gymnasium shoes. These suits can be secured in Greeley, made to order, at very reasonable club rates, and for this reason students are advised to wait until they arrive at school to secure gymnasium suits.



Normal High School Track Team 1907.

MEDICAL AND PHYSICAL EXAMINATIONS.

All students are required to take the medical and physical examination. The examination is made by the director of the department, who is also the school physician. It consists of a thoro medical examination of the heart and lungs, and of the recording of abnormalities, such as round or uneven shoulders, flat chest, weak back, spinal curvature, etc.

After the examination each student is given a handbook of personal hygiene, which contains his prescription of exercize for correction of his physical defects. The hand book also contains valuable health hints on diet, bathing, exercize and general health.

GYMNASIUM CLASSES.

Girls.

All girls are required to take the regular class work in physical training, which consists of instruction in correct walking, marching tactics, calisthenics, dumb bell, wand, and Indian club exercises, fancy steps and gymnastic games.

Boys.

All boys are expected to take the regular work in physical training, which consists of marching tactics, vigorous dumb bell exercizes, single stick exercizes, apparatus work, gymnastic games and indoor athletics, such as shot put form, high and pole vault practise, sprint starts and work with the hurdles.

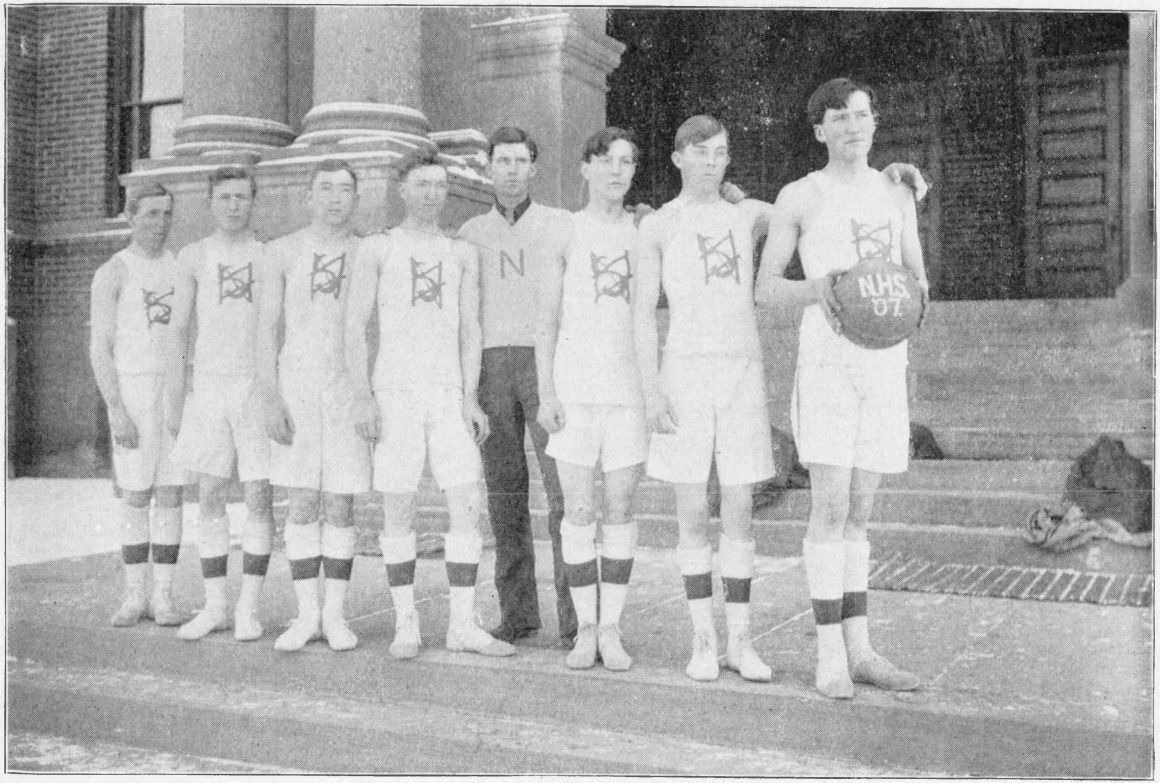
MILITARY DRILL.

All high school boys are required to take military drill from the close of the football season until the track work begins in the spring. The school is supplied with fifty Winchester repeating rifles, loaned by the State. The manual of arms and marching tactics are taught.

OUTDOOR SPORTS.

Tennis tournaments, field basketball games, and class games in both boys and girls athletics are held, spring and fall. Cross country running, the best exercize for the development of heart and lungs, or endurance, is indulged in in the early spring. Strong teams are organized in basketball, track athletics and football, interscholastic games are arranged and played under strict faculty supervision.

The school is a member of the Northern Colorado Interscholastic Athletic League. Two annual meets have been held on the Normal School athletic field, and the Normal High School has always taken its share of the prizes.



Normal High School Basketball Team 1906-7.

Inside of Library.

LIBRARY HANDICRAFT.

PROFESSOR GERTRUDE RUPP.

The course in Library Handicraft is closely related to the work of the art department and of the manual training department. It aims to give students a knowledge of the process through which material must go before it is placed in their hands as a book, and it is an aid, not only to those who may wish to continue with the study of library work, but to others as well in general literary work.

The course includes:

General Handicraft—Pamphlet boxes, library card trays, note book covers, picture mounting, *passe partout,* etc.

Printing—History and evolution of printing, block type, illustrations, paper making, study of newspaper work, etc.

Bookbinding—History of bookbinding, study of different fine bindings, choice of materials, work in collating, sewing, casing, rebinding, making portfolios, loose leaf covers, scrap book.

Designing—Original book covers.

COURSE IN LIBRARY SCIENCE.

PROFESSOR ALBERT S. WILSON.

This course is intended not only for those who wish to adopt library work as a profession, but also for those who, as readers, wish to make intelligent and ready use of the

full resources of the library. The course will include selection of books for purchase, mechanical preparation of books for actual use, the making of accession records, the classifying of books according to subjects, the construction of author, title, and subject catalogs, and the arrangement of books on shelves, with labeling devices for the finding of books. There will also be practical activity in the charging in and out of books, assistance to readers in the finding of material, and practise in the use of reference books by means of various indexes. It is expected that by a combination of instruction and actual participation in library work, students will gain a practical knowledge of library methods, of the systematized means of acquiring and rendering available all possible information, as well as a love and respect for books as the storehouses of the accumulated wisdom of the ages.

LIBRARY AND READING ROOM.

The true university is a collection of books.—Carlyle.
Reading makes a full man.—Bacon.

For the use of all connected with the school, there is an excellent library and reading room containing about twenty-five thousand volumes. This is an essential feature of the school. It is a fountain of knowledge, a source of disciplin and a means of culture. The shelves are open to all. No restrictions are placed upon the use of books, except such as are necessary to give all users of the library an equal opportunity and to provide for a reasonable and proper care of the books.

Among the reference books are the following: Encyclopedias—the Britannica, the American, the New International, Johnson's the Iconographic, the People's, the Universal, the Young People's, etc. Dictionaries—The Century, The Encyclopedic, The Standard, The Oxford, Webster's, Worcester's, etc.; dictionaries of particular subjects, as Architecture, Education, Horticulture, Painting, Philosophy, Psychology, etc.; Lippincott's Gazetteers; Larned's History of Ready Reference; Harper's Cyclopedia of United States History; etc.

In the library are to be found many rare and valuable works, such as Audubon's Birds of America, Buffon's Natural History, Nuttall and Michaux's North American Sylva, and the works of Kirby and Spence, Cuvier, Jardine, Brehm and others.

In addition to the general library, there is an annex of government publications containing a nearly complete series of congressional documents and departmental publications. Most of these publications are received regularly by the school.

The library subscribes regularly for about two hundred and twenty of the best magazines and educational journals. It also receives thru the courtesy of the publishers, most of the county papers of the state, and many of the religious papers of the country. As volumes of the leading magazines are completed, they are bound and placed on the shelves as reference books. To facilitate the use of periodicals, Poole's and many other good indexes are provided.

A course in library handicraft has been arranged for

those who wish to become familiar with library methods. For more detailed information as to the library and as to the course in library handicraft, see library bulletins.

COURSE OF STUDY.

36 weeks in one year's work.
22 recitations per week required.
792 recitations in one year's work.
12 recitations count one credit.
66 credits in one year's work.
198 credits required for graduation.
"R" indicates required subjects, all others are electiv.

In order to take full work, the student must take all the required work of each year and enough electiv to make at least 22 recitations per week.

NINTH GRADE.

FALL TERM.	WINTER TERM.	SPRING TERM.
English .....5 R	Reading ....5 R	English .....5 R
Algebra .....5 R	Algebra .....5 R	Algebra .....5 R
Ancient History 5	Ancient History 4	Medieval History
Latin 5	Latin 5	Latin 5
German 5	German 5	German 5
Zoology 4	Zoology 4	Zoology 4
Mechanical Drawing 4	Pictorial Drawing 4	Designing 4
Music 4	Music 4	Music 4
Elementary Joinery 4	Elementary Joinery.....4	Advanced Joinery 4
Physical Training .....4 R	Physical Training .....1 R	Physical Training .....1 R

TENTH GRADE.

FALL TERM.	WINTER TERM.	SPRING TERM.
Reading ....5 R	English .....5 R	English ....5 R
Algebra 5	Algebra 5	Arithmetic 5
Civics 5	Civics 5	Civics 5
English History 4	English History 4	Modern History 4
Bird Study.....4	Taxidermy 4	Bird Ecology...4
Botany 4	Physiology 4	Botany 4
History of Commerce 4	Geography of Commerce ...4	Physical Geography 4
Latin 5	Latin 5	Latin 5
German 5	German 5	German 5
Sewing 4	Sewing 4	Textils and household art.
Wood Turning..4	Advanced Joinery	Advanced Joinery
Music 4	Music 4	Music 4
Pictorial Drawing 4	Mechanical Drawing 4	Decorative Design 4

NOTE.—Figures indicate number of recitations per week.

ELEVENTH GRADE.

FALL TERM.	WINTER TERM.	SPRING TERM.
English .....5 R	English .....5 R	Reading 5
Industrial History .....5 R	Industrial History .....5 R	Economics 5
Geometry 4	Geometry 4	Geometry 4
Latin 5	Latin 5	Latin 5
German 5	German 5	German 5
Cooking 4	Cooking and Dietetics.....4	Food composition and food values 4

FALL TERM.	WINTER TERM.	SPRING TERM.
Physics 4	Physics 4	Physics 4
Agriculture 4	Agriculture 4	Agriculture 4
Wood carving...4	Inlaying 4	Parketry 4
Printing 4	Printing 4	Printing 4
Music 4	Music 4	Music 4
Pictorial Drawing 4	Mechanical Drawing 4	Decorative Designing 4
Library Handicraft 4	Library Handicraft 4	Library Science 4
Physical Training .....1 R	Physical Training .....1 R	Physical Training .....1 R

TWELFTH GRADE.

FALL TERM.	WINTER TERM.	SPRING TERM.
English .....5 R	English .....5 R	Reading 5
Political Economy 5	Political Economy 5	Political Economy 5
History Modern Europe 5	History Modern Europe 5	History Modern Europe 5
Chemistry 5	Chemistry 5	Chemistry 5
Latin 5	Latin 5	Latin 5
German 5	German 5	German 5
Trigonometry ..5	Trigonometry ..5	Trigonometry ..5
Bacteriology ...4	Bacteriology ...4	Bacteriology ...4
Music 4	Music 4	Music 4
Art 4	Art 4	Art 4
Manual Training 4	Manual Training 4	Manual Training 4
Physical Training .....1 R	Physical Training.....1 R	Physical Training .....1 R

The regular course of the high school is three years in length, and students who finish this course satisfactorily receive the diploma of the school. A fourth year of work is offered in the twelfth grade for those students who wish to prepare for college or who, for any reason, wish to extend their course. For this year's work is given a special certificate showing the fulfillment of college requirements.

The arrangement of the program is such as to facilitate and to encourage the grouping of related subjects by the students when choosing their electivs. In this way a student may pursue some special line of work thruout his course, while taking the required work and some promiscuous electivs. Some of the suggested groups are as follows:

AGRICULTURAL GROUP.	MANUAL TRAINING GROUP.	INDUSTRIAL GROUP.
Zoology 3	Mechanical Drawing 1	History of Commerce 1
Botany 2	Pictorial Drawing 1	Geography of Commerce ...2
Biology 1	Designing 1	Physical Geography 1
Agriculture 2	Elementary Joinery 1	Business Arithmetic 1
Soil Bacteriology 1	Advanced Joinery 2	Industrial History 2
Chemistry 3	Wood Turning..1	Economics 1
	Wood Carving..1	
	Inlaying 1	
	Iron Work.....1	
	Printing 3	

DOMESTIC SCIENCE GROUP.

Mechanical Drawing	1	Designing	1
Pictorial Drawing	1	Sewing	2
		Household Art	1
		Cooking	3
Chemistry	3		
Physiology	1		
Bacteriology	1		

NOTE.—Figures indicate number of terms the subject is given each year.

Similarly groups can be formed in History, Mathematics, Language, Physical Science, and the like, by consultation with the principal of the High School and the superintendent of the training school.

Students who finish satisfactorily the three years' course in the High School enter the Junior year of the State Normal School.

GIFTS TO THE HIGH SCHOOL.

Gifts of large framed pictures have been made to the High School as follows:

The Vatican (etching), George D. Horne.

Ducal Palace, Venice (photograph), Class of 1903.

Dance of the Nymphs—Corot—(photogravure), Class of 1904.

Spring—Ruysdael—(photogravure), Class of 1905.

Sir Galahad—Watt—(photogravure), Class of 1906.

ALUMNI ASSOCIATION.

In June, 1906, the Normal High School Alumni Association was organized, and a reunion and banquet held

at the school. The officers elected were Edith Muncaster, President; Gertrude Joyce, Vice-President; Elizabeth Koster, Treasurer; Eva Wylie, Secretary. The Association now includes about one hundred members.

REGISTERED STUDENTS.

CLASS OF 1907.

Baird, Alice ..... Evans
Beardsley, Edith ..... Greeley
Bons, Mamie ..... Greeley
Camp, Myrtle ..... Greeley
Chestnut, Maud ..... La Salle
Craig, Maud ..... Evans
Crawford, Charles ..... Greeley
Dannels, Clara ..... Bayfield
Dean, Rose ..... Greeley
Delling, Evelyn ..... Greeley
Devinny, Marie ..... Edgewater
Dick, Jeanne ..... Walsenburg
Durning, Bertha ..... Greeley
Eggleston, Martha ..... Greeley
Erskine, Cora ..... Rouse
Fedde, Agnes ..... Fowler
Finch, Lester ..... Greeley
Gammon, Minnie ..... Loveland
Garrigues, Grace ..... Greeley
Hall, Frank ..... Cheyenne Wells
Hall, Beula ..... Cheyenne Wells
Hall, Rene ..... Cheyenne Wells
Hall, Carl ..... Greeley
Hammond, Maud ..... Dolores
Hammond, Edna ..... Dolores
Hibner, Dee ..... Greeley
Holliday, Margaret ..... Laramie, Wyo.
Hoy, Lillian ..... Coal Creek
Jillson, Hazel ..... Longmont
Johnson, John ..... Sterling
Jones, Lynn ..... Buffalo Creek

Kelley, Lillian ..... Cripple Creek
Kindred, Avis ..... Greeley
Kyle, Clover ..... Evans
Kyle, Henry ..... Evans
Lamma, Clara ..... La Salle
Lamoy, Madaline ..... Iola
Lockhart, James ..... La Salle
Long, Margaret ..... Lafayette
Lucas, Cora ..... Greeley
Mackey, Gertrude ..... Greeley
Mead, Wilhelmina ..... Greeley
Morris, Clara ..... Greeley
McAfee, Mona ..... Greeley
McCann, Maude ..... Greeley
McCreery, Mildred ..... Greeley
Patterson, Alice .....
Pearson, Hazel ..... Lafayette
Piedalue, Laura ..... Greeley
Putney, Maud ..... Greeley
Quinlan, Agnes ..... Gypsum
Reid, Janet ..... Greeley
Richardson, Clyde ..... Greeley
Reilly, Katie ..... Georgetown
Roberts, Mabel ..... Cripple Creek
Roland, Garnet ..... Sterling
Royer, Russell ..... Greeley
Tracy, Lillian ..... Denver
Van Gorder, Elizabeth ..... Greeley
Wright, Lora ..... Greeley
Young, George ..... Evans
Yerion, Cena ..... Greeley

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CLASS OF 1908.

Alexander, Edith ..... Greeley
Bedford, Merton ..... Greeley
Bernethy, Ruth ..... Greeley
Blumer, Henrietta ..... Elizabeth
Bowerman, Ina ..... Greeley

Brady, Teresa ..... Greeley
Bradfield, Louis ..... Greeley
Calvin, Nona ..... Greeley
Carpenter, James ..... Atlantic City, Wyo.
Cary, Leta ..... Greeley
Chestnut, Asa ..... La Salle
Clock, Louva ..... Yampa
Cook, Mary ..... Denver
Cooper, Agnes ..... Creede
Douhan, Julia ..... Greeley
Elmer, Marjorie ..... Greeley
Faris, Robert ..... Cripple Creek
Foster, Mabel ..... Greeley
Gates, Allie ..... Greeley
Gardner, Ralph ..... Greeley
Grant, Allister ..... Evans
Goodwin, Lizzie ..... Crawford
Gore, Stella ..... Greeley
Graham, Katherine ..... Greeley
Hatch, Frank ..... Greeley
Hill, Georgie ..... Ault
Hosack, Walter ..... Greeley
Houghton, Vera ..... Greeley
Hunter, Calla ..... Greeley
Jackson, James ..... Greeley
Jackson, Alma ..... Greeley
Leeper, Effie ..... Canon City
Miller, Alta ..... Greeley
McClintock, Alice ..... Greeley
McClenahan, Stella ..... Greeley
McCullom, Merriam ..... Greeley
Nusbaum, Elsie ..... Greeley
Paine, Velma ..... Greeley
Patterson, Marjorie ..... Greeley
Pence, Pansy ..... Ault
Peterson, Jennie ..... Greeley
Real, Mary ..... Greeley
Reeves, Frank ..... Greeley

Rygren, Emma ..... Albion, Wyo.
Sanburg, Lillian ..... Boulder
Schroeder, Alma ..... Greeley
Seabury, Ethel ..... Cheyenne, Wyo.
Sherman, Jessie ..... Greeley
Straight, Alan ..... Greeley
Talbot, Nellie ..... Kersey
Ward, Katie ..... Greeley
Ward, Maud ..... Greeley
Werkheiser, Ola ..... Greeley
Whitescarver, Merle ..... Trinidad
Wilmarth, Maud ..... Greeley
Wilson, Ella ..... Greeley
Work, Marion ..... Greeley
Zilar, Bessie ..... La Salle

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CLASS OF 1909.

Beardsley, Inez ..... Greeley
Bender, Sylvia ..... Colorado Springs
Bergeman, Emma ..... Greeley
Blair, Anna ..... Greeley
Blair, Bessie ..... Greeley
Blair, Bertha ..... Greeley
Blaisdell, Oscar ..... Greeley
Bradley, Rosa ..... Greeley
Brainard, Rose ..... Greeley
Brockway, Ada ..... Greeley
Camp, Bessie ..... Greeley
Carpenter, Edith ..... Atlantic City, Wyo.
Carrithers, Glessner ..... Greeley
Christman, Mary ..... Lucerne
Comer, Myra ..... Greeley
Crook, Earl ..... La Salle
Ericson, Arthur ..... Greeley
Fay, Charles ..... Greeley
Finch, Clarence ..... Greeley
Finch, Callie ..... Greeley
Freeman, Harman ..... Greeley

Gardner, Howard ..... Greeley
Gordon, Chauncey ..... Greeley
Hammond, Louise ..... Dolores
Hart, Alex ..... Greeley
Heighton, Charles ..... Lucerne
Hopkins, Mildred ..... Greeley
Horton, Charles ..... Evans
Hudson, Mary ..... Greeley
Huffsmith, Gertrude ..... Evans
Johnson, Mabel ..... Greeley
Kelley, Letah ..... Cripple Creek
Kennedy, Lyrra ..... Wray
Laughrey, Bernice ..... Greeley
Lawson, Bessie ..... Ault
Lee, Arthur ..... Johnstown
Ling, Bessie ..... Greeley
Lockhart, Mae ..... Greeley
Mackey, Joseph ..... Pueblo
Miller, Lois ..... Greeley
Mitchele, Charles ..... Pine
Moore, Elizabeth ..... Platteville
Morris, Ruth ..... Greeley
Motheral, Clare ..... Greeley
Mott, Irene ..... Charles City, Iowa
Mundy, James ..... Greeley
McClellan, Elma ..... Nunn
McCoy, Adelaide ..... Ozawkie, Kan.
McCullom, Agnes ..... Evans
McKinny, Iva ..... Loveland
Nordstrom, Sylvia ..... Greeley
Park, Olive ..... Greeley
Piedalue, Regina ..... Greeley
Real, John ..... Greeley
Real, Elizabeth ..... Greeley
Rogers, Francis ..... Greeley
Sayers, Denson ..... Greeley
Schafferhoff, Anna ..... Durango
Schulze, Laura ..... Evans
Scott, Herbert ..... Evans

Shambo, Mabel ..... Hardin
Shearer, Harlan ..... Greeley
Smith, Helen ..... Golden
Smith, John ..... Greeley
Sprangers, Marie ..... Denver
Steck, Susie ..... Greeley
Swanson, Lois ..... Greeley
Sweet, Gladys ..... Greeley
Tepley, Anna ..... Greeley
Thompson, William ..... Pacific, Wyo.
Thompson, Laura ..... Greeley
Turner, Elmer ..... Greeley
Vail, Efton ..... Greeley
Varvel, Emmett ..... Greeley
Warner, Carl ..... Greeley
Watson, Marie ..... Lake City
Webber, Mary ..... Breckenridge
Wilson, Anna ..... Greeley
Wilson, Pearl ..... Greeley
Wilmarth, Alta ..... Greeley
Williams, Flossie ..... Greeley
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Total registration for 1907 201

GRADUATES.

CLASS OF 1902.

Beardsley, Myrtle ..... Denver
Buckley, Emma ..... Greeley
Cheese, Ida ..... Platteville
Day, William ..... Greeley
Day, Grace ..... Greeley
Dolan, Margaret ..... Leadville
Douglass, Russie ..... Mexico, Mo.
Ellis, Ruth ..... La Salle
Niemeyer, Blanche ..... Evans
Patterson, Bessie ..... Greeley
Remington, Katie ..... Greeley
Snyder, Tyndall ..... Greeley
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CLASS OF 1903.

Adams, Roxana M..... Greeley
Alexander, Raymond P..... Mosca
Buchanan, Louisa D..... Brush
Cummings, Josephine S..... Greeley
Ellis, Ralph W..... La Salle
Hall, Ivan Clifford..... La Grange
Kendel, J. Clark..... Greeley
McDonald, Anna E..... Leadville
McFarland, Rachel ..... Salida
Proctor, Emily L..... Loveland
Robb, Pearl G..... Greeley
Rutt, Raymond J..... Octavia, Neb.
Sibley, Blanche T..... Denver
Snook, Harry J..... Greeley
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CLASS OF 1904.

Abbott, Vivian ..... Greeley
Alps, Rosaline L..... Loveland
Bodfish, Gertrude ..... Victor
Brake, Mona ..... Greeley
Camp, Leo ..... Vernal, Utah
Cheese, Cora ..... Platteville
Cozzens, Mabel M..... Lucerne
Dean, Edna ..... Greeley
Doherty, Anita M..... Cheyenne
Doke, Carrie ..... Greeley
Draper, Everette F..... Greeley
Ellis, Edith E..... La Salle
Finch, Myrtle ..... Greeley
Foote, Amy R..... Hugo
Gardner, Ada E..... Yuma
Hall, Mabel G..... Greeley
Hiatt, Grace ..... Central City
Hoffman, Ethel A..... Platteville
Hoffman, Pearl E..... Platteville
Kellogg, Pearl A..... Greeley
Laughrey, Maude L..... Greeley
Midgett, Alma M..... Platteville
Mincey, F. Myrtle..... Eaton
Moore, Robert M..... La Salle
Morrison, Marguerite ..... Evans
Murphy, Catherine ..... Rouse
McMillan, Ella M..... La Salle
Norris, Louella ..... Greeley
Pike, Jennie ..... Morrison
Reid, Boyd ..... Greeley
Rhodes, Edith P..... Ashton
Sanford, Olive M..... Greeley
Schroeder, Helen M..... Greeley
Schull, Beulah B..... Bellevue
Sibley, Winifred ..... Denver
Ward, Olive ..... Greeley
Wylie, Eva ..... Evans

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CLASS OF 1905.

Baird, Olive ..... La Salle
Bane, Naomi ..... Frances, Colo.
Barry, Lois ..... Greeley
Beattie, Elizabeth ..... La Salle
Bly, Winifred ..... Greeley
Cook, Alfaretta ..... La Junta
Dean, Iva ..... Greeley
Dean, Sherman ..... Greeley
Doke, Bettie ..... Greeley
Duenweg, Rose ..... Platteville
Edgington, Blanche ..... Greeley
Gill, Emma ..... Lindon
Harbottle, Anna ..... Greeley
Herrington, Edith ..... La Salle
Herriott, Mary ..... Evans
Hedgpeth, Allena ..... Lamar
Hiatt, Paris ..... Central City
Johnson, Blanche ..... Monte Vista
Joyce, Gertrude ..... Cripple Creek
Kelsey, Cammie ..... Fort Lupton
Koster, Elizabeth ..... Rico
Lanham, Iva ..... Loveland
Laughrey, Leona ..... Greeley
Moore, Attie ..... Fort Collins
Muncaster, Edith ..... Rico
North-Tummon, Allene ..... Georgetown
Pearcey, Lillie ..... Eads
Reid, Glen ..... Greeley
Romans, Frank ..... Salida
Scott, Laura ..... Denver
Schwertfeger, Emma ..... Sterling
Spence, Mary ..... Chromo
Stampfel, Alvene ..... Rico
Smith, Clinton ..... Greeley
Wilkinson, Mabel ..... Greeley
Waite, Nellie ..... Greeley

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CLASS OF 1906.

Albee, Ida ..... Berthoud
Archibald, Allie ..... Evans
Baird, Myrtle ..... La Salle
Baker, Georgia ..... Greeley
Barry, Susie ..... Evans
Barmettler, Alice ..... Georgetown
Brainard, Fay ..... Greeley
Brainard, Iona ..... Greeley
Brown, Charlotte ..... Glenwood Springs
Crawford, Ada ..... Greeley
Dale, Ethel ..... Edgewater
Delling, Olive ..... Greeley
Duenweg, Anna ..... Platteville
Finley, Ethel ..... Windsor
Gammon, Hallie ..... Greeley
Grable, Laura ..... Denver
Hughes, Martha ..... Silverton
Hurley, William ..... Greeley
Johnson, Edna ..... Greeley
Johnson, Mildred ..... Greeley
Johnston, Harry ..... Evans
Kibby, Bertha ..... Berthoud
Kyle, Homer ..... Evans
Latson, Irma ..... Rocky Ford
Miner, Elizabeth ..... Crested Butte
Montague, Pearl ..... Denver
Moore, Charles ..... Evans
McLernon, Irene ..... Sidney, Neb.
O'Boyle, Alice ..... Denver
Patterson, Mae ..... Greeley
Peterson, Josie ..... Creston, Iowa
Ramsdell, Fred ..... Greeley
Rawls, Berenice ..... Creston, Iowa
Sopp, Helen ..... Georgetown
Stephens, Joseph ..... Akron
Wells, Rose ..... Beaver

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Total number of graduates 134

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THE W. F. ROBINSON PTG. CO., DENVER

State Normal School of Colorado

English Bulletin

September 1907

SERIES VII. No. 2

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

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

First Term Senior English.

First Term Senior English

Generalized history of literature from the evolutionary view point, with special reference to (1) the phases of early literary expression most valuable in the teaching of children, (2) the broader significance of the great forms of literature.

SYLLABUS.

I. Introduction.

1. New conceptions of literature resulting from the evolutionary view point: the unity and the necessity of expression in relation to the development of the race.

a. Wider time-relations and schematism.

(1) Comparative view of time covered by the history of civilized and by the history of primitive man; by the history of the great forms of literature and by the history of primitive vehicles of expression.

(2) Difference in the framework needful for the schematizing of history and of anthropology; for the study of art literature and of folk-literature.

b. Points of view in the development of literary study leading to the present conception.

(1) Defensive period: Elaboration of claims for the art of poetry, narrowly conceived, with debate on the value of different forms; study of the "garment," the "body" of art. (Elizabethan beginnings of criticism.)

(2) Judicial period: Closer observation of particular pieces and writers, with use of comparison for the purpose of setting one above another, and of historical reference to justify one form rather than another; the magisterial study of literature for pronouncing

judgment rather than for insight. (Dryden the most open-minded and discerning critic in this phase.)

(3) Vital and national period: Growth of the spirit expressed in Goldsmith's counsel to Gray—"Study the people." Progress of the conception of a national literature, seeking the spiritual tendency of successive periods and their relation to political, social, and religious conditions. (Carlyle the leader of this new study, which is the distinctive contribution of the 19th century.)

(4) World period: Recognition of the essential unity of all literature; search for the inner spiritual process in literature and therewith recognition that this process is revealed wherever literature is found; presentation of literature as essential human experience, with typical forms varying under different racial and cultural conditions—the study of literature rather than of literatures. (Begun in the 19th century, awaiting fuller development in the 20th.)

c. Aspects of present literary study especially valuable to the teacher.

(1) The pursuit of literature from the wider historical and the comparative standpoint (two applications of one method) reaching behind developed literary forms into the undifferentiated festal and labor chorus of the tribe, and attempting to trace thence (a) the inner process, (b) the characteristic forms, and (c) the social effects of literary activity.

(2) Recognition of the importance of folk-literature as distinguished from art literature.

(*a*) For appreciation of literature as a human phenomenon.

(*b*) For development of its worth as an agent in teaching.

(3) The broading and enlightening effect of the study of comparative literature similar to that resulting from the study of comparative religion.

2. Relation of the new conception of literature (essential character of human expression; unity of process) to the formation of a course for the culture of children.

a. The child's need of the imaginative and spiritual elements of race-development.

b. The possibility of selecting material suitable for the child's spiritual culture from the products of primitive expression.

(1) The presumption furnished by the recapitulation theory.

(*a*) The limitations of this favorable presumption.

(*b*) The mistakes to which the theory has led, particularly the notion that the material carries of itself the desired effect.

(*c*) The suggestions of the theory needing to be tested and developed by particular considerations drawn from the nature of the material in its relation to the characteristics of the child mind and the aims of education.

c. The conditions of success in the use of folk-material for cultural ends.

(1) The working over of the material in such a way as

(*a*) To develop its best content and eliminate its lower features;

(*b*) To bring out through artistic means (not though exposition or unskilled hammering on the moral) the inner significance of the human experience involved.

(2) A thoroughly conceived sequence of material, developing richly, in accordance with the child's growing capacity, the elements of human experience.

(3) The vitalizing of all material through the personality of the teacher.

Some References for Reading.

Article "Anthropology" in "Six Thousand Years of History." (A good summary of the extension of history accompanying later research, but with no application to literature.)

Gummere: The Beginnings of Poetry. (Later chapters for the idea of poetry in primitive life.)

Vaughn: English Literary Criticism. Introduction. (Good for phases of literary study and particularly for the work of Carlyle.)

Carlyle: Miscellaneous Essays. Vol. I. State of German Literature—particularly the part beginning, "Criticism has assumed a new form in Germany; it proceeds on other principles, and proposes to itself a higher aim."

Matthew Arnold: The Function of Criticism.

Moulton: The Literary Study of the Bible. Preface. (For the idea of comparative literature and the differing, but equal, importance of the historical and the literary study of a product.)

Tolstoy: Life. Chaps. II and III. (For the common content of great religious literature.)

What is comparative literature? (C. M. Gayley) Atlantic Monthly 92:56.

List of articles in current magazines in note book in the library.

Suggestive Questions for Preparation.

1. Make some simple diagram representing the time reltaion involved in I, 1, (1).

2. Does this time comparison mean that only a small fraction of what is worthful in human expression been included in the study of literature?

3. Mark a general difference between the forms used for classifying art-literature and those for denoting folk-literature.

4. Mention four kinds of research that have contributed to the study of comparative literature.

5. Should you call the "appreciations" of the present day examples of the first phase of literary study?

6. Which phase of literary consciousness is usually inferred when one asks, Is Kipling a standard writer? Which is the greater poet, Wordsworth or Shelley? Substitute questions which illustrate the third period.

7. How does the contrast between the manner of viewing Shakespeare in the 18th century and in the 19th illustrate the growth of literary study as noted in the four phases above?

8. How is possession of the fourth view-point immediately advantageous in starting to read any product. of remote time or place?

9. How does the Modern Readers' Bible illustrate

period three? What further advance carries the study into phase four?

10. A lecturer said: "The origin of poetry is rhythm." In what respect was the speaker's sense of the nature of poetry probably defective? (See I, 1, c, (1), a.) How would you supplement it?

11. What human attitude tends to be developed by the study of comparative literature? Of comparative religion?

12. Give three reasons why the culture epoch theory does not *prove* the desirability of using folk-literature instead of modern literature in educating children.

13. Make as strong an argument as you can for the use of modern literature in training children. Answer this argument, supporting the value of folk-literature.

14. Why do teachers who attempt the use of myth or folk epic sometimes fail? Discuss the conditions of success.

15. What sort of knowledge of folk-literature ought the teacher of children to possess?

State Normal School of Colorado

English Bulletin

October 1907

SERIES VII. NO. 3

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

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

First Term Senior English.

First Term Senior English.

Generalized history of literature from the evolutionary view point, with special reference to (1) the phases of early literary expression most valuable in the teaching of children, (2) the broader significance of the great forms of literature.

LESSON TWO: SYLLABUS.

II. Outline of the larger phases of expression before the complete dominance of individual artistry. (See I, earlier syllabus.)

These modes to be figured as wide general regions through which the stream of expression is borne, the various forms of literature (here used as a term signifying emotional and imaginative expression in language, oral or written) being represented by currents of the stream which are again lost in the general flow, or which acquire new characters as they pass through the locks that divide one level from another.

A. The period of communal expression.

1. The conditions of such expression.
   a. The smallness and homogeneity of the horde.
   b. The sameness of the life-problem for all.
   c. The vital and practical origin of the emotion expressed.
2. The nature of communal emotion.
   a. As generated in the horde.
   b. As expressed by the horde without separable individual consciousness.
3. The typical form of the communal period: the festal dance.

Rhythm which is the seed and life of life
And of all art the root and branch and bloom.
—Richard Watson Gilder.

a. Sources of our knowledge of the primitive dance: travelers' observation and study of the dances of the Australians, Mincopies, Andaman Islanders, Bushmen, Fuegians, Botocudos, and other tribes; comparison of these dances with what is known of the development of the choral dance among the "classic" peoples; interpretation of the data by comparison with other anthropological facts.

b. General character of the dance: the most complete expressional agent, involving the whole body and arousing the highest degree of reciprocal excitement; difference from the modern dance in purpose, content, and influence—source in fundamental practical needs, (food, destruction of enemies, etc.) effect in profound social changes.

c. Classes: gymnastic, mimetic; probability that the former were originally mimetic.

d. Occasions and content: present interests of the horde as a whole—the hunt, war, the seasons, incidents among men and animals, conceptions of a life after death (in at least one observed case; Cf. the Dionysiac festivals).

e. Reasons why the primitive dance should be accounted the first step in literary evolution: rhythm a formative agent; the movements accompanied by song; presence of lyric, epic, and dramatic elements; the mimetic dance of love and war leading to the folk drama; the tendency of the dance to become autotelic. Thus

the general content of the dance (sense of kind, sympathy), its subjective effects (emotional intoxication with deliverance from the merely personal—the *katharsis* of Aristotle), its essential form-element (rhythm), and its law of development (from practical to autotelic) so many bonds of connection between the earliest "literary" expression of the savage horde and the greatest work of the individual poet.

f. Features of the dance which, originally practical, become autotelic: scene chosen, dress, rhythm, instruments, choruses, dramatic representation.

g. Sources of pleasure in the dance which help to develop its autotelic tendency: the lively satisfaction of vigorous and rapid motion; the natural relief of giving vent to inward pressure of feeling (Cf. Yrjo Hirn's view of the primary art impulse as that of externalizing a mood to enhance its pleasure, or to relieve the pain of inhibition); the organic delight in rhythm; gratification of the propensity to imitate (sometimes developing into an independent passion); increased sympathy—the sense of kind; in some religious dances, the satisfaction of union with the tribal god; the *katharsis* (beneficient cleansing and freeing of the mind from turbulent and unreconciled passions) which Aristotle declared to be the highest function of tragedy.

h. Social value.

(1). The primitive dance the probable gateway of tribal organization, because capable of arousing the emotion of kinship and common consent necessary to fuse into dynamic force the practical reasons for union.

(2). The dance in its early development a continuous moral force: the individual savage brutish, stolid, idiotic, fitful; the horde through festal consent a social body capable of the beginnings of civilization, poetry, religion.

(3). The dance the conjectural gateway also of sentential speech: strong feeling about a more clearly realized situation the possible agent in shaking free the beginnings of syntax from the mere emotional cadence and repetition of the communal cry.

(4). The dance influential through sexual selection in improving the tribe.

(5). The dance the beginning of a social agency of exhaustless force—the art impulse: the "waking vision" of primitive communal emotion the preliminary stage of artistic power; the "spontaneous play of fancies and images suggesting and following one another in the confusion of a dream," the stuff on which thought and effort seize in the beginning of artistic activity.

B. Pedagogical deductions from the communal dance, applicable to the literature work of the lower grades.

1. Need of abundant bodily movement brought into fruitful relation with the imaginative and emotional interests of the children; marching, dancing, gymnastics, not as detached exercises, but as agents in expressing some meaning.

2. Better use of the instinct to "act out": dramatizing the life of birds and other creatures, incidents in school, home, and playground, especially significant

features of the stories presented to the children or read by them; unifying, through a "play" constructed by the children in the regular composition work, the meaning of an entire course.

3. Desirability of a revival of the festival in school life (a) to unite the different groups of a school body (b) to promote delight in the out-of-door world (when the character of the festival permits) (c) to raise selected experiences, grave or joyous, to higher levels of intensity and hence to more potent influence (d) to accustom the children to work in accordance with a true principle of art, that of producing in the spectators the thoughts and emotions of the performers.

The undertaking of such festivals only as shall grow out of and unify the work of the pupils, and of only such number each year (say two or three) as will leave room for quiet growth between.

Readings.

Gummere: The Beginnings of Poetry (The best treatment of the communal dance from the literary standpoint).

Grosse: The Beginnings of Art (Excellent for a digest of the facts).

Posnett: Comparative Literature.

Matthews: The Development of the Drama.

Chapters on the origin of the drama in the histories of national literature—Greek, Spanish, German, French.

Chapters or paragraphs in books on anthropology and in travelers' tales of primitive peoples (For facts—

sometimes inaccurate. and interpretations—not infrequently misleading).

A lesson in the association of work and play (Peter W. Dykema) The Craftsman, September, 1907.

The Journal of Folk-Lore, histories, books on early customs (for old forms of celebrating festivals) and current articles for revivals and rearrangements of carols, masques, processions, plays, and bits of ancient or primitive ritual.

Required Work.

The presentation in careful and detailed outline of a plan suitable for celebrating Harvest Home or Thanksgiving, Christmas, Easter, Patriots' Day (February, because of the birthday of Washington and of Lincoln), May Day, or Arbor Day.

Suggestive Questions for Preparation.

1. What do you understand by the statement that early poetry was communal?
2. Can the conditions that made communal production possible be repeated in the modern world? In the child's world?
3. Which of the great forms of art literature lies farthest from communal beginnings?
4. What is the difference between the terms *communal* and *universal* as applied to literature?
5. What definite traces of the communal period are found in the Iliad? In the Bible?

6. Literature moves from the practical to the autotelic. Explain this statement.

7. Name three characteristics of primitive, communal "literature" that have persisted in the greatest art literature.

8. Has the fact that primitive literature was communal any significance for teaching children?

9. Do you approve of concert recitation of poetry? Under what conditions?

10. What is the value of 'dramatizing' a story?

11. What is Yrjo Hirns' theory about the beginning of the "inner process" in poetry? (See I, c, (1), (a) and II, *A*, 3, g.) Does this theory offer any suggestion about teaching oral and written composition?

12. What is the difference between presenting a play and making a true festival?

State Normal School of Colorado

Education Is Motorization

Bulletin. October 1907.

A Syllabus

SERIES VII. NO. 4

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

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

A Syllabus

—ON—

Education Is Motorization

—BY—

Z. X. SNYDER

PREFACE

The following is a syllabus used by the author in his classes in the philosophy and science of education.

It is a consideration of education as a biological process growing out of the functioning of the organism. Thought, feeling and action are all functions of the organism. It is the dynamic conception of education; that is, education is the result of the efforts of the organism to adjust itself to its environment and to adjust environment to itself.

In accordance with this conception education finds its realization in the life of the individual—in his expansion into life, mind, social participation and divine recognition.

From the above standpoint it may be said that education is a functioning of cells.

Education is Motorization.

1. The nervous system is the organ of mind. All psychical phenomena from the first crude impulse of living matter to the highest types of mentality; as, sensation, thought, feeling, volition, and consciousness are functions of the nervous system — action and reaction of atoms, molecules, cells, tissues, organs, body.

2. The entire organism is the organ of motor activity. All activities of the individual, whether they be sensuous or mental, reflex or conscious motions, are functions of the organism. There is no training independent of the body. All impulses, ideas, sentiments, ideals and deeds are functions of the organism.

3. Motorization in education is the development, organization and reorganization of the histonal elements of the body and their unification in movement and motion to the end of realization; it is functioning the organism.

4. All movements and motions are the result of a coalescence of stimuli. There are two types of stimuli — *inner* and *outer;* the inner stimulus is hereditary and phyletic; the outer stimulus is any external phenomenon affecting the organism. Much depends upon the congruity of these two types of stimuli. If they are incongruous the resultant to action is weakened in proportion to the incongruity. Congruity leads to strong feeling for action in a particular direction.

5. When there is a complete circuit of coalescence, there is adjustment to and of environment to self; this, again, is motorization — education. When the external

stimulus meets with a congruous internal stimulus and this in turn with congruous ideas, the flow in the direction of motor activity will be at its best. A strong interest to actualize will accompany the movement. Dominant physical tones run throughout.

6. The motor activities may, as to region, be classified into *central* and peripheral. In motorization a very important idea is usually lost sight of; that is the development of a central organic feeling, or movement and then releasing it in motion, in realization — in doing, through the peripheral organs. There should be a strong feeling for the movement all over the body — the strong dominant tone. It means doing with the whole body. The teacher must engender this feeling in the child. The racial impulse, the child's age, the child's environment and its development must all be reckoned with in this matter.

7. The whole process in education from the outer stimulus, arousing the entire being in realization to final realization is one of gradual evolution—it is monistic — the nature of it is the same all along — it is organic — natural; this process is one of maturation; that is, no thought is matured until it is realized. In this physiological and educational series (Motor series equals stimulus, sense, sensor centers, thought centers, motor centers, muscle and doing, equals Motorization) no term should be omitted from the first impulse to realization; from sense and imagination to realization in play; from sense, thought and imagination to realization in games; from sense, idea and

reflection to realization in work; from sense, idea and the ideal to realization in life.

8. If a thought is not matured until it is realized, it is clear that the subjects which are used as means to develop thought, feeling and ideals should be adjusted to the child, so that he experiences the truths, etc., in his life in thought, in feeling, and in action; a child should live *his* life through the entire motor series.

9. The matter of completing the physiologicial circuit in the educational process makes the difference between the savage and the civilized, cultured man. It is the difference between the few crude facts of nature on the one hand and, on the other, the play of ideas on these facts directed by ideals and realized in life.

10. The above doctorine teaches that as soon as a truth and its process in realization becomes unconscious (consciousness being a by-product of the process), it ceases to be structural (structural meaning educational); it then becomes a virtual energy and is only further realized when it helps to reconstruct, thereby, again, becoming an active energy in the life of the individual.

General Principles in Education Based upon Motorization.

1. The education of an individual is a scientific process.

2. As a scientific process, it is based upon the organism; hence, it is subject to physiological laws.

3. That part of the organism that has to do with the physical phenomena is the nervous system; that which has to do with motorization is the entire organism.

4. That part of the nervous system that has to do with the thinking process is the brain.

5. The parts of the brain that have to do with the sense-impressions are the sense centers of the cortex; those parts that have to do with the organization of these impressions (or thinking) are the thought centers of the cortex; those parts that have to do with final realization of the thoughts are the motor centers. These are all connected by nerve fibers.

6. Hence, originally *all* knowledge comes by experience through the sense organs; in our individual experiences we get them directly, in history we get them indirectly, from the race we get them phyletically.

7. Feeling, interest, memory, consciousness, emotion, attention and will are by-products of the physiological process. This process is the result of the building up of the organs of the animal kingdom through the countless years of its existence by natural selection.

8. The elementary organs of all these tissues are the microscopic cells. Hence, education is functioning cells.

Suggestions Growing out of Study of Motorization.

1. Motorization results in two types of realization;

individual and social. Motorization that ends in the individual falls short of its full fruitage ; it should reach into the social life.

2. All those phases of manual work which have their origin in primitive life and by development have reached large wholes in the present social life are more important in school work than phases that have started and have not found a large place in the social whole ; as woodwork, weaving, iron, glass, clay, agriculture, gardening, forestry, painting, drawing, architecture, among the first ; and basketry, furs, among the latter.

3. In teaching, arrange conditions and material (as,— air, temperature, objects, pictures, literature and subjects) and yourself so as to develop strong body movement, or feeling for expression. Do not sterilize by too much detail and verbosity.

4. Be careful to strengthen each term of the motor series from stimulus to action.

5. Physical culture, all forms of art (as,— sculpture, pottery, painting, literature, and music) make the body more rythmetical and responsive to the development of movement — of stress in doing.

6. In stimulating the child's body movements, there must always be taken into consideration the child's racial and individual interests. The medium and its form through which he realizes his movement must be congruous with his total interests and his social life.

7. With children whose realizations are in play, it should always be remembered that it is not best to develop a strong feeling or movement, and let it die by absorb-

tion without realization in play. That is, a nervous explosion dying away in the tissue is not healthy or educative. It produces morbidity.

8. In the education of the motor activities the movement must be from the center outward to peripheral action; the peripheral action being based upon strong central movement, or stress.

9. The application of the doctrine of motorization finds its highest service in correlation, or better concentration; as,—drawing, and art, mathematics, history and literature, agriculture, forestry, gardening, physics and English, with manual training; drawing and art, physics, chemistry, geography, history and literature, gardening and agriculture and manual training and English with domestic science; spelling, reading, grammar, history and literature, geography with English; spelling, grammar, use of words, literature and dramatising history with reading; art, history, literature, sociology, industry with languages. These groups all correlate in the life of the child as it transfigures itself into humanity, or the human activities.

10. Broadly speaking, the large areas of the lives of children in their motorization may be defined as the play, the game, the manual training and the art stages; these conform somewhat to infantile, the child, the youth and the adolescent periods.

Applications in Motorization.

I. IN USE OF WORDS—

1. Oral,—As to content and as to sentential structure there should be congruous coalescence from first stimulus through the ear, sense centers, idea centers to the motor centers controlling the vocal chords resulting in speech, which is realization. The word from an oral standpoint has its ultimate value in realization in the social life activities.

2. Written,—As to content, sentential structure and orthograhic structure (spelling) there should be congruous coalescence from the first stimulus through the eye, sense centers, thought centers, motor centers controlling the arm and hand to the written word, which is realizaation. The written word has also a very large value in social life activities. Spelling is only necessary in writing. I think the above suggests the series of motorization to be used in teaching spelling.

II. IN READING—

1. Vocal,—Motorization proceeds from the first stimuli through one or more senses, as the case may be, to the sense centers, thought and motor centers to the vocal cords, accompanied by a body movement together with peripheral movements organized into one whole called dramatization. This process builds up and expresses the whole scheme of the content of the piece read, into being which is absolutely necessary in conveying the thought and scheme to others. Oral reading

has a high social value when well done. Considerable use should be made of the drama.

2. Silent, — Motorization here proceeds from stimulus to body movement, but does not find its end in motion — in dramatization. There is the better matured thought in the oral and dramatic reading; silent reading leads up to the last but one term in motorization, which term is action. It builds a potential which, however, may later become kinetic — or realized. A strong body feeling growing out of the stimuli properly presented leads up to the vivid imagination, which is always a condition for self-forgetfulness in good acting. Self-forgetfulness only follows when there is perfect coalescence of the action of the senses, sense centers, thought and motor centers (sense, stimulus, thought, emotion and will.) The teacher using the proper stimuli together with his personality makes the condition for the development of this entire process in reading.

III. ARITHMETIC—

To motorize in arithmetic means to realize the mathematical experiences in the child's life. Experiences here are first gotten in the same way as in any other subject through the senses. The motor series should be stimulated throughout, developing a strong feeling for movement. A caution must be observed in mathematical teaching not to mistake symbol work for content work. The laboratory is as important in arithmetic, algebra, and geometry, as in any other science. There should be much drill, but it should be motorized

drill — drill that has all the elements of motorization in it — drill that carries with it real life.

IV. LANGUAGE —

Preliminary to the opening up of a subject in any language, there should be given such exercises as to arouse the motor series along the line. The stronger the movement, the greater the disposition to realize the ideas in use. In all language teaching, good use may be made of the lantern illustrating the habits, conditions, customs, history, literature, and spirit of the people whose language is being studied ; good use may also be made of the story. Too much detail and too much technique repress the motor feeling. Young people in the adolescent period are more interested in the life side of the language than the technical, and will react more readily to such.

V. NATURE STUDY —

The field, the laboratory, the library and the teacher are the stimuli in this subject ; what a feeling may be aroused through these media ! This feeling will find its realization in tramping the fields, in climbing the trees, in digging, in working in the museum, in searching in the library, and in many ways which the pupils will devise.

VI. PHYSICS —

The stimuli coming directly out of the environment, such as the mechanical contrivances involving principles of physics are realized when these contrivances are con-

structed; as, haystacker, windmill, irrigation ditches and headgates, telephones, electric lighting, water motors, telegraphic system, the mechanics of vehicles, eye glasses, thermometers, ventilation, gas lighting, heating apparatus, plumbing, etc. The material for an entire course of physics lies in the presence of the child. The fullest realization may be experienced here. Formulations of facts into principles should follow in this work; then in turn the application of the principle in life in the daily activities of the pupils.

VII. HISTORY.

In history by the aid of the lantern, pictures, library, museum, and the story, the child may be brought into very close and sympathetic relations with the peoples whom it is studying. The entire motor series may be realized up to the last term, action; here there is fine opportunity to dramatize the life of the period. This sort of work well directed develops a strong potential for ethical action in the life of the pupil. A study of the life history of utensils, tools, machines, fabrics, etc., put pupils in sympathy with the life of a people.

VIII. GEOGRAPHY—

Geography furnishes great opportunities for stimulation of the sense and thinking activities of children. Products, their transportation to different parts of the world, the physical conditions upon which the products and transportation depend and the dependence of the people upon them, all provide a wide field of interest

and study. The local fields, manufactories, methods of transportation, pictures, the lantern, library, and the museum, are media for stimulation. People are interested in people; strong feeling grows out of a clear and close study of geography in relation to the people. This sort of study realizes the definition of geography, "The earth is the home of man." Considerable motor work may be done in moulding; out in the field is an excellent place to mould on a large scale; every school should have a piece of ground on the campus for the construction of the continents on a large scale; an entire class may make it.

IX. LITERATURE—

Here, there is a fine opportunity to develop the fact that "literature is life." By the use of the lantern; by pictures showing how people live—showing the trials, difficulties, hardships, joys and sorrows, aspirations and ideals; by the use of the story; by the use of the library; by the use of the museum, the life of the human family may be given such a setting as to develop strong impulses, sentiments and ideals of response in the pupils. The motor series in literature finds its highest point in thought, sentiment and action—action in the drama, action in the practial lives of the pupils. The tissues of the entire body should feel literature by being so developed, constructed, and reconstructed by the study of it as to make a powerful potential, the release of which would flow in the direction of right living. Literature is life; it should be felt as life, studied

as life, loved as life, lived with as life, acted as life. This is motorization in literature.

X. ARTS-CRAFTS—

From sense to muscle, from the kindergarten to high school, inclusive, in manual training, in domestic science, in gardening and forestry and in art, is the law of the motor series. Any term slighted results in a slight in all forms that follow. The best opportunity is afforded in these subjects for the development of a strong movement to do. Every time the pupil does, the doing should reflect back and clear up the ideas upon which the doing is based. The feeling, or movement, should be deeply artistic in all that is done. The construction must first be true, then ornamented to suit. The lantern, pictures, the library and Arts-Crafts museum are all means to the end. They are great in making a soul for this work. It all belongs to motorization.

XI. MUSIC—

The first step is the development of a feeling for music through tone. Tone is the primary motor element in a strong musical feeling. The musical soul is the attuned body; every cell vibrates in rythmic unison with every other cell; there is congruous coalescence of all the organic units. Fundamentally the teacher's tone is the stimulus; in the child the motor series is from the teacher's tone to the child's vocal cords. Music is the climax of the arts. Because it is the finest

of the fine arts, it naturally takes more time to develop it; while this is true, it is the most universally applied of all the arts, It should have more time in the curriculum. A growth of feeling for the proper tone should commence with the little children in the kindergarten and continue throughout the school course.

XII. PHYSICAL EDUCATION—

This should be a basis for the entire educational structure. In the formal work the stimulus is the command. The stimulus, thought and action is the formula. In motorization in physical education there is much to be done with rythm. Music to guide the movements is important. The entire nature is congruous in action. From the standpoint of motor adjustment the entire body is better conditioned for work in any line. Physical exercise should be for life's sake.

What has been said above has reference to general organic adjustment. Besides this it has an important value as a health tonic; it creates a better hygienic adjustment of all the parts of the body, It, again, has a pathological value. There are remedial exercises that correct defective parts.

Realizations Growing Out of the Applications of Motorization in Education.

1. "Education as Motorization" is realized in the expansion of the individual in the development of the vital, mental, social and spiritual natures.

2. The development of the vital, or biological nature is the expansion, multiplication and functioning of the cells of the organism.

3. The development of the mental, or psychological nature is the enlargment and functioning of his intellect, his sensibilities and his will, which are functions of his organism.

4. The development of his social, or sociological nature is his ethical interpretation of his environment as formed by his fellow-men, and his social participation with them.

5. The development of his spiritual, or philosophical nature is the enlargement of his view of the universe of things and forces and the unity of all these; further, it is the development of the power of the individual to sense divinity and to feel and recognize divine impulses in his own nature and a divine control of all things.

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First Term Senior English.

Generalized history of literature from the evolutionary view point, with special reference to (1) the phases of early literary expression most valuable in the teaching of children, (2) the broader significance of the great forms of literature.

LESSON THREE: SYLLABUS.

II. Outline of the larger phases of expression before the complete dominance of individual artistry. (See I, first syllabus.)

B. The period of individual improvisation based on communal emotion. (See *A*, second syllabus.)

In a sense now unfamiliar, song resounded through the whole communal life.—Gummere.

1. The probable steps from communal toward individual production.

a. A slight variation on the endless repetition of the horde made by an improviser withdrawn but a moment from the communal circle.

b. Growth of the custom that each member of the horde shall make a rude improvisation on the common theme.

(I). This contribution a simple indication of some feature of the situation suggested before in endless repetition by the horde.

c. Acceptance of an approved addition by the horde and witness to its adoption by the shouting of the original chorus, which thus becomes the binding element.

d. The improvised verse, when greeted with

favor, passed down as part of a growing traditional stock.

e. The choral song thus coming to be a braiding of production and reproduction, of improvisation and memory.

f. Gradual retreat of the choral throng, giving prominence to the individual singer.

g. A general gift of improvising verse antedating the development of a national literature (in cases where growth has been from a primitive state).

2. The typical form: the folk-ballad.

a. Relation of ballad structure to communal beginnings: the stanzas representative of individual contribution, the refrain of the common voice of the horde; the verses presenting a situation condensed and elliptical as regards content, but long-drawn-out as regards form, the chorus giving the emotional key-note or summary of the whole; preservation of the communal spirit in the total oblivion of individual composers and the constant variation of content on the lips of the people. 'Nothing is anybody's; everything is everybody's.'

b. Moments in the history of the ballad.

(I). Shaped in the communal period of dance and song.

(II). Handed down with endless variation by oral transmission.

(A). Repeated by mothers and nurses for the entertainment of children.

(B). Sung in the middle ages to the harp by wandering bards.

(C). Chanted in later times by ballad-singers at fairs, markets, ale-houses, streets corners.

(D). The name confusedly applied to street songs and other verse made by individuals for the people—and, indeed, to almost every brief form of art poetry.

(E). Modernized in language by nameless minstrels and ballad singers to suit new times and places; accommodated in detail to fit different audiences and nationalities; presented in numerous versions of the same story, with countless borrowings and exchange of stanzas, incidents, descriptions.

(F). Subject to influences from rising art poetry and influencing it in return.

(G). Printed sometimes, often in degenerate form, for the broadside press.

(H). Written down, perhaps centuries after composition; collected from old manuscripts and from the lips of the people; printed, with or without variants, in ballad books, by students and lovers of folk-poetry. (Ritson, Grundvig, Herder, Percy, Scott, Child, Roxburge Club, Ballad Society.)

(I). Found in forms, printed or manuscript, that hardly date back later than the Fourteenth century, though in origin older perhaps by hundreds of years.

(J). Exercising, especially in the Eighteenth century, a strong influence on literary poetry in favor of genius and nature and against the stereotyped art of the schools. Wordsworth's saying, of Bishop

Percy's *Reliques*, "For our own country, its poetry has been absolutely redeemed by it."

(K). Forged by earlier writers and imitated by many modern poets. (e. g. Coleridge in *The Ancient Mariner;* Arytoun in *Lays of the Scottish Cavaliers;* Macaulay in *Lays of Ancient Rome;* Scott in *Jack o' Hazeldean, Proud Mazie in the Wood;* Tennyson in *The Sisters;* Rosetti in *Troy Town, Sister Helen, The White Ship;* Longfellow in *The Wreck of the Hesperus.*)

c. Characteristics of the ballads in their present form.

(I). Narrative manner.

(A). Features.—Direct plunge into the story. Presentation of the tale by hints, glimpses, salient points: the usual parts of narrative structure lacking any detailed development—the happening often inferred, the ladder almost wholly absent, the situation and conclusion frequently suggested in lyrical iteration throughout the stanzas. (Vide *Lord Randal*, Gummere, p. 168.) Abruptness of transition, without bridge from one point of the situation to another. Absence of explanation or reflection about persons or motives. Mixture of lyric, dramatic, and epic elements, the story being told sometimes in dialogue, sometimes in lyric monologue, sometimes in simple, straightforward narrative. Iteration in form of question and answer, often in triads, in epithet, in turn of expression and trick of verse (the "artless art" of this iteration having the effect of binding stanzas together or of impressing unconscious symbolism). Tragic meaning conveyed by bare simplicity,

sharp contrasts, and repeated suggestion, without subjective development.

(B). Explanation of these features.—The conditions of the first making choral and immediate. The incidents familiar to the audience and readily supplied from memory. Later, the story partly sung and partly said, the missing links being supplied in prose. The unconscious art of singers recognizing that, for the imagination, the part may be greater than the whole.

(II). Verse form: simple stanzas, the oldest being the tetrameter couplet (from which is formed, by writing the refrain as alternate verse, the stanza of four verses), the commonest being the "ballad measure," septenarius or "fourteener," in four verses of alternate four and three iambic feet; frequent filling out of metre by retention of the Middle English accent on the final syllable (din-ere, mon-ey, wom-an) and its assumption by words which never properly had it; the refrain, which usually appears in the trimeter verses (originally sung by the chorus and accompanied by dancing steps) sometimes mere syllables to mark time, sometimes a phrase without discoverable relation to the situation, sometimes words expressing the emotional atmosphere of the ballad; the inconsequential refrain serving in the old ballads and in some modern imitations to give an atmosphere of intensified feeling or tragic foreboding to the story.

(III). Cast of content and general spirit: primitive flavor, without reflection or sentimentality; intermingling of the supernatural and marvelous; con-

junction of primitive savagery with fundamental virtue, of deeds of tragedy, violence, cruelty, revenge, with honor, courage, fidelity, devotion; everywhere grim contrasts, naked satire, underlying tragedy; virility, freshness, and sincerity of tone; impersonal and objective utterance; vigor of phrasing; rough but energetic rhythm.

d. Relation between the original choral ballad and the ballads in their present form.

(I). No continuous bridge between the individual ballad and its choral original.

(A). This fact accounted for by the conditions of oral transmission: "In its original and quite choral form, the ballad could no more be preserved as a poem than molten iron is preserved, as such, in the casting."

(B). The actual choral ballad something which "one must make up, as a composite photograph, from the best old manuscript versions and the versions of soundest oral tradition."

(C). The lack of continuity between original and present form putting the final test of each particular ballad on the traces it shows of primal ballad structure.

(II). Our ballad collection, notwithstanding lack of continuous records, furnishing evidence of choral origin.

(A). Inconclusive tests.—Transmission by tradition (true of the popular verse of individual singers as well as of the folk-ballad, hence certain only for ex-

clusion). Presence of "I" in the text (seldom helpful for exclusion because often due to later singers and leaving unaffected the real impersonal quality of the ballad). Simplicity or crudeness of style (use of common words in common order and absence of all figurative language insufficient as test; imperfect rhyme and rhythm a false test, the former being often apparent only and the latter always untrue of the original dance ballad). Possession of refrain (difficult of application because refrains were often omitted in printing, and because a stanza of one ballad sometimes came to be sung as refrain for a new ballad; hence proof of choral origin necessary for stanzas as well as for refrain).

(B). The convincing test: evidences of incremental repetition in the mould of the poem—the structure which consists in a "succession of verses or of stanzas, mainly in triads, which are identical save for one or two pivotal words," these incremental words serving, however slowly, to advance the situation. Examples.—*The Bonny Earl of Murray* (Gummere p. 155) stanzas 3, 4, 5; *The Twa Brothers* (p. 174), stanzas 8, 9, 10; *Mary Hamilton* (p. 159), stanzas 5, 6, and 14, 15; *Babylon.*

(1). Marks of the oldest folk-ballads: presentation of a situation (rather than a story) in dialogue couplets with incremental repetition, with or without a refrain, the latter often printed as alternate verse, making a stanza of four verses. "As a matter of mere statistics, incremental repetition is found consistently, and mostly along with the refrain, in all the ballads

which are grouped by Professor Child as oldest and nearest the primitive type." (Gummere: *The Popular Ballad*, p. 134, note.)

(III). Types of ballad structure, showing deviation from the original choral form.

(A). Ballads in which the text is little more than a progressive refrain in dialogue, e. g. *The Maid Freed from the Gallows* (Child No. 95; American version in Kittredge's one-volume edition).

(B). Ballads in which this dominant choral structure is combined with a simple, subordinate narrative, e. g. *Babylon* (Gummere, p. 188).

(C), Simple narrative ballads without refrain, e. g. *Johnie Armstrong* (Gummere, p. 127).

(1). The course of the ballad in the hands of tradition a process which can be followed from its choral beginnings to its final narrative or epical form.

(*a*). The tale at second hand tending to lose its dramatic conditions (dialogue, descriptive acts and their accompanying words reduced; "we" changed to "he" or "they"). Details springing up to develop, particularly, the "ladder," until the ballad situation grows into a more complete story. A brief, direct summary of the action, or epic preface, sometimes prefixed to the ballad situation.

(2). The "long, epic road" a gradual change from dominance of a situation, slow, incremental progress, foreshortened treatment of events, and preponderance of choral singing, to dominance of a story,

rapidity of narrative manner, fulness of treatment, and the coherence of smoothly flowing narrative.

(D). Ballads in which the lyric tendency has become dormant and carried the piece from the epic path toward the song; repetition being no longer of the incremental and dramatic kind, e. g. *Bessy Bell and Mary Gray* (Gummere, p. 163), *Lady Alice* (Child, 85), *Barbara Allen* (Child, 84).

(E). The combination of narrative ballads into a coherent epical poem, viz: *The Gest of Robin Hood* (Gummere, p. 1).

e. The "ballad question".

(I). Its difference from the "epic question".

(II). The two sharply contrasting views.

f. The social effects of the ballad.

(I). In primitive ballad times.

(II). In later literary times.

g. The literary worth of the folk-ballad.

(I). Not to be judged by the same tests that should be applied to art poetry.

(II). The characteristic effects of the old ballad.

3. Uses of the ballad in teaching children, particularly in the upper grades.

a. Simple work with the ballad an aid in helping the children to enter more fully into the life, interests, and literary work of Sir Walter Scott, the author best adapted to first study of the literature of individual artistry.

(I). The place of the border ballads in the

early love of Scott for border life and adventure and for collecting the songs of pipers, shepherds, and old women; the ballads which Scott liked best; his own imitations; his use of Sherwood Forest in Ivanhoe.

(A). The ballads a good link between the impersonal folk-material used in lower grades and works of individual artistry like Scott's historical novels and poems.

(II). Use of ballad structure to vary the composition work in which the early interests of Scott are vivified by leading the children to try to do the same thing for their environment that Scott did for his: attempt, in gathering local traditions, to catch in the simplest ballad forms the gist of a situation, and so to embody in rhythm (strict rhythm that may be recited in concert) what the class can work out together under the guidance of the teacher. This exercise capable of developing a sense of rhythm that passive listening or mere reciting will not secure.

b. The use of the greenwood ballads to give the picturesque and emotional side of outlawry in the Thirteenth century in England.

(I). The idealizing of life in the forest: growth of the conception of Robin Hood as a man free from tyrannous legal and social restraint, but faithful to human sympathies—his leniency, as a robber, to the poor and to the rich in trouble, his devotion to the Virgin, his respect for women, his mirth and kindliness with his followers; development of typical characters surrounding Robin Hood, who represent feeling about the

social conditions of the time—the knight, the friar, the banished men, the king of the realm as official enemy of Robin Hood.

(A). Value of the Robin Hood cycle for giving such an idea of existence in Sherwood Forest as may serve to verify the greenwood phase brought into May Day and other festivals to represent the fresh, free life out-of-doors.

c. Use of the ballads as to an introduction to poetry.

(I). Reading of good narrative ballads (such as Sir Patrick Spens, Johnie Cock, Johnie Armstrong, Kinmont Willie, with such imitations as Kipling's ballad of East and West) for associating verse with qualities that children are able to appreciate—vigor, naturalness, stirring movement—instead of with something far-off, difficult, and fine spun, like the impression likely to be made on the average child by modern subjective poetry.

(II). Laying the foundation for a liking for rhythmical language and a knowledge of simple verse forms by teaching the children to say ballads rhythmically and to try imitations of them for situations in which they are particularly interested. (Cf. 3, a, (II).)

d. Occasional use of the ballads.

(I). For sharpening the sense of a tragic situation without introducing complexities and subtleties in advance of the children's comprehension. Examples. —*Bewick and Grahame* (Gummere, p. 176) for conflict of

duties; *Edward* (Gummere, p. 169) for remorse, and revulsion from one who has led the sinner into evil.

(II). For illuminating some old custom, superstition, primitive or historical incident. Examples. —*Bewick and Grahame* (G. p. 176) for the old brotherhood in arms; *The Three Ravens* (G. p. 167) for the old idea of the rescue of human beings by brute friends; *Bessy Bell and Mary Gray* (G. p. 163—founded on an actual event) for bringing out the pathos of a plague. (Burns' admiration of this ballad—see Principal Shairp's Life of Burns in the American Men of Letters series, p. 75); *Babylon* for a tragic situation in outlaw life; *The Twa Brothers* (G. p. 174), first nine stanzas, used last year by teacher in second grade to help children feel the love of Ab and Oak (Stanley Waterloo: Story of Ab) notwithstanding Ab's violence upon his comrade; *King Estmere* (G. p. 270) for suggestions of Siegfried and Gunther's courting of Brunhilde; *Young Hunting* (G. p. 209) for fire-test of murderer; *The Wife of Usher's Well* (G. p. 195) and others, for belief in ghosts and supernatural events.

Readings.

Gummere: Old English Ballads. Introduction (Good for history of the 'ballad question' and for a tenable view; Appendix I for suggestions about ballad-history in Europe; II and III for verse and style.)

Gummere: The Popular Ballad (Best all-around treatment in English.)

Henrik Ibsen: The Saga and the Ballad. Contem-

porary Review, Sept. 1906. (Good for present conditions of folk-poetry in the North.)

Beers: History of English Romanticism in the Eighteenth Century. Chap. VIII. Percy and the Ballads (Good for ballad revival and its influence.)

Johnson's Encyclopedia, 1893: "Ballad Poetry" by Child.

Ten Brink: History of English Poetry. Vol. I.

Courthope: History of English Poetry. Vol. I, Chap. XI. The Decay of English Minstrelsy.

Thomas Percy: Reliques of Ancient English Poetry.

Ritson: Ancient Songs and Ballads, Ed. Hazlitt. Introduction.

Ritson: Select Collection of English Songs. 3 vols. Introduction.

Walter Scott: Minstrelsy of the Scottish Border. 3 vols.

T. J. Child: English and Scottish Popular Ballads. (1882-98) in ten parts. Introduction. Bibliography in tenth part. (Best for ballad variants.)

Nimmo: Ballads.

"A Book of Old English Ballads."

All the ballads in Gummere's collection.

Questions for Aid in Preparation.

1. What structure of ballad is nearest the original choral form?

2. Make as good a 'definition' as you can of the folk-ballad (Gummere: *The Popular Ballad*, p. 2, 13, 75.)

3. Give an example from the *Iliad* of the relation

between individual and communal expression: a passage which shows the seam between communal and individual feeling; an instance from the story of Cadmon of the growth of individual artistry out of more nearly communal conditions; an illustration from the rise of the Greek drama of the decreasing function of the chorus and the increasing prominence of the individual.

4. What simile does Mr. George Meredith use for the rise of ballads? (The Amazing Marriage, chap. 34, quoted by Gummere, *The Popular Ballad*, p. 14).

5. Do you know any children's games in which the old dance-ballad still survives?

6. Give the ballad convention for,—attitude of a fighting man when wounded; hopelessness of pardon; numbering things; behavior on receiving a letter; women's loss of fathers and husbands. How does Courthope explain such conventions, as opposed to the explanation given by those who accept the choral origin of the ballad? (Courthope: History of English Poetry—Chapter on the Decline of Minstrelsy.)

7. Name six early customs or superstitions that you have gathered from balladry, and say in what ballad or ballads each is found.

8. Say what each one of the three great forms of literature has retained from the choral conditions out of which it came.

9. Analyze *Lord Randal* (G. p. 168) and *Edward* (G. p. 169) for their lyric, epic, and dramatic elements, and say what would be the narrative parts if the situation were turned into epic story.

10. What does Gummere mean when he says that a ballad "had struck into the long epic road"?

11. Give the steps by which a ballad of incremental repetition in dialogue might grow into a smooth narrative of epical ballad.

12. Scan *Sir Patrick Spens*, *Lord Randall*, and *Mary Hamilton*.

13. How many ballads (about) make what Gummere calls the "closed account" of folk-balladry?

14. Since it is not possible to trace these ballads separately back to the communual dance, how is their genuineness supported?

15. Name six marks of the genuine ballad, saying which is the real test.

16. The ballad of King Estmere and the Old English poem of Widseth (Cook and Tinker: Translations from Old English Poetry, p. 3) both speak sometimes in the first person, both tell of wandering minstrels and of the courts of kings who listen to song and give guerdon of gold rings. What is the difference in kind between them?

17. Discuss the two chief stanza-forms of the folk-ballad.

18. What new and illuminating use of an old figure does Gummere make in comparing the genuine folk-ballad with even the best forgeries and imitations?

19. How could you change the figure of Fontenelle's empire of poetry (Gummere: The Popular Ballad, p. 1-2) in such a way as to make room for the folk-ballad in its right relation to the later forms?

20. How does the "ballad question" differ from the "epic question"? Give the two sharply contrasted views of ballad origin and name a supporter of each.

21. Name six lovers of the folk-ballad; three good collections.

22. Discuss the influence of the folk-ballad in the Eighteenth century.

23. Name a dozen good ballad imitations.

24. How should the folk-ballad be read? Be able to read well three chosen ballads.

25. Discuss five uses of the ballad in teaching literature in the grades.

Required Exercises.

1. Make an abstract in outline form of the introduction to Gummere's Old English Ballads (or of one of the articles cited in the references in library).

2. Make a ballad in which you try to present the gist and the feeling of some historical event (either well known or obscure). Try to make the rythm exact.

3. Make a plan for a lesson in the seventh grade, either in literature or composition, in which a ballad (or ballads) read or imitated, is used as material.

STATE NORMAL SCHOOL

The Kindergarten

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Kindergarten Bulletin

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Kindergarten Bulletin

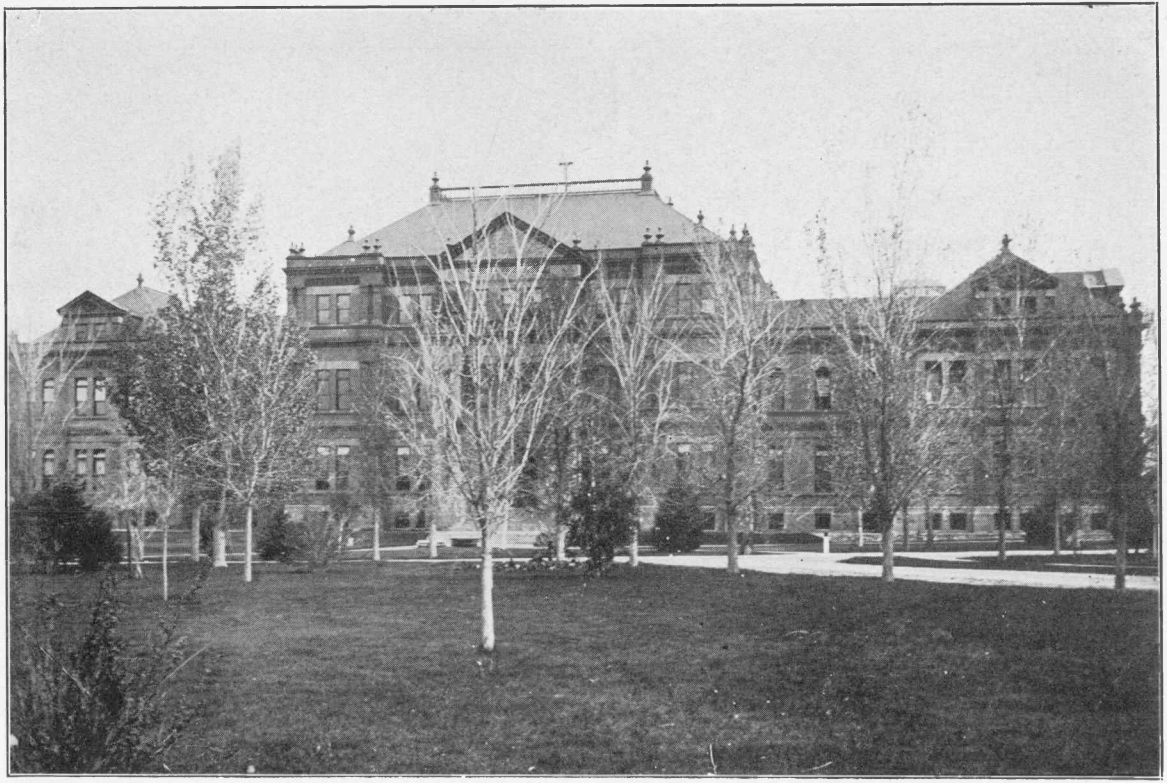
BY

E. Maud Cannell, - Outline of Course
Director Kindergarten.

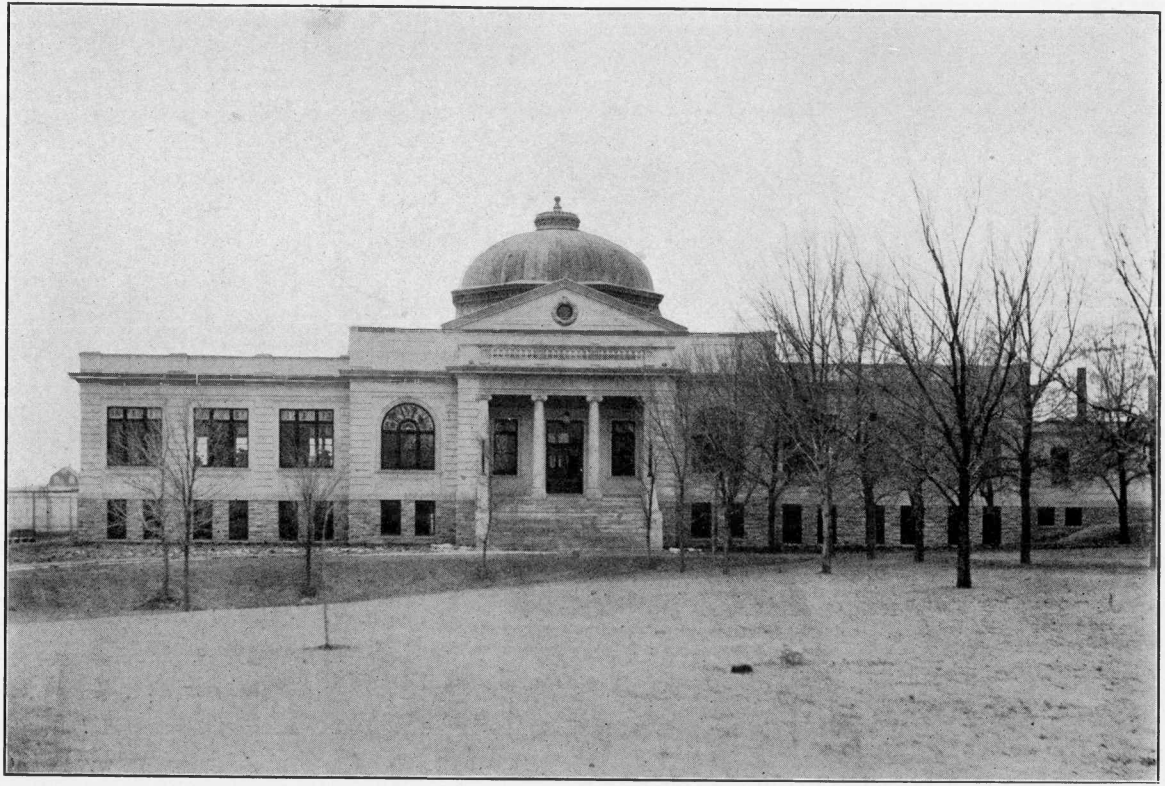
D. D. Hugh, - - Introduction
Superintendent Training School.

Z. X. Snyder, - - - Preface
President.

Front View of Quadrangle.



Administration Building.



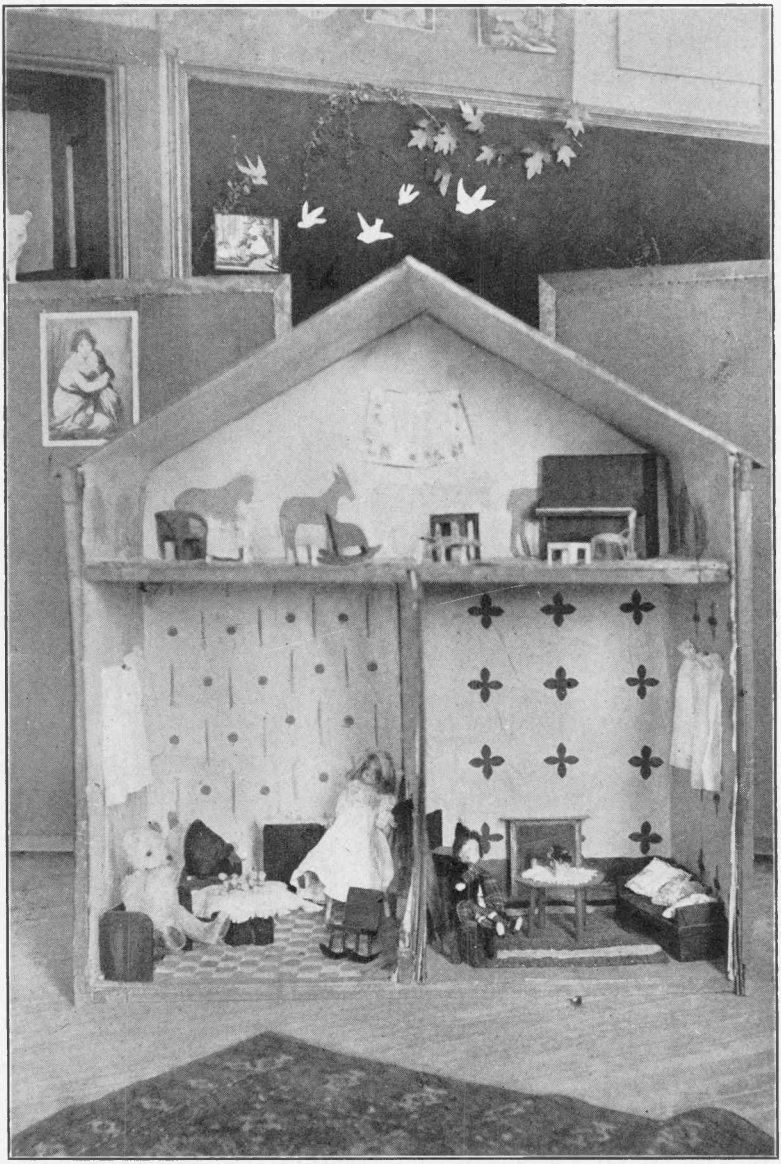
Library Building.

President's Residence.

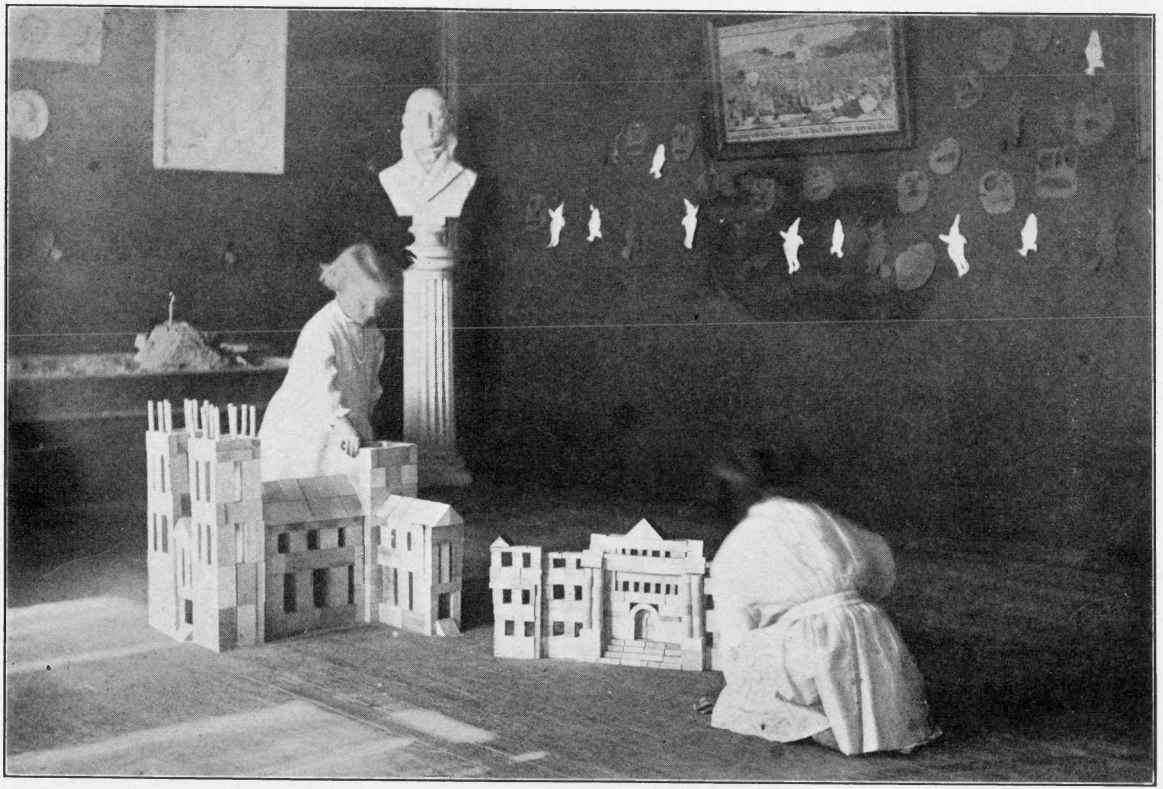
Nature Study—Raking Leaves.

Watching a Porcupine.

Juniors Playing Games.



The Doll House.



Building.

Modeling.

Birthday Party.

Kindergarten Band.

Preface.

The exposition of the kindergarten as given in this bulletin is in accordance with the modern conception of education. The Kindergarten, as conducted at the State Normal School, is a part of the Training School, or a part of the public school system. The old conception that it is a place for formal work principally with the gifts, is not in conformity with the notion of the modern kindergarten. Playing, talking, singing and out-door rambles are the natural activities of children. It is around these centers that the work organizes itself. Many activities grow out of them that are inventive, occupational and "discoverable",—that are helpful, stimulating, inspiring and developing. The idea is also, that the teacher is a companion; one who can enter into the childlife in its relations to nature and human interests. In a modern kindergarten, the children should spend much of the time in taking rambles into the fields of nature that there may be developed that "nutrition of feeling" for nature so necessary in real education. Nature is the mainspring of life, and every child should have an abiding feeling to live with her. There should be nothing formal—just breathe and live it. Nature is to the intellectual life what air is to the physical life—conditioning—fundamental. Play is also a fundamental impulse. The activities have their roots in it. If it were possible to have a concrete vision of the evolution of the motor activities, it would be seen that every movement has had and

has the fibers of its roots in the play impulse. Large play rooms, play grounds and open fields and woods are the school rooms of the kindergarten. The little children should have a chance to talk. Any formal discipline that interferes with the natural activity to inquire, to ask questions, to explain in this form of expression is not natural, and does not belong to the kindergarten. Singing is a natural activity; it is a method of expression in which the sentiments are more largely involved than in the other forms. Just as play, speech and love of nature may be repressed by the technician, so may the rhythmic impulses to sing be repressed and withered by the formal teacher.

There is coming still more freedom for the kindergarten; more of the old Froebelian form and talk are going to be thrown off and a freer and more childlike atmosphere created in which the child is to live and move and have its rightful being.

The exposition set forth in this bulletin is a movement in the direction of improving the kindergarten,—also a movement in the direction of more thoroughly making the kindergarten an integral part of the public schools. All the reform that is to come to the kindergarten is not here set forth—some of it is. Reforms must be evolutionary as a rule.

Trusting that this may help the educational people of the State in forming a better vision of a modern kindergarten, this bulletin is issued by the Normal School authorities.

Introduction.

The educational doctrines of Froebel, probably to a greater extent than those of any other prominent modern educator, are based upon his philosophy. To him the varied phenomena of the world, including man, are expressions of the Universal Life, which is conceived as self-conscious energy. "In all things there lives and reigns the Divine Unity, God." While it is the mission of all created things to reveal in different degrees of perfection this inner life, it is the special prerogative of man to rise to full consciousness of his relation to the Divine, and with full purpose of heart to make his own life as complete a revelation as possible of the immanent life of God. To aid in the attainment of this end is the function of the school.

From this noble conception of education several important consequences follow for the teacher. In the first place, the child must be treated as an active being, as a partaker of the Divine nature. Hence, education is not to consist of filling the mind with knowledge, but rather of furnishing opportunities for "self-activity." Accordingly, importance is to be attached to the instinctive activities of the child, such as play, imitation, constructiveness, etc. Through these the child realizes the potentialities within him. The work of the teacher is to furnish an environment that will call forth these activities. In this respect Froebel is in harmony with the voluntaristic tendency of modern psychology, with its emphasis upon the activities

of the child, rather than with the intellectualism of Herbart and his followers.

In the second place, we find in Froebel's philosophical background the source of his interest in Nature. This, too, is a revelation of God, and consequently akin to man. Hence contact with Nature enables the child to accquire a clearer knowledge of his own life. The attainment of a better understanding of the physical world was certainly one of Froebel's main aims, if not his primary aim, in the organization of the system of gifts. That Froebel's followers have sometimes made these gifts an end in themselves and shut up the child in the school-room, away from the influences of Nature, is doubtless true; but in this respect they departed from the spirit of the Master. It is, moreover, a fact that Froebel's philosophical conception of Nature led him to trace out many fanciful analogies concerning its relation to man; but in an age lacking in definite scientific knowledge it was natural that a man of his poetic temperament should fall into such vagaries. In the kindergarten we need a revival of nature-study from the standpoint of our best modern methods of teaching the subject.

Again, in Froebel's philosophical foundations we find the motive for the social activities of the schoolroom. While the development of the personality of the child must be taken as the supreme end of education, this cannot be accomplished by isolating him from society as Rousseau taught. The normal environment of the child is the environment of human beings—beings, too, made in the image

of God. Hence the institutions which have arisen to minister to human needs—the school, the church, the state, etc. —must necessarily be important factors in education. Only through participation in the larger life of humanity does the child come into possession of his divine birthright. Froebel was, therefore, intensely interested in the social aspects of education, and in organizing the activities of the schoolroom in a way to develop the social spirit. It is, of course, possible that in the selection of games and other means for this purpose Froebel's methods may not always have been beyond criticism. This could not be expected. Let us follow the spirit of his suggestions, and from our fuller knowledge of child-life devise adequate means for the attainment of the desired end.

In the organization of the curriculum of the kindergarten the occupations are more suggestive to us than the gifts. To develop the life of the child through participation in the life of the home and the community is the keynote to Froebel's educational activity. Hence the school must afford the child an opportunity to get acquainted with typical home and community occupations through entering into the spirit of these activities rather than by the acquisition of facts about them. This does not necessarily mean that the kindergarten child shall actually perform these activities, but rather that he shall represent them in his plays. Undue emphasis upon their realistic performance trammels the imaginative nature of the child and does violence to the development of his neuro-muscular system. The gifts may be a useful addition to other kinds of material for

representing the various occupations with which the child is dealing. The order of their use will be determined by the kind of material needed in this work, not by any logical sequence in the geometric forms.

No such outline of work as is here presented can, of course, be final. No growing teacher ever exactly repeats work she has given. The true kindergartener must be willing to learn not only from the writings of Froebel, but also from recent studies in genetic psychology. Most of all she must be a careful, patient student of children herself. From time to time she will need to modify her methods to conform to her growing insight into the nature of the child. The kindergarten course of study, moreover, as that of any other part of the public school system for that matter, must be suited to the community in which the children live—a principle which Froebel understood very well. But it is believed that the outline herewith presented by Miss Cannell will be suggestive to kindergarteners who are striving to follow the spirit rather than the letter of Froebel's teachings.

As to the immense value of the teachings of Froebel, not only for the kindergarten, but for the whole public school, there can be no doubt. In insisting that the supreme test of the educational efficiency of the school is its ability to furnish an environment for the normal development of the child through his activities and social relations, Froebel is in harmony with the best educational thought of modern times. When the elementary school teacher realizes that any results she may obtain in the way of facts

acquired by the child are absolutely worthless except in so far as they minister to the development of the personality of the child, the chief difficulties in the way of making the kindergarten an organic part of the public school system will have been removed. Nor will there longer be any more doubt of its value than of the value of any other part of the public school system as a specialized agency of the home for providing a better educational environment than can otherwise be furnished for the child.

Outline of the Kindergarten Course of Work.

The definition of a program of the year's work in a kindergarten must always be attempted with hesitation. The free, joyous activity of a little child is fortunately irrepressible and irresistible, certain to break the bounds of any curriculum which may be set for him. Especially is this true when the aim is to follow the lead of the child's spontaneous interests. When, as in the kindergarten, materials and technique are subordinate to the purposes of him who utilizes them, any formulation of results in terms of practical utilities, knowledge gained and things made, must be entirely tentative.

To secure to the child a sound and active body; to judiciously increase his motor efficiency; to fill him with a greed for experience; to cut a few facets in his "many-sided" interest; to foster habits of initiatve, choice and consideration; above all, to preserve his spontaneous self-ex-

pression and his love of play; these are basic purposes too large to be defined in any curriculum of sharply defined means and ends. To establish an attitude of expectancy toward life, to give a little more significance to the daily routine and environment of the child's home and kindergarten—this is vital. Nothing else really counts. Things done and things made are absolutely worthless save as they give opportunity for emotional reactions and the unhampered carrying out of one's own purposes. Skill and technique are by-products, never suitable stimuli to action. They have no rightful claim to be the direct objects of attainment. The same attitude is taken toward instruction. The tyranny of ideas may be quite as stultifying as the tyranny of things. Instruction is clearly not the aim of the kindergarten. Facts learned and things done are futile save as they stimulate individual action and enrich the personality. Securing these, the incidental experimentation and information are more easily assured and made usable.

We believe that it is entirely possible to take Froebel's significant contribution to theories of educational aims and processes without undue stress upon the symbolic significance of nature and the material environment of the child's life. Some of this is undoubtedly Froebellian, due to the spirit of his time and his own philosophic thought. But it has, in times past, been needlessly magnified by kindergartners themselves to whom, going into the work as many did from motives of religion and philanthropy, this aspect of his thought especially appealed. We believe that today

most kindergartners are free from habits of symbolic thought, certainly from its practical applications in their teaching, and that the defining of our position upon this point is made necessary only by critics standing aloof from actual kindergarten practice and who are unable to forget the past.

To us there is no esoteric value in certain materials called "gifts" and "occupations", nor in the "sequence" in which they may be presented to the child. Our only consideration is to give the child playthings of such a nature and in such a manner that he may manipulate and utilize them in building up desirable new reactions out of old experiences. The effort is rather so to guide experience and arouse needs that his resources may be equal to the crises of the moment. All kindergarten materials—together with other materials at hand—should be means by which the child works out his own purposes. This applies to the presentation as well as to the selection of material. The sequence of the kindergarten gifts and occupations indicates not a logical but a psychological order: the order which the child naturally selects under the guidance of a good teacher who sees to it that the things at hand are suited to his capacity to utilize them. Psychological sequence in the gifts and occupations is merely the pedagogical attempt to present a series of means paralleling a series of interests where one difficulty is presented at a time. This is, or we believe ought to be, the principle upon which any course of study is made for any grade beyond the kindergarten. Thus the

teacher organizes his phonic work into a series of sounds, or selects the reading matter for his grade, or determines upon the presentation of certain mathematical facts before others. The building gifts are given first because children like and can use this material before they are interested in the flat representations which are made with the higher gifts. Again, the building gifts are presented in order because until the child is ready for certain complexities of material they only stultify his activity. For example, little children are frequently seen to push aside all the triangular prisms of the fifth gift, that they may build only with the simple and familiar cubes. The gifts above the sixth are used merely as adjuncts to the building material, or for experimentation in design to be applied to some form of utility which needs decoration—wall paper or rugs for the doll's house, etc., etc.

The needs of our daily life in the kindergarten usually are best met by the "occupations" which are never formalized into a progressive sequence of media. That material is always selected which most suitably lends itself to the motor co-ordinations of the child and the character of his play. Some of the traditional occupations are never used; of the remaining some are more valuable than others. Those are of most worth which have played the largest part in the history of human progress: those which are found in the majority of homes, about which cluster the richest emotional associations and which are surest to interest the child in the arts and industries of today. We use freely any material not in the sequence of kindergarten occupations which

is deemed desirable. Experience, however, proves that many "outside" materials are too unorganized and present too many difficulties for the manipulation of children of kindergarten age, however usable the *products* may be in the play life of school and home. We find practicable a very soft tin for making cooking utensils and the tradesman's tools; large stove-pipe wire for the ribs of grass-woven hanging baskets; tilo matting for floor coverings, book covers, etc.; raphia for coarse sewing on burlap—not for weaving which is too difficult for these children; coarse canvas for table and pillow covers; cheese cloth for dusters and bedding; oil cloth, Holland shades, and strips of cloth for weaving.

In a general way the work of the year concerns itself largely with interests which may be grouped under the following heads:

Kindergarten Activities Suggested by the Child's Experience of the Needs and Duties of the Home.

a. The time in the opening weeks of the year is taken up, not in talking about or reproducing the home life of the children, but in such actual living in the kindergarten room itself as shall necessitate our participation in the interests and occupations of the average home. The aim is to secure to each child opportunity for love, helpfulness and personal responsibility as he comes to feel that the room is his own playroom and the life in it as normal and varied as

is the life of his own home. In carrying on this daily activity many little homely duties are learned. We put the room in order, arranging chairs, screens and playroom; we care for our window plants and the parroquets (the only caged life we ever have in the room); we find our brooms and learn to use them; make dust cloths and bags to hold them; re-line the waste baskets and drive hooks for the hanging of needed utensils; we wash the dishes, paint cups, mucilage bottles, etc., etc.

Certain playthings, as the large Hennesey blocks and picture books, are always accessible to the children during the free play time before kindergarten opens. These he learns to keep in perfect order as the price of the privilege. He learns, as the year progresses, the significance of the pictures and casts about the room.

b. Turning to the homes from which we come, we represent mother's work, and especially the loving care she gives to each member of the home; what father does at home and "down town;" what little children do for father, mother, the baby and each other. Our kindergarten needs bring parallel activities. We wash the doll's clothes on Monday, we iron, mend, go a-visiting, wash our windows, tables, and cupboards. In all this the doll plays an important part. On her we drape our fancies and test our knowledge. For making real the gift plays at the table the paper doll seems indispensable. For before-school and circle plays we have both rag and bisque dolls, and at times make dolls from clothes pins, nuts, potatoes, etc.

c. A simple analysis of the the activities of the home goes hand in hand with the construction of houses for our doll family. The babies make a simple house, without roof, of a heavy construction paper not too stiff to be folded into shape. Children of intermediate grade often use shoe or fruit boxes, while the oldest group make a very substantial house of a packing box large enough to allow a child to really play in its rooms. Continuously for weeks, intermittently for the year, the furnishing of this house occupies their time. Wall paper is designed for the different rooms, floor paste is cooked on a chafing dish and spread with mops of soft rags. The floors are stained and rugs woven on looms of the children's construction. Furniture is made in several media. Some good things have been done with slats and glue; the traditional cardboard modelling is always satisfactory; the sixth gift, glued and stained, has given results, pleasing, but too expensive for general use. On the whole, we find most profit in utilizing the half-shaped materials to be picked up about any house building in the neighborhood for furniture, Mission-like in style. For chair backs, arms, rockers, and articles of lighter construction, shingles are especially good. The children use no saws or planes, relying upon a vigorous and prolonged use of sand paper to get the material into the right proportions and finish. The articles are fastened with tacks or glue and finished in stain or enamel paint as desired. Protected by aprons made of any material to be gotten without expense, usually burlap, the children paint the outside of the house with house paint. They also paint the large doll's

cradle, made of a soap box, and renew the white enamel on the wicker doll carriage. Using the large building gifts the children represent the parts of the structure of a house; the common types of roofs; doors and how they open; the narrow casing of windows; the support of porch roofs; steps and staircases; and foundations, which are also often built of stones and mortar from some kindly mason.

d. Animal mothers and children and their homes interest us and by contrasts and resemblances give clearer understanding of our own home life. Birds and insects in the autumn and spring time, domestic and wild animals during the winter months are objects of observation as more particulary described under the nature work for the year.

Activities Suggested by Our Need for Clothing.

As "grown-ups" are said to be all good when dressed in their best, so a child's change in apparel is to him mightily significant. He loves the varied attire of the teacher and her purely decorative adjuncts of dress, and that is a gala day which sees his own Sunday suit descend to daily uses. The changing seasons contribute a vivid pleasure in occasions to don leggings and furs, or to wear sandal shoes and short-sleeved dresses. Likewise, the dolls need clothes and the doll beds must have bedding. Cotton and silk we learn to distinguish by touch and by samples of the raw materials in various stages of preparation. Wool we find in our own environment and give some time to tracing the process of its manufacture. When it is possible to convey the children to the sugar factory we see the thousands of sheep being

fed there in the fall. We are always fortunate in finding one or more sheep owned in the neighborhood, making several visits for a more detailed observation. The children often shear a pelt in kindergarten, twist the thread and sew some simple design on cardboard (the fibre not being strong enough usually to stand the strain of a close meshed fabric); woolen warp is used for rugs woven of silkaleen or of carpet rags; a tam-o'-shanter can be made for the doll of coarse yarn; and woolen cloth is used for needle books, and flat-iron or tea holders. A mattress for the doll's bed is made of corn husks cut fine, of waste ends of worsted, or an "Ostermoor" is constructed of layers of felt tufted together. Pillows are stuffed with down from the milkweed seed, sometimes with down saved by children whose parents keep fowl. Flannel cloth is converted into woolen sheets to replace the white silkaleen ones used in the summer. Perhaps the child gets one of his clearest perceptions of interdependence when he reflects that his new suit is made from the sheep's cast-off clothing of last year, and when his thought travels from the sheep to the shepherd, weaver, storekeeper and tailor who form connecting links in the story.

Activities Which May Be Suggested by Our Interest in Foods and Their Preparation.

As in all the play of the children, the effort is made to have the things done grow out of the needs of our kindergarten life. Pumpkins must be provided for our Hallowe'en pranks, popcorn for the Christmas tree; many seeds

and nuts are desirable for use in decorating our room. We are a hospitable family and wish to entertain our friends from time to time. Hence the following are some of our *ends*:

To dry apples to be made later into sauce.

To bury grapes in sawdust.

To preserve peaches or plums. These are served to the mothers at some winter party.

To harvest the crop in our own school garden: popcorn for the Christmas tree, pumpkins for Jack-o'-lanterns, etc.

To flail oats—using a home-made flail—and cook in a chafing dish.

To pound corn, or grind it in a cofee mill, making corn bread.

Of the second gift material and rubber belts, to construct a mill which will "go," crudely, but to the satisfaction of the children.

To make cookies, doughnuts, or small drop cakes for our Thanksgiving luncheon.

To stew cranberries.

To watch the bees at work, visit a hive if possible, and buy honey for a luncheon.

To buy milk, raise our own cream and churn it into butter. For this purpose we make crude paddles by sandpapering bits of wood, and skimmers by pounding nails through soft tin.

To serve a Thanksgiving luncheon to our mothers.

To serve a luncheon in the spring using the lettuce, radishes, and onions from our school garden.

To have a birthday party whenever a mother invites us to do so. This is entirely spontaneous on the part of the mother, and the feast is always simple in character—a plain cake, or perhaps stick candy and animal crackers. At such times the children usually say a detailed "Thank you" to mother, grocer, miller, farmer, cow, hen, etc., tracing the series of dependencies to the limit of their knowledge.

Activities Connected With Trades and Industries.

Among the tradesmen who supply the necessities of our life in the home and in the kindergarten are the following:

1. *The Farmer.*

Make simple tools, using sticks and glue; use soft tin for blades set in pine handles sand-papered by the children; make barns, etc., in cardboard modelling.

Make wagons in various ways; children using spool boxes or drafting their own patterns in cardboard for the body, button moulds and the pasteboard seals from milk bottles for wheels, the eighth gift slats for tongue and springs, etc.

Build up a sand-table representation of a farm, using the enlarged gift material. This usually includes irrigating ditches, fenced fields, house, barn, chicken coops, and orchards and fields of grain, which perpetually tantalize the cardboard animals who gaze on them.

Invent games and plays showing the produce which the farmer takes to town and the supplies he brings back with him.

2. The Grocer.

The children buy the needful materials for baking and the putting up of fruit. A kind grocer put up a pound of sugar in twelve small bags for the dozen children who went to buy it.

The children make simple scales and buy and sell in mimic fashion. Using the actual materials, many valuable games for the senses of taste and smell are enjoyed.

3. The Baker.

Each year we visit the Phoenix bakery, after which the children build an oven, make a long shovel, bend narrow strips of soft tin into cookie cutters of various shapes, and make tin pans large enough for real use. These are taken home for use on mother's baking day. Last year a pan of biscuit cut with a thimble were so perfectly cut and baked by a child at home that we decided to present them to the "Mr. Baker" who had extended to us his hospitality.

4. The Shoemaker.

After visiting a cobbler, the children twist and wax thread; try to sew on cardboard, using two needles at once; measure one of the kindergarten dolls for shoes made of soft leather; sew lines with which to play horse; model in clay a last for their own feet; make a clay shoe filled with the old woman and her numberless children, etc., etc.

5. The Blacksmith.

The visit to see a horse shod results in considerable activity, largely self-initiated as a result of the action, noise

and element of slight danger which the shop presents. A forge is built of bricks or stones, using mortar or wet clay; our "really truly" bellows presented by a friend leads to smaller ones of pasteboard and cloth; horse shoes of tin are pounded full of holes; and the second gifts with sticks, rings and tablets lend themselves to good mimic representations. "Hearing games" to distinguish various substances struck, naturally suggest themselves.

6. The Miner.

Children naturally discover the large part fuel plays in the work of the shoemaker, baker, blacksmith. While the mine is not in our immediate environment, it is sufficiently near so that many children have seen one. To all, the idea is more familiar because of its place in the industries of the state. Here the mystery of a mine, its vastness and darkness, the habits of daily life—all are interesting. We represent the putting in of coal for winter in our own houses and visit the heating plant of the school. On the sand table a mine is built, burying coal in the sand, making the shafts, cage, railroad tracks, carts and burros. As in much other work, many different gifts are combined as the occasion demands. We make candles of tallow or of paraffine and miners' lamps of coarse stove-pipe wire.

7. The Postman.

The postman is studied as the medium through which the interdependent wants of various forms of labor are supplied; the newspaper and letter in the home, the sending of valentines and Christmas gifts are universal experiences on which to build.

Activities Growing Out of Social Intercourse and the Varying Interests of the Community.

Children of one group visit another group, watching their work or being entertained by some accomplishment of song or story; they visit the bird and squirrel houses among the trees on the campus; they sometimes go to see some child recovering from illness, or make some little gift to send him. We have been out serenading—at ten in the morning! —visiting the mothers within walking distance, or sometimes the children of another grade. The kindergarten band has played for the different grades from the first to the eighth. Such things afford a reason for drill and skill, lifting them above the level of self-consciousness or artificiality. The parents are also, of course, invited from time to time to the various celebrations held in the kindergarten room and at times the older grades are asked to participate in our Christmas or other exercises.

The children often dictate a note of thanks for a birthday cake sent by some mother, or a letter to a distant friend who has sent us some treasure of garden or woods not accessible to us here. We have thus said "Thank you" for nuts and arbutus from the East, bitter-sweet and ferns from the Middle West, and orange blossoms and fruit from California. Sometimes the invitations to parents for special celebrations in the schoolroom have been sent exactly as phrased by the children. The birthday parties and luncheons served to parents afford occasion to learn to cut

tissue paper napkins into pretty shapes, to set a table neatly and to decorate it tastefully, to serve food properly, and to wait until all are served before beginning to eat.

Perhaps we do not draw enough upon the resources of the home in carrying out school work. It is a sure way to arouse interest, to keep the parents informed as to our doings and their significance, and to help the children to unify the purposes of home and school life. First explaining at some mothers' meeting the purpose of our request and the specific end in view, that there may be no sense of burden or annoyance, we have at times asked the home to contribute carpet rags for the rugs in our doll house, spools for the wheels of our farm wagons, and woolen cloth for the leaves of needle books, for tea holders, etc., etc. We are inclined to think that, tactfully done, there is more value in this sort of home and school co-operation than has yet been realized. Where there is no domestic science department in a school affording facilities for occasional use of a cook stove, some mother in the neighborhood may gladly invite the children to bring to her oven the dishes prepared in the kindergarten.

At times the children have the pleasure of social co-operation or assistance. The gifts on our Christmas tree are entirely for others; the tree itself with its kindergarten-made decorations is given for the further use of some charitable organization of the town; the children contribute to the Thanksgiving offering of the school; and at Christmas time may bring offerings of toys and in the kindergarten

make scrap books of pictures or simple playthings for some children's home or hospital.

The other common holidays of the year, equally with Christmas, give occasion for entering into the life of the community. Hallowe'en is an orgy of grotesquerie and kindly fun. Jack-o'-lanterns made from the pumpkins grown in our school garden give great delight. Games and rhythm reflect the swift surprise and absurd postures of the pictorial Brownie, and the spirit of the day—one of personal initiative and license—is utilized in especially free hand-work. Lanterns painted with all the spots, stripes and zig-zags of an inventive mind, much use of orange and black in posters or blotters, festoons of brownies and black cats—the children revel in these.

The Thanksgiving season marks the culmination of our experience in planting, harvesting and storing the things raised in our kindergarten garden. Here, too, our hospitality is exercised. The plums or peaches preserved by the children in September are served at a luncheon given to the mothers, together with cookies, drop cakes or tiny pumpkin pies of their own baking. Thus the home life which we are trying to live in the kindergarten and the social environment in which it is set are naturally knit together.

Easter brings the dyeing of eggs, a hunt for them on the lawn and an egg-rolling on the terrace, as well as the usual making of Easter cards, egg dolls, pen wipers, etc. On May day a pole is wound and baskets hung filled with the flowers of our own gathering on "the hill."

The occasional presence of a circus in town is a God-send to the spontaneous utilization of opportunity. After being taken to see the parade the children reproduce what is perhaps the last remnant of the pageantry of chivalry left to a republican life. Through the bars of their chair-cages look walking hyenas, roaring lions and chattering monkeys; ponderous elephants trapped in table covers sway restless trunks, while the kindergarten band, seated in our little wooden balcony, and free for once from the accompanying rhythm of the piano, revels in din and confusion: bare-backed riders leap over chairs and through paper rings, or show fancy steps to the changing rhythm of the piano, clowns, dressed in whatever may take the fancy of colored chalk, strips of crepe paper, Hailman beads, odds and ends of cheese cloth, and paper caps, amuse responsive spectators. The end of the performance sees the crust broken through many a child's hindering self-consciousness or habit of prosaic stolidity.

Activities Suggested by Our Life Out-of-Doors.

Froebel's Mother Play opens with a game for the exercise of the fundamental motor centers of the baby, in response to the physical world around him. Nowhere in the book does he show children cooped up in the house or busy with games or toys taken from the artificial aspects of life: a kite, a stone dam in the brook, men in the hay field, a visit to the carpenter or the baker, the finding of the chickens and pigeons, the discovery of a deserted nest, crude wind or string musical instruments which they have

constructed from hollow stems or grasses at hand—these are the interests which he shows the child as occupied in.

We live much out of doors. Occasionally we conduct the entire session on our beautiful campus, frequently the children are out for all save the opening circle work, while the games can be played out doors save in the severest of winter weather. Our longer excursions to visit the various tradesmen give whole mornings to an out-door life. As occasion demands the building blocks are taken onto the lawn or sidewalk where children may see the house they are trying to represent.

In the fall and spring our home pets and the domestic animals which supply us with food and clothing occupy our attention. The cow, hen, horse, sheep, cat, dog, rabbit, our own kindergarten parroquets and other birds are our chief objects of interest. Later, the attention goes to the preparation for winter made by the wild animals. The subject opens up the field of folk tales and primitive rhythms. We watch the bird migrate and the caterpillar make his chrysalis or cocoon. Dogs, cats, and mother-hen and her chickens are frequent visitors in the room. Other animals are kept for a short time as they may be found, then released, for we prefer to see them free in their normal life. In this way we have recently had a mud turtle and a porcupine. And a flock of chickens kept on the school garden gives us opportunity to feed them or to go egg-hunting.

This year the children decided to cut various animals as a frieze to decorate the wall-paper in the bedroom of the larger doll house.

We keep a calendar of the days, at first marking each day with a picture suggesting the usual work of the home on that day, as a washtub for Monday and a broom for Friday. Later we use colored papers recording the weather changes.

As we watch the changing seasons we are naturally much interested in plant life. A few house plants are tended by the children all winter, but the school garden gives the chief opportunity for activity. We plant spring vegetables to be harvested before the summer vacation, and pumpkins, popcorn, peas and beans for use in the winter time. One spring, at the suggestion of a child, a rake was constructed by pounding nails through a pine stick. The following are a few of the things made with nature material:

Leaf chains and books of pressed flowers and leaves to use in decorating valentines or Christmas cards.

Collections of seeds, nuts and small fruits for stringing or laying in designs. There is a large field, which we have scarcely touched, in converting nuts and seed pods into dolls, animal forms, etc.

Small gourds have been hollowed into individual cups for kindergarten parties.

Cat-tails, ribbon grass, yucca and iris leaves make good weaving material.

Corn-cob houses perpetually please; a corn-husk doll and mattress for her bed afford good work.

Milkweed down stuffs the doll's pillows.

Rose hips and the stems of cat-tails were converted into a good-sized portiere.

A good garden trellis for the sand-table is made of the eighth gift slats and glue. A corn crib can also be constructed of these.

In crude little ways the children utilize nature materials in decorating the room, the doll house, or other things of practical utility which they make. They find the colors in leaves, stems, and flowers before deciding upon a color scheme for the doll house, and one year the dining room paper was decorated with a seed pod motive after making collections of seeds to show their methods of dispersion.

Water, wind, and sunshine are forces too intangible for much place in the program. However, the garden work calls our attention to them. A few experiments with blue prints have been tried, soap bubbles give pleasure, kites are sailed out of doors, pin wheels and wind mills made, and a simple weather vane constructed from the second gift or from a yardstick and cardboard.

Rhythm. Little marching of the military sort is done; for this, descriptive walking is substituted. We walk to suitable music, showing how father goes to work; how mother goes a visiting; we saunter and bow to friends whom we meet, or hurry to catch a car. We play lady and lift our dresses to cross the street; walk after a rain with much careful stepping over mud puddles; poise on tip-toe daintily as maybe, to fairy music; or represent the grotesque postures and stealthy movements of Hallowe'en brownies.

The kindergarten band is composed of drums, triangles, tambourines, clappers and cymbals. We learn to double the second, third or fourth beat of the measure at will; then by differing combinations of instruments and aided by the piano, simple orchestral effects are gotten. For this purpose we use music composed by some of our student teachers.

The trade plays are considerable sources of rhythmic movement. The tap, tap of the shoemaker, the steady blow of the carpenter and the ring of the blacksmith's anvil are rhythmically represented. Children's plays and games are rhythmical. To appropriate music they swing, play see-saw, or hop-scotch, skip, run, jump the rope, etc., etc. Their toys are imitated as, a walking doll, jumping jack, jack-in-a box, or donkey with nodding head, a train of cars, and a row boat. They also imitate the flight of bee, bird and butterfly, the leap of squirrel, dance of the bear, swaying of the elephant, and step, trot and gallop of the horse.

Stories. While this bulletin aims to sketch some of the forms given to the *motor* activity of the children, these are so often initiated by the morning stories that short space may be given the subject. We are gradually trying to do away with the story common in kindergartens—one setting before the children the facts of science, the doings of the home or the commonplace conduct of daily life. This outline sketch of the year's program shows how we rather try to live these activities, getting the child's work out of his own life, not out of stories about life. This gives larger place to story dramatic or poetic in form, in substance ap-

pealing to the imagination and the emotion, in structure more unified. Collections of stories available give little that is good in form, much that is suggestive material. The students in the training department of the kindergarten are trying to use their studies in English by adapting stories found in the usual source books, also by writing original stories. Thus we are feeling about for material suited to our own ends and accumulating a manuscript book of the work of the department.

In conclusion, we wish to iterate that any kindergarten program must be fragmentary and somewhat misleading. The interests here sketched are not the only ones within the child's environment with claim at times upon our attention, nor are the materials specified the only ones used in the work. The more conventional hand-work of the kindergarten is taken for granted as needing no specification, and of the various topics of interest likely to be found on our program only those have been indicated which are of importance so basic as to insure a yearly recognition. Life is not served in sections with a pie knife, so the range of our interests progresses spirally during the year. Fall and spring bring each its own especial form of work in the garden, for example, and the activities of the home are perpetually sustained by its needs. A training school kindergarten, with its adjustment to the time schedule of other departments and its pupil teachers who must come and go at fixed periods, can never have the desirable freedom of choice in materials quickly selected to meet the spontaneous aims set up by the children nor in the times of the day, of

the week, of the year, when certain interests shall be dominant. To adjust the work of so many teachers requires a formalization of time, of ends, and of materials quite unnecessary in a kindergarten carried on through the year by a few kindergartners always in charge.

And, finally, while many things done are here omitted, it is also true that to so enumerate the things done may give a misleading effect of complexity; to nail to the post of scrutiny with the sharpness of the written word so delicate and fragmentary a thing as the play-interest of a little child is always to be somewhat absurd. Things sound elaborate and artificial which are too fugitive and partial to be really so in the doing. We try in the kindergarten to live a simple and sincere life, rich in feeling, normal in activity, unostentatious and child-like in its undertakings.

THE W. P. ROBINSON PTG. CO., DENVER

SUMMER TERM
1908

State Normal School of Colorado

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SEVENTH

ANNOUNCEMENT

OF THE

SUMMER TERM

OF THE

State Normal School

OF COLORADO

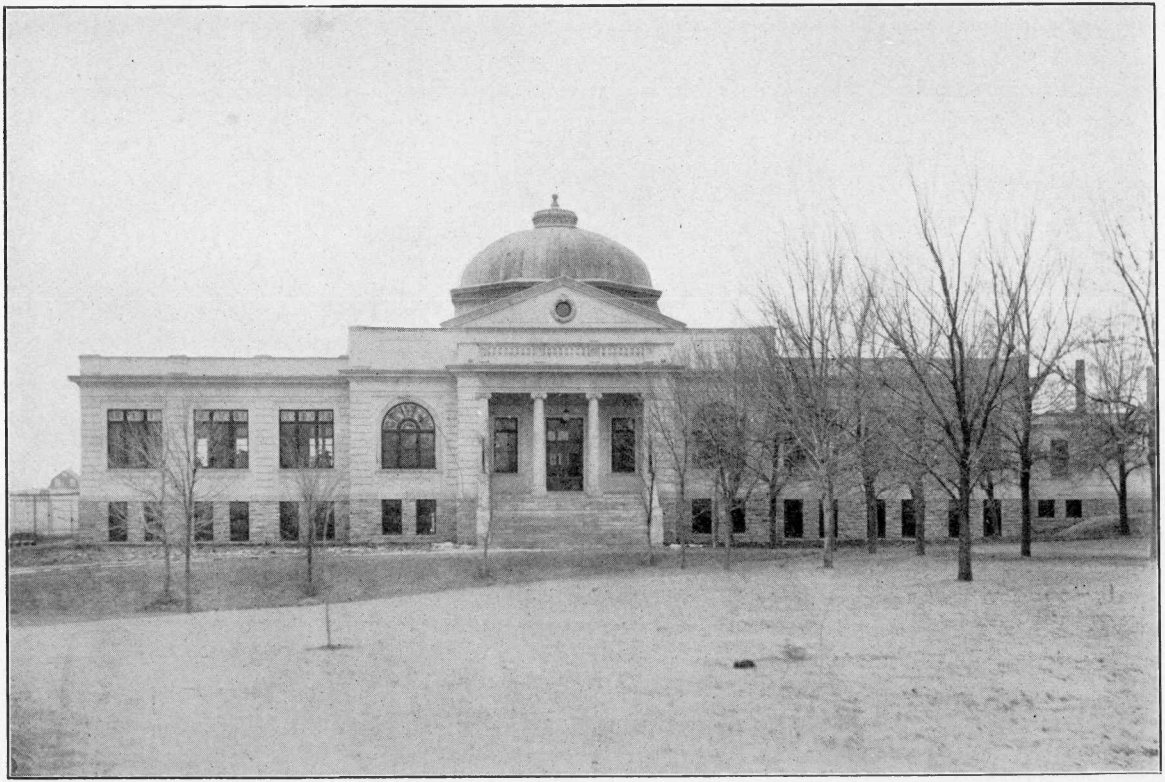
Greeley, Colorado

1908

PUBLISHED BY
TRUSTEES OF STATE NORMAL SCHOOL

Front View of Quadrangle.

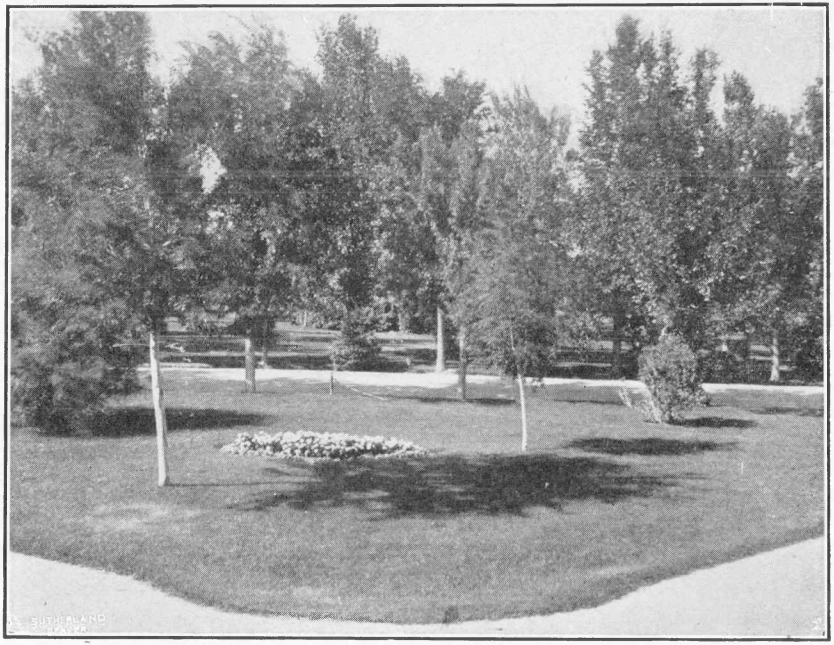
Administration Building.



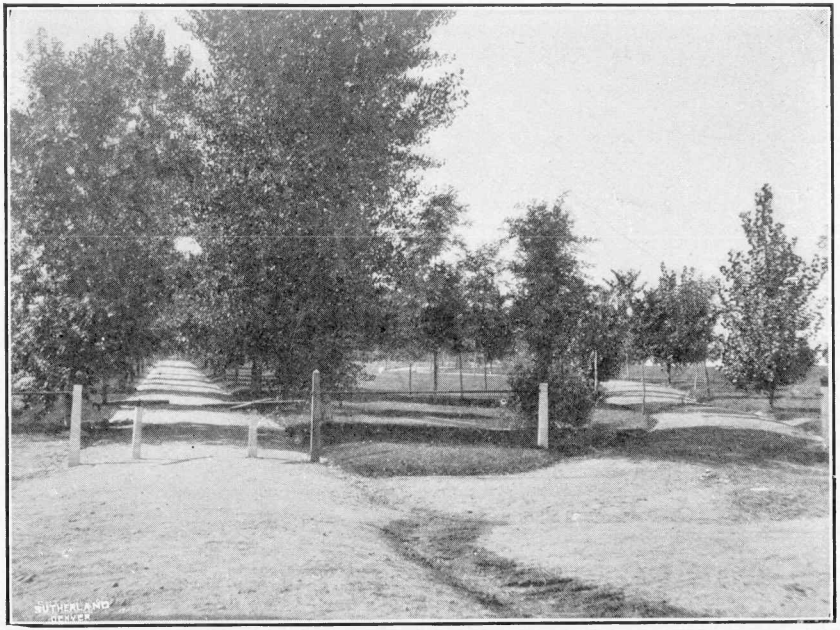
Library Building.

President's Residence.

Campus.—Main Entrance.



Campus.

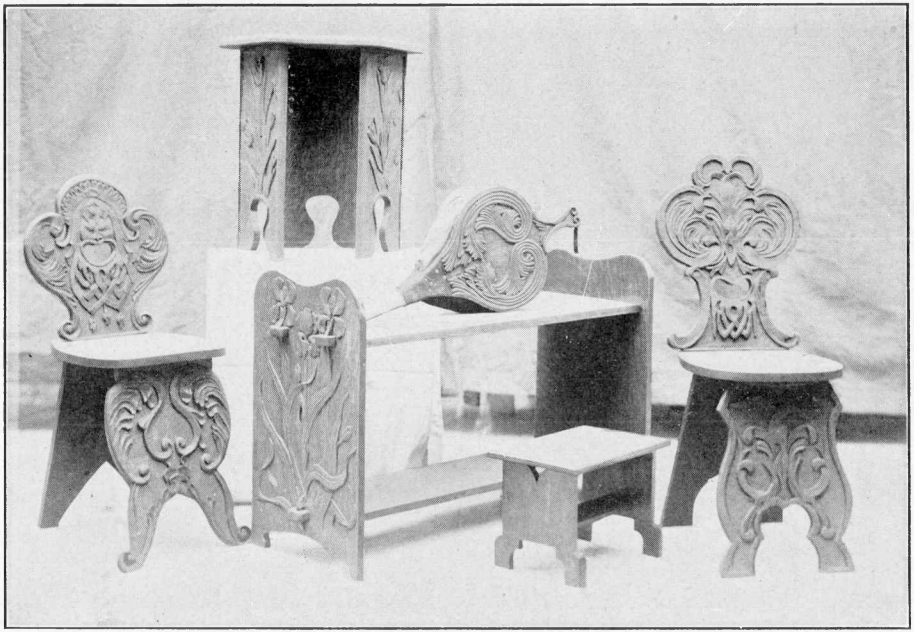


Campus.—Tree Walk.

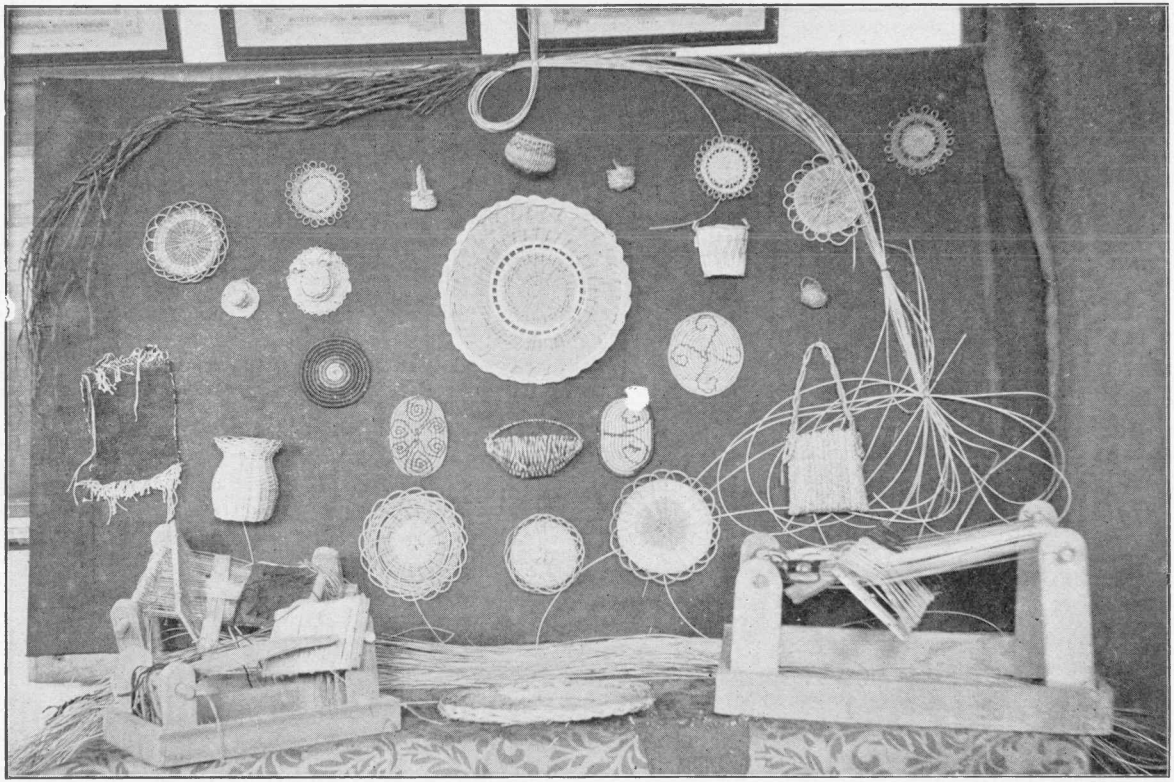
Nature Study.—Raking Leaves.

Nature Study.—Watching a Porcupine.

School Garden.—Third and Fourth Grades.— Nature Study.



Manual Training.—Carving.



Manual Training.—Basketry.

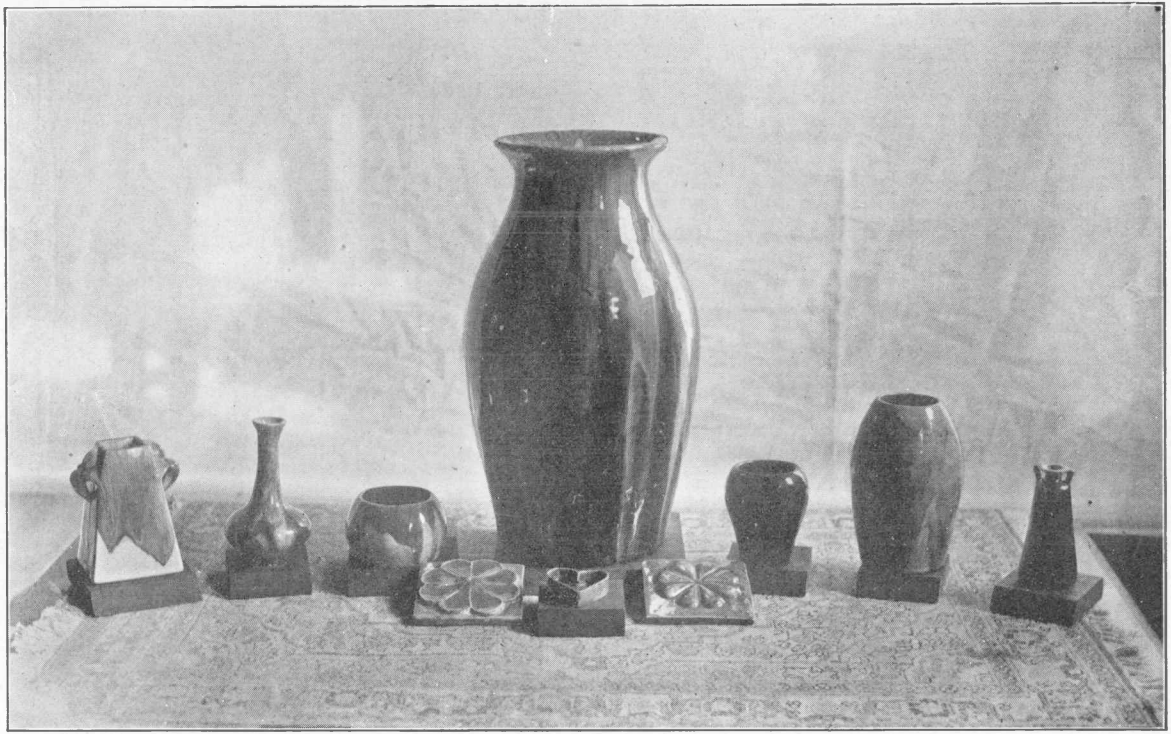
Manual Training Museum.

Art.—Pottery—First Step on Wheel.

Art.—Pottery—First Step—Free-hand.

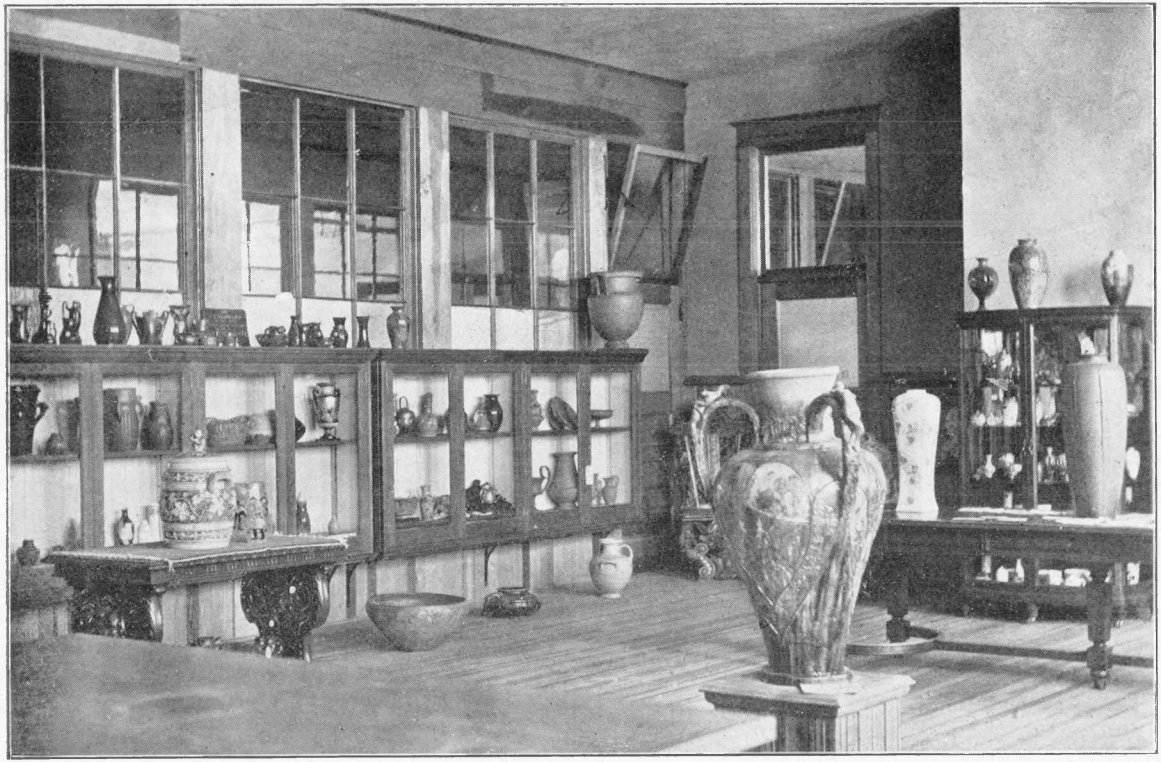
Art.—Pottery—Second Step—Decorating.

Art.—Pottery—Third Step—Glazing and Burning.

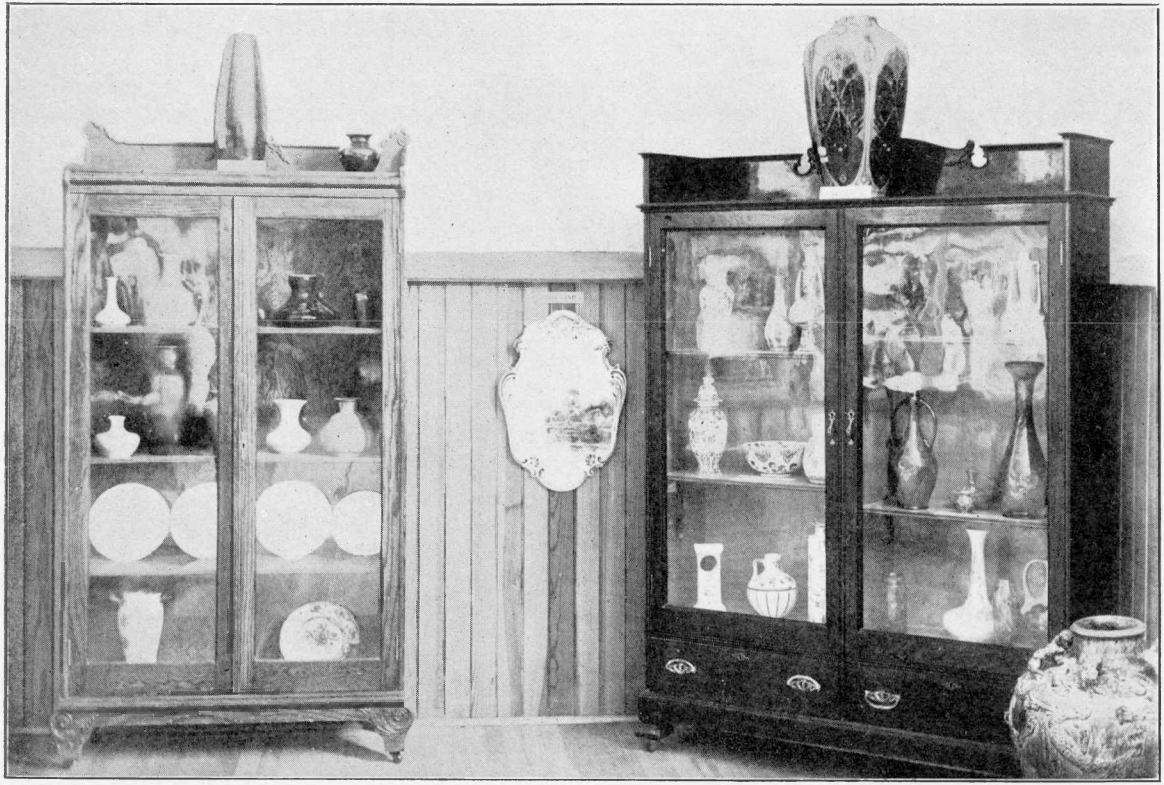


Art.—Pottery—Finished Product.

Pottery Made in School.



Section of Ceramic Museum.



Section of Ceramic Museum.

NORMAL SCHOOL FACULTY.

1907-1908.

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Nature Study and School Garden.

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Training Teacher—Upper Grammar Grades.

EDGAR D. RANDOLPH,
Assistant Critic—Grammar Grades.

ELIZABETH HAYS KENDEL, Pd. M.,
Training Teacher—Lower Grammar Grades.

DORA LADD, Pd. B., B. S.,
Training Teacher—Upper Primary Grades.

BELLA BRUCE SIBLEY, Pd. M.,
Training Teacher—Lower Primary Grades.

ALICE M. KRACKOWIZER, B. S., B. Ed.,
Assistant Critic—Grammar Grades.

ELIZABETH MAUD CANNELL, Director of Kindergarten,
Training Teacher.

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Professor of Bibliography.

SELA BOYD, Ph. B., Pd. B., Assistant Librarian.
ALICE I. YARDLEY, Assistant Librarian.

VERNON MCKELVEY,
President's Secretary.

OFFICE, NORMAL BUILDING. OFFICE HOURS, 8 TO 12 AND 1:30 TO 5:30.

ANNOUNCEMENTS.

The Summer Term of The Colorado State Normal School opens Tuesday, June 16, 1908, and closes Friday, July 24, 1908, making a term of six weeks.

The work done during the summer term is: (1) The regular Normal work arranged in courses, for which credit is given when completed, enabling teachers who cannot attend at any other time than during the summer terms, to complete the Normal Course, get the diploma, which is a license to teach in the state for life, and receive the professional degree of Bachelor of Pedagogy. (2) The Work is arranged to enable graduates of the State Normal School of Colorado, and others prepared to do so, to take up graduate work, whereby they may, during the summer terms, earn the master's diploma. (3) The work is so arranged that persons who wish to pursue special lines may have the opportunity to do so. (4) An opportunity is given to high school teachers to study from the pedagogical standpoint the subjects they are to teach. (5) An opportunity is given to principals and superintendents to study the educational problems which confront them in their daily work. (6) An opportunity is given to regular Normal students to make up their work when, through sickness or otherwise, they have not been able to complete it satisfactorily during the regular year.

SURROUNDINGS.

Greeley is a city of 9,500 inhabitants. It has beautiful streets lined with trees, and comfortable homes in which the students live. There is a feeling of comfort and a spirit of culture; there is a true, social, democratic spirit pervading the institution and the community. Two hundred miles of snowy mountains are seen from the Normal campus.

Campus.

The campus is the most beautiful in the state and is as beautiful as any in the country. It is situated on an eminence overlooking the city, and consists of forty acres of ground, improved with thousands of trees, shrubs and flowers, artistically arranged and well kept.

Buildings.

The buildings, situated in the midst of the campus, are beautiful, commodious and well equipped for the purposes for which they are intended.

ADVANTAGES.

Some of the advantages of the school are: A strong faculty especially trained, both by education and experience; a library of 40,000 volumes; well equipped laboratories of biology, physics, chemistry, manual training and physical education; a first-class athletic field, gymnasium,

etc., all under the direction of specialists; a strong department of art; field and garden work in nature study; a model and training school; a kindergarten; and all other departments belonging to an ideal school.

HISTORY OF SCHOOL.

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

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

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

LOCATION.

The Normal School is located at Greeley, in Weld county, on the Union Pacific and Colorado & Southern railways, fifty-two miles north of Denver. This city is in the valley of the Cache la Poudre river, one of the richest

agricultural portions of the state. The streets are lined with trees, forming beautiful avenues. The elevation and distance from the mountains render the climate mild and healthful. The city is one of Christian homes, and contains churches of all the leading denominations. It is a thoroughly prohibition town. There are about 9,500 inhabitants.

EXPENSES.

1. Boarding and room from $3.75 to $4.50, two in a room. Opportunity for self-boarding for those who desire it.

2. *Tuition Free* to all citizens of Colorado. $10.00 matriculation, physical education, laboratory and book fee to citizens of Colorado. Citizens of other states, in addition to the above, $5.00 tuition fee for the summer term.

3. All students who take Manual Training, Cooking, Sewing or Art, will pay a fee of $2.00 to pay for material.

THE OPPORTUNITY.

The holding of this summer term at the Normal School offers an excellent opportunity to those who have to teach. It enables one who teaches a full year to attend the Normal during the summer term, get credit for work done, and when sufficient credits are secured, to graduate

from the school, receiving a diploma which licenses to teach in the public schools of Colorado for life, and confers upon the holder the degree of Bachelor of Pedagogy.

COURSES OF WORK.

Courses are offered in all of the following departments.

PSYCHOLOGY.

At least two of the following courses will be offered; and, if there is sufficient demand, the other also.

1. Physiological and Experimental Psychology.

Through lectures, readings, discussions and dissections, a thorough study is made of the brain and central nervous system, of the sense organs, and of the relation of mind and brain. Physical growth, precocity and dullness, motor ability, and certain phases of the hygiene of instruction, attention, perception and apperception, illusions, and memory are studied in detail with numerous laboratory experiments, personal observations, and exercises in introspection. Constant use is made of a well stocked library, and themes and note books give evidence of work done by students.

2. Descriptive and Analytical Psychology.

Using Course 1 as a foundation, this course proceeds with a study of the higher types of mental processes, such

as emotion, action, thinking, self-consciousness, suggestion and imitation, and related topics. Laboratory methods are still used wherever possible, but more emphasis is placed on introspective analysis than in Course 1. The derivation of pedagogical principles from the natural laws of mental activity is a prominent feature of the course, and illustrations are drawn daily from school-room and playground.

3. Pedagogical Psychology.

This is an attempt to put the main conclusions of psychology into a more usable form for application in the school-room. Starting with Dr. Dewey's conception of education as a "reconstruction of experience," it proceeds to show how all the sound principles of pedagogy are but aids to the mind's natural processes of reconstructing itself. From the view point of functional psychology the Herbartian formal steps are criticised and interpreted, and the culture epoch theory discussed. From a study of the nature and origin of knowledge as revealed in the development of the sciences in primitive society, the constructive activities are found to be the true center of correlation for the studies of the curriculum, and the methods of differentiating these studies from the pupil's social-industrial activities are suggested. The school as a social institution naturally comes to be a conspicuous thought of the course, and the best literature along that line is read. The psychology and pedagogy of drawing, writing, reading and other school subjects are considered in their broader aspects. The work is closely correlated throughout with observation

of teaching in the training school, and is expected to prepare the students to approach their own practice teaching with some measure of confidence and appreciation of its significance.

PEDAGOGY.

Junior.

(See Psychology 3).

Senior.

The pedagogy course of the Senior year is designed to accompany the practice teaching of Seniors in the Training School. It consists chiefly of the study of the application of psychological principles with which the students are already acquainted, to the method of the recitation and the organization of the curriculum of the elementary school. It also includes the discussion of a number of practical problems of school management.

The work of the class is carried on by means of lectures, recitations, and conferences. The theoretical part of the work is kept in close relations with the practical experience of the school-room. To accomplish this purpose, frequent reports are made by the members of the class of their own experiences in teaching. These reports furnish a basis for the discussion of various phases of school work in the light of current educational thought. In this connection, also, the best accessible book and periodical literature, pertinent to the subjects under discussion, is reviewed.

SCHOOL MANAGEMENT.

The course offered in School Management is intended to be of practical help to teachers. All phases of a teacher's work, from the time he makes application for a position until he closes the door of his school-room at the end of the year and files his report with the proper official, are subjects of discussion. The following detailed topics indicate the character of this course:

I. The teacher's equipment for his work.
   1. Natural fitness. His personality, aptness, adaptability, appreciation of children and his work.
   2. Diplomas, as evidences of work done.
   3. Certificates—city, county, state.
   4. Testimonials.

II. The teacher seeking a position.
   1. Applications—by letter, in person.
   2. Recommendations—most effective, manner of presentation.
   3. Teachers' agencies or bureaus—use, abuse.

III. The teacher employed.
   1. The teacher's relation and duties to the board.
   2. His relation to patrons and community.
   3. His relation to the pupils and the school.
   4. His relation to the school property.
   5. School-room and school grounds sanitation.

IV. The teacher—

1. As an instructor—class management, individual instruction, school gradation.
2. As an executive—in the School room, on the play ground. Ability to direct and invent helpful games.

V. The teacher as a part of the educational system of his state.

1. His relation to state supervision.
2. His relation to county supervision.
3. His relation to local supervision.
4. His reports to the above authorities and care in making reports.

5. School laws of Colorado. A full discussion of these laws, with an attempt at a full understanding of the essential provisions.

BIOLOGY.

I. Botany.

1. Elementary course in botany, based upon laboratory and field work with common plants.

2. Ecological botany. The study of plants in their relations to the environment. The different forms of plant societies which are to be found in the vicinity are studied with a view to the determination of the laws which govern them.

3. Systematic botany. In this course a study is made of one or more plant groups as exemplified in the flora of the vicinity.

II. Zoology.

1. Elementary course in zoology, including laboratory and field work.

2. Faunal studies. In this course the animals of some particular group are studied, particular attention being given to the fauna of Colorado.

The large museum collections, which are especially rich in Colorado forms, are available for purposes of instruction in all the courses.

NATURE STUDY.

The work in Nature Study is elective and receives credit toward either the B. Ped. or M. Ped. degree; hence it is open to any student at the summer school. It follows along two main lines:

I. The Practice of Nature Study.

The time devoted to this part of the work is spent in the actual study of nature. The aim is not only to illustrate by actual practice the pedagogy of the subject, but also, in so far as is possible, to increase and develop interest in and sympathy for the nature-environment of the class.

II. The Pedagogy of Nature Study.

Under this head it is designed to acquaint the students with the subject of nature study from the school standpoint.

The topics usually treated in the discussion of any school subject; viz., the aim, source, scope, method, values and results are considered, and govern largely the practice in nature study as outlined above.

In general, the course is designed rather to teach teachers how and why to teach nature study than to increase their knowledge of scientific subjects. A considerable amount of the latter is, however, the incidental result of the work as planned. Plants and animals are the subject matter upon which the course is founded.

PHYSICS, CHEMISTRY AND GEOGRAPHY.

Magnetism, Electricity and Light.

This course is so planned that many of the fundamental experiments can be taken into the grade work of the schools, where they can be performed by the pupils with much interest and profit. This course includes, besides the fundamental principles of magnetism, electricity and light, the study of radio-activity and wireless telegraphy.

Chemistry.

This course includes the study of the following: The elements oxygen, nitrogen, hydrogen, carbon and their compounds; valence; writing and interpreting chemical equations; acids, bases, salts; Periodic law.

Methods of Geography.

We believe if the subject of geography be properly presented, the time usually given to it in the public schools can be materially shortened and better results obtained. Special effort is made to put theory into practice in presenting this subject. Much attention is given to field work.

MATHEMATICS.

Courses in Arithmetic, Algebra and Geometry are given.

The fundamental purpose of the department of Mathematics is two-fold; namely, to induce and cultivate power in mathematical thinking, and to apply this power to the practical use of making the teaching of Arithmetic and of Algebra and Geometry in our public schools more rational and practical. Stress will be laid on how to teach these subjects.

HISTORY AND SOCIOLOGY.

I. A Course in American History.

Comprising a survey of European commercial and political history from 1452 to 1492; a detailed study of American civilization; industrial conditions, and educational and political growth of the colonies; a study of the American Revolution from the records of the British par-

liament; a study from original sources of the formation and ratification of the American Constitution; and special individual study of the biographies and political doctrines of American statesmen, tracing the rise of political parties, and the progress of American educational, industrial, and social life.

This course includes lectures on methods in history, and outlines of history courses for both elementary and high schools. The seminar method of study is followed the major part of the term, thus offering special opportunity for library research to all students.

II. A Course in Sociology.

This course includes a study of the development of human society from the primitive family to the present highly organized civil community. Special attention is given to the industrial activities of primitive peoples, and the possible relation of these activities to the present elementary school curriculum.

Fundamentally this course treats of the development of the individual character and personality through contact with human society. The seminar method is used exclusively, each student pursuing a special distinct library course. Class room work includes discussions of students' reports, and lectures by the head of the department.

LATIN.

The department of Latin offers the following courses, each comprising three terms:

First. An elementary course, consisting of careful study and practice in pronunciation, a mastery of the inflections, syntax, and readings suitable to beginners. The texts read are selections from Cæsar, Cicero, and other writers of the classic period. Much attention is given to the contributions made by Rome to modern life and civilization.

Second. An intermediate course, comprising grammar reviews, including the more difficult constructions, Latin versification, and prose composition, criticism of Roman life and customs. The texts used are readings from Cicero, Virgil, and Sallust.

Third. An advanced course, consisting of discussions on the art of teaching Latin, instruction in the art of reading Latin, drills in *sight* reading and *"ear"* reading, and reviews of such parts of the grammar as seem necessary. Much attention is given to the mastery of idiomatic expressions, and to the history and literature of the Roman people. The literature read consists of poetry, history and essays, taken from Horace, Cicero, Sallust, Livy and Tacitus. This course is intended for those fitting themselves for positions as teachers of Latin, and it presupposes at least as much Latin as is offered in our best high schools.

MODERN FOREIGN LANGUAGES.

I. Elementary German.

For beginners. The phonetic-colloquial method is employed, *i. e.*, the language-facts are studied rather as an introduction to the living language than as a gateway to the literature.

II. German Reading.

For students whose previous knowledge of the language will enable them to appreciate texts of literary merit. The subject matter read is determined by the constitution of the class.

III-IV. Courses in French.

Courses in French analogous to those offered in German are given, provided classes can be organized.

ENGLISH.

1. Junior.

Grammar: function of sentence forms and members, laws of syntax, forms of words; "good use" in oral and written speech.

Composition: theory of the paragraph as an organic unit; elementary laws of the chief types of composition; practice in narrative and expository paragraph-writing. *One term.*

2. Junior.

Literature: introductory study for conception of the fundamental meaning of literature in its relation to the developing human consciousness. Presentation of the first great form of literature, the natural epic, with study of the Iliad as the greatest example of this form. Brief study of transition from epic to lyric and drama in Greece. Reading of Hamlet as example of the rich content and elaborate form of the developed drama.

Composition: practice in narrative structure through selecting a *motif* and synthesizing an appropriate action in such a way as to show clearly the development of the idea; continued paragraph-writing; one long theme. *One term.*

3. Senior.

Pedagogy: a view of the principles of English teaching as concerned with grade work.

Literature: review of the evolutionary conception of literary development, with special emphasis on the pedagogical significance of the myth, saga, ballad, and folk-epic. Review of transition from epic to drama and study of Œdipus Tyrannus and Œdipus Coloneus for dramatic structure and for their indwelling idea as illustrating the growth of the Greek consciousness since its expression in the Iliad.

Composition: practice in presenting in good outline form material of wider range; one theme. *One term.*

4. Senior.

Literature: careful study of one of Shakespeare's great tragedies; study of one novel for theme, structure,

treatment, and comparison with the epic and drama; brief treatment either of the lyric or the modern drama.

Composition: application of principles to large wholes; two long themes. *One term.*

READING AND INTERPRETATION.

I. Reading.

1. Work on short selections for power (a) to grasp the meaning of the text accurately and rapidly; (b) to separate the characters one from the other, and enter into their experiences; (c) to give expression with life and interest.

II. Interpretation.

1. Selected scenes from *The Merchant of Venice.*
   (a) Rapid reading for the theme and the subjects and functions of the scenes related.
   (b) Impersonation of the characters.
   (c) Presentation of the scenes by the classes.

III. Methods.

1. Selection of material for the grades.
2. Treatment of subject matter according to the steps given in "1" under Reading.
3. Observation lessons.
4. Correction of vocal defects in speech and voice.
5. Discussion of questions of interest to the grade teacher.

MUSIC AND HISTORY OF MUSIC.

I. Vocal Music.

A series of music lessons is given covering tonality, as involved in hearing and singing in major keys without transition or modulation; in simple transitions and modulations; in notation necessary to the foregoing.

The practice includes methods of presentation, illustrating ear training, dictation, the child voice, and the other items of practical teaching in the modern school.

II. History of Music.

In this subject there is a series of twelve lectures given on the following topics. Music as an Art; the Elements of Music; Musical Appreciation; Age of Counterpoint; Age of Harmony; Meaning of Mode; What is Classical Music; Romanticism and Its Ideals; Folk Songs; the Art Song; Oratoria; Opera.

These lectures are largely biographical, showing how each composer, using the material at his command, discovered new means of expression. They endeavor also to make clear how each master expressed the spirit of his age in its highest ideals. They are illustrated by the lantern, by the piano, and by the voice.

DRAWING AND PAINTING.

Course I. Showing the method of teaching drawing and painting in the elementary school from first to eighth grade inclusive.

Course II. A course in sketching for the teachers themselves.

Course III. A course in fine art work in water color and in oil.

Course IV. A course in the history of Art.

Course V. A course in clay modeling and artistic pottery making.

MANUAL TRAINING.

The following courses in Manual Training are offered:

1. Elementary Course in Woodwork.

This course is designed to give a general knowledge of woods, a fair degree of skill in using wood-working tools, and an acquaintance with the underlying principles of manual training. It also includes mechanical and free-hand drawing in their application to constructive design and decoration.

2. Elementary Wood Carving.

This course, which is conducted by laboratory methods, consists of eight hours per week, and includes prelim-

inary exercises in the care and use of tools, and aims to give a general training in the practical application of the fundamental principles of art in drawing, design, clay modeling and historic ornament, as applied to the special work of wood carving. The regular course in art should be taken in connection with this work.

5. A Course in Woodwork Suitable for the Elementary Schools.

This course includes the planning and constructing of a series of objects suitable for the different grades, keeping in mind the following considerations: Correlation, child interest, powers of the individual, and the degree of skill required in the different constructive processes in woodworking. The course also includes methods in teaching, relation of teacher to work, discussion and preparation of materials, care of tools, and working drawings.

6. Electiv. Textils.

The object of this course is to fit students to teach textils in the grades. The course consists of play-house rug-weaving and basketry. The latter subject is studied under the following topics: The place of basketry in the history of art; its relation to pottery, its symbolism, its colors, its materials; braids, raffia embroidery, coil work and rattan models—all leading up to original plans, patterns, forms and combinations, and culminating in the preparation of a course of study for the grades.

DOMESTIC SCIENCE.

The following courses in Domestic Science are offered:

COOKING.

1. Junior.

General principles of cookery.
Methods of cooking.
Effect of heat upon food.
Cooking of simple foods.
Serving.

SEWING.

1. Junior.

Patching, mending and simple repairing; draughting patterns and making simple garments involving all the principles of hand sewing.

Special work in cooking and sewing is offered, the exact nature of it depending upon the preparation and the needs of applicants.

PHYSICAL EDUCATION.

1. Practice: One-half hour five times a week.
   (a) Marching tactics.
   (b) Swedish free movements.
   (c) Bells, wands, clubs, etc.
   (d) Games.

2. Gymnasium work for special individuals, including a series or "system" of health exercises for the professional person. One-half hour daily following 1.

3. Practical Hygiene, four hours weekly. Adapted to the requirements of the teacher, personally and in relation to the pupil and the school.

Lectures and discussions.

Special bearing upon theory and practice of exercise and body culture.

KINDERGARTEN.

I. Theory.

The work covers the regular work as laid out for the fall quarter of the kindergarten junior course. This includes theory and practice with the first three gifts, the practical working out of the occupations representing the point and the line with original utilization of nature's materials, the early songs of the Mutter und Kose Lieder, and practice in playing kindergarten and traditional street games.

II. Practice.

A well equipped kindergarten is open for observation and practice during the entire time. Stress is laid on garden work, outdoor games, and construction work with the nature materials to be found in the environment. Practice teaching in the kindergarten receives the same credit as its equivalent during any other quarter of the year.

EQUIPMENT.

The institution is well equipped in the way of laboratories, libraries, gymnasiums, playgrounds, an athletic field, art collection, museums, and a school garden.

There are specially equipped, separate laboratories for the following sciences: biology, physics, chemistry, taxidermy, and physical education. They are all fitted up with the very best apparatus and furniture.

There are special industrial laboratories for sloyd, carving, weaving, basketry, cooking, sewing, and children's room. All these are well fitted up in every way.

The library has 40,000 volumes bearing on the work of the Normal School. There is ample opportunity to work out subjects requiring library research. There is a handicraft department connected with the library whereby a student may learn how to run a library, as well as many other things.

The gymnasium is well equipped with modern apparatus. Games of all sorts suitable for schools are taught.

State Normal School of Colorado

THE MUSEUMS

MAY
1908

State Normal School of Colorado

Museum Bulletin

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Museum Bulletin.

The work of the State Normal School of Colorado is organized about four centers of thought, information and inspiration, viz: the *field*, the *museum*, the *library*, and the *laboratory*.

By the field work is meant excursions in nature study and science into the field—the school garden, the school nursery, visitations to industrial enterprises in the community, to enlarge the vision in industrial history and geografy, the taking of classes to business places—banks, town council meetings, court houses, etc., to give a conception of the business relations of the people and also a view of civic and governmental management, to take the students to historic points of interest that they may the more nearly come in touch with the concrete life of the past. By laboratory is meant a working place where the pupil attacks a problem in any subject and seeks a solution by means of experiment thru the use of apparatus. By library is meant a working room filled with books, where the student may be able to find all the literature necessary to illuminate the subject being studied—a place where merely to be is an inspiration and stimulation for information, refinement and enlargement of mental vision. The museum, the subject of this bulletin, is the collection, determination and classification of specimens for the study of subjects, being represented by objects and pictures. In botany there is a classified concentration of the flora of the district, country or the world. In zoology there is a graduated series in animal life with its likenesses and differences, arranged for study and instruction; all

these specimens, as a rule, that they may be more effectiv, have been given an artistic setting, that not only the student may find them useful for study, but that the layman may find them inspiring and instructiv. In the geografical museum is the world in miniature in its physical and humanistic productions and characteristics—a collecting together of the results of the forces of nature as they operate upon the crust of the earth, and the products of the earth's surface as modified by man's influence while living in the midst of them,—this concentration of the forces of nature, as modified by man, gives a pupil at a certain stage of his development a conception of the earth as the home of man. In the museum of economic botany, which embraces school garden, the nursery, elementary agriculture and landscape architecture, is an excellent place to exhibit the relations of soil to our economic life. In the historical and anthropological museum there are collected sets of industrial products showing the present life of the people, also collections representing the past life of the people—collections of busts and pictures which give an expression of the sentiments and activities of the people that have been and of the people that are. In the domestic science museum collections of food stuffs, implements and utensils that were used by peoples in the past and are used by people at present. In the textil museum all of different fibers from the raw material up to the finished products in their many different lines, together with looms and pictures of weaving of primitiv man, as well as man at the present time are well arranged. In the English and literary museum there are collections showing the evo-

lution of books directly concerned in English, also old illustrated editions of the great literary characters, plastic art forms in plaster and marble to illustrate the great pieces of literature, together with many pictures. In the dramatic museum pictures of great dramatists, grouped according to country and power, the evolution of the reader, the evolution of the drama, together with pictures and models of great theaters, plays and characters are found. In the classical museum copies of the old Greek and Roman writers, and old classic pieces of statuary of them, bas-reliefs, showing the activities of the people during the classical times, etc., are installed. In the modern language museum there are found charts, portraits, pictures and models showing the habits, customs and life of the people whose language and literature is being taught in the department. In the psychological museum are found collections of the brains of all the mammalians in graduated series, also the evolution of the brain from the simple cell up to the brain of the modern man, together with old books on psychology and physiology, old charts, apparatus for experiment, charts for showing reactions, etc. In the museums of the lower forms of life in the biological department there are many specimens of mollusks, insects, reptils, starfishes and life histories well classified and well set to instruct and inspire the student of natural history. In the museum of manual training are collected and classified woods from all the states and all the countries of the world, micrografs of all the woods of North America, lantern slides, showing the tissues of woods, the evolution of tools, pictures of furniture of the different stages of develop-

ment of the human family, together with collections of modern furniture, carvings and the work of different schools from the different countries of the world. The pedagogical museum has collections of furniture, apparatus and the evolution of the text-books from the old New England primer up to the splendid editions we have now, together with many pictures to illustrate all the lines of activity in the pedagogical department. In the art museum there are collections of statuary, pictures, lantern slides, ceramics, etc., to illustrate the work of art and esthetic values in life as it has been exprest in artistic form. In the ceramic museum there are over two thousand specimens from all parts of the world, series showing the evolution of an individual vase, of a piece of terra cotta, of the tile, of the brick, of the drain pipes, from the crude clay up to the finisht products; where original pieces cannot be got, replicas are obtained so that the ceramic museum shows the life of civilization.

Every department in the institution has connected with it a working museum growing out of the work and back into it. Any department may use the museum of any other department under the proper regulations; this correlates the museum work.

Purpose of a Museum.

1. The general purpose of a museum is information and inspiration. It is a place to gain information and inspiration about nature and the products and activities of people.

2. The particular purpose of a museum is to help in the solution of problems that arise in school and in life; it should give a larger vision of the lesson and a clearer vision of the activities of life.

3. A museum is to concentrate the objects of a particular subject into small compass, the better to give a concrete grasp of the whole field of the particular inquiry.

4. The purpose of a museum has in it an element of entertainment; in all good teaching there is in it an element of inspiration — providence — entertainment. Teaching is at its best if the interest is keen enough to occasion the above.

5. One of the main functions of a museum is its arrangement for research work; not necessarily that something unknown to man is to be found out, but something that is previously unknown to the pupil or student is found out.

6. The museum becomes purposeful just as it brings into classified form the products of matter, life and mind in an orderly whole so as to reveal the universe of things in its unity.

The Value of a Museum.

The educational value of a museum is inestimable. It is valuable in leading the pupil to see the relations of forces in producing things of matter, life and mind; this is making activ the thinking powers. The modern museum lays stress on the artistic setting of natural ob-

jects; this stimulates and enlarges the esthetic sentiments. It also leads a pupil to be a doer; it tends to make him dynamic in his work; this develops the pragmatic side of his life.

The development of many subjects of vast importance in life has been largely thru the use of museums. The ancients and all civilized peoples have created museums; the large cities of all countries expend sums of money in their museums; all because of their educational value.

Commercial and industrial museums show the growth of the agricultural and mauufacturing activities. The historic development of implements, utensils, arms, apparel, government and activities of all kinds show the growth of civilization better than lectures and books. The historic evolution of the plow from the one made of a stick to the splendid steam gang-plow shows the development of life in the concrete better than in any other way. Objects and pictures show the civic and social life of all time in a manner better than books.

There is a growing sentiment for the museum in this country. A good illustration of a useful museum is the Commercial Museum of Philadelphia, Penn. It was developt and is growing for the purpose of commercial and industrial advantage to the interests of this country and particularly of Philadelphia and Pennsylvania. The legislature appropriated $50,000 for the purpose of having this museum send suitable museums out to the schools of the state, that the children might see and study the products of the world.

Every school from the rural district to the university

should have a museum—a growing museum—one in which the children and the patrons have an abiding interest.

Organization of Museums.

I. CLASSIFICATION OF MUSEUMS.

A. PHYSICAL MUSEUMS:—This includes all museums dealing with inorganic matter, as museums of chemistry, of physics, of geology, of mineralogy, of geografy, etc.

B. BIOLOGICAL MUSEUMS:—This includes all museums dealing with organic life, as museums of birds, of mammals, of reptils, of fishes, of radiates, of mollusks, of insects, of botany, of economic botany, of histology, of physiology, etc.

C. ANTHROPOLOGICAL MUSEUMS:—This includes all museums growing out of the activities of man, as museums of psychology, of sociology, of history, of English and literature, of reading, of dramatic expression, of classical antiquity, of modern languages, of pedagogy, of textils, of domestic science, of manual training, of physical education, of mathematics, of art, of ceramics, of music, etc.

The above classification is only for the purpose of convenience and does not in the work interfere with the unification of all the museums. The great aim in all the work is to show the unity of this universe of things.

II. DIVISION OF WORK.

1. Z. X. Snyder, Ph. D., President,
   Director of all Museums.
2. W. G. Chambers, A. E. Beardsley and F. L. Abbott,
   Managers of Anthropological, Biological and Physical Museums respectivly.
3. L. A. Adams, M. S.,
   Curator of Museum of Birds and Mammals.

   H. W. Hochbaum, B. S. A.,
   Curator of Museum of Economic Botany—School Garden, Forestry, Elementary Agriculture, Nature Study.

   Eleanor Wilkinson,
   Curator of Museums of Textils and of Foods and Household Utensils.

   David Douglas Hugh, A. M.,
   Curator of Museum of Pedagogy.

   Zachariah Xenophon Snyder, Ph. D.,
   Curator of Museum of Ceramics.

   Samuel Milo Hadden, Pd. B., A. B.,
   Curator of Museum of Manual Training.

   George Washington Barrett, M. D.,
   Curator of Museum of Physical Education.

   Albert Frank Carter, M. S.,
   Curator Museum of Library.

   Will Grant Chambers, A. M. and M. S.,
   Curator of Museum of Psychology.

   William Kennedy Stiffey,
   Curator of Museum of Music.

   Frances Tobey, B. S.,
   Curator of Museum of Reading and Dramatic Interpretation.

   Louise Morris Hannum, Ph. D.,
   Curator of Museum of English and Literature.

Gurdon Ranson Miller, Ph. B.,
Curator of Museum of History and Anthropology.

James Harvey Hays, A. M.,
Curator of Museum of Classical Antiquity.

Richard Ernesti,
Curator of Museum of Art.

Arthur Eugene Beardsley, M. S.,
Curator of Museum of Mollusks, of Insects, of Fishes, of Reptils, of Radiates.

Francis Lorenzo Abbott, B. S.,
Curator of Museum of Geology, of Mineralogy, of Chemistry, of Physics, of Geografy.

Abram Gideon, Ph. D.,
Curator of Museum of Modern Languages.

George Bruce Halsted, B. A., M. A., Ph. D., F. R. A. S.,
Curator of Museum of Mathematics.

4. R. W. Bullock, Charles Waddle, Elizabeth Kendel, Bella B. Sibley, Dora Ladd, E. Maud Cannell, Alice N. Krackowizer, E. D. Randolph, Achsa Parker, E. A. Cross, Marshall Pancoast,
Assistant Curators in their departments.

5. G. R. Miller, Ph. B., A. E. Beardsley, M. S., D. D. Hugh, A. M., S. M. Hadden, A. B., H. W. Hochbaum, B. S. A., and Achsa Parker, A. M.,
Committee of Museums.

III. FUNCTIONS OF DIFFERENT WORKERS IN MUSEUMS.

1. DIRECTOR:—The function of the director is:—
   a. The general direction of all the museums.
   b. To give suggestions as to plans and methods of management.

c. To help obtain material upon the recommendation of the managers and curators.

2. MANAGERS:—The function of the managers is to have general charge of all the museums that belong to classes A, B and C, to unify them, to be curators of their particular museum or museums, and to collect material.

3. CURATORS:—Each curator is to have immediate charge of his museum. He is responsible for the growth and use of the museum under his charge, the installation of specimens and the amount of interest taken in it as an educational factor by the students in his classes.

4. ASSISTANT CURATORS:—The assistant curators help the curators to perform the work of their respective museums.

5. MUSEUM COMMITTEE:—The work of this committee is to receive all museum invoices, distribute the specimens to the different museums and assist the managers and curators to install them properly.

Technical Management of Museums.

The technical management of museums involves considerable care and labor. Patience and accuracy are the important factors. It takes labor to collect, classify and place the material.

I. THE FOLLOWING IS THE ROUTE OF A SPECIMEN FROM BEGINNING TO END.

1. To collect it.
2. To apportion it by committee to proper museum in accordance with regulations governing committee.
3. To accession it in accession book.
4. To install specimen in proper place in museum and label it.
5. To fill out preliminary card by curator of museum and deliver it to typewriter of museums.
6. To make typewritten cards precisely like the preliminary card.
7. To deliver one card to the curator from which the preliminary card came and to place the other one in the general museum cabinet in the library.
8. To put data on the card together with some other data in a register expressly prepared for the purpose.

II. REGULATIONS.

1. No specimen is allowed to be taken from the museum without the permission of the curator and never to be taken from the building without the permission of the director; and when taken in accordance with this regulation, it must be returned as soon as it has been used, and carefully put in its place.
2. No museum specimen is to be used except for teaching purposes in classes, lectures and

study. They are not to be used in plays and for theatrical purposes.

Organize a Museum in Your School.

The way to organize a museum is to organize it. Commence to collect, to beg, to purchase and to solicit deposits. At once label the specimens and arrange them effectivly.

The State Normal School is glad to assist any school in the organization and building of a museum. It will give suggestions and instructions in various directions that are helpful. It hopes later to be able to make exchanges with schools, the schools exchanging what is in their communities for what is in other communities. The Normal School will become a sort of exchange.

Location of Museum.

Each museum is located, when possible, in the class room. This is for the purpose of making it convenient to be used in the recitation. As a rule, museums are too isolated to be most useful. They are locked up in some special room. They are referred to in the class and in the lectures, but are not used as they should be; hence, to make a museum most useful, it should be in the midst of the pupils and teacher—on the walls, in nooks and corners of the class room and in the halls. The students also come

more frequently in contact with the specimens when they are located in the room in which they recite; they associate—sort of loaf with them and learn to know them; this method of arranging and using specimens gives a school a working museum. The children and the teacher make the cases and frames to hold the specimens, if there is no other way to get them. If there is a manual training department, the frames, cases and boxes are forthcoming.

Collecting a Museum.

I. MATERIAL.—Objects of nature, such as soils, rocks, minerals, fossils, insects, birds, plants, woods, leaves, flowers, etc.; pictures of objects, pictures of industries, pictures of manufacturing establishments and processes; pictures of men who have figured in the particular life of the community, state and country; pictures of discoverers, of inventors, poets, literary men, scientists, orators, statesmen, etc.

II. SOURCES OF MATERIAL.—Nature, magazines, newspapers, government reports, stories, farmers, manufacturers, travelers, men, friends living in other countries, etc.

III. SECURING MATERIAL.—1. Collections. 2. Gifts. 3. Purchases. 4. Deposits.

Collections.—The pupils and teachers collect. They can go on collecting tours; they can collect incidentally at all times. When

original pieces cannot be had, replicas are obtained so as to show the unity of life in the particular activity.

Gifts.—Friends of the museum will give to the collections. There are many persons in the community—patrons and others who are glad to give specimens when they know that they will be taken care of. Manufacturing firms are, as a rule, glad to give to museums sets of their products. As an example, the cotton mill will give an exhibit showing the making of cloth from the crude cotton to the finisht product; a knife manufacturing establishment will give the knife in all its forms from the crude iron to the finisht product; other firms will do the same. These are excellent to show the evolution of the particular object.

Purchases.—There are many things that may be purchast for a few cents; example, from a grocer samples of coffee, tea, nuts, spices, etc., may be purchast. This may be carried to any extent.

Deposits.—There are often people in the community who have interesting things who do not want to part with them, but are willing to give them to the museum for awhile on deposit, if they are sure that they will be taken care of. They are just as good for teaching purposes as if owned by the school.

IV. PREPARING MATERIAL.—There are different ways of preparing specimens. One of the simplest

ways is to have a notebook which belongs to the museum; when a specimen is acquired, number it, name it, and write its number and name in the notebook, stating who collected it, who gave it to the museum and any other knowledge that is necessary to describe it. It also dignifies a specimen to label it; it still more dignifies a specimen if a neat block is made and the specimen laid on it; if the edge of the block is beveled, it makes a good place for the label. If the specimen is a picture, it may be labeled and numbered on the back; for keeping safely it may be put in an envelope with similar pictures. Another way would be to mount the picture on a neat cardboard of a proper size before it is numbered and labeled. A more permanent way is to write a card for each specimen and have on it the name, the number and such other details as are useful; number the specimen and label it in the same manner. These cards may be kept in a small tray made of cardboard or wood; at the same time keep a notebook in which the specimen is registered or entered and in which notes made about it that are useful are recorded. Still more elaborate plans may be used in preparing a specimen; in any event, in the collecting of specimens for a museum some preparation is necessary to make them useful.

V. KEEPING MATERIAL.—On the walls of the room, in nooks and corners and in the halls is space for

frames and cases for keeping the specimens. This is necessary, for they should be well kept. Children, patrons and friends are always more interested in specimens that are cared for. They should be kept safe, clean, and neatly arranged; they should be kept so that they are convenient for teaching purposes.

VI. ARRANGING MATERIAL.— In arranging material take into consideration convenience for use and the relation of the specimens. Make the specimens look as important as possible. They should also be arranged so as to teach a lesson by simply looking at them; to illustrate, here is a shelf labeled Mexico; on it are grasses and plants, and material made out of these grasses and plants, out of which the Mexicans make a number of different textil products as baskets, mats, carpets, brooms, brushes, etc. All these are arranged in their order on the shelf and labeled properly. These teach a lesson without the presence of the teacher.

VII. USING MATERIAL. — This material is got up for use in the interpretation of the lessons that the children are studying in the school; this makes the museum an organic part of the school; the material is also used in its arrange ment and setting for inspiring and instructing when there is no one present; it will instruct those who visit; it will instruct the children while looking at the specimens; it will instruct the teacher and all while looking at them and

while preparing them. There is a great deal of instruction, inspiration, knowledge and growth in the preparation and arranging of a museum.

Museums.

Anthropological Museums.

MANAGER—W. G. CHAMBERS.

The Anthropological group of museums is distinguisht from the other two groups on the following basis: The collections of the Physical Museums represent the processes and products of inanimate nature, of the various physical and chemical forces; the Biological Museums illustrate in their specimens what nature has produced through the so-called organic forces operating in the vegetable and animal kingdoms below man; while the museums of the Anthropological group exhibit in their varions collections the products and processes of self-conscious intelligence as it functions in human life. In this group are included the following museums, each illustrating the products of human thought, feeling, and action in one distinct aspect of human experience: (1) the Psychological Museum; (2) the Sociological Museum; (3) the Historical Museum; (4) the Museum of English and Literature; (5) the Museum of Reading and Dramatic Expression; (6) the Museum of Classical Antiquities; (7) the Museum of Modern Languages; (8)

the Pedagogical Museum; (9) the Textil Museum; (10) the Domestic Science Museum; (11) the Manual Training Museum; (12) the Physical Education Museum; (13) the Mathematical Museum; (14) the Museum of Art; (15) the Museum of Ceramics; and (16) the Museum of Music.

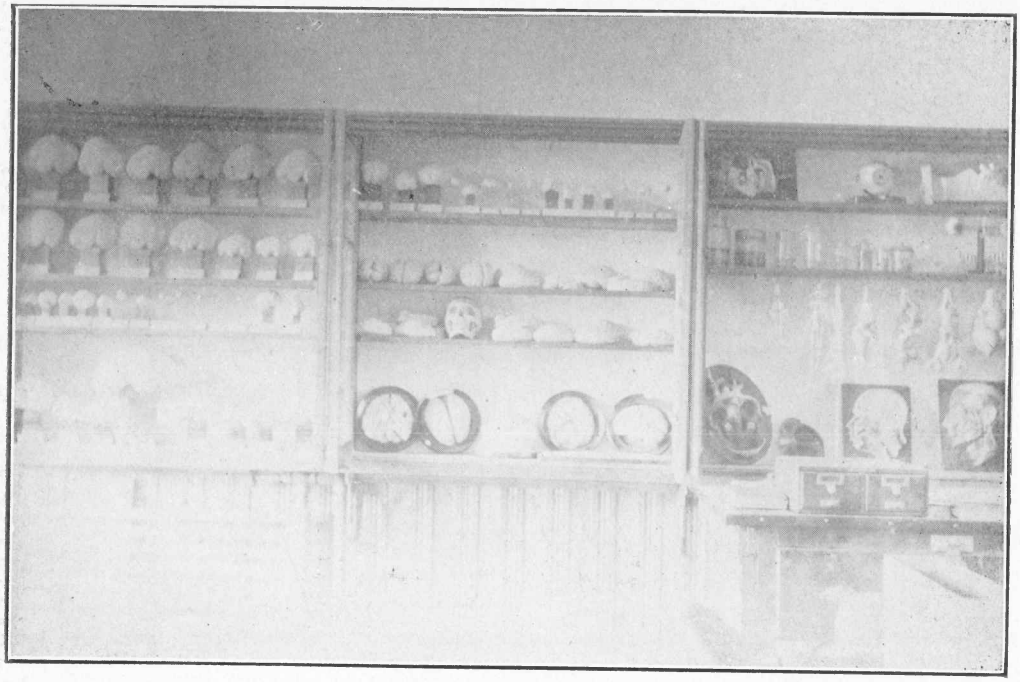
The field covered by each museum is sufficiently indicated by the following reports.

Museum of Psychology.

CURATOR—W. G. CHAMBERS.

The collections of the Psychological Museum fall naturally into a number of groups corresponding to the different departments of the science. Thus we have specimens, models, charts, books and apparatus illustrativ of Human, Comparativ, Genetic, Ethnic, Experimental, Abnormal, Physiological and Histological Psychology.

The materials of this museum are, fortunately, adapted both for museums and laboratory work and are of constant use for teaching purposes. For example, many of the pieces of apparatus are exhibited to show the progress in the development of experimental psychology and at the same time are used for experimental purposes. The animal brains both illustrate stages in the development of the nervous system and furnish material for dissection and histological study. Our charts (most of which are manufactured in the department) both illustrate the grafic methods of showing comparativ facts



Museum of Psychology.

and statistical results, and are constantly brought into use for teaching psychological principles. Thru the study of our numerous old books on philosophy and mental science we trace the development of the various psychological theories and discover the times and manners of the various changes which have occurred in psychological thought. And again, our collection of skulls and casts of cranial cavities of representativ races, in addition to the historical and anthropological interest, furnishes valuable illustrations for ethnic and certain phases of comparativ psychology.

REPRESENTATIV COLLECTIONS.

I. About fifty volumes representing the development of philosophical and psychological thought in this country, and including:—

Early text books on "Mental Science" and "Mental Philosophy," among them Upham (1875), Hickock (1857), Dugald Stewart (1855), Wayland (1845), Abercrombie (1841), Rausch (1840), McCosh (1860), Victor Cousin (1834) and many others.

Philosophical works of the Scottish philosophers, Reid, Stewart and Hamilton.

Lord Kames' Elements of Criticism (1830).

Jonathan Edwards' Inquiry into the Freedom of the Will (1757).

Boethius' Consolation of Philosophy (1785, Tr. by Ridpath).

Use of the Body in Relation to the Mind, by George Moore, M. D., (1847. One of our first attempts at Physiological Psychology).

Isaac Watts' Logic, or the Right Use of Reason (1806).

Isaac Taylor's Elements of Thought (1857).

II. Five large casts of different sections of the Human Brain.

III. Eight sets (three models each) of Witmer's Brain Models, in wax, life size.

IV. A set of models of the sense organs.

V. A series of fifty plaster casts of cranial cavities of the higher vertebrates.

VI. A series of models of typical nervous systems including radiates, annelids, insects, mollusks, etc.

VII. A series of wax models, enlarged, of typical animal brains, including amphibia, birds, fishes, etc.

VIII. Actual brains, including human, sheep, cat, rat, etc.

IX. A number of preserved specimens, such as a human foetus, nervous system of a cat, histological slides, etc. Also skulls, models of vital organs, etc.

X. A very complete set of charts of nervous system, brains, brain sections, courses of fibers, etc., some imported and some made in the department. Also charts, on cloth, showing results of child study and statistical investigations. Very complete sets.

XI. Psychological Instruments, representing the more common experiments in psychological laboratories; color mixer and discs, chronoscope, ergograf, dynamometers, electric keys, switches and attachments, kymograf, and numerous others.

Museum of History and Anthropology.

Museums of History and Sociology.

CURATOR—G. R. MILLER.

I. The Historical Museum is in constant activ use thruout the class rooms of the school. Its more than two thousand specimens contribute material for actual teaching purposes in this school nearly every hour of the day. This material finds its way into every grade from the kindergarten thru the high school. This Museum is an exhibit of Historical specimens. It attracts many visitors, but its function is strictly pedagogical. Normal students are taught to consider it always as a positiv adjunct to the school teaching equipment as a distinctly valuable part of the school apparatus for class purposes, and as such they are using it in an effectiv manner in the Normal practis school.

II. A partial schedule of specimens by groups:—

Flags of all nations; large fotografs of great historic paintings; wall portraits of great historic characters; collections of American colonial money; collection of Confederate money; collection of United States fractional scrip; collection of American, Mexican, Spanish, French and English coins; fine specimens of United States, Canadian, Alaskan and Russian furs; series of old firearms; collection of old swords, sabers, bayonets and knives; Alaskan exhibit of clothing, utensils and weapons; a

Philippine exhibit of over one hundred specimens; American Indian flints, arrow heads, spear heads, stone axes and hammers (fifty specimens); Philippine basketry and pottery; a large collection of rare American Indian pottery; medals awarded the Normal School at World expositions; American Indian totemic specimens; American Indian household idols and utensils; relics of American battlefields; a large exhibit of industrial manufacturers.

Museum of English and Literature.

CURATOR—LOUISE M. HANNUM.

The chief function of a museum in the English department of a school like ours is to remove obstacles to the influence of literature. When the images and conceptions which fulfil expression are unfamiliar or remote from the pupils' habitual plane of mental life, the visual appeal of pictures and sculpture may furnish the element necessary to arouse association and stimulate the play of feeling. Similarly, the time from which the piece comes, the personality that gave it birth, may be brought nearer the student by a MS. edition, an author's copy, an artist's illustration. Since the world of image, notion and discourse is a world common to the arts, and lying near to that of history, the more various and interconnected may be the avenues thru which that world opens itself to the mind, the more secure and lasting is likely to be the

Museum of English and Literature.

citizenship which the student may acquire in his all too brief years as a disciple.

For awakening a sense of the significance of form in revealing meaning, and of method in teaching, there is being gathered a collection of text books to illustrate the ideas and practis of other periods, and the advance in pedagogy which is not less markt in grammar, composition, and rhetoric than in the presentation of literature.

Perhaps the feature of most constant value in the museum should be the illustrativ material to accompany oral literature in the grades. It was the imaginary picture of burning Troy which aroused in the boy Schliemann the determination to reveal to the world the ancient scene of the great story that had delighted his childhood. In seeking to vivify for the child mind and heart the life of beauty and ideal worth, our pupil-teachers will most effectivly advance their own power to correlate all means furnisht by a museum for building up the emotional and imaginativ life.

The department is at the present time in possession of two hundred fotografs and other reproductions; four framed pictures for the wall; six subjects in *bas-relief* for the wall; several art shields; thirty statuets and medallions; rare editions or fac similes of Homer, Shakespeare, Milton, Goethe; manuscript and illustrated editions for the study of folk-literature, including epic, myth, ballad, saga; text books illustrating progress in editing literature for the young and in teaching grammar, rhetoric, composition, and the history of literature.

Museum of Reading, Literary Interpretation, Dramatic Art.

CURATOR—FRANCES TOBEY.

ASSISTANT CURATOR—MARSHAL PANCOAST.

The service of the Dramatic Reading Museum is (a) to make concrete and vital the study of the historical development of reading text-books and of methods of teaching reading; (b) to illumin the study of literary interpretation by means of illustrativ material, including pictures, casts, autograf letters, manuscripts, rare and unique books; (c) to stimulate interest in the drama and promote an intelligent study of its historic development by such objectiv means as historic costumes, varied articles pertaining to stage-craft, grafic and plastic reproductions of historic theaters and of great exponents of dramatic art.

Material on hand:—1. A series of American text books of reading, from the year 1790 (60 volumes).

2. Fotografs of modern reproductions of Greek theaters.

Museum of Classical Antiquity.

CURATOR—JAMES H. HAYS.

The chief functions of the classical museum is to furnish to the Latin classes and to classes in Ancient History a great interest in the life of the Roman and Ancient peoples. The Latin language is no longer

Museum of Classical Antiquity.

taught for its own sake, nor for what mental training it may furnish, but for the purpose of bringing pupils into closer touch with a civilization which has contributed much to our own. Everything that speaks of the daily life, thoughts, and activities of these people is a bond between them and ourselves. Classic art unfolds itself to us in every Roman ruin or Grecian vase. A Roman coin bearing the image and superscription of a Cæsar bids us "render unto Cæsar the things that be Cæsar's." Pictures, casts, manuscripts, weapons of war, maps of battle fields, and the literature of classic days, all contribute to keener appreciation of Roman and Grecian daily life. By means of these more or less tangible expressions of the life of those early days, what of truth and beauty the Greeks attained, and what of strength and culture the Romans possest, we hope the better to secure in our teaching of their language and literature.

CLASSIFICATIONS AND SPECIMENS.

In the classical museum fine specimens along the following lines may be seen:—Sixteen plates of original manuscripts of classic writings; four vols. Modern Texts, Cicero's complete works, editions 1724, etc.; six vols. Translations of Classics, including Dryden's Virgil, Ed. 1698; sixteen casts of heads and busts of distinguished Romans and Greeks; also figures of mythical characters, and illustrativ architecture; seven pictures of classic scenes, buildings, national games, and public invents.

Museum of Music.

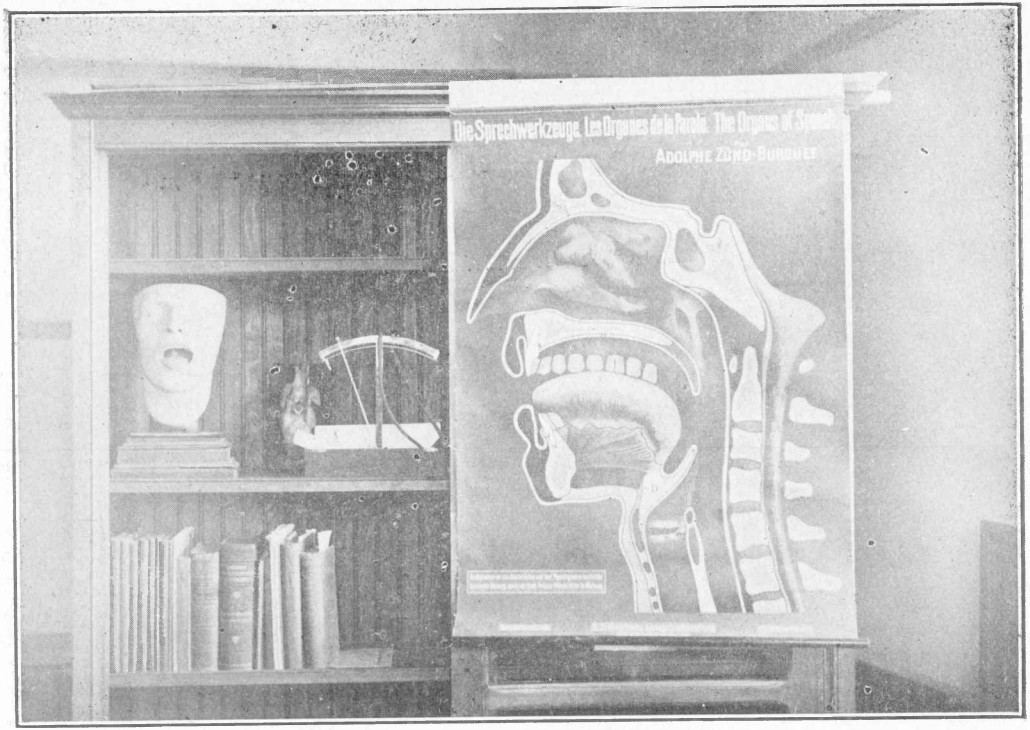
CURATOR—WILLIAM K. STIFFEY.

I. FUNCTION OF MUSIC MUSEUM.

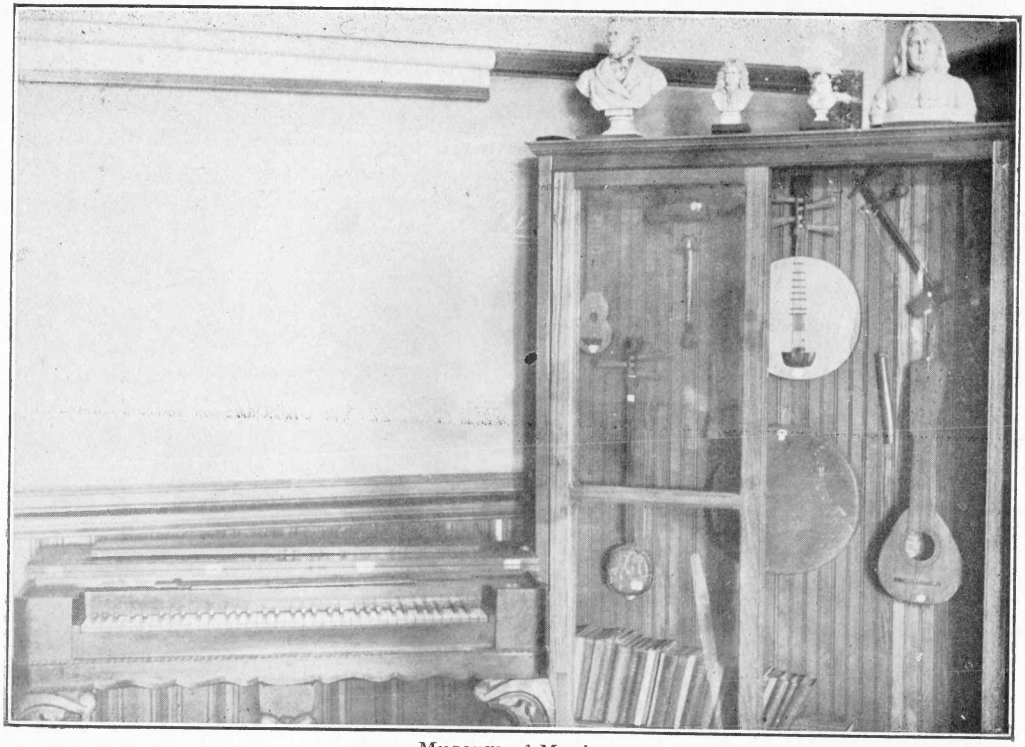
The proper function of a music museum would be to illuminate by illustration the various phases of music teaching. In teaching notation, specimens of the various notes used, from the letters, the neumae, etc., show the evolution of notation as a more complex art required. A well equipt museum would also contain works printed in the various notational systems, such as the Paris Cheve, the Aiken seven character system, and the Tonic Sol-fa.

Specimens of church music from Palestrina, LeLasso, etc., and Madrigals from Festa, Waelrent, Edwards and others should be used to illustrate early attempts at counterpoint; specimens of Farrant, Tye, Gibbons, Ford, etc., to show the growth of Counterpoint into Harmony; compositions of Scarlatti, Purcell, Correlli, and others to show the beginning of the String Band and Musical Form.

The above course will have prepared the pupils to understand and appreciate the history of modern music from Bach and Handel to the present time. Specimens of the Fugue, Sonata, Symphony, etc., of the instrumental forms, and the Art Song, Oratorio, Opera, Cantata, Anthem, Motet, etc., should be illustrated by judiciously selected specimens of standard works. Running with the study of the above enumerated works a course (incidental) in the biography of the various composers would be of interest. Pictures and busts of



Museum of Modern Foren Languages



Museum of Music

the leading representatives of the various epochs could be used with good effect.

Such instruments as can be used to give the intervals of scales or qualities of tones peculiar to their class or period might be utilized for that purpose.

II. LIST OF DIFFERENT SPECIMENS IN MUSIC MUSEUM.

Philippino lute, Chinese mandolin, Chinese lute, Chinese violin, Philippino violin, cheremia (ancient war fife of Aztec), Aztec lute, Alaskan drum, Alaskan dance rattle, Alaskan deer-toe rattle, melodian; Pictures "The Song" —Grutzeer; "The Concert"—Cedarstrom; "Mozart and Sister Before Maria Theresa"—Borckman; "The Singing Lesson"—Gay; "Evening Song"—Zmurko. Busts of Liszt, Schumann, Wagner, Handel, Mozart, Beethoven. Medallions of Meyerbeer, Rossini, Chopin, Gluck, Auber, Beethoven, Brahms, Wagner, Handel, Haydn, Mendelssohn, Mozart, Liszt.

Museum of Modern Foren Languages.

CURATOR—A. GIDEON.

A Museum of Modern Foren Languages has both an illustrativ and a laboratory function. It includes objects or reproductions of objects that tend to throw light upon the material and spiritual life of the nation whose language is being studied:—Pictures of celebrated persons, places, and buildings; maps and plans of cities; casts and models; illustrations of garb, manners, and customs; fotografs depicting historical events; reproductions of works of art in painting and sculpture; views

of noted landscapes, etc.; text books used in instruction in foren schools, as well as documents and objects having reference to, or forming a part of the foren educational system; interesting editions of literary works; books and apparatus exhibiting the development of instruction in languages in America and England; apparatus for present needs, charts, fonetic instruments, models of the vocal organs.

The museum at present contains:—A number of maps of foren countries; a series of fonetic charts; books exhibiting different methods of foren language instruction; a set of instruments for fonetic experiments; models of the vocal organs.

Soon to be added:—A collection of fotografs; Cassel's Historical Cartoons; Hölzel's Bilder; Models of Weimar Theater, process of bell-casting, Bastille, etc.; Könnecke's Bilder Atlas.

Museum of Art.

CURATOR—R. ERNESTI.

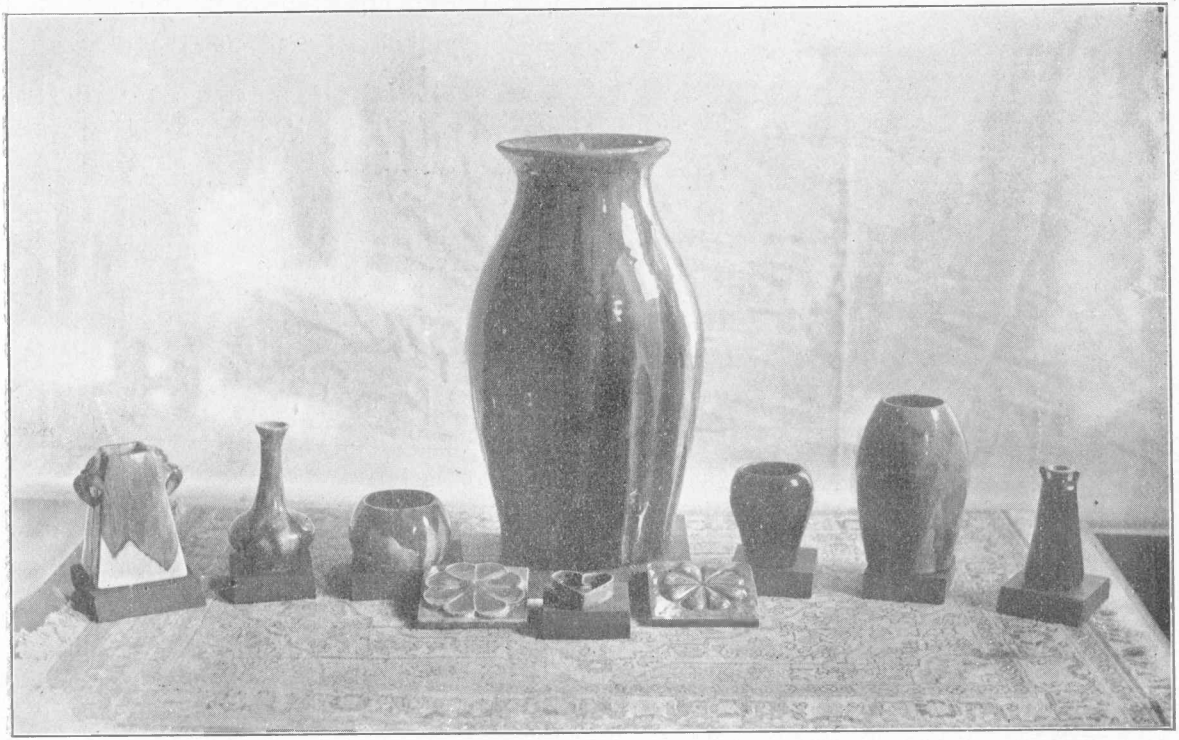
The Art Museum of the Colorado State Normal School is particularly fortunate is being finely equipt to perpetuate and carry out its functions in the fullest sense. It is not simply a repository of paintings, pictures, casts, statuary, pottery, metals and the many things that lend charm to an art museum, but it is an activ center of inspiration.

The energy that lies in the instruction thru our museum is forcibly illustrated in every lesson given by

Museum of Art.—Pottery—First Step on Wheel.

Museum of Art.—Pottery—Second Step—Decorating.

Museum of Art.—Pottery—Third Step—Glazing and Burning.



Museum of Art.—Pottery—Finished Product.

Museum of Art.—Pottery—First Step—Free-hand.

Museum of Art.

showing the greatest correlativ possibilities with the whole individual, scientific and art world, which is the deep and broad thought that underlies all art creations.

The use of this museum makes for fullest academic possibilities in art, not only in the fact we can reproduce and paint and draw these articles, thus training hand, eye and soul, but that the student is brought into touch at every step with facts of history.

It is not the working for the preparation of specialists, but the touching of life in the fullest thru industrial and scientific correlations that intelligible exposition of ideas is produced, which make life full of rich values. For instance, in the use of replicas of Greek statuary we come in touch with the early history of art in its greatest perfection. In the Ipsen replicas of Greek vases we also have a stage in history, as well as in the potteries of the American Indian; so we come down gradually in this historic art study till we reach productions by the English—Doulton, Ruskin, Royal Worcester—or until we have the American vista in the line of Grueby, Rookwood or Teco. We do not touch history or any other study directly, but we come very close to all and are ever face to face with the evolution of fine form and structure.

LIST OF ARTICLES.

Statuary and casts, 146; paintings, 15; other pictures and reproductions, 717; potteries, 159; models—metals and bronzes, 193; total, 1230.

These are distributed as follows: In Library—Statues, 8; bronzes, 2; marbles, 3; vases, 2.

Library Hall—Pictures, hanging, 6.

Lower Main Hall—Pictures, hanging, 6; statuary and casts, 23.

Rest Room—Casts, 1; pictures, 1; ancient clock, 1.

Superintendent's Office—Pictures, hanging, 2.

President's Office—Pictures, hanging, 3; statuary, 1; pottery, 2.

In Art Room proper—Casts and statuary, 69; Branam pottery, 36; Japanese models, 37; Indian models, 24; diverse models, 168; Buffalo pottery, 54; metal ware, 1; ancient clock, 1; spinning wheel, 1; pictures, unframed, 354; students' exhibit—pictures, 363; marble vase, 1.

Chapel—Pictures, hanging, 12; statuary, 5.

Upper Hall—Pictures, hanging, 5.

High School—Pictures, hanging, 15; statuary, 8.

Training School—1 and 2 grades—Pictures, hanging, 8; statuary, 5.

3 and 4 grades—Pictures, hanging, 12; statuary, 7.

5 and 6 grades—Pictures, hanging, 5; statuary, 3; vases, 4.

7 and 8 grades—Pictures, hanging, 20; statuary, 12; bronzes, 2.

Museum of Mathematics.

CURATOR—DR. GEORGE B. HALSTED.

The functions of a mathematical museum in teaching are manifold. Historically that the great names of this queen yet handmaiden of the sciences should be given concrete connotation is highly desirable. The scope,

the range of the present world-wide creativ activity in this oldest of the sciences and the accompanying stimulus and uplift may be visibly and impressivly illustrated. Again the variety and wealth of figures and models which of late more than ever have been called into existence to connect sensuous intuition with the ideal construct, which is mathematics, make the museum a living coadjutor in the teaching of what is at once the most classic and the most modern of subjects.

The numerous and amazingly powerful instruments and machines which modern invention has contributed to accomplish with superhuman accuracy and ease the operations involved in the applications of mathematics to life, practically indescribable in words alone, may be simplicity itself to hand and eye.

The Mathematical Museum consists of:—More than five hundred valuable books illustrating the evolution of the science; complete sets of all the mathematical periodicals in all languages; pictures of the great mathematicians and things pertaining to them and their science; an extraordinarily rich collection of mathematical manuscripts and autografs; figures and models, including the paradoxical contributions from Hyperspace and Non-Euclidean Geometry; mathematical instruments, apparatus, and machines; miscellaneous matters and things mathematical.

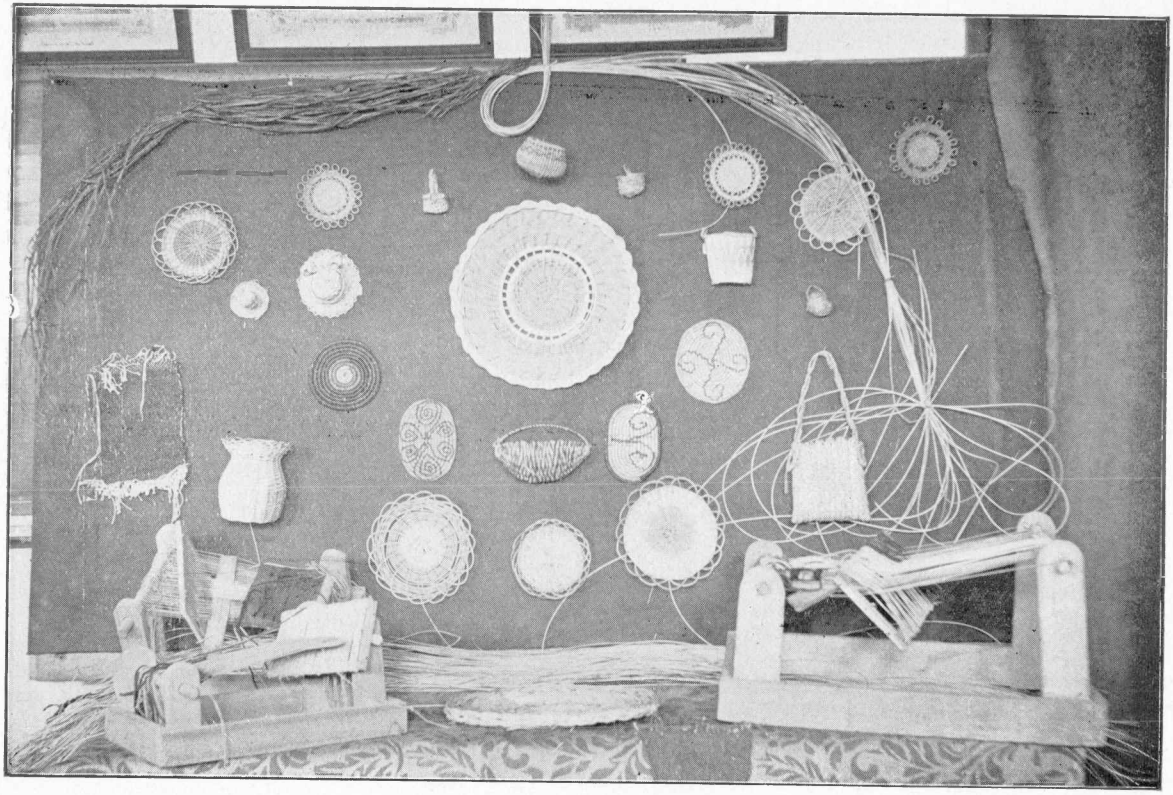
Museum of Textils and Domestic Science.

CURATOR—ELEANOR WILKINSON.

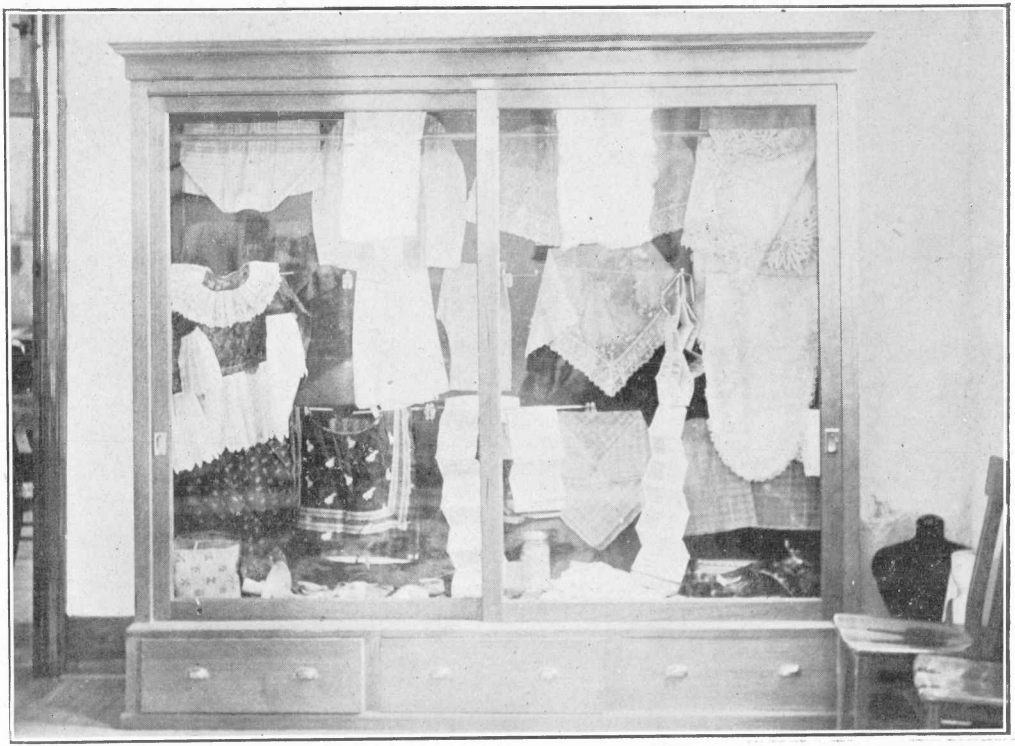
This department museum is necessarily divided into two sections. These sections are on exhibition respectivly in the sewing rooms and in the cooking rooms.

These exhibits are in constant use in classes in the elementary school, the high school, and the normal school. The Domestic Science Museum is a collection of specimens for practical teaching purposes, and is so used.

The following is a partial schedule of exhibits in this museum:—Fourteen Philippine household utensils; twenty specimens Philippine clothing; two specimens Philippine bedding; large exhibit of domestic textils; large exhibit of domestic cotton cloth; large exhibit of Navajo rugs; twenty-five specimens imported fine laces; Mexican drawn work; five specimens Philippine brooms; six specimens of Philippine shoes; twelve specimens of Mexican baskets; twenty-five specimens of Mexican mattings; fifteen specimens Mexican fibers; ten specimens Mexican brooms and brushes; twelve specimens Imperial Smyrna rugs; ten Indian moccasins; specimens Alaskan fine bead work; five specimens Alaskan bone spoons; twenty-three samples fine oriental rugs; thirty specimens linen thread; thirty specimens cotton thread; twenty specimens of teas; fifteen specimens of coffees; twelve specimens of wheat food products; twelve specimens corn food products; six specimens, evolution manufacture of chololate; eight collections of food charts; six collections of meat charts; twenty-five exhibits showing chemical composition of common foods.



Museum of Textils.



Museum of Textils

Museum of Manual Training.

CURATOR—S. M. HADDEN.

The museum is organized along the following lines—historical, theoretical and practical.

The historical is illustrated by a collection of material, tools and processes that have largely influenced the lives of peoples.

This collection, when properly installed, will give a wide knowledge of and a feeling for the activities of peoples.

The exhibit should be of interest to the layman because thru it and his own experiences he will be able to read the history of the industrial life of people.

Thru the race expression as interpreted by such an exhibit the student teacher will find much material that will aid him in both directing and interpreting the child's activities.

The child will gather much valuable information from such an exhibit, reading thru the exhibited products the lives of peoples.

The exhibit should also aid the child in his search for interesting lines of work.

The theoretical section will deal with the industrial activities of various countries as displayed by the work in their public schools.

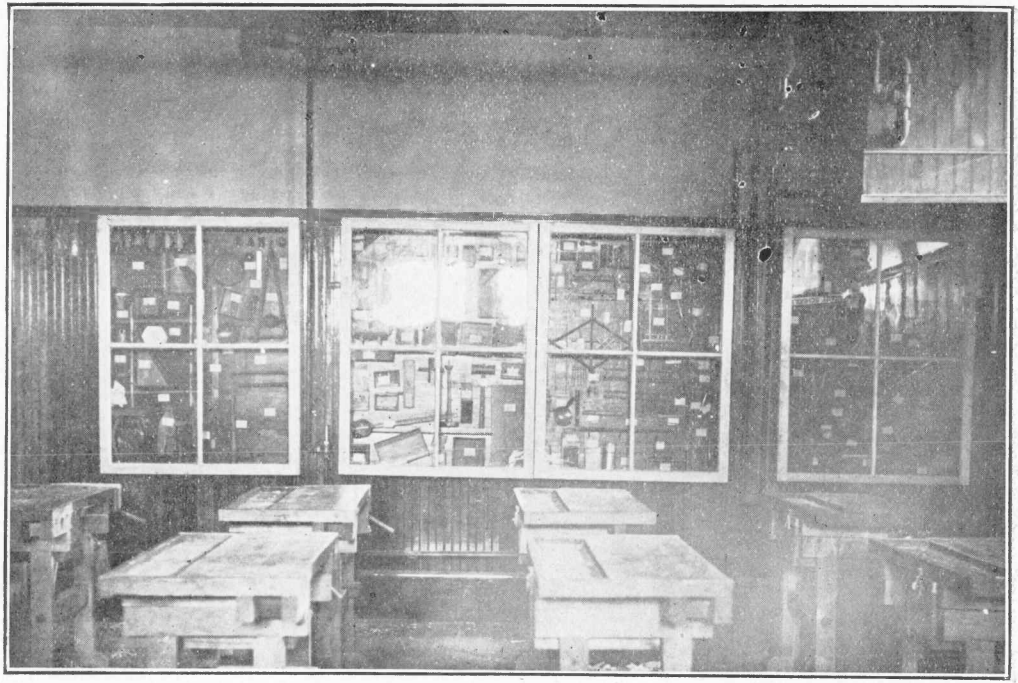
Such an exhibit will do much for a student teacher, showing him the close relation between the home, the industrial life of the community, and the industrial life of the school.

The practical side will include a collection of materials

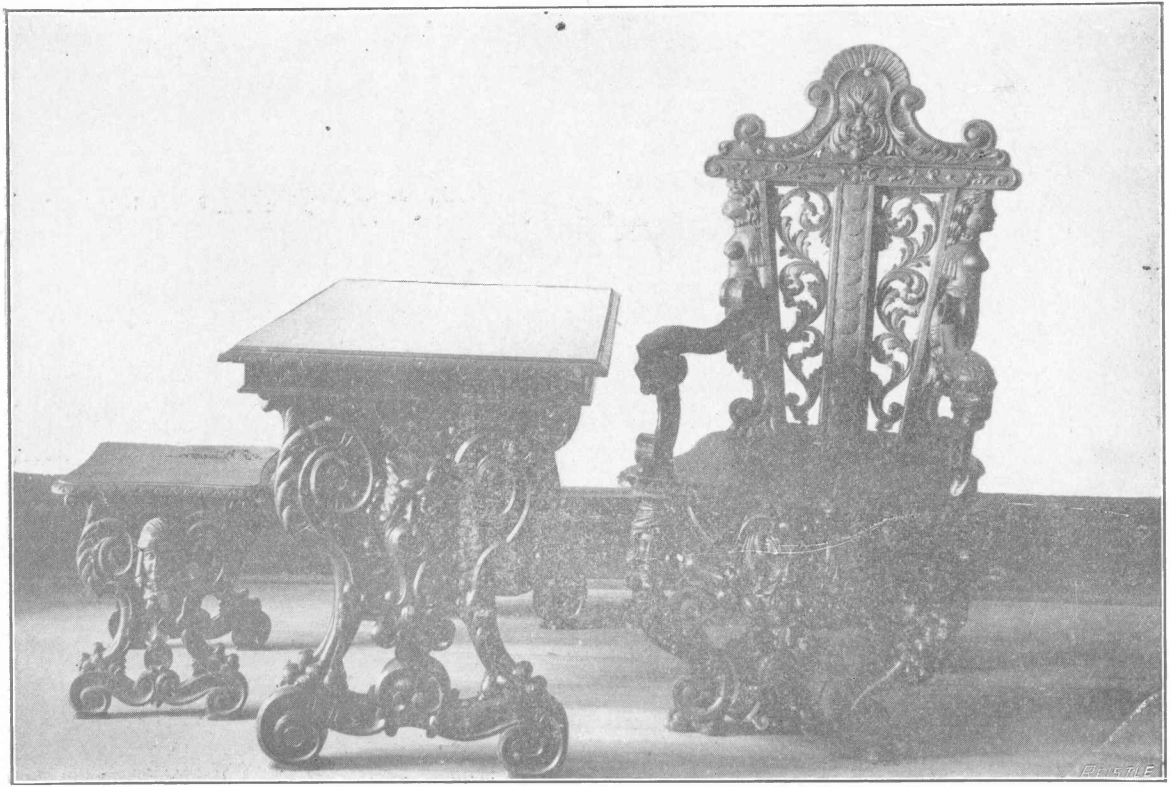
from widely separated districts, so arranged that they will be of interest to the visitor at the school.

We want to make this collection so complete and arrange it in such a manner that it will become a ready reference collection to which the teacher, the student-teacher or the child in any grade may go and obtain valuable information in the minimum amount of time.

Below is a list of material now in position in the Museum of Manual Training:—Nine processes in the making of a saw—the gift of Henry Diston & Sons, Philadelphia; eight samples of different Philippino wood-working tools; eight samples of wood-carving, from Nuremburg, Germany; three samples of carved furniture, copies of originals in the Germanic Museum, Nuremburg, Germany; eleven samples of Alaskan Indian wood-carving and color decoration; six wood-working and wood-carving tools used by Alaskan Indians; seven primitiv stone tools, found in the United States; one Zuni Indian fire drill; one American Indian metal drill; four nativ Mexican Indian awls; eighty specimens of Japanese woods, finisht and mounted; one hundred twenty-four specimens of woods of the United States, finisht and mounted; fifteen specimens of woods from the Philippine Islands; ninety-six specimens of Porto Rican woods, finisht and mounted; six hundred pictures of Craftsman furniture, mounted in a filing case in alfabetical order; two hundred eight micrografs of woods from all over the world, mounted in a case for reference; one nativ Mexican Indian pulque cup, mounted; two shingles from the Philippine Islands, used by the nativs, mounted; one model of a sled used by the nativs of the



Museum of Manual Training—Japan School Exhibit.



Museum of Manual Training.

Museum of Manual Training—Carving.

Museum of Pedagogy—Games

Philippine Islands, mounted; one hundred fifty-six samples of wood and metal work from the public schools of Japan; forty-seven samples of wood work from the public schools of Massachusetts; one specimen of wood carving from Egypt; one inlaid box, made by inmate of State Penitentiary of Colorado.

Museum of Pedagogy.

CURATOR—D. D. HUGH.

The function of the Pedagogical Museum is to provide material that will be useful for illustrativ purposes in connection with the teaching in the Training Department; or that will throw light upon the present organization of equipment of schools, and upon the evolution of the various subjects of the curriculum. For this purpose the material has been classified under the following heads.

School Furniture.—Miscellaneous samples collected and displayed with the aim of being helpful to all who have to do with the purchasing of modern school equipment.

Books.—A special library for teachers containing now about a thousand books and pamphlets illustrating:

(a). Text-books today used in class work—a section intended to include the best of these, both for our own guidance in providing for our classes, and for the sake of acquainting the student-teachers and all interested visitors with the field from which they may select text-books for themselves and their schools.

(b). Old text-books, illustrating the evolution of the treatment of the various school subjects—a section chiefly of use to the advanced student who wishes to broaden his scholarship by a comprehensiv survey of the educational history of the past century and more as embodied in its text books, where the eliminations and shiftings of emphasis are excedingly suggestiv.

(c). Books on the theory and practis of teaching—a section designed to acquaint both student and visiting teachers with the newest thought of those best qualified to guide in the work of teaching.

Pictures. — (Fotografs, fotogravures, carbon and color prints, stereopticon slides, and illustrations culled from various current publications and mounted by the school)—A collection made with the double aim: (1) Of meeting the demand for illustrations in class work; and, as far as may be thru tasteful decorations, of ministering to the ultimately utilitarian or culture need; (2) of furnishing in both these functions a good example for the public schools at large.

The sources of the more expensiv pictures were: The Berlin Photographic Co., Denver; The Soule Art Publishing Co., New York; The Sanborn Soile Co., San Francisco; of the cheaper pictures those of the well-known Perry Picture Co. are typical.

Apparatus and Devices for Class Use.—Especially in the lower grades.—(1) Apparatus now in use in progressiv schools; for example, charts to be used in the teaching of arithmetic; the maximum and minimum thermometers, and the anemometer, to be used in the teaching of geografy. (2) Apparatus no longer in use

in the better schools, but useful to the student of the evolution of school apparatus.

Games.—This section of the museum contains material for playing games that are useful in connection with the teaching of number, reading, and rythm. For example, addition, subtraction, and counting by 2's, 3's and 4's, which gives a foundation for the multiplication taught later by keeping scores for different games. Written instructions for playing games are placed upon the blackboard or printed upon slips. The children read these instructions and play the games accordingly.

Toys and Kindergarten Material.—A collection not thoughtlessly, but selectivly made, based on those nativ interests of children that find satisfaction in their play, chosen to demonstrate the claim of toys to a place in school life as incentivs to experimentations and as helps toward facil motor coordination and classified roughly according as they: Anticipated future activities, as the doll; or appeal to manual skill, as carpenters' tools; or satisfy a natural love of change, as the Harlequin; or illustrate elementary types of machinery, as the cart; or appeal to a love of tone or rythm, as the horn; or require the fitting of part to part, as building blocks, etc.

The various departments contain already considerable material, and are being constantly added to. We have (for illustration) in:

School Furniture.—Adjustable seats and desks, prest steel wardrobe lockers, blackboard, erasers, crayon, supplies of different sorts, besides miscellaneous minor school conveniences.

Books.—About a thousand, including pamphlets.

Pictures. — Conservativly a thousand, part still unmounted; besides these a supply of foren postcards, and nearly a thousand stereoscopic slides.

Games.—About fifty, with many duplicates.

Apparatus.—Special helps for teaching arithmetic and geografy; blocks, charts and the like, an anemometer and a maximum and minimum thermometer, a barometer and the like. Besides these, many busy-work theories.

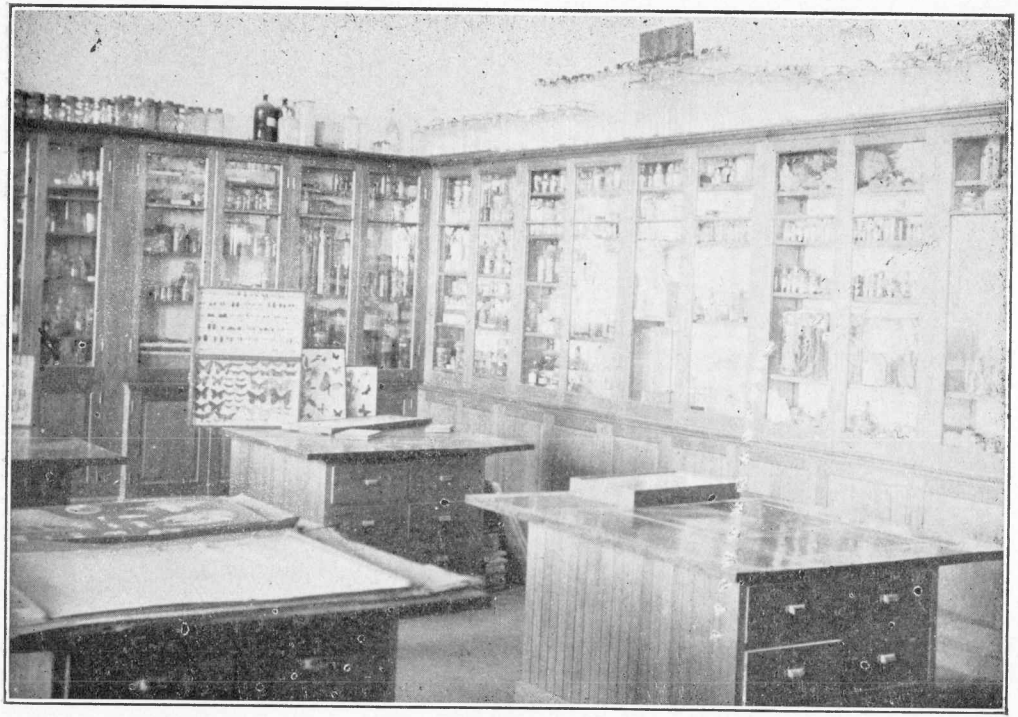
Toys.—A few only as yet—chiefly dolls, illustrating in their dress the costumes of various nationalities.

Museum of Reptils, Mollusks, Crustacea, Protozoa and Insects.

CURATOR—A. E. BEARDSLEY.

I. The Function of the Museum in Teaching.

As an important auxiliary in the teaching of nature-study and the biological sciences, the museum is in constant use. The living specimen in the hands of the pupil is supplemented by other specimens from the museum collections illustrating its relation to other animals or plants, or showing different stages in its life history, —stages which may be obtainable only with great difficulty, or not at all, at the particular season when the lesson is to be given. By means of the museum collections local and geografical varieties may be brought into direct comparison with the specimen in hand, illustrating the effects of environment and of isolation upon the development of the species. Except for the museum,



Museum of Biology

such comparison could, in general, be only vaguely suggested to the mind of the student, since it would be extremely rare that fresh specimens of the different kinds needed would be readily obtainable at the same time. In many animals marked changes in appearance occur with the changes of the seasons. The mountain hare, the ermin, and the ptarmigan in their winter dresses are widely different in appearance from the same animals in their summer costumes; living specimens change with the changing of the seasons and, at a given time, show their characteristics for that particular season only; the museum enables us to see all the seasonal forms together, at one view and at all seasons. The museum can never fully take the place of the living specimen nor supply a perfectly natural environment; but as an auxiliary to these, and as an aid in teaching the biological sciences and nature study, the museum is indispensable.

II. Brief schedule of specimens.

1100 Protozoa, twenty Porifera (sponges), 150 Coelenterata, 515 Vermes, 1150 Mollusca, fifty Echinadermata, 7075 Crustacea, thirty Myriapoda, 5500 Insecta, 250 Arachinida, 650 Fishes, seventy Amphibians, 125 Reptils, 7500 Plants, 300 Fossils.

Museum of Birds and Mammals.

CURATOR—L. A. ADAMS.

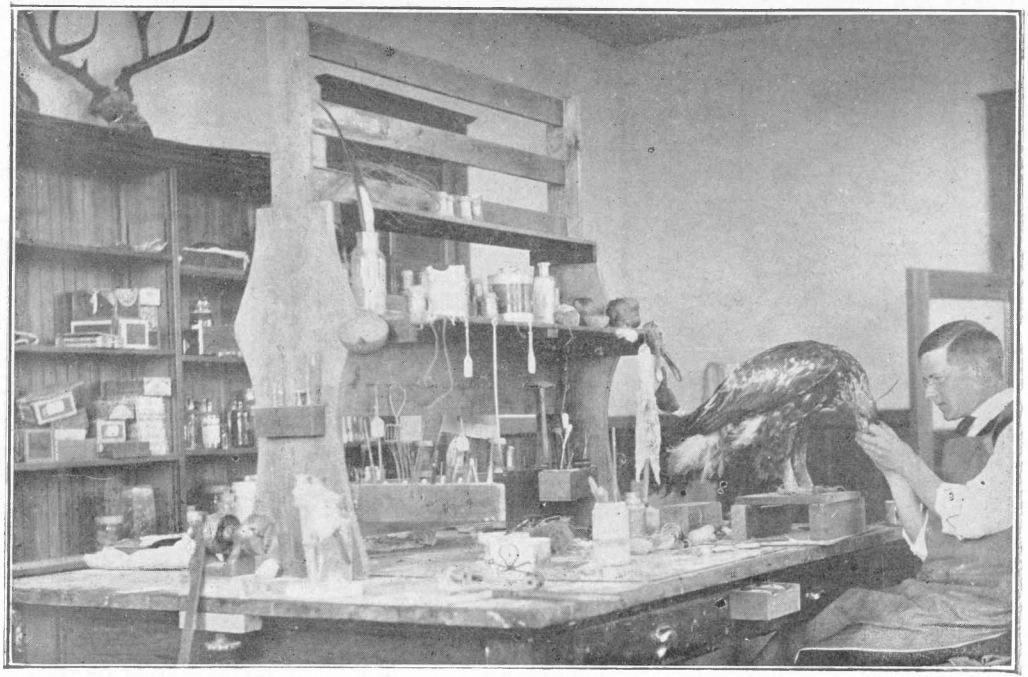
The Museum of Natural History occupies the northeast portion of the first floor of the new Library building.

The equipment consists of a large display room where the specimens are shown, the office of the curator, and the laboratory. The Museum room is large and well lighted and has a large floor space for showing specimens. The laboratory is modern in every way and is prepared to do any kind of museum work.

The museum is growing rapidly and new specimens are being added every week. It is planned to make the museum modern in every way, and no pains will be spared to attain this end. It will not be "An asylum for the declining years of things of little use" as Bumpus so aptly describes the museum of long ago. The old idea was to build up a museum so as to humble the observer and impress him with his ignorance; a common label was a great mistake and attractivness was carefully stifled; the specimens were arranged in military order with great care, and, while a joy to the scientist, were of little use to the public. We now try to make the museum attractiv, a place of pleasure as well as instruction. In other words the best use is being made of it.

Our museum is planned for educational purposes, and we are trying to make it worth while to the student and public as well as to the scientist. The best place to study nature is out of doors but as we do not have the opportunity to see the wild things there, the next place is the well-prepared museum. We are trying in a way to supplant the woods and fields by taking them up bodily and confining small portions of them in cases so that they may be readily seen and appreciated. This is the new idea in this work and is a great stride in the

Museum of Birds.



Museum of Birds and Mammals—The Work Room.

Museum of Mammals.

Museum of Birds and Mammals.

right direction. We are going to have all of the familiar forms prepared in this way and have already made quite a start in this direction.

A recently completed group of Rocky Mountain screech owls will serve as an example. This group consists of a large cottonwood stump which has really been a home of the owls, and five owls in various characteristic positions. It was cut down carefully and brought into the laboratory, where the owls were mounted and placed on it, and it was made to look as nearly as possible as it did in the woods. The owl does not make a home of its own, but appropriates the nest of a flicker or a natural cavity. A hole is cut in this stump so that the nest and eggs can be seen, and it is made as attractiv as possible. A study of this group will give the student some accurate knowledge of the habits of this owl. It will show him something of its home, food, habits and several other owl characteristics.

In teaching the student about birds or mammals, the greatest difficulty is to get him to give them life. Often he studies them in books and in mounted specimens and regards them merely as objects that must be studied, thinks of them as so many blocks of wood and gives them as little life and individuality. We are endeavoring to make the student love our wild friends, give them more attention and hence add to his own enjoyment and knowledge. As fast as possible we will place on exhibition all of the more common forms, arranged so as to show something of the habits and of the life history. As a general rule it may be said that in teaching we use the skins and mounted specimens for forms that are not

easily found and use the museum merely as a supplement to the field.

DESCRIPTION.

The museum has a good representativ collection of the birds of North America, and the mammals are being secured as rapidly as they can be obtained. The collection of mounted birds numbers two hundred and fifty specimens, most of them the larger birds of prey, of which the greater part are so mounted so that they will fit into groups when the accessories can be secured. Besides these there are over twelve hundred skins in the collection, all accessible to the students for study. A recent acquisition gave the museum the best collection of humming birds in the west. It numbers five hundred and sixty-two specimens and represents over two hundren of the five hundred and fifty known species of the humming bird. They are in the form of skins at present, but many of them will be mounted in the near future. There is enough material in this collection alone to furnish work for a year's study. Another of the recent additions is an albino, red-winged black bird. It is pure white with beautiful salmon shoulders and is a true object of beauty.

The mammals, which are mostly small forms typical of this locality, are represented by forty mounted specimens, one hundred and fifty skins, and a collection of skulls and skeletons numbering about one hundred and fifty. Some of them are in the rough, but they will be mounted as soon as possible. Already four have been mounted: A bat, small; a fine skeleton of the large fruit eating bat of the orient; a skeleton of a baboon;

and a human skeleton. A large snake skeleton is being prepared and will be on exhibition in the near future. It is a boa constrictor skeleton, over fifteen feet long.

Two very fine cases show the feather, the different colorations and how some of the peculiar markings have been evolved. The collection of birds' eggs is very complete; many of them are with the nests. There are over a hundred nests and among them are nineteen of the humming bird, showing the great variety of nests constructed by these small members of the bird group.

The collection of eggs numbers three hundred and fifty sets and furnishes a good study of evolution and protection. Some of the most interesting are the eggs of our larger birds. Eggs of all of the larger wingless birds are found, including casts of the eggs of the Moas and the Aepyornis, giant wingless birds whose heads towered some ten feet above the ground.

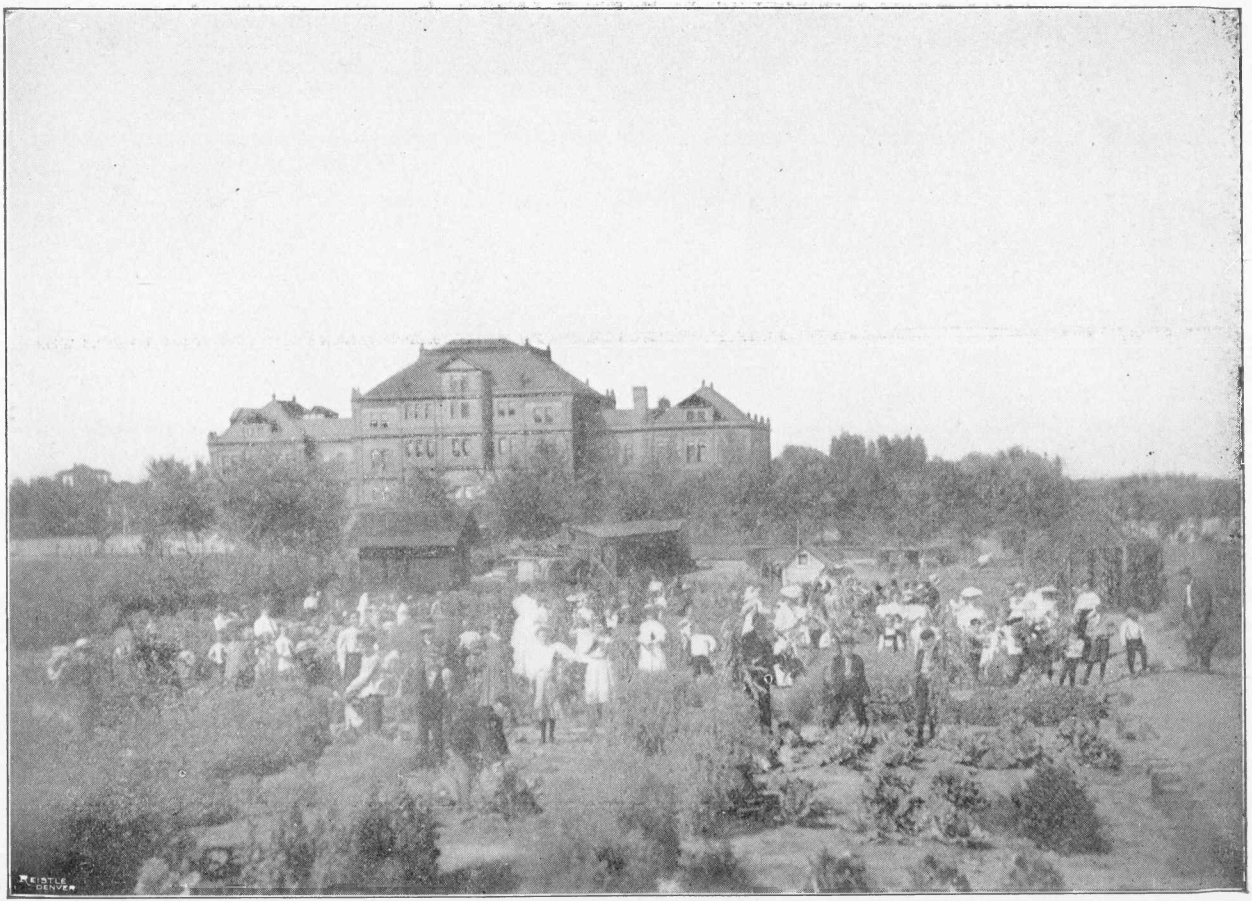
For convenience in mounting, casts are made of all of the mammals' bodies. There are over thirty of these casts now in the museum showing the head and the parts of the body used. A Papier-Mache manikin is provided for the classes in physiology. It is made so that all of the parts can be taken out and studied and is a great addition to the equipment. There is a dried body also, which shows the body of a man dissected and hardened, with all of the organs in position.

A series of casts are shown giving an idea of the heads of monkeys and the races of man. It consists of the following: Gorilla, male and female; Chimpanzee, male and female; Ourang-outang, male and female and young; Prehistoric man; Negro; Indian; Malay; Mongolian; Caucasian.

Museum of Economic Botany and Agriculture.

CURATOR—H. W. HOCHBAUM.

It may be said that the main purpose of the Museum of Economic Botany and Agriculture is to furnish illustrativ material for use in the teaching of Agriculture, Nature Study and School Gardening. In the teaching of these subjects it is essential that the objects under discussion are actually seen, perhaps handled, by the student. It is not enough merely to talk about soils, birds, or plants. These must actually be seen. If the teacher, for example, has soil samples where the student can feel and see for himself the points under discussion, the teaching will mean more. To talk about clay soils, loams or sandy soils, will not help nearly as much to a clear understanding of the uses of these types as when the student can feel and see for himself the various differences in the actual soil samples. So, in the study of plants, the actual plants must be at hand where the student may observe them. Many other illustrations may be found of the value of the material of this museum. The smaller agricultural implements and utensils that form a part of the collections are often brought into actual use to show the mode of operation or the principles that may be involved. Comparisons are also made with specimens of more primitiv origin or earlier forms of implements now in use. School gardeners while discussing the relativ thicknesses of seeds, shape, etc., may study the actual seeds in the museum. Nature students while studying the economic relations of insects,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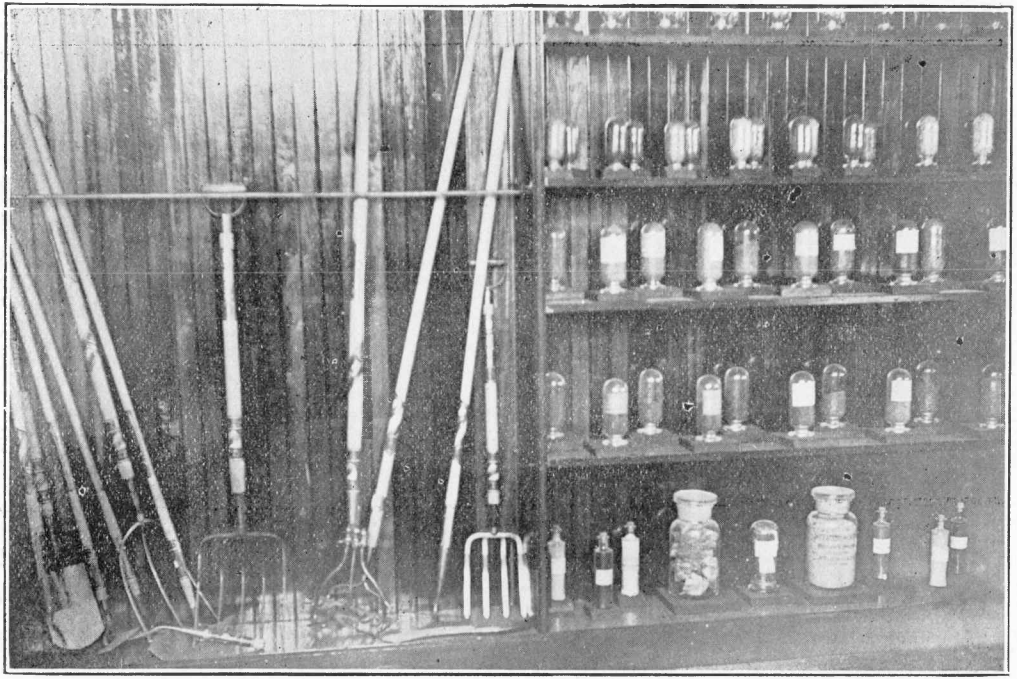
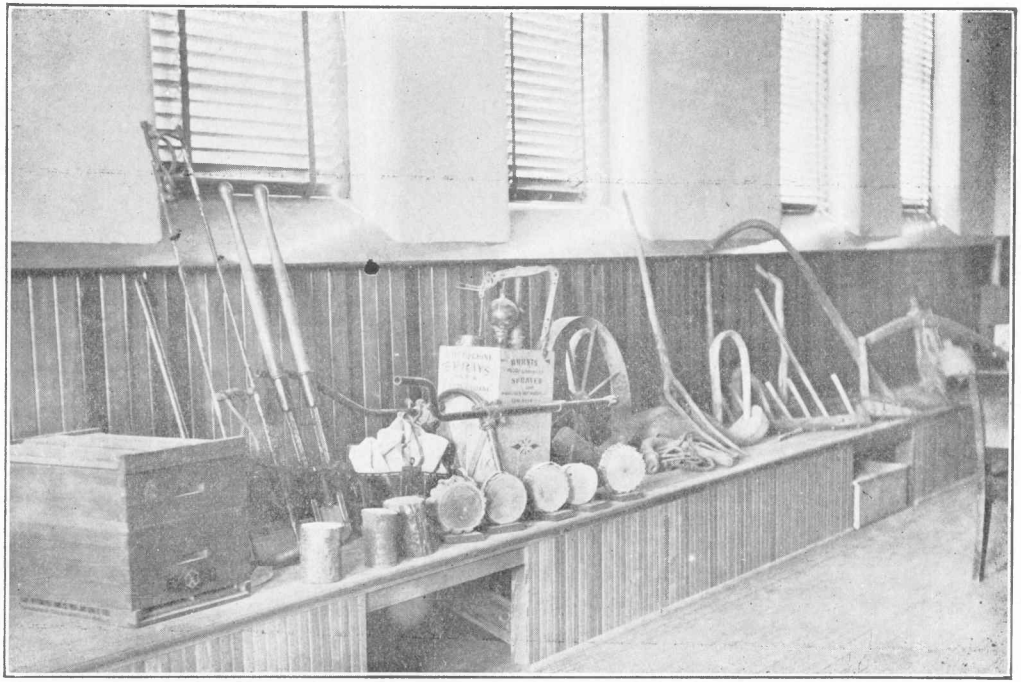


Museum of Elementary Agriculture and School Garden.



Museum of Elementary Agriculture and School Garden.

plants and animals, may draw actual specimens from the museum for illustration.

This museum comprizes two sections: An outdoor section and an indoor section. Outdoors, garden and field afford opportunities for the observation and study of plants and other factors of interest to the student of agriculture, gardening or nature study. Here soil is actually turned over, sown, cultivated, crops harvested, plants are propagated, bugs killed, bringing out the point that the museum, whether indoors or out, is not solely a place for the exhibition of museum material, but that wherever possible this material is handled and the museum becomes, in a way, a laboratory. Outdoors are grown very many ecocomic plants, both nativ and introduced. Ornamental plants so arranged so as to show their best uses in connection with the decoration of home grounds also form a large part of this section. Every year large numbers of new economic and ornamental plants are set out, and it may be said that here on the grounds of the State Normal School as varied a collection of plants may be found as anywhere in the State. The Campus is reputed to be the most beautiful in the State and the influence of its many beautiful trees, shrubs and flowering plants on student and public is surely a great one, showing how hardy, decorativ plants add to the beauty and comfort of a home. There are now about 300 species of hardy, woody, ornamental plants represented on the Campus and perhaps 2000 species of other plants of economic importance.

In the indoor section the following groups are to have places: A collection of nativ woods; nativ edible and

poisonous fruits and roots; nativ weeds; economic fungi; economic insects and life histories of the same; agricultural seeds, i. e. grains, grasses; forage crops, etc.; forest seeds; garden seeds; forest products, as oils, gums, dyes, shellac, etc.; agricultural products other than food, used in manufactures, as fibers, tobacco, etc.; fotografs illustrating the various agricultural industries, blooded cattle, horses, sheep, etc.; fotografs of birds, animals, plants and flowers in their nativ habitat; fetilizers, insecticides, and fungicides; the smaller agricultural implements from the primitiv to the most modern, together with fotografs illustrating their use; soil types, nativ and foreign, with relation to their economic importance; literature, old and modern, relating to agriculture; portraits of famous botanists and agriculturists; garden plants and fotografs of the various garden crops.

General list of exhibits in the Museum of Economic Botany and Agriculture, April 1, 1908: Thirty-two specimens of woods; fifteen specimens of fruits and roots; eighteen specimens of weeds; three specimens of fungi; five specimens of economic insects; 100 specimens of agricultural seeds; sixty specimens of tree and shrub seeds; 100 specimens of economic seeds, U. S. Dept. Agreculture; 150 specimens of garden seeds; fifty fotografs of live stock; eighteen fotografs of plants and flowers in their nativ habitat; forty-six samples of commercial fertilizers; eighteen samples of insecticides and fungicides; thirty samples of soil from as many states; forty samples of adulterated food and food adulterants; 2000 specimens in School Herbarium; 300 specimens in Wild Flower Herbarium; 225 specimens in Garden Herbarium; valuable bulletins and books.

Museum of Ceramics.

Museum of Ceramics.

Museum of Ceramics.

Museum of Ceramics.

Agricultural implements and utensils as follows: One potato sprayer; one garden sprayer; one garden seed drill and cultivator; one seed sower; one Keystone dehorner; one Sharples cream separator; one incubator; one brooder; sixteen garden hand tools, rakes, forks, hoes, etc.; one Babcock milk tester and outfit; three beehives complete; one collection of apiarian supplies, numbering thirty-five pieces; one wooden plow from Philippine Islands; one wooden harrow from Philippine Islands; one complete harness for same, yokes, ropes, etc.; one pitchfork from Philippine Islands; one ox yoke, American, used by pioneers in the State.

Museum of Ceramics.

CURATOR—Z. X. SNYDER.

The use of the Ceramic Museum is manifold. It has a historic significance; it shows the development of civilization, in a way, when the wares are arranged in a series from the primitiv peoples to the finest product in pottery making. It has an industrial meaning, since it shows the extended growth all over the world of pottery as an industry. It most of all is useful in giving the pupil a notion of pottery as a fine art. It is that particular kind of art that appeals to the sense of touch and muscle in reaching the deeper artistic feeling.

There are represented the following countries: Holland, Germany, Austria, Sweden, Belgium, Hungary, Italy, Spain, Japan, China, Mexico, England, Ireland, and America.

Over one thousand pieces are classified and installed in the museum, and are accessible for instruction and inspiration.

There are five series of specimens showing the evolution of a piece from the crude clay to the finisht product in the five great lines of ceramic industry and art. The first series is the evolution of a vase; second, is the evolution of a brick; third, the evolution of a piece of tile; fourth, that of a pipe, and fifth, that of a piece of terra cotta.

When one reflects the extent and reach of these five lines of ceramic activity, he is amazed at the volume of business in this country and the world.

The Biological Museums.

MANAGER—A. E. BEARDSLEY.

In the Biological Museums are included all specimens and exhibits of living things and the products of living things, excepting only man and the products of the activities of man; these products, on account of their great variety and importance are, for convenience, groupt together into a special section as the Museums of Anthropology. As thus limited, the biological museums comprize the following departments:

Museum of Mammals including mounted specimens, skins, and skeletons of mammals, together with specimens, models, charts, and fotografs illustrating their structure, their products, and their habits and modes of life.

Museum of Birds.

Museum of Reptils, Amphibians, and Fishes.

Museum of Mollusks.

Museum of Arthropods, including insects, spiders, crustaceans, etc.

Museum of Lower Invertebrates, including the starfishes and their allies, corals, worms, sponges, etc.

Museum of Physiology.

Museum of Economic Biology, including animals and plants which bear a special relation to the welfare of man, such as injurious insects, beneficial insects, poisonous plants, useful plants, etc.

Museum of Botany, including specimens representing plants, their forms, history, structure, and products.

Museum of Paleontology, including fossil shells, bones, teeth, and other remains of animals and plants that lived in earlier geological times.

The Physical Museums.

MANAGER—F. L. ABBOTT.

The materials comprized in the Physical Museum as outlined in this bulletin are not only the products of what are known as the Physical and Chemical forces, but also those products of the soil that are essential to the support of life. Further than this, it is designed to represent also, as far as is practical in this section, that highest type of thought, invention, as exprest in the various appliances serving to render man superior to his natural surroundings.

For the sake of convenience, first in classifying the material, and second in referring to it, these Museums are thrown into four divisions as follows:

1. The Geografical Museum containing agricultural products, manufactured products, and building materials, etc.

2. The Mineralogical Museum containing the products of the mines.

3. The Physical Museum containing the products of inventions, etc.

4. The Chemical Museum containing the elements and many of their combinations either as nature has made the combinations or as the compounds are made in the laboratory.

Museum of Geografy, Chemistry, and Mineralogy.

CURATOR—F. L. ABBOTT.

Believing, as we do, that the study of geografy in general should be the study (in particular) of the people —people in their homes and about their business—and the study of their relations (of control and adjustment) to their natural environment—believing this, we believe also, of course, in the use of a museum of specimens well selected to illustrate the various phases of the subject.

In the lower grades at least, educators are now fully agreed that something of the sort is absolutely necessary; the sense of touch is the final court of appeals for

Museum of Geography

all the senses, especially in the very young. And the same is far enough true in the upper grammar grades and the high school that the only change in procedure needed is a change of the emphasis to suit the more advanced interests of the pupils.

With this in view we would lay most stress in the lower grades on the manners and customs of the various peoples; and in the upper grades and the high school, we would most particularly lay stress upon the development of commerce and the industries; the significance of climate and topografy; and the social and political interrelations of the people. For such a treatment of Geografy (indeed it seems to us, for any treatment of geografy) to be adequate a museum is indispensable.

To illustrate these phases of the work in geografy as we conceive it, we should have a collection of the agricultural products of the different countries which help us to get a better conception of the climatic conditions of the various countries; in general like products like climate. A collection of the manufactured products shows us the multiplicity of the occupations of the peoples. Very important is a collection of the natural resources of the countries, such as our building stones, etc. To illustrate the forms of dress, modes of living, ways of traveling, kinds of architecture, and the natural scenery of the various parts of the world, pictures are very essential. Such pictures can be found in abundance in the illustrated magazines, of which there are a great number.

SUMMARY OF MUSEUM MATERIAL.

A. GEOGRAFICAL:—Five kinds of building stones;

eight Portland cement exhibits, showing material from which it is made; twelve gypsum and its products; three kinds of brick and materials from which they are made; cotton balls and seed; five specimens of beet sugar in its different stages of making; crude rubber; fifty pictures, unmounted; 1500 pictures in magazines (cataloged); ten coals and its products; oils, crude, from three localities; twenty-five exhibits Pueblo steel works, materials used; alkali, sample from field; model of Philippino home; five samples spice; three globes; thirty-five maps; three barometers; six erosion models; two sunshine indicators; astronomical lantern; cloud fotografs; metata; 100 marble specimens, polished.

B. MINERALOGICAL:—Fifty gypsum crystals, of many varieties; twenty-five quartz crystals; thirty lead ores; five manganese ores; twenty-five silver ores, two silver wires; thirty iron ores; twenty-five copper ores; ten zinc ores; two gold ores; five tungsten ores; twenty feld spar groups, crystals of several varieties; fifty rock forming materials (National Museum).

C. CHEMICAL:—Sixty elements that exist either in solid or liquid state; one fireless cooker.

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